
Q152 - Navigation General: Oceans or Near Coastal

1. On 15 October 2023, you will be docking on the Southern Branch Elizabeth River, VA at the second low tide. The berth is located between NOAA reference tidal station #8638660 and reference station #8639348. What time (LST) will you be docking

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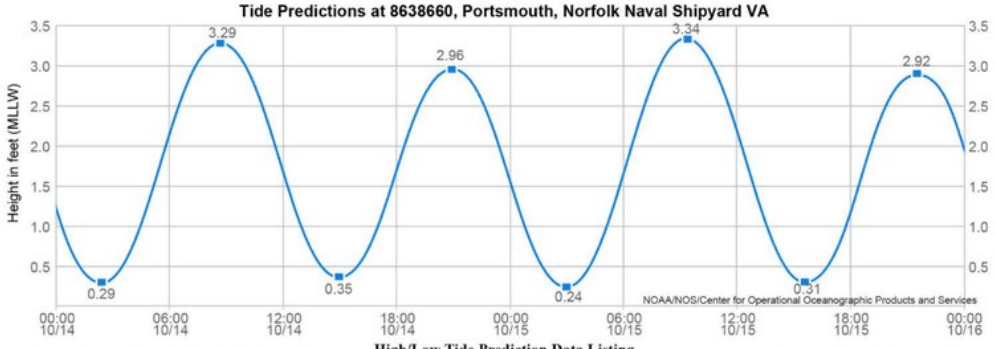
NOAA/NOS/CO-OPS
Tide Predictions at 8638660, Portsmouth, Norfolk Naval Shipyard VA



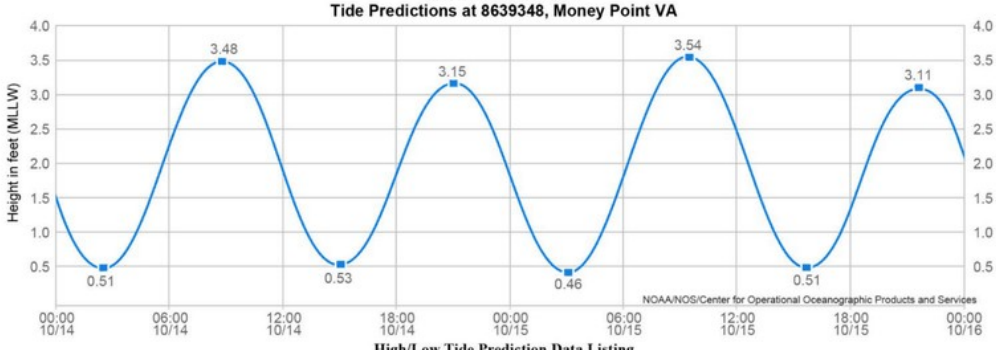
High/Low Tide Prediction Data Listing

Station Name: Portsmouth, Norfolk Naval Shipyard, VA
Action: Daily
Product: Tide Predictions
Start Date & Time: 2023/10/14 00:00
End Date & Time: 2023/10/15 23:59

Source: NOAA/NOS/CO-OPS
Prediction Type: Harmonic
Datum: MLLW
Height Units: Feet
Time Zone: LST

Date	Day	Time	Hgt	Time	Hgt	Time	Hgt	Time	Hgt
2023/10/14	Sat	02:25	0.29 L	08:40	3.29 H	14:58	0.35 L	20:53	2.96 H
2023/10/15	Sun	03:00	0.24 L	09:17	3.34 H	15:37	0.31 L	21:32	2.92 H

NOAA/NOS/CO-OPS
Tide Predictions at 8639348, Money Point VA



High/Low Tide Prediction Data Listing

Station Name: Money Point, VA
Action: Daily
Product: Tide Predictions
Start Date & Time: 2023/10/14 00:00
End Date & Time: 2023/10/15 23:59

Source: NOAA/NOS/CO-OPS
Prediction Type: Harmonic
Datum: MLLW
Height Units: Feet
Time Zone: LST

Date	Day	Time	Hgt	Time	Hgt	Time	Hgt	Time	Hgt
2023/10/14	Sat	02:25	0.51 L	08:48	3.48 H	15:00	0.53 L	21:02	3.15 H
2023/10/15	Sun	03:01	0.46 L	09:25	3.54 H	15:40	0.51 L	21:40	3.11 H

Note: The interval is High/Low, the solid blue line depicts a curve fit between the high and low values and approximates the segments between.
Disclaimer: These data are based upon the latest information available as of the date of your request, and may differ from the published tide tables.

- 1537
- **1539**
- 1540
- 1459

Note:
The docking time is determined by averaging the second low tide times from the two reference stations. Station 8638660 has a low tide at 1537 LST, while station 8639348 has a low tide at 1540 LST. Averaging these times results in a docking time of 1539 LST.

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2. A magnetic compass card is marked in how many degrees?

- 90
- 180
- **360**
- 400

Note:
A magnetic compass card represents a full circle, which is measured in 360 degrees. Therefore, the correct answer is 360.

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3. The heading of a vessel is indicated by what part of the compass?

- Needle
- Card
- **Lubber's line**
- Gimbals

Note:
The heading is determined by the alignment of the compass card with the fixed lubber's line, which is aligned with the vessel's fore-and-aft line. The lubber's line serves as a fixed reference point, while the compass card rotates to indicate direction; the needle or sensing element aligns the card, and the gimbals maintain the compass's level.

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4. What does the lubber's line on a magnetic compass indicate?

- **The vessel's compass heading**
- Compass north
- Magnetic north
- A relative bearing taken with an azimuth circle

Note:
The lubber's line is a fixed reference mark on a magnetic compass that indicates the vessel's compass heading, aligning with the ship's centerline and showing the direction the bow is pointing on the compass card.

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5. A vessel heading NNW is on a course of _____.

- 274.5°
- 292.0°
- 315.5°
- **337.5°**

Note:
A vessel heading NNW has a course of 337.5. This is because NNW lies 22.5 west of true north on a standard 16-point compass rose, calculated as 360 - 22.5.

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6. A vessel heading NE is on which course?

- 022.5°
- **045.0°**
- 067.5°
- 090.0°

Note:
Northeast corresponds to a course of 045.0 because it lies exactly halfway between North (000) and East (090) on a 360 compass.

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7. A vessel heading WSW is on a course of _____.

- 202.5°
- 225.0°
- **247.5°**
- 271.0°

Note:
WSW lies between southwest (225) and west (270), resulting in a true bearing of 247.5.

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8. A vessel heading SSE is on a course of _____.

- 112.5°
- 135.0°
- **157.5°**
- 180.0°

Note:
SSE lies between SE (135.0) and S (180.0), resulting in a course of 157.5.

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9. Apparent wind speed blowing across a MODU under tow can be measured by a(n) _____.

- **anemometer**
- wind vane
- thermometer
- barometer

Note:
An anemometer measures wind speed, including apparent wind speed on a MODU under tow. Other instruments measure wind direction, temperature, or atmospheric pressure, respectively, and are therefore incorrect.

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10. At 0000 you fix your position and change course to 090°T. At 0030 you again fix your position, and it is 0.5 mile east of your DR. Which statement is TRUE?

- The drift is 0.5 knot.
- **The current is easterly.**
- You should alter course to the right to regain the track line.
- The current is perpendicular to your track line.

Note:
Being east of your DR after steering 090T indicates an easterly current.
