



Navigation General

Aids To Navigation

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Illustration D037NG below represents a movable dam. If there is high water and the wickets are down so that there is an unobstructed navigable pass through the dam, what light(s) will be shown at D if the lock walls and piers are not awash?

One red light

Illustrations: D037NG_WM_090418

Illustration D037NG below represents a movable dam. If there is high water and the wickets are down so that there is an unobstructed navigable pass through the dam, what light(s) will be shown at B if the lock walls and piers are not awash?

Three red lights

Illustrations: D037NG_WM_090418

Illustration D036NG below represents a fixed C of E lock and dam. What navigational light(s) is(are) exhibited at the position indicated by the letter D?

Two green lights

Illustrations: D036NG_WM_012914

The Light List shows that a navigational light has a nominal range of 10 miles and a height above water of 38 feet (11.6 meters). Your height of eye is 52 feet (15.8 meters) and the visibility is 11.0 miles. At which approximate range will you first sight the light?

10.5 miles

Illustrations: LUMGEORNGE

See REF985

The Light List indicates that a light has a nominal range of 10 miles and is 11 feet high. If the visibility is 5 miles and your height of eye is 20 feet, at what approximate distance will you sight the light?

6.3 miles

Illustrations: LUMGEORNGE

See REF985

The Light List shows that a navigational light has a nominal range of 6 miles and a height above water of 18 feet (5.5 meters). Your height of eye is 47 feet (14.3 meters) and the visibility is 1.5 miles. At what approximate range will you first sight the light?

2.0 miles

Illustrations: LUMGEORNGE

See REF985

The Light List indicates that a light has a nominal range of 14 miles and is 26 feet high. If the visibility is 14 miles and your height of eye is 20 feet, at which approximate distance will you sight the light?

11.2 miles

Illustrations: LUMGEORNGE

See REF985

What is the approximate geographic visibility of an object with a height above the water of 70 feet, for an observer with a height of eye of 65 feet?

19.0 nm

Illustrations: LUMGEORNGE

See REF974

The Light List shows that a navigational light has a nominal range of 12 miles and a height above water of 25 feet (7.6 meters). Your height of eye is 38 feet (11.6 meters) and the visibility is 5.5 miles. At what approximate range will you FIRST sight the light?

8.0 miles

Illustrations: LUMGEORNGE

See REF985

The Light List indicates that a light has a nominal range of 13 miles and is 36 feet high. If the visibility is 17 miles and your height of eye is 25 feet, at what approximate distance will you sight the light?

12.9 miles

Illustrations: LUMGEORNGE

See REF985

The Light List shows that a navigational light has a nominal range of 5 miles and a height above water of 21 feet (6.4 meters). Your height of eye is 32 feet (9.8 meters) and the visibility is 1.0 mile. At what approximate range will you first sight the light?

1.5 miles

Illustrations: LUMGEORNGE

See REF985

A lighthouse is 120 feet (36.6 meters) high and the light has a nominal range of 18 miles. Your height of eye is 42 feet (12.8). If the visibility is 11 miles, approximately how far off the light will you be when the light becomes visible

19.0 mi

Illustrations: LUMGEORNGE

See REF974

The Light List indicates that a light has a nominal range of 14 miles and is 26 feet high. If the visibility is 4 miles and your height of eye is 20 feet, at what approximate distance will you sight the light?

7.5 miles

Illustrations: LUMGEORNGE

See REF985

The Light List indicates that a light has a nominal range of 13 miles and is 36 feet high (11.0 meters). If the visibility is 7.0 miles and your height of eye is 25 feet (7.6 meters), at what approximate distance will you sight the light?

10.0 miles

Illustrations: LUMGEORNGE

See REF985

The Light List shows that a navigational light has a nominal range of 15 miles and a height above water of 29 feet (8.8 meters). Your height of eye is 52 feet (15.8 meters) and visibility is 6.0 miles. At which approximate range will you first sight the light?

11.0 miles

Illustrations: LUMGEORNGE

See REF985

The Light List shows that a navigational light has a nominal range of 12 miles and a height above water of 25 feet (7.6 meters). Your height of eye is 30 feet (9.1 meters) and the visibility is 0.5 mile. At what approximate range will you first sight the light?

1.4 miles

Illustrations: LUMGEORNGE

See REF985

The Light List indicates that a light has a nominal range of 18 miles and is 38 feet high. If the visibility is 6 miles and your height of eye is 15 feet, at which distance will you sight the light?

11.7 nm

Illustrations: LUMGEORNGE

See REF985

The Light List indicates that a light has a nominal range of 14 miles and is 42 feet high (12.8 meters). If the visibility is 6 miles and your height of eye is 20 feet (6.1 meters), at what approximate distance will you sight the light?

10.0 miles

Illustrations: LUMGEORNGE

See REF985

The Light List indicates that a light has a nominal range of 8 miles and is 48 feet (14.6 meters) high. If the visibility is 6 miles and your height of eye is 35 feet (10.7 meters), at what approximate distance will you sight the light?

5.9 nm

Illustrations: LUMGEORNGE

See REF985

The Light List shows that a navigational light has a nominal range of 17 miles and a height above water of 28 feet (8.5 meters). Your height of eye is 32 feet (9.8 meters) and the visibility is 11.0 miles. At what approximate range will you first sight the light?

12.6 miles

Illustrations: LUMGEORNGE

See REF985

The Light List shows that a navigational light has a nominal range of 18 miles and a height above water of 22 feet (6.7 meters). Your height of eye is 16 feet (4.9 meters) and the visibility is 2.0 miles. At which approximate range will you first sight the light?

5.8 miles

Illustrations: LUMGEORNGE

See REF985

The Light List indicates that a light has a nominal range of 14 miles and is 42 feet (12.7 m) high. If the visibility is 16 miles and your height of eye is 20 feet (6.1 m), at which approximate distance will you sight the light?

12.8 miles

Illustrations: LUMGEORNGE

See REF985

The Light List shows that a navigational light has a nominal range of 6 miles and a height above water of 18 feet (5.5 meters). Your height of eye is 40 feet (12.2 meters) and the visibility is 27.0 miles. At which approximate range will you first sight the light?

9.8 miles

Illustrations: LUMGEORNGE

See REF985

The Light List shows that a navigational light has a nominal range of 22 miles and a height above water of 48 feet (14.6 meters). Your height of eye is 35 feet (10.7 meters) and the visibility is 20.0 miles. At what approximate range will you first sight the light?

14.7 nm

Illustrations: LUMGEORNGE

See REF985

The Light List shows that a navigational light has a nominal range of 15 miles and a height above water of 40 feet (12.2 meters). Your height of eye is 25 feet (7.6 meters) and the visibility is 5 miles. At about what range will you FIRST sight the light?

9.5 miles

Illustrations: LUMGEORNGE

See REF985

The luminous range of a light takes into account the _____
existing visibility conditio

Illustrations: LUMGEORNGE

See REF981

The Light List indicates that a light has a nominal range of 20 miles and is 52 feet high. If the visibility is 12.0 miles and your height of eye is 20 feet, at what approximate distance will you sight the light?

13.7 miles

Illustrations: LUMGEORNGE

See REF985

The Light List shows that a navigational light has a nominal range of 19 miles and a height above water of 52 feet (15.8 meters). Your height of eye is 42 feet (12.8 meters) and the visibility is 10.0 miles. At what approximate range will you first sight the light?

16.0 miles

Illustrations: LUMGEORNGE

See REF985

The Light List indicates that a light has a nominal range of 20 miles and is 52 feet (16 meters) high. If the visibility is 20 miles and your height of eye is 20 feet (6 meters), at what approximate distance will you sight the light?

13.5 nm

Illustrations: LUMGEORNGE

See REF985

What is the approximate geographic range of Southwest Ledge Light, Connecticut, if your height of eye is 32 feet (9.8 meters)? Refer to "Reprints from the LIGHT LISTS AND COAST PILOTS".

15.5 nm

Illustrations: GEO1052_WM

See REF974

What is the approximate geographic range of Fenwick Island Light, Delaware, if your height of eye is 37 feet (11.6 meters)? Refer to "Reprints from the LIGHT LISTS AND COAST PILOTS".

17.8 nm

Illustrations: GEO1481_WM

See REF974

Your height of eye is 40 feet (12.2 meters). What is the approximate geographical distance at which Ambrose Light, NY, could be visible? Refer to "Reprints from the LIGHT LISTS AND COAST PILOTS".

21.0 nm

Illustrations: GEO1441_WM

See REF976

What is the approximate geographic range of Assateague Light, VA, if your height of eye is 52 feet (15.8 meters)? Refer to "Reprints from the LIGHT LISTS AND COAST PILOTS".

23.0 nm

Illustrations: GEO1072_WM

See REF974

What is the approximate geographic range of Horton Point Light, NY, if your height of eye is 40 feet (12.2 meters)? Refer to "Reprints from the LIGHT LISTS AND COAST PILOTS".

19.3 nm

Illustrations: GEO1062_WM

See REF974

What is the approximate geographic range of Fenwick Island Light, Delaware, if your height of eye is 42 feet (12.8 meters)? Refer to "Reprints from the LIGHT LISTS AND COAST PILOTS".

18.3 nm

Illustrations: GEORANGE_WM

See REF974

Determine the approximate geographic visibility of an object, with a height above the water of 85 feet (25.9 meters), for an observer with a height of eye of 60 feet (18.3 meters).

19.9 nm

Illustrations: GEORANGE_WM

See REF975

A mountain peak charted at 700 feet breaks the horizon, and your height of eye is 12 feet. What is your approximate distance off (choose closest answer)?

34.7 nm

Illustrations: GEORANGE_WM

See REF975

What is the approximate geographic range of Race Rock Light, NY, if your height of eye is 27 feet (8.2 meters)? Refer to "Reprints from the LIGHT LISTS AND COAST PILOTS".

15.7 nm

Illustrations: GEORANGE_WM

See REF974

What is the approximate geographic range of Point Judith Light, Rhode Island, if your height of eye is 62 feet (18.9 meters)? Refer to "Reprints from the LIGHT LISTS AND COAST PILOTS". (use charted range of 20 miles as nominal range)

18.6 nm

Illustrations: GEORANGE_WM

See REF974

What is the approximate geographic range of Shinnecock Light, NY, if your height of eye is 24 feet (7.3 meters)? Refer to "Reprints from the LIGHT LISTS AND COAST PILOTS".

15.9 nm

Illustrations: GEORANGE_WM

See REF974

When a dual purpose marking is used, the mariner following the Intracoastal Waterway should be guided by the

shape of the yellow mark

Illustrations: ICW01

See REF973

You are sailing south on the Intracoastal Waterway (ICW) when you sight a red nun buoy with a yellow square painted on it. Which of the following is TRUE?

You should leave the buoy on your port hand.

Illustrations: ICW01

See REF973

You are sailing south on the Intracoastal Waterway (ICW) when you sight a red nun buoy with a yellow triangle painted on it. Which statement is TRUE?

The ICW and another waterway coincide in this geographical area.

Illustrations: ICW01

See REF973

You are sailing south on the Intracoastal Waterway (ICW) when you sight a red nun buoy with a yellow square painted on it. Which statement is TRUE?

You should leave the buoy to port.

Illustrations: ICW01

See REF973

You are sailing south on the Intracoastal Waterway (ICW) when you sight a green can buoy with a yellow square painted on it. Which of the following is TRUE?

You should leave the buoy to port.

Illustrations: ICW01

See REF973

Aids to navigation marking the intracoastal waterway can be identified by _____.
yellow stripes, squares, or triangles marked on them

Illustrations: ICW01
See REF973

What indicates a dual purpose buoy?
Green buoy with a yellow square

Illustrations: ICW01
See REF972

You are entering an east coast port and see a buoy with a yellow triangle painted on it. What does the symbol indicate?
you are in the vicinity of the ICW

Illustrations: ICW01
See REF973

A green buoy has a yellow triangle on it. This is a(n) _____.
dual purpose marking used where the ICW and other waterways coincide

Illustrations: ICW01
See REF973

Buoys and day beacons exhibiting a yellow triangle or square painted on them are used _____.
where the ICW and other waterways coincide

Illustrations: ICW01
See REF973

A daymark used to indicate the starboard side of the channel when approaching from seaward will have the shape indicated by what letter in illustration D045NG below?
D

Illustrations: D045NG_WM_091018, USAIDS04
See REF932

In illustration D045NG below, what two shapes shown are used to indicate a preferred channel?
A and D

Illustrations: D045NG_WM_091018, USAIDS04
See REF967

A daymark used to indicate the safe water in a channel will have which of the shapes shown in illustration D045NG below?
C

Illustrations: D045NG_WM_091018, USAIDS04
See REF927

In illustration D045NG below, which shape is a daymark warning of danger?
B

Illustrations: D045NG_WM_091018, USAIDS04
See REF967

A daymark used as a special mark is indicated by which letter in illustration D045NG below?

B

Illustrations: D045NG_WM_091018, USAIDS04

See REF929

You are in a channel inbound from sea. A daymark used to mark a channel junction, when the preferred channel is to port will have the shape indicated by what letter in illustration D045NG below?

D

Illustrations: D045NG_WM_091018, USAIDS04

See REF932

In illustration D045NG below, a green-and-red banded daymark, with the uppermost band green, will have which of the following shapes?

A

Illustrations: D045NG_WM_091018, USAIDS04

See REF967

You are in a channel inbound from sea. A daymark used to mark a channel junction when the preferred channel is to starboard will have the shape indicated by what letter in illustration D045NG below?

A

Illustrations: D045NG_WM_091018, USAIDS04

See REF932

In both regions of the IALA buoyage system, which topmark shown in illustration D022NG below is used on a special mark?

D

Illustrations: D022NG_WM_082918, IALA_A_B

Of the four light characteristics shown in illustration D019NG below which one does NOT represent a safe water mark of the IALA Buoyage System?

A

Illustrations: D019NG_WM_082918, IALA_A_B

Which topmark shown in illustration D023NG below identifies an isolated danger?

B

Illustrations: D023NG_WM_082918, IALA_A_B

Under the IALA Buoyage System, which topmark shown in illustration D023NG below will be displayed on a safe water mark?

A

Illustrations: D023NG_WM_082918, IALA_A_B

You sight a spar buoy with the top mark shown in illustration D027NG below. You must take which of the following actions?

keep well clear of the buoy and pass on either side

Illustrations: D027NG_WM_082918

Under the Uniform State Waterway Marking System a mooring buoy is painted _____.
white with a blue band

Illustrations: STATE01, STATE02

A white buoy with a blue band is _____.
a mooring buoy

Illustrations: STATE01, STATE02

A mooring buoy, if lighted, shows which color light?
White

Illustrations: STATE01, STATE02

Under the Uniform State Waterway Marking System a mooring buoy is painted _____.
white with a blue band

Illustrations: STATE01, STATE02

A white buoy with a blue band is _____.
a mooring buoy

Illustrations: STATE01, STATE02

A mooring buoy, if lighted, shows which color light?
White

Illustrations: STATE01, STATE02

In illustration D044NG below, a pillar buoy is indicated by which letter?

C

Illustrations: D044NG_WM_050719

In illustration D044NG below, what type of buoy is indicated by the letter A?

can

Illustrations: D044NG_WM_050719

In illustration D044NG below, what type of buoy is indicated by the letter D?

nun

Illustrations: D044NG_WM_050719

In the North Sea area, you sight a buoy showing an uninterrupted quick-flashing white light. Which of the four topmarks shown in illustration D031NG below will this buoy be fitted with under the IALA Buoyage system?

B

Illustrations: D031NG_WM_083018, MYCARDINAL_WM

In the North Sea area, you sight a buoy showing a quick white light with 9 flashes every 15 seconds. Which of the four topmarks shown in illustration D031NG below would be fitted to the buoy?

A

Illustrations: D031NG_WM_083018, MYCARDINAL_WM

In the North Sea area, you sight a buoy showing a quick white light showing 6 flashes followed by one long flash at 15 second intervals. Which of the four topmarks in illustration D031NG below would be fitted to this buoy?

C

Illustrations: D031NG_WM_083018, MYCARDINAL_WM

During daylight hours black double-cone topmarks are the most important feature of cardinal marks. Which of the four topmarks shown in illustration D030NG below indicates the best navigable water lies to the west of the buoy?

C

Illustrations: D030NG_WM_083018, MYCARDINAL_WM

In the North Sea area, you sight a buoy showing a quick white light with 6 flashes, followed by one long flash at 15 second intervals. Which of the four topmarks shown in illustration D030NG below would be fitted to this buoy?

A

Illustrations: D030NG_WM_083018, MYCARDINAL_WM

In the North Sea area, you sight a buoy showing a quick white light with 9 flashes every 15 seconds. Which of the four topmarks shown in illustration D030NG below would be fitted to the buoy?

C

Illustrations: D030NG_WM_083018, MYCARDINAL_WM

In the North Sea area, you sight a buoy with a quick light showing 3 flashes every 10 seconds. Which topmark in illustration D030NG below would be fitted to this buoy under the IALA Buoyage Systems?

D

Illustrations: D030NG_WM_083018, MYCARDINAL_WM

While steaming north of the Irish coast, you sight a buoy which shows the light rhythm shown in illustration D028NG below. How would you pass this buoy?

East of the buoy

Illustrations: D028NG_WM_090418, MYCARDINAL_WM

On a voyage along the coast of France, you sight a buoy with the top marks as shown in illustration D026NG below. How should you steer your vessel?

south of the buoy

Illustrations: D026NG_WM_082918, MYCARDINAL_WM

You are underway on course 127°T. You sight a buoy with the topmarks shown in illustration D025NG below, bearing two points on the starboard bow. Which action must be taken?

Ensure the bearings change to the right.

Illustrations: D025NG_WM_082918, MYCARDINAL_WM

Which cardinal quadrant is represented by the topmark in illustration D024NG below?

Western

Illustrations: D024NG_WM_082918, MYCARDINAL_WM

While proceeding along the Norwegian coast on course 039°T, you sight the black-yellow-black banded buoy shown in illustration D021NG below, bearing 053°T. What action should you take?

Alter course to 060° and ensure that the true bearings decreases

Illustrations: D021NG_WM_082918, MYCARDINAL_WM

While proceeding along the Mediterranean coast of Spain, you sight the black and yellow buoy shown in illustration D020NG below. Your course is 039°T, and the buoy bears 053°T. What action should you take?

Maintain course and ensure that the bearings increase

Illustrations: D020NG_WM_082918, MYCARDINAL_WM

What does a buoy with a composite group-flashing light indicate?

Bifurcation (channel junction)

Illustrations: USAIDS02

See REF961

A buoy having red and green horizontal bands would have a light characteristic of _____.
composite group flashing

Illustrations: USAIDS02

See REF961

A preferred-channel buoy will show a _____.
composite group-flashing (2 + 1) red or green light

Illustrations: USAIDS02

See REF961

A lighted preferred-channel buoy may show a _____.
composite group-flashing light

Illustrations: USAIDS02

See REF961

A preferred-channel buoy may be _____.
lettered

Illustrations: USAIDS02

See REF961

Which buoy may be even numbered?

Unlighted nun buoy

Illustrations: USAIDS02, USAIDS05

See REF933

Which buoy is NOT numbered?

Preferred-channel buoy

Illustrations: USAIDS02, USAIDS05

See REF961

Which buoy may be odd numbered?

An unlighted can buoy

Illustrations: USAIDS02, USAIDS05

See REF933

Which buoy will NOT display white retro reflective material?

Preferred channel mark

Illustrations: USAIDS02, USAIDS05

Which buoy may be odd numbered?

Lighted green buoy

Illustrations: USAIDS02, USAIDS05

See REF933

Preferred channel buoys indicate the preferred channel to transit by _____.

the color of their top band

Illustrations: USAIDS02

See REF961

In the U.S. Aids to Navigation System, red and green horizontally-banded buoys mark _____.

junctions or bifurcations

Illustrations: USAIDS02

See REF961

Red lights may appear on _____.

horizontally banded buoys

Illustrations: USAIDS02

See REF961

Under the IALA-A Buoyage System, when entering from seaward a lateral system buoy to be left to starboard may display which topmark shown in illustration D046NG below?

C

Illustrations: D046NG_WM_050719, IALA_A_B, IALA_B, IALA_A, IALASYSTEM

See REF960

Under the IALA-B Buoyage System, when entering from seaward a lateral system buoy to be left to port may display which of the topmarks shown? Illustration D046NG

D

Illustrations: D046NG_WM_050719, IALA_A_B, IALA_B, IALA_A, IALASYSTEM

See REF960

Under the IALA-A Buoyage System, when entering from seaward a lateral system buoy to be left to port may display which topmark shown? Illustration D046NG

B

Illustrations: D046NG_WM_050719, IALA_A_B, IALA_B, IALA_A, IALASYSTEM

See REF960

Under the IALA-B Buoyage System, when entering from seaward a lateral system buoy to be left to starboard may display which of the topmarks shown? Illustration D046NG

A

Illustrations: D046NG_WM_050719, IALA_A_B, IALA_B, IALA_A, IALASYSTEM
See REF960

What is the light phase characteristic of a lighted isolated-danger mark?

Group flashing

Illustrations: USAIDS03
See REF959

A buoy marking a wreck will show a(n) _____.
white light FL (2) and a topmark of 2 black spheres

Illustrations: USAIDS03
See REF959

Buoys which mark isolated dangers are painted with alternating _____.
red and black bands

Illustrations: USAIDS03
See REF959

Which type of daymark is used to mark the port side of the channel when entering from sea?
Green square

Illustrations: USAIDS05
See REF932

You are heading out to sea in a buoyed channel and see a quick flashing green light on a buoy ahead of you. In U.S. waters, how should you leave the buoy?
to starboard

Illustrations: USAIDS05
See REF958

Your vessel is leaving New York harbor in dense fog. As the vessel slowly proceeds toward sea, you sight a green can buoy on the starboard bow. Which action should you take?
Stand on, leaving the buoy to your starboard.

Illustrations: USAIDS05
See REF933

Which type of daymark is used to mark the starboard side of the channel when entering from sea?
Red triangle

Illustrations: USAIDS05
See REF932

A lateral system buoy displaying a quick light _____.
indicates that special caution is required

Illustrations: USAIDS05
See REF933

A triangular daymark would be colored _____.
red

Illustrations: USAIDS05
See REF932

As you enter a channel from seaward in a U.S. port, the numbers on the starboard side buoys _____.
increase and the buoys are red

Illustrations: USAIDS05
See REF933

A red triangular daymark marks _____.
the starboard side of a channel

Illustrations: USAIDS05
See REF932

A lighted buoy to be left to starboard, when entering a U.S. port from seaward, shall have a _____.
red light

Illustrations: USAIDS05
See REF933

Buoys which only mark the left or right side of the channel will never exhibit a light with which characteristic?
Composite group flashing

Illustrations: USAIDS05
See REF933

What feature(s) of a daymark is (are) used to identify the beacon upon which it is mounted?
Color and shape

Illustrations: USAIDS05
See REF932

Which daymark has no lateral significance?
Black and white diamond

Illustrations: USAIDS05
See REF932

You are steaming southward along the west coast of the United States when you encounter a buoy showing a flashing red light. Which is TRUE concerning the buoy? _____.
The buoy should be left on the vessel's port side

Illustrations: USAIDS05
See REF933

You are steaming southward along the west coast of the United States when you encounter a buoy showing a flashing red light. The buoy should be left on _____.
the vessel's port side

Illustrations: USAIDS05
See REF933

As your vessel is heading southward along the east coast of the United States, you encounter a buoy showing a red flashing light. How should you pass this buoy?

Leave it to your starboard.

Illustrations: USAIDS05

See REF933

Which buoy may be even numbered?

Unlighted nun buoy

Illustrations: USAIDS02, USAIDS05

See REF933

"Proceeding from seaward" for the purpose of the direction of buoying offshore, lateral system buoys would be proceeding

northerly on the Pacific Coast

Illustrations: USAIDS05

See REF933

Which buoy is NOT numbered?

Preferred-channel buoy

Illustrations: USAIDS02, USAIDS05

See REF961

You are steaming in a westerly direction along the Gulf Coast. You see ahead of you a lighted buoy showing a red isophase light. Which action should you take?

Alter course to port and leave the buoy to starboard.

Illustrations: USAIDS05

See REF933

Which buoy may be odd numbered?

An unlighted can buoy

Illustrations: USAIDS02, USAIDS05

See REF933

You are steaming southward along the west coast of the United States when you sight a buoy showing a flashing green light. How should you pass this buoy?

Leave it to your starboard.

Illustrations: USAIDS05

See REF933

Which buoy will NOT display white retro reflective material?

Preferred channel mark

Illustrations: USAIDS02, USAIDS05

A nun buoy will _____.

have an even number

Illustrations: USAIDS05

See REF933

Which buoy may be odd numbered?

Lighted green buoy

Illustrations: USAIDS02, USAIDS05

See REF933

As you enter a U.S. channel from seaward the numbers on the buoys _____.

increase with the can buoys being odd numbered

Illustrations: USAIDS05

See REF933

What indicates a buoy that should be left to port when entering from seaward? (U.S. Aids to Navigation System)

Odd number

Illustrations: USAIDS05

See REF933

Entering from seaward, triangular-shaped daymarks are used to mark _____.

the starboard side of the channel

Illustrations: USAIDS05

See REF932

Buoys are marked with reflective material to assist in their detection by searchlight. Which statement is TRUE?

A preferred-channel buoy displays either red or green reflective material to agree with the top band of color.

Illustrations: USAIDS04, USAIDS05, USAIDS06

Port side daymarks may be _____.

numbered

Illustrations: USAIDS05

See REF932

A light having characteristics which include color variations is defined as _____.

alternating

Illustrations: LIGHTCHAR

Which of the following traits possessed by an articulated light makes it superior to other types of buoys?

It has a reduced watch circle

Illustrations: LIGHTCHAR

A List of Lights entry (L Fl) is a single flashing light which shows a long flash of not less than _____.

2.0 seconds duration

Illustrations: LIGHTCHAR

On navigational aids, what does the light characteristic "Fl(2+1)" mean?

Light flashes combined in groups, with a different number of flashes in each group

Illustrations: LIGHTCHAR

The time required for a lighted aid to complete a full cycle of light changes is listed in the Light List as the _____.
period

Illustrations: LIGHTCHAR

See REF978

An alternating light _____.
shows a light that changes color

Illustrations: LIGHTCHAR

What is characteristic of an occulting light?
4 sec. flash, 2 sec. eclipse, 3 sec. flash, 2 sec. eclipse

Illustrations: LIGHTCHAR

A light that has a light period shorter than its dark period is described as _____.
flashing

Illustrations: LIGHTCHAR

What is the characteristic of a quick flashing light?
Shows not less than 60 flashes per minute

Illustrations: LIGHTCHAR

An occulting light is one in which _____.
the period of light exceeds the period of darkness

Illustrations: LIGHTCHAR

What is characteristic of an isophase light?
1 sec. flash, 1 sec. eclipse

Illustrations: LIGHTCHAR

What is the characteristic of a quick light?
Shows not less than 60 flashes per minute

Illustrations: LIGHTCHAR

Some lights used as aids to marine navigation have a red sector to indicate a danger area. How are the limits of a colored sector of light listed in the Light List?
True bearings as observed from a vessel toward the light

Illustrations: LIGHTCHAR

See REF977

In waters where the cardinal system is used you would expect to find danger _____.
lying to the south of a northern quadrant buoy

Illustrations: MYCARDINAL_WM

While steaming north of the Irish coast, you sight a buoy which shows the light rhythm shown in illustration D028NG below. How would you pass this buoy?

East of the buoy

Illustrations: D028NG_WM_090418, MYCARDINAL_WM

A cardinal mark showing an uninterrupted quick-flashing white light indicates the deepest water in the area is on the _____.

north side of the mark

Illustrations: MYCARDINAL_WM

Under the IALA cardinal system, a mark with a quick white light showing 6 flashes followed by one long flash indicates that the safest water is on the _____.

south side of the mark

Illustrations: MYCARDINAL_WM

During daylight hours black double-cone topmarks are the most important feature of cardinal marks. Which of the four topmarks shown in illustration D030NG below indicates the best navigable water lies to the west of the buoy?

C

Illustrations: D030NG_WM_083018, MYCARDINAL_WM

Under the IALA cardinal system, a mark with quick white light showing 3 flashes every 10 seconds indicates that the safest water in the area is on the _____.

east side of the mark

Illustrations: MYCARDINAL_WM

Under the IALA cardinal system, a mark with a quick light showing 9 flashes every 15 seconds indicates that the safest water is on the _____.

west side of the mark

Illustrations: MYCARDINAL_WM

In the North Sea area, you sight a buoy showing a quick white light with 6 flashes, followed by one long flash at 15 second intervals. Which of the four topmarks shown in illustration D030NG below would be fitted to this buoy?

A

Illustrations: D030NG_WM_083018, MYCARDINAL_WM

While steaming on course 280°T, you sight a buoy showing a very quick-flashing (VQ) white light well to port. Maintaining course, you sight another buoy showing a quick-flashing (Q) white light. You should pass _____.

north of the buoy

Illustrations: MYCARDINAL_WM

On approaching the English Channel on course 080°T, you note the symbol YBY near a charted buoy. You must pass _____.

westward of the buoy

Illustrations: MYCARDINAL_WM

You are underway on course 142°T when you sight a buoy bearing 105°T. The buoy's white light has a characteristic of continuous very-quick flashing. To ensure that your vessel remains in the best navigable water you would _____.
alter course to port and pass north of the buoy

Illustrations: MYCARDINAL_WM

A cardinal mark showing an uninterrupted quick-flashing white light indicates the deepest water is located in which quadrant?

The north quadrant of the mark

Illustrations: MYCARDINAL_WM

While proceeding along the Mediterranean coast of Spain, you sight the black and yellow buoy shown in illustration D020NG below. Your course is 039°T, and the buoy bears 053°T. What action should you take?

Maintain course and ensure that the bearings increase

Illustrations: D020NG_WM_082918, MYCARDINAL_WM

In the North Sea area, you sight a buoy showing a quick white light with 9 flashes every 15 seconds. Which of the four topmarks shown in illustration D030NG below would be fitted to the buoy?

C

Illustrations: D030NG_WM_083018, MYCARDINAL_WM

You are underway in the North Sea on course 216°T when you sight a buoy bearing 021° relative. Under the IALA Buoyage System, you are in the best navigable water if the buoy _____.

has a light characteristic of Q(6) + L Fl 15s

Illustrations: MYCARDINAL_WM

You are underway on course 328°T when you sight a buoy broad on your port bow. Which would indicate that you are in the best navigable water?

exhibits a light with the characteristic of VQ(3)5s

Illustrations: MYCARDINAL_WM

While proceeding along the Norwegian coast on course 039°T, you sight the black-yellow-black banded buoy shown in illustration D021NG below, bearing 053°T. What action should you take?

Alter course to 060° and ensure that the true bearings decreases

Illustrations: D021NG_WM_082918, MYCARDINAL_WM

In the North Sea area, you sight a buoy with a quick light showing 3 flashes every 10 seconds. Which topmark in illustration D030NG below would be fitted to this buoy under the IALA Buoyage Systems?

D

Illustrations: D030NG_WM_083018, MYCARDINAL_WM

The characteristic of a lighted cardinal mark may be _____.

very quick flashing

Illustrations: MYCARDINAL_WM

See REF964

that vessels are excluded from the marked area. 3. A circular shape indicates that certain operating restrictions are in effect within the marked area.

REF930

Entering and exit signals. Signal lights are located outside each lock gate. When the green (go) light is on, all vessels will enter in the sequence prescribed by the Lock Master. When the red (stop) light is on, the lock is not ready for entrance and vessels shall stand clear. In addition to the above visual signals, the Lock Master will signal that the lock is ready for entrance by sounding one long blast on the lock air horn. The Lock Master will signal that the lock is ready for exit by lighting the green exit light and sounding one short blast on the air horn.

REF931

Period: The interval of time between the commencement of two identical successive cycles of the characteristic of the light or sound signal.

REF932

Generally, lateral aids to navigation indicate on which side of a vessel an aid to navigation should be passed when the vessel is proceeding in the conventional direction of buoyage. Normally, the conventional direction of buoyage is the direction in which a vessel enters navigable channels from seaward and proceeds towards the head of navigation. In the absence of a route leading from seaward, the conventional direction of buoyage generally follows a clockwise direction around land masses. For example, proceeding southerly along the Atlantic Coast, from Florida to Texas along the Gulf Coast, and northerly along the Pacific Coast are considered as proceeding in the conventional direction of buoyage. In some instances, this direction must be arbitrarily assigned. Where doubt exists, the mariner should consult charts and other nautical publications. Virtually all U.S. lateral marks are located in IALA Region B and follow the traditional 3R rule of red, right, returning. A summary of the port and starboard hand lateral mark characteristics is contained in the following table.

Characteristic	Port Hand	Starboard
Color	Green	
Shape (buoys)	Cylindrical (can) or pillar	Conical (nun) or pillar
Dayboard	Green square	Red triangle
Topmark (if fitted)	Cylinder	Cone, point up
Light Color (if fitted)	Green	Red
Reflector Color	Green	Red
Number	Odd	

U.S. lateral aids to navigation at certain Pacific Islands are located within IALA Region A and thus exhibit opposite color significance. Port hand marks are red with square or cylindrical shapes while starboard hand marks are green with triangular or conical shapes.

REF933

Generally, lateral aids to navigation indicate on which side of a vessel an aid to navigation should be passed when the vessel is proceeding in the conventional direction of buoyage. Normally, the conventional direction of buoyage is the direction in which a vessel enters navigable channels from seaward and proceeds towards the head of navigation. In the absence of a route leading from seaward, the conventional direction of buoyage generally follows a clockwise direction around land masses. For example, proceeding southerly along the Atlantic Coast, from Florida to Texas along the Gulf Coast, and northerly along the Pacific Coast are considered as proceeding in the conventional direction of buoyage. In some instances, this direction must be arbitrarily assigned. Where doubt exists, the mariner should consult charts and other nautical publications. Virtually all U.S. lateral marks are located in IALA Region B and follow the traditional 3R rule of red, right, returning. A summary of the port and starboard hand lateral mark characteristics is contained in the following table.

Characteristic	Port Hand	Starboard Hand
Color	Green	Red
Shape (buoys)	Cylindrical (can) or pillar	Conical (nun) or pillar
Dayboard	Green square	Red triangle
Topmark (if fitted)	Cylinder	Cone, point upward
Light Color (if fitted)	Green	Red
Reflector Color	Green	Red
Number	Odd	Even

U.S. lateral aids to navigation at certain Pacific Islands are located within IALA Region A and thus exhibit opposite color significance. Port hand marks are red with square or cylindrical shapes while starboard hand marks are green with triangular or conical shapes.

REF934

Alternating Lights: A rhythmic light showing light of alternating colors.

REF935

Occulting light: A light in which the total duration of light in each period is clearly longer than the total duration of darkness and in which the intervals of darkness (occultations) are all of equal duration. (Commonly used for single occulting light which exhibits only single occultations which are repeated at regular intervals.)

REF947

Mean High Water is the average of all the high water heights observed over a period of several years. For example, in the United States this period spans 19 years and is referred to as the National Tidal Datum Epoch.

REF958

Generally, lateral aids to navigation indicate on which side of a vessel an aid to navigation should be passed when the vessel is proceeding in the conventional direction of buoyage. Normally, the conventional direction of buoyage is the direction in which a vessel enters navigable channels from seaward and proceeds towards the head of navigation. In the absence of a route leading from seaward, the conventional direction of buoyage generally follows a clockwise direction around land masses. For example, proceeding southerly along the Atlantic Coast, from Florida to Texas along the Gulf Coast, and northerly along the Pacific Coast are considered as proceeding in the conventional direction of buoyage. In some instances, this direction must be arbitrarily assigned. Where doubt exists, the mariner should consult charts and other nautical publications. Virtually all U.S. lateral marks are located in IALA Region B and follow the traditional 3R rule of red, right, returning. A summary of the port and starboard hand lateral mark characteristics is contained in the following table.

Characteristic	Port Hand	Starboard Hand
Color	Green	Red
Shape (buoys)	Cylindrical (can) or pillar	Conical (nun) or pillar
Dayboard	Green square	Red triangle
Topmark (if fitted)	Cylinder	Cone, point upward
Light Color (if fitted)	Green	Red
Reflector Color	Green	Red
Number	Odd	Even

U.S. lateral aids to navigation at certain Pacific Islands are located within IALA Region A and thus exhibit opposite color significance. Port hand marks are red with square or cylindrical shapes while starboard hand marks are green with triangular or conical shapes.

REF959

Isolated danger marks are erected on, moored over, or placed immediately adjacent to an isolated danger that may be passed on all sides. These marks should not be approached closely without special caution. Isolated danger marks are colored with black and red bands, and if lighted, display a group flashing (2) white light. A topmark consisting of two black spheres, one above the other is fitted for both lighted and unlighted marks.

REF960

Note: There are two regions, A and B, to the IALA (The International Association of Lighthouse Authorities) Maritime Buoyage System. The lateral marks indicate port and starboard hand sides of well-defined channels, and are colored red and green. Region A uses red and green to indicate port and starboard sides of the channel respectively. In region B, the colors are reversed with red to starboard and green to port when entering from seaward. Topmarks are identified by shape: can, conical, spherical, and -shaped only.

REF961

Preferred channel marks are aids to navigation which mark channel junctions or bifurcations and often mark wrecks or obstructions. Preferred channel marks may normally be passed on either side by a vessel, but indicate to the mariner the preferred channel. Preferred channel marks are colored with red and green bands. At a point where a channel divides, when proceeding in the conventional direction of buoyage, a preferred channel in IALA Region B may be indicated by a

modified port or starboard lateral mark as follows:

Characteristic	Preferred to starboard	Preferred to Port
Color	Green with one broad red band	Red with one broad green band
Shape (buoys)	Cylindrical (can) or pillar	Conical (nun) or pillar
Dayboard	Green square, lower half red	Red triangle, lower half green
Topmark (when fitted)	Green square or cylinder	Red triangular cone, point up
Light Color (if lighted)	Green	Red
Rhythm	Composite group flashing (2+1)	Composite group flashing (2+1)
Reflector color	Green	Red

CAUTION: It may not always be possible to pass on either side of preferred channel aids to navigation. The appropriate nautical chart should always be consulted.

REF962

Correct answer. "Buoys with horizontal red and green bands mark junctions (where two channels come together) or bifurcations (where two channels split one). If the top-most band is green, keeping the buoy on the port hand will follow the preferred channel, as if the whole buoy were green. If the top-most band is red, keeping the buoy to starboard ("red right returning" applies) will keep you in the preferred channel."

REF963

AIDS TO NAVIGATION DISCREPANCIES The Coast Guard does not keep the tens of thousands of aids to navigation comprising the U.S. Aids to Navigation System under simultaneous and continuous observation. Mariners should realize that it is impossible to maintain every aid to navigation operating properly and on its assigned position at all times. Therefore, for the safety of all mariners, any person who discovers an aid to navigation that is either off station or exhibiting characteristics other than those listed in the Light Lists should promptly notify the nearest Coast Guard unit. Radio messages should be prefixed "COAST GUARD" and transmitted directly to one of the U.S. Government radio stations listed in Chapter 3, Section 300L, Radio Navigational Aids (CDPUBRA117). Recommendations and requests for aids to navigation and to report aids to navigation that are no longer needed should be mailed to the Coast Guard district concerned.

REF964

Reference: The American Practical Navigator, Bowditch. 2002 Edition, Page 75. "When lighted, a cardinal mark exhibits a white light; its characteristics are based on a group of quick or very quick flashes which distinguish it as a cardinal mark and indicate its quadrant."

REF965

Characteristic: The audible, visual, or electronic signal displayed by an aid to navigation to assist in the identification of an aid to navigation. Characteristic refers to lights, sound signals, racons, radiobeacons, and daybeacons.

REF966

Reference: Bowditch: The American Practical Navigator "A special mark may be used to indicate a special area or feature which is apparent by referring to a chart, sailing directions, or notice to mariners." The light when used must be yellow and may show any phase characteristic except those used for the white lights of cardinal, isolated danger, and safe watermarks.

REF967

Generally, lateral aids to navigation indicate on which side of a vessel an aid to navigation should be passed when the vessel is proceeding in the conventional direction of buoyage. Normally, the conventional direction of buoyage is the direction in which a vessel enters navigable channels from seaward and proceeds towards the head of navigation. In the absence of a route leading from seaward, the conventional direction of buoyage generally follows a clockwise direction around land masses. For example, proceeding southerly along the Atlantic Coast, from Florida to Texas along the Gulf Coast, and northerly along the Pacific Coast are considered as proceeding in the conventional direction of buoyage. In some instances, this direction must be arbitrarily assigned. Where doubt exists, the mariner should consult charts and other nautical publications. Virtually all U.S. lateral marks are located in IALA Region B and follow the traditional 3R rule of red, right, returning. A summary of the port and starboard hand lateral mark characteristics is contained in the following table.

Characteristic	Port Hand	Starboard
Color	Green	
Shape (buoys)	Cylindrical (can) or pillar	Conical (nun) or pillar
Dayboard	Green square	Red triangle
Topmark (if fitted)	Cylinder	Cone, point up
Light Color (if fitted)	Green	Red
Reflector Color	Green	Red
Number	Odd	Even

U.S. lateral aids to navigation at certain Pacific Islands are located within IALA Region A and thus exhibit opposite color significance. Port hand marks are red with square or cylindrical shapes while starboard hand marks are green with triangular or conical shapes. Information and regulatory marks are used to alert the mariner to various warnings or regulatory matters. These marks have orange geometric shapes against a white background. The meanings associated with the orange shapes are as follows: 1. An open-faced diamond signifies danger. 2. A vertical diamond shape having a cross centered within indicates that vessels are excluded from the marked area. 3. A circular shape indicates that certain operating restrictions are in effect within the marked area.

REF968

MR: Octagonal dayboard bearing stripes of white and red, with a white reflective border.

REF969

NB: Diamond-shaped dayboard divided into four diamond shaped colored sectors with the sectors at the side corners white and the sectors at the top and bottom corners black, with a white reflective border.

REF970

Special marks are not primarily intended to assist safe navigation, but to indicate special areas or features referred to on charts or in other nautical publications. The feature should be described in a nautical document such as a chart, Light List, Coast Pilot or Notice to Mariner. Some areas that may be marked by these aids to navigation are spoil areas, pipelines, traffic separation schemes, jetties, or military exercise areas. Special marks are yellow in color and, if lighted, display a yellow light.

REF971

TR-SY: Triangular red dayboard with a red reflective border and a yellow reflective square.

REF972

Intracoastal Waterway aids to navigation: The Intracoastal Waterway runs parallel to the Atlantic and Gulf coasts from Manasquan Inlet, New Jersey to the Mexican border. Aids to navigation marking these waters have some portion of them marked with yellow. Otherwise, the coloring and numbering of the aids to navigation follow the same system as that in other U.S. waterways. In order that vessels may readily follow the Intracoastal Waterway route, special markings are employed. These marks consist of a yellow square and yellow triangle and indicate which side the aid to navigation should be passed when following the conventional direction of buoyage. The yellow square indicates that the aid to navigation should be kept on the left side and the yellow triangle indicates that the aid to navigation should be kept on the right side. A yellow horizontal band provides no lateral information, but simply identifies aids as marking the Intracoastal Waterway. Aids to Navigation marking the Intracoastal Waterway (ICW) display unique yellow symbols to distinguish them from aids marking other waters. Yellow triangles indicate aids should be passed by keeping them on the starboard (right) hand of the vessel. Yellow squares indicate aids should be passed by keeping them on the port (left) hand of the vessel. A yellow horizontal band provides no lateral information, but simply identifies aids as marking the ICW.

REF973

Intracoastal Waterway aids to navigation: The Intracoastal Waterway runs parallel to the Atlantic and Gulf coasts from Manasquan Inlet, New Jersey to the Mexican border. Aids to navigation marking these waters have some portion of them marked with yellow. Otherwise, the coloring and numbering of the aids to navigation follow the same system as that in other U.S. waterways. In order that vessels may readily follow the Intracoastal Waterway route, special markings are employed. These marks consist of a yellow square and yellow triangle and indicate which side the aid to navigation should be passed when following the conventional direction of buoyage. The yellow square indicates that the aid to navigation should be kept on the left side and the yellow triangle indicates that the aid to navigation should be kept on the right side. A yellow horizontal band provides no lateral information, but simply identifies aids as marking the Intracoastal Waterway.

REF974

Geographic Range: The greatest distance the curvature of the earth permits an object of a given height to be seen from a particular height of eye without regard to luminous intensity or visibility conditions. Luminous Range: The greatest distance a light can be expected to be seen given its nominal range and the prevailing meteorological visibility.

REF975

Geographic Range: The greatest distance the curvature of the earth permits an object of a given height to be seen from a particular height of eye without regard to luminous intensity or visibility conditions.

REF976

Geographic Range: The greatest distance the curvature of the earth permits an object of a given height to be seen from a particular height of eye without regard to luminous intensity or visibility conditions. Luminous Range: The greatest distance a light can be expected to be seen given its nominal range and the prevailing meteorological visibility.

REF977

Sectors of colored glass are placed in the lanterns of some lights in order to produce a system of light sectors of different colors. In general, red sectors are used to mark shoals or to warn the mariner of other obstructions to navigation or of nearby land. Such lights provide approximate bearing information, since observers may note the change of color as they cross the boundary between sectors. These boundaries are indicated in the Light List (Col. 8) and by dotted lines on charts. These bearings, as all bearings referring to lights, are given in true degrees from 000° to 359°, as observed from a vessel toward the light. Altering course on the changing sectors of a light or using the boundaries between light sectors to determine the bearing for any purpose is not recommended. Be guided instead by the correct compass bearing to the light and do not rely on being able to accurately observe the point at which the color changes. This is difficult to determine because the edges of a colored sector cannot be cut off sharply. On either side of the line of demarcation between white, red, or green sectors, there is always a small arc of uncertain color. Moreover, when haze or smoke are present in the intervening atmosphere, a white sector might have a reddish hue. The area in which a light can be observed is normally an arc with the light as the center and the range of visibility as the radius. However, on some bearings, the range may be reduced by obstructions. In such cases, the obstructed arc might differ with height of eye and distance. When adjoining land cuts off a light and the arc of visibility is given, the bearing on which the light disappears may vary with the distance of the vessel from which observed and with the height of eye. When the light is cut off by a sloping hill or point of land, the light may be seen over a wider arc by a vessel farther away than by one closer to the light. The arc drawn on charts around a light is not intended to give information as to the distance at which it can be seen, but solely to indicate, in the case of lights, which do not show equally in all directions, the bearings between which the variation of visibility or obstruction of the light occurs.

REF978

Period: The interval of time between the commencement of two identical successive cycles of the characteristic of the light or sound signal.

REF979

LIGHT COLORS Only aids to navigation with green or red lights have lateral significance. When proceeding in the conventional direction of buoyage, the mariner in IALA Region B, may see the following lighted aids to navigation: Green lights on aids to navigation mark port sides of channels and locations of wrecks or obstructions that must be passed by keeping these lighted aids to navigation on the port hand of a vessel. Green lights are also used on preferred channel marks where the preferred channel is to starboard (i.e., aid to navigation left to port when proceeding in the conventional direction of buoyage). Red lights on aids to navigation mark starboard sides of channels and locations of wrecks or obstructions that must be passed by keeping these lighted aids to navigation on the starboard hand of a vessel. Red lights are also used on preferred channel marks where the preferred channel is to port (i.e., aid to navigation left to starboard when proceeding in the conventional direction of buoyage). White and yellow lights have no lateral significance. The shapes, colors, letters, and light rhythms may determine the purpose of aids to navigation exhibiting white or yellow lights. Most aids to navigation are fitted with retro reflective material to increase their visibility in darkness. Red or green retro reflective material is used on lateral aids to navigation that, if lighted, will display lights of the same color.

REF980

Luminous Range: The greatest distance a light can be expected to be seen given its nominal range and the prevailing meteorological visibility. Meteorological visibility: The greatest distance at which a black object of suitable dimension could be seen and recognized against the horizon sky by day, or, in the case of night observations, could be seen and recognized if the general illumination were raised to the normal daylight level. Nominal range: The maximum distance a

light can be seen in clear weather (meteorological visibility of 10 nautical miles) . Listed for all lighted aids to navigation except range lights, directional lights, and private aids to navigation.

REF981

Luminous Range: The greatest distance a light can be expected to be seen given its nominal range and the prevailing meteorological visibility.

REF982

When first sighting a light, an observer can determine if it is on the horizon by immediately reducing his height of eye. If the light disappears and then reappears when the observer returns to his original height, the light is on the horizon. This process is called bobbing a light. If a vessel has considerable vertical motion due to rough seas, a light sighted on the horizon may alternately appear and disappear. Wave tops may also obstruct the light periodically. This may cause the characteristic to appear different than expected. The light's true characteristics can be ascertained either by closing the range to the light or by increasing the observer's height of eye.

REF983

Luminous Range: The greatest distance a light can be expected to be seen given its nominal range and the prevailing meteorological visibility. Meteorological visibility: The greatest distance at which a black object of suitable dimension could be seen and recognized against the horizon sky by day, or, in the case of night observations, could be seen and recognized if the general illumination were raised to the normal daylight level. Nominal range: The maximum distance a light can be seen in clear weather (meteorological visibility of 10 nautical miles) . Listed for all lighted aids to navigation except range lights, directional lights, and private aids to navigation.

REF984

33 cfr part 207.300 Ohio River, Mississippi River above Cairo, Ill., and their tributaries; use, administration, and navigation.

REF985

Geographic Range: The greatest distance the curvature of the earth permits an object of a given height to be seen from a particular height of eye without regard to luminous intensity or visibility conditions. Luminous Range: The greatest distance a light can be expected to be seen given its nominal range and the prevailing meteorological visibility. The nominal range is the maximum distance at which a light can be seen in clear weather as defined by the International Visibility Code (meteorological visibility of 10 nautical miles).