

Crew Course Navigation Exercise 1

Questions

Chartlet bases on 18441. Variation is $17^{\circ} 30' E$, do not correct for the year.

A) You are leaving the north entrance of the Shilshole Marina, it is a warm sunny day, the skipper, tells you to set a course for the Meadow Pt. Buoy because he wants to check out the bikinis on the beach. You draw 6 feet.

What do you think?

B) You are headed to Port Madison for a BBQ and Raft-Up. As you turn around the Meadow Pt. Buoy the Skipper asks you to set a course to about 0.7 nm due True North of Point Monroe. You are turning for 6 kts.

What is your course Magnetic, the distance to the Way Point, and how long will it take to arrive outside Port Madison?

C) The Skipper is thinking about skipping the BBQ and going through Agate Pass and on to his favorite bar in Poulsbo. Your mast height is 60 feet.

What do you think?

D) What is at $47^{\circ} 39.7' N$ $122^{\circ} 30.0' W$?

E) What is the Latitude and Longitude of the Meadow Pt. Buoy?

F) What are the characteristics of the Meadow Pt. Buoy?

G) What are the characteristics of the Pt. Monroe Light?

H) What are the characteristics of the VTS Buoy off West Pt.?

I) You are heading south and you pass close abeam of the Meadow Pt. Buoy. The Skipper asks you to set a course to Elliot Bay Marina as he is suffering withdrawal symptoms and needs a Mushroom Swiss Burger. Your speed is 6 kts.

What is the distance to the entrance of the Marina?

How long will it take to reach the entrance?

J) You are leaving Port Madison and headed home to Lake Union. As you pass 700 yards due True North of Pt. Monroe the Navigator advises you to steer 120° to the Shilshole Entrance Buoy. The boat speed is 6 kts.

What is the distance to the Shilshole Entrance Buoy? How long in transit to the Buoy?

K) For the course in question B above what is the water depth at the center of the VTS (Vessel Traffic System)?

Answers

A) You are leaving the north entrance of the Shilshole Marina, it is a warm sunny day, the skipper, tells you to set a course for the Meadow Pt. Buoy because he wants to check out the bikinis on the beach. You draw 6 feet.

What do you think?

You will have safe water if you hold outside the line from the North Entrance Buoy to the Meadow Pt. Buoy.

However you may need your First Aid skills if the Skipper's significant other is on board.

B) You are headed to Port Madison for a BBQ and Raft-Up. As you turn around the Meadow Pt. Buoy the Skipper asks you to set a course to about 0.7 nm due True North of Point Monroe. You are turning for 6 kts.

What is your course Magnetic, the distance to the Way Point, and how long will it take to arrive outside Port Madison?

272 M (Magnetic)

4.4 nm

44 minutes

C) The Skipper is thinking about skipping the BBQ and going through Agate Pass and on to his favorite bar in Poulsbo. Your mast height is 60 feet.

What do you think?

The bridge clearance at Agate Pass is 75 feet for the middle 300 feet, so you should have acceptable clearance.

HOWEVER: Agate Pass looks narrow so you could have an issue with the speed of the current. (Agate Pass has maximum currents in the range of 6+ kts, so a careful evaluation of the currents to find a safe time to transit the Pass would be prudent.)

D) What is at 47° 39.7' N 122° 30.0' W?

Skiff Pt.

E) What is the Latitude and Longitude of the Meadow Pt. Buoy?

47° 41.8' N 122° 24.6' W

F) What are the characteristics of the Meadow Pt. Buoy?

G "1" Fl G 4s

Green, Number "1," Flashing Green light, 4 second cycle.

G) What are the characteristics of the Pt. Monroe Light?

There is no longer is a light at Pt. Monroe.

H) What are the characteristics of the VTS Buoy off West Pt.?

Y "SG" Fl Y 2.5s RACON (— -)

Yellow Colored, Lettered "SG" (also called SIERRA GOLF) Flashing Yellow Light, 2.5 second cycle, RACON, Long – Short (A RACON is a device that returns a specific signal when swept by a Radar beam, the signal then shows up on the Radar Screen to identify the specific Aid to Navigation.)

I) You are heading south and you pass close abeam of the Meadow Pt. Buoy. The Skipper asks you to set a course to Elliot Bay Marina as he is suffering withdrawal symptoms and needs a Mushroom Swiss Burger. Your speed is 6 kts.

What is the distance to the entrance of the Marina?

Approximately 5.4 nm.

Turn South East at the West Point Buoy and dogleg outside of the wreck west of Four Mile Rock.

How long will it take to reach the entrance?

About 54 minutes. Or round to "About an hour."

J) You are leaving Port Madison and headed home to Lake Union. As you pass 700 yards due True North of Pt. Monroe the Navigator advises you to steer 120° to the Shilshole Entrance Buoy. The boat speed is 6 kts.

What is the distance to the Shilshole Entrance Buoy? How long in transit to the Buoy?

4.2 nm

You will never arrive at the entrance buoy. Your course will take you south of West Point.

What happened? The Navigator probably took the number from the outside of the Compass Rose, in TRUE and not the inner ring that is Magnetic, so the course is off by the Variation for the area (about 17° E)

K) For the course in question B above what is the water depth at the center of the VTS (Vessel Traffic System)?

99 to 108 Fathoms (594 to 648 Feet).

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