

U.S.C.G. Merchant Marine Exam  
Mate Offshore Supply Vessels  
Q213 Chart 12354TR  
(Sample Examination)

Choose the best answer to the following Multiple Choice Questions.

1. The following questions should be answered using Chart 12354TR, Long Island Sound - Eastern Part, and the supporting publications.

Your draft is 12 feet (3.6 meters)  
Your height of eye is 16 feet (4.8 meters)  
Gyro error is 2°W  
Variation is 14°W

"Per standard magnetic compass" is abbreviated "psc"  
"Per gyrocompass" is abbreviated "pgc"

**DEVIATION TABLE**

<b>Magnetic Heading</b>	<b>Deviation</b>
000°	0°
030°	1°W
060°	2°W
090°	4°W
120°	2°W
150°	1°W
180°	1°E
210°	2°E
240°	3°E
270°	3°E
300°	2°E
330°	1°E

You are on course 092°T and the engines are turning for 8 knots.  
At 0452, you take the following bearings:

Stratford Point Light 020°pgc  
Stratford Shoal (Middle Ground) Light 141°pgc

What is your 0452 position?

- (A) LAT 41°05.0'N, LONG 73°07.5'W
- (B) LAT 41°05.0'N, LONG 73°07.3'W
- (C) LAT 41°05.2'N, LONG 73°07.8'W
- (D) LAT 41°04.8'N, LONG 73°07.3'W

*If choice C is selected set score to 1.*

2. If the visibility is 10 miles, what is the earliest time you can expect to see New Haven Light?

- (A) 0508
- (B) 0514
- (C) 0500
- (D) You will not sight the light.

*If choice D is selected set score to 1.*

3. At 0507, Stratford Shoal Middle Ground Light bears 208°pgc. What is the position of your 0507 running fix?

- (A) LAT 41°05.1'N, LONG 73°05.1'W
- (B) LAT 41°04.6'N, LONG 73°04.7'W
- (C) LAT 41°04.8'N, LONG 73°04.9'W
- (D) LAT 41°04.8'N, LONG 73°04.8'W

*If choice A is selected set score to 1.*

4. Based on your running fix, you \_\_\_\_\_.

- (A) have a head current
- (B) are not affected by a current
- (C) are being set to the north
- (D) have a following current

*If choice D is selected set score to 1.*

5. Your 0507 position is about 7 miles from Bridgeport, CT. What is the distance from this position to Newport, RI?

- (A) 88 miles
- (B) 114 miles
- (C) 95 miles
- (D) 101 miles

*If choice A is selected set score to 1.*

6. Your 0530 position is LAT 41°04.9'N, LONG 73°01.1'W. What is the course per standard magnetic compass to a position 1.0 mile south of Twenty Eight Foot Shoal "TE" buoy?

- (A) 082.0°psc
- (B) 092.5°psc
- (C) 096.0°psc
- (D) 099.5°psc

*If choice D is selected set score to 1.*

7. The south shore of Long Island Sound near your position is \_\_\_\_\_.

- (A) low and marshy
- (B) high with numerous cliffs
- (C) fringed with rock shoals
- (D) backed by marshes and wooded uplands

*If choice C is selected set score to 1.*

8. At 0530, you change course to 090°T and increase speed to 8.5 knots. What is the course to steer per gyrocompass if northerly winds are causing 2° of leeway?

- (A) 094°pgc
- (B) 088°pgc
- (C) 092°pgc
- (D) 090°pgc

*If choice D is selected set score to 1.*

9. At 0615, Stratford Point Light bears 292°pgc, Falkner Island Light bears 052°pgc, and Branford Reef Light bears 018°pgc. What was the current since 0530?

- (A) 263° at 0.9 knots
- (B) 083° at 0.9 knots
- (C) 263° at 1.2 knots
- (D) 083° at 1.2 knots

*If choice D is selected set score to 1.*

10. What is the approximate depth of the water under the keel at 0615?

- (A) 106 feet (32.3 meters)
- (B) 85 feet (25.9 meters)
- (C) 95 feet (29 meters)
- (D) 89 feet (27.1 meters)

*If choice B is selected set score to 1.*

11. At 0615 you change course to 078°T. If there is no current, when will Falkner Island Light be abeam?

- (A) 0730
- (B) 0750
- (C) 0735
- (D) 0743

*If choice A is selected set score to 1.*

**12.** At 0700, Falkner Island Light bears  $023^{\circ}$ pgc, and the range to the south tip of Falkner Island is 7.1 miles. What was the course made good since 0615?

- (A)  $087^{\circ}$ T
- (B)  $084^{\circ}$ T
- (C)  $081^{\circ}$ T
- (D)  $078^{\circ}$ T

*If choice C is selected set score to 1.*

**13.** At 0705, the gyro loses power. At 0730, you are on course  $092^{\circ}$  per standard magnetic compass (psc) when you take the following bearings:

Falkner Island Light bears  $356^{\circ}$ psc  
Horton Point Light bears  $123^{\circ}$ psc  
Kelsey Point Breakwater Light bears  $048^{\circ}$ psc

What is the position of your 0730 fix?

- (A) LAT  $41^{\circ}06.7'N$ , LONG  $72^{\circ}36.0'W$
- (B) LAT  $41^{\circ}07.2'N$ , LONG  $72^{\circ}36.4'W$
- (C) LAT  $41^{\circ}07.0'N$ , LONG  $72^{\circ}36.2'W$
- (D) LAT  $41^{\circ}07.4'N$ , LONG  $72^{\circ}36.4'W$

*If choice C is selected set score to 1.*

**14.** Horton Point Light \_\_\_\_\_.

- (A) has a fixed green light
- (B) is shown from a white square tower
- (C) is 14 feet above sea level
- (D) is synchronized with a radio beacon

*If choice B is selected set score to 1.*

**15.** If visibility permits, Little Gull Island Light will break the horizon at a range of approximately \_\_\_\_\_.

- (A) 18.0 miles
- (B) 15.6 miles
- (C) 11.1 miles
- (D) 12.8 miles

*If choice B is selected set score to 1.*