



Navigation General

Inland Navigation

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The diagram 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, WESTERNRIVSYS

The illustration 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

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

Two green lights

Illustrations: D036NG_WM_012914, WESTERNRIVSYS

In the U.S. Aids to Navigation System on the Western Rivers, a preferred channel buoy to be left to port while proceeding downstream will.

have the upper band red

show a red light if lighted

have a characteristic of composite group flashing if lighted

All of the above

Illustrations: WESTERNRIVSYS

Under the U.S. Aids to Navigation System on the Western Rivers, a daymark on the right descending bank will.

be green

Illustrations: WESTERNRIVSYS

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

Two green lights

Illustrations: D036NG_WM_012914, WESTERNRIVSYS

In addition to monitoring channel 16, all Corps of Engineer locks may use as working channels .
12, 13 and 14

Illustrations: WESTERNRIVSYS

You are downbound approaching a lock and see 3 green lights in a vertical line. This indicates .
the upstream end of the river wall

Illustrations: WESTERNRIVSYS

The place where a channel moves from along one bank of the river over to the other bank of the river is called a
_____.
crossing

Illustrations: WESTERNRIVSYS

Where is the pivot point of a towboat with a tow ahead?
One-third the length of the combined unit back from the head

Illustrations: WESTERNRIVSYS

Under the U.S. Aids to Navigation System on the Western Rivers, the buoys marking the starboard side of the channel when going upstream will be .
red

Illustrations: WESTERNRIVSYS

Under the U.S. Aids to Navigation System on the Western Rivers, a preferred-channel buoy is .
horizontally-banded red and green

Illustrations: WESTERNRIVSYS

In order to utilize the capacity of a lock to its maximum, pleasure craft are locked through with all of the following EXCEPT.
oil barges

Illustrations: WESTERNRIVSYS

You are downbound on the Ohio River locking through Greenup. The chamber has been emptied and the lower gates are open. You hear one short blast of the whistle from the lock. You should .
leave the lock

Illustrations: WESTERNRIVSYS

What term is used to describe a river barge designed to carry coal or any similar cargo not requiring weather protection?
Open hopper

Illustrations: WESTERNRIVSYS

You are pushing a tow ahead and passing close to another towboat which is pushing ahead in the same direction (you are overtaking). After the towheads pass close alongside _____.
the tows will tend to drift together

Illustrations: WESTERNRIVSYS

Who should be consulted for changing conditions of controlling depths in major channels?

U.S. Army Corps of Engineers

Illustrations: WESTERNRIVSYS

Under the U.S. Aids to Navigation System on the Western Rivers, passing daymarks on the left descending bank are **red triangles**

Illustrations: WESTERNRIVSYS

The diagram 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, WESTERNRIVSYS

Information about major breakdowns, repairs, or other emergency operations with regard to weirs and (or) wicket dams, on the western rivers, may be obtained by consulting the.

Broadcast Notice to Mariners

Illustrations: WESTERNRIVSYS

You are holding position above Gallipolis Lock and Dam when you hear two long blasts of the horn from the lock. This indicates that you should.

enter the riverward lock

Illustrations: WESTERNRIVSYS

What term is used to describe a tank barge constructed with the structural framing inside the cargo tank and the side shell plating containing the cargo?

Single hull

Illustrations: WESTERNRIVSYS

You are pushing a tow ahead, at high speed, near the right hand bank of a canal. The forces affecting your towboat and tow will tend to _____.

push the head of the tow away from, and pull the stern of the towboat into, the right hand bank

Illustrations: WESTERNRIVSYS

All aids to navigation listed in the Mississippi River System Light List are shown as miles from a reference point and on the.

left or right descending bank

Illustrations: WESTERNRIVSYS

Under the U.S. Aids to Navigation System on the Western Rivers, passing daymarks on the right descending bank are **green square-shaped panels with green reflector borders**

Illustrations: WESTERNRIVSYS

Information about temporary, short term changes affecting the safety of navigation in U.S. waters is distributed to navigational interests by the .

Local Notice to Mariners

Illustrations: WESTERNRIVSYS

You are upbound approaching a lock and dam and see two green lights in a vertical line. This indicates .
the downstream end of an intermediate wall

Illustrations: WESTERNRIVSYS

What term is used to describe a tank barge constructed with the structural framing outside the cargo tank and the cargo tank plating separated from the shell plating?

Double hull

Illustrations: WESTERNRIVSYS

On the Mississippi and Ohio Rivers, there is a special type of fog known as steam fog. It is caused by .
cold air passing over much warmer water

Illustrations: WESTERNRIVSYS

How is a navigation light identified on an Army Corps of Engineers navigation map?

Name and miles from a reference point

Illustrations: WESTERNRIVSYS

While proceeding downriver (descending) you sight a red diamond-shaped panel with small, red reflector squares in each corner on the left bank. Under the U.S. Aids to Navigation System on the Western Rivers this is a .

crossing daymark

Illustrations: WESTERNRIVSYS

The illustration 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, WESTERNRIVSYS

Permission to leave the riverward chamber of twin locks is given by the lockmaster and consists of which sound signal?

Two short blasts

Illustrations: WESTERNRIVSYS

A bluff bar is a bar _____.

that has a sharp drop off into deep water

Illustrations: WESTERNRIVSYS

You are ascending a river and exchanging navigational information via radiotelephone with a descending vessel. If the descending vessel advises you to "watch for the set" above point X, what would you expect to encounter above point X?

A sideways movement of your vessel

Illustrations: WESTERNRIVSYS

Steam fog is most likely to occur on the Mississippi and Ohio Rivers in.

fall, around early morning

Illustrations: WESTERNRIVSYS

In which source could you find the vertical clearance of a bridge on the Ohio River?

Light List of the Mississippi River System

Illustrations: WESTERNRIVSYS

While proceeding downriver, you sight a red triangular-shaped daymark on the left bank. Under the U.S. Aids to Navigation System on the Western Rivers this is a.

passing daymark

Illustrations: WESTERNRIVSYS

Restricted areas at locks and dams are indicated by .

signs and/or flashing red lights

Illustrations: WESTERNRIVSYS

A bold reef is a reef _____.

that can be detected by water turbulence

Illustrations: WESTERNRIVSYS

A towboat has the same draft as the barges it is pushing ahead. If the distance from the stern of the towboat to the head of the tow is 800 feet, where is the approximate location of the pivot point of the unit?

250 feet from the head of the tow

Illustrations: WESTERNRIVSYS

While passing through Memphis, the weather report on the TV news indicates that a cold front is crossing western Kentucky and Tennessee. Tomorrow's weather will be dominated by a high pressure area. What weather should you expect tomorrow?

Moderate winds from the northwest, clear visibility and cooler temperatures

Illustrations: WESTERNRIVSYS

Navigation charts of the Upper Mississippi River are published by.

Corps of Engineers, U.S. Army

Illustrations: WESTERNRIVSYS

At McAlpine L & D, normal upper pool elevation is 420.0 feet (130.8 meters) MSL, equal to 12.0 feet (3.7 meters) on the upper gage. The vertical clearance at the Clark Memorial Highway bridge is 72.6 feet (22.1 meters) above normal pool. What is the clearance if the gage reads 10.6 feet (3.2 meters)?

74.0 feet (22.6 meters)

Illustrations: WESTERNRIVSYS

The illustration 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, WESTERNRIVSYS

The dumping of refuse in a lock is permitted .

at no time

Illustrations: WESTERNRIVSYS

A section of the river that is narrower than usual and is often navigable from bank to bank is a _____.
chute

Illustrations: WESTERNRIVSYS

A towboat is pushing barges ahead at a dangerously fast speed when _____.
water comes over the foredeck of the lead barges

Illustrations: WESTERNRIVSYS

While upbound through Memphis, the weather report on the TV news indicates that a cold front will cross western Kentucky and Tennessee the next morning. What weather should accompany this front?
Gusting winds shifting to the northwest with thunderstorms

Illustrations: WESTERNRIVSYS

On an Army Corps of Engineers navigation map, each mile A.H.P. on the Lower Mississippi River is marked by a.
black dot

Illustrations: WESTERNRIVSYS

At McAlpine L & D, normal upper pool elevation is 420.0 feet MSL, equal to 12.0 feet on the upper gage. The vertical clearance at the Clark Memorial Highway bridge is 72.6 feet above normal pool. What is the clearance if the gage reads 27.2 feet?
57.4 feet

Illustrations: WESTERNRIVSYS

The following boats are approaching a lock. Which has priority for locking?
Corps of Engineer towboat running empty-headed

Illustrations: WESTERNRIVSYS

A backlash below a lock is defined as a _____.
an eddy working along the lower guide wall

Illustrations: WESTERNRIVSYS

The lockmaster has given you permission to tie off on the lower guide wall to wait your turn to lock through. What should you be most concerned with?
Current reaction when the lock chamber is being emptied

Illustrations: WESTERNRIVSYS

While upbound through Memphis, the weather report on TV news indicates that a warm front is stationary over the Kentucky - Missouri - Tennessee areas. What weather conditions should you expect?
Southerly winds with steady rain; fog or overcast

Illustrations: WESTERNRIVSYS

On the Corps of Engineer's Navigation Maps, the channel is .
indicated by a broken line

Illustrations: WESTERNRIVSYS

Normal pool elevation is the height in feet of the section of river above a dam. This height is measured from.
mean sea level

Illustrations: WESTERNRIVSYS

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One red light

Illustrations: D037NG_WM_090418, WESTERNRIVSYS

The following types of vessels are awaiting lockage on the upper Mississippi. Which type of vessel is normally passed through the lock first?
Commercial passenger vessels

Illustrations: WESTERNRIVSYS

A current moving across a lock entrance toward the river or toward the dam is called a(n) _____.
outdraft

Illustrations: WESTERNRIVSYS

The proper way to approach a downstream lock where there is an outdraft is to be _____.
close in to the land wall, keeping the stern in at all times

Illustrations: WESTERNRIVSYS

The Light List shows a lighted aid to navigation on the left bank. This means that the light can be seen on the port side of a vessel.
descending the river

Illustrations: WESTERNRIVSYS

On the Mississippi River, gage zero is the gage reading measured from the.
National Geodetic Vertical Datum

Illustrations: WESTERNRIVSYS

The lock chamber is 600 feet X 110 feet. Your towboat is 150 feet X 35 feet. Which of these tows will require a double lockage?
9 jumbo barges

Illustrations: WESTERNRIVSYS

A deadhead is a(n) _____.
tree or log awash in a nearly vertical position

Illustrations: WESTERNRIVSYS

What is most likely to happen when you push a multiple tow into a countercurrent?
There is a risk you may lose control.

Illustrations: WESTERNRIVSYS

The Light List shows a lighted aid to navigation on the left bank. This means that the light can be seen on the starboard side of a vessel.

ascending the river

Illustrations: WESTERNRIVSYS

In the U.S. Aids to Navigation System on the Western Rivers, the light characteristic of group flashing (2) is used for lights on.

the left descending bank

Illustrations: WESTERNRIVSYS

This diagram 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, WESTERNRIVSYS

When approaching a lock and at a distance of not more than a mile, vessels desiring a single lockage shall sound which signal?

One long blast followed by one short blast

Illustrations: WESTERNRIVSYS

A rock and sand structure extending from the bank of the river toward the channel is known as a _____.

wingdam

Illustrations: WESTERNRIVSYS

What is used to help prevent damage to barges, locks, and landings when you are locking or landing a tow?

Possums (fenders)

Illustrations: WESTERNRIVSYS

The Light List shows a lighted aid to navigation on the right bank. This means that the light can be seen on the port side of a vessel.

ascending the river

Illustrations: WESTERNRIVSYS

The light characteristic of composite group flashing (2 + 1) is used in the Aids to Navigation System on the Western Rivers for lights on.

preferred-channel buoys

Illustrations: WESTERNRIVSYS

A flashing green light displayed at a single lock means that the lock is.

ready for entrance

Illustrations: WESTERNRIVSYS

When approaching a lock entrance, the visual signal displayed when a single lock is ready for entrance is a flashing.

green light

Illustrations: WESTERNRIVSYS

A structure, usually made of stone, or cement pilings, which extends from the bank at approximately right angles to the current is called a _____.

dike

Illustrations: WESTERNRIVSYS

When attempting an upstream landing while pushing empty barges ahead in a hard onshore wind, the approach is best made _____.

with bow out, stern in

Illustrations: WESTERNRIVSYS

The Light List shows a lighted aid to navigation on the right bank. This means that the light can be seen on the starboard side of a vessel.

descending the river

Illustrations: WESTERNRIVSYS

The light characteristic of flashing is used in the Aids to Navigation System on the Western Rivers for lights on .
the right descending bank

Illustrations: WESTERNRIVSYS

A flashing red light displayed at a single lock means that the lock.
cannot be made ready immediately and vessels shall stand clear

Illustrations: WESTERNRIVSYS

Which light signal indicates that you have permission to enter a lock on the Ohio River?

Flashing green

Illustrations: WESTERNRIVSYS

A tow that is properly aligned to pass through a narrow opening between two bridge piers is "_____
in shape

Illustrations: WESTERNRIVSYS

When one upbound vessel is overtaking another vessel and both are pushing a tow ahead, what reaction may you expect?

Both towheads will tend to drift apart, and the overtaken vessel will be slowed down.

Illustrations: WESTERNRIVSYS

What is NOT found in the Mississippi River System Light List?

Distance that a lighted aid to navigation can be seen at night

Illustrations: WESTERNRIVSYS

Under the U.S. Aids to Navigation System used on the Western Rivers, aids to navigation lights on the right descending bank show.

white or green lights

Illustrations: WESTERNRIVSYS

All persons or vessels within the lock area, including the lock approach channels, come under the authority of the **lockmaster**

Illustrations: WESTERNRIVSYS

Which light signal indicates that you may approach the lock?

Flashing amber

Illustrations: WESTERNRIVSYS

The "head of the bend" is the _____.

top or upstream beginning of a bend

Illustrations: WESTERNRIVSYS

When pushing a tow and approaching barges tied off to the shore, you should _____.

decrease speed while passing so you won't create a suction

Illustrations: WESTERNRIVSYS

What volume of the Coast Guard Light List is used for the Mississippi River system?

V

Illustrations: WESTERNRIVSYS

What lights would you see on the Illinois water way when any wickets of the dam or bear traps are open, or partially open, which may cause a set in the current conditions in the upper lock approach?

Red over amber (yellow)

Illustrations: WESTERNRIVSYS

Descending boats, while awaiting their turn to enter a lock, shall NOT block traffic from the lock. They shall be above the lock by at LEAST.

400 feet

Illustrations: WESTERNRIVSYS

You are approaching a lock and see a flashing amber light located on the lock wall. You should .

approach the lock under full control

Illustrations: WESTERNRIVSYS

The abbreviation L.W.R.P. on the navigation maps means _____.

low water reference plane

Illustrations: WESTERNRIVSYS

When pushing barges ahead close to a steep revetment where there is no current, what is MOST likely to occur?

The head of the tow will tend to sheer away from the revetment.

Illustrations: WESTERNRIVSYS

If your vessel were proceeding up river (ascending), the port side of the channel would be marked according to the U. S. Aids to Navigation System on the Western Rivers by.

green can buoys

Illustrations: WESTERNRIVSYS

If your vessel were proceeding down river (descending), a green square marker with a green reflector border on the right bank would be a .

passing daymark

Illustrations: WESTERNRIVSYS

If a towboat requires a double lockage it shall give which sound signal at a distance of not more than one mile from the lock?

One long blast followed by two short blasts

Illustrations: WESTERNRIVSYS

You are approaching Gallipolis Lock and Dam. The traffic signal light is flashing red. You should .

hold your position and not attempt to enter the lock

Illustrations: WESTERNRIVSYS

The controlling depth of the river is _____.

the least available water in a channel which limits the draft of boats and tows

Illustrations: WESTERNRIVSYS

When steering a tow downstream around the shape of a sand bar, and staying on the proper side of the buoys, an operator should be cautious of _____.

eddies below the bar

Illustrations: WESTERNRIVSYS

You are approaching a swing bridge at night, what will indicate that the bridge is open for river traffic?

three green lights

A vessel crossing a river on the Western Rivers, must keep out of the way of a power-driven vessel _____.

ascending the river with a tow

ascending the river without a tow

descending the river with a tow

All of the above.

You are approaching a vertical lift bridge. You know the span is fully open when.

there is a range of green lights under the lift span

A vessel is proceeding downstream in a narrow channel on the Western Rivers when another vessel is sighted moving upstream. Which vessel has the right of way?

The vessel moving downstream with a following current

You are approaching an open drawbridge and sound the proper signal. You receive no acknowledgment from the bridge. Which action should you take?

Approach with caution and proceed through the open draw.

On the Western Rivers, a vessel crossing a river must _____.

keep out of the way of a power-driven vessel ascending or descending the river

Clearance gauges at bridges indicate.

distance from the water to low steel of the bridge

Vessels regularly navigating Ohio and Mississippi rivers above Cairo, Illinois, and their tributaries, shall at all times have on board a copy of _____.

U.S. Army Corps of Engineers Navigation Regulations (Blue Book)

A bridge over a navigable waterway is being repaired. There is a traveler platform under the bridge's deck that significantly reduces the vertical clearance. If required by the CG district commander, how will this be indicated at night?

A quick flashing red light at each lower corner

Drawbridges equipped with radiotelephones display a .

blue and white sign showing the radio's channels

Which instrument may a towing vessel, engaged in towing exclusively on the Western Rivers, use in place of a magnetic compass?

Illuminated Swing Meter

If the main channel under a bridge is marked with lights of the lateral system the adjacent bridge piers should be marked with.

fixed yellow lights

A drawbridge may use visual signals to acknowledge a vessel's request to open the draw. Which signal indicates that the draw will NOT be opened immediately?

A fixed red light

Which is TRUE of a downbound power-driven vessel, when meeting an upbound vessel on the Western Rivers?

She shall initiate the maneuvering signals.

She has the right of way.

She shall propose the manner of passage.

All of the above.

In which publication could you find information concerning the minimum lighting required for bridges on U.S. waters?

Code of Federal Regulations

If your vessel must pass through a draw during a scheduled closure period, what signal should you sound to request the opening of the draw?

Five short blasts

Which is TRUE on the Western Rivers when a vessel downbound with a following current is meeting an upbound vessel?

She has the right of way only if she is a power-driven vessel.

The channel under a bridge is marked with aids from the lateral system. The centerline of the channel is marked on the bridge with.

a red-and-white octagon

You are approaching a drawbridge and have sounded the proper whistle signal requesting it to open. You hear a signal of one prolonged and one short blast from the bridge. Which action should you take?

Approach under full control to pass through the bridge.

You are in charge of a power-driven vessel crossing a river on the Western Rivers. You must keep out of the way of _____.

- a sail vessel descending the river*
- a power-driven vessel ascending the river*
- a vessel restricted in its ability to maneuver crossing the river*
- All of the above.*

The channel under a bridge is marked with lights of the lateral system. The centerline of the channel shall be marked on the bridge by.

- an occulting white light*

You are approaching a drawbridge and have sounded the request-for-opening signal. The bridge has responded with five short blasts. How would you respond?

- Any of these signals is considered a valid response*

Your ship is returning to New Orleans from a foreign voyage and carrying a bulk cargo of anhydrous ammonia. You must notify the Captain of the Port, New Orleans, _____.

- At least 96 hours before entering port*

The draw span of a floating drawbridge may be marked with.

- a yellow light showing Morse Code (B)*

You are approaching a drawbridge and must pass through during a scheduled closure period. What signal should you sound?

- Five short blasts*

A facility used for the discharge of a cargo of a particular hazard, such as chlorine, butane or ethane, must have what to warn water traffic of an immediate danger during fire or cargo release?

- A siren or rotating flashing light*

The draw span of a floating drawbridge may be marked with.

- a yellow diamond*

You are approaching the first of two drawbridges that span a narrow channel. The second drawbridge is close to the first. Which signals should you sound?

- Sound the request-for-opening signal and, after the bridge acknowledges it, sound the request-for-opening signal for the second bridge.*

A facility used for the discharge of a cargo of a particular hazard, such as chlorine, butane or ethane, must have what to warn water traffic of an immediate danger during fire or cargo release?

- A siren or rotating flashing light*

The white lights in a vertical line on a multiple-span bridge indicate.

- the main channel*

The term "Western Rivers," when it refers to regulations requiring towing vessels to carry navigational-safety equipment, charts or maps, and publications, includes the _____.

- Port Allen - Morgan City Alternate Route*
- Mississippi River and its tributaries*
- Red River and the Old River*
- All of the above.*

You are in a channel in U.S. waters near an industrial plant with a load/discharge facility for barges. You hear a siren being sounded at the facility. What does this indicate?

- There is danger at the facility due to a fire or cargo release.*

When displayed under a single-span fixed bridge, red lights indicate.
the channel boundaries

The navigation regulations applicable to a U.S. inland waterway can be found in the.
Coast Pilots

You are in a channel in U.S. waters near an industrial plant with a load/discharge facility for barges. You hear a siren being sounded at the facility. What does this indicate?
There is danger at the facility due to a fire or cargo release.

When the navigational channel passes under a fixed bridge, the edges of the channel are marked on the bridge with what lights?
Red lights

On which route is a towing vessel over 39.4 feet in length NOT required to carry an echo-sounding device?
Western Rivers

You are in a channel in U.S. waters near an industrial plant with a load/discharge facility for barges. You see an emergency rotating flashing light on the facility light up. What does this indicate?
There is danger at the facility due to a fire or cargo release.

Which light combination does NOT indicate a navigational channel passing under a fixed bridge?
Red lights on the LDB and green lights on the RDB

A power-driven vessel operating in a narrow channel with a following current, on the Western Rivers, is meeting an upbound vessel. Which statement is TRUE?
The downbound vessel must initiate the required maneuvering signals.
The downbound vessel has the right-of-way.
The downbound vessel must propose the manner and place of passage.
All of the above.

You are in a channel in U.S. waters near an industrial plant with a load/discharge facility for barges. You see an emergency rotating flashing light on the facility light up. What does this indicate?
There is danger at the facility due to a fire or cargo release.

You are approaching a multiple-span bridge at night. The main navigational channel span will be indicated by .
3 white lights in a vertical line in the center of the span

A vessel crossing a river on the Western Rivers has the right of way over _____.
vessels descending the river
all vessels ascending and descending the river
vessels ascending the river
None of the above