The following questions are to be answered by plotting on chart 13205 TR, Block Island Sound, and using the supporting publications.

Each question is completely independent of any other question on this exam.

The following information is applicable to all questions.

(The abbreviation "psc" stands for "per standard magnetic compass".)

VARIATION IS 15° W

DEVIATION TABLE

HDG.MAG.	DEVIATION
000°	2.0°E
030°	3.0°E
060°	4.0°E
090°	2.0°E
120°	1.0°E
150°	1.0°W
180°	2.0°W
210°	3.5°W
240°	3.0°W
270°	1.5°W
300°	0.0°
330°	1.5°E

5.8.2.1a1-1

The following questions are to be answered by plotting on chart 12221 TR, Chesapeake Bay, and using the supporting publications.

Each question is completely independent of any other question on this exam.

The following information is applicable to all questions.

(The abbreviation "psc" stands for "per standard magnetic compass".)

VARIATION IS 9° W

DEVIATION TABLE

HDG.MAG.	DEVIATION
000°	2.0°E
030°	3.0°E
060°	4.0°E
090°	2.0°E
120°	1.0°E
150°	1.0°W
180°	2.0°W
210°	3.5°W
240°	3.0°W
270°	1.5°W
300°	0.0°
330°	1.5°E

5.8.2.1b1-1

The following questions are to be answered by plotting on chart 12354 TR, Long Island Sound, and using the supporting publications.

Each question is completely independent of any other question on this exam.

The following information is applicable to all questions.

(The abbreviation "psc" stands for "per standard magnetic compass".)

VARIATION IS 14° W

DEVIATION TABLE

HDG.MAG.	DEVIATION
000°	2.0°E
030°	3.0°E
060°	4.0°E
090°	2.0°E
120°	1.0°E
150°	1.0°W
180°	2.0°W
210°	3.5°W
240°	3.0°W
270°	1.5°W
300°	0.0°
330°	1.5°E

5.8.2.1c1-1

1. **(5.8.2.2A1-1)** The following questions are to be answered using Chart 13205 TR, Block Island Sound, and supporting publications.

   Your vessel is on a course of 090°T at a speed of 14 knots.
   Your draft is 37 feet and your height of eye is 56 feet.

   A deviation table is not included with this question. Course is given as True.

cht_5_8_2_2a1_1

10. **(5.8.2.2A2-1)** The following questions are to be answered using Chart 13205 TR, Block Island Sound, and supporting publications.

    There are fog patches.
    You are turning for 12.1 knots.
    Your draft is 22 feet.
    The gyro error is 3°W.

    DEVIATION TABLE

Magnetic Heading	Deviation
180°	2.5°E
195°	2.0°E
210°	1.0°E
225°	0.5°W

cht_5_8_2_2a2_1

19. **(5.8.2.2A3-1)** The following questions are to be answered using Chart 13205 TR, Block Island Sound, and supporting publications.

    Your height of eye is 55 feet and your vessel's draft is 22 feet.
    Your present course is 111°T and your vessel's engines are turning RPMs for 13 knots.

    A deviation table is not included with this question. Course is given as True.

cht_5_8_2_2a3_1

28. *(5.8.2.2A4-1)* The following questions are to be answered using Chart 13205 TR, Block Island Sound, and supporting publications.

Your height of eye is 42 feet and your vessel's draft is 34 feet.
The gyro error is 2°E.
You are keeping daylight savings time (ZT+4).
Use 15°W variation where required.

DEVIATION TABLE

Magnetic Heading	Deviation
030°	3°W
060°	4°W
090°	3°W
120°	2°W
150°	0°
180°	1°E
210°	2°E
240°	3°E
270°	2°E
300°	1°E
330°	1°W
360°	3°W

cht_5_8_2_2a4_1

37. *(5.8.2.2A5-1)* The following questions are to be answered using Chart 13205 TR, Block Island Sound, and supporting publications.

Your height of eye is 36 feet and your vessel's draft is 16 feet.
The gyro error is 2°E. There is a light haze.
Use 15°W variation where required.

DEVIATION TABLE

Magnetic Heading	Deviation
000°	2.0°E
030°	3.0°E
060°	4.0°E
090°	2.0°E
120°	1.0°E
150°	1.0°W
180°	2.0°W
210°	3.5°W
240°	3.0°W
270°	1.5°W
300°	0.0°
330°	1.5°E

cht_5_8_2_2a5_1

46. *(5.8.2.2A7-1)* The following questions are based on Chart 13205TR, Block Island Sound, and the supporting publications.

Your vessel has just taken departure from New London harbor.
Your height of eye is 65 feet and your vessel's draft is 22feet.
Use 15°W variation where required.

A deviation table is not included with this question. Course is given as True.

cht_5_8_2_2a7_1

55. *(5.8.2.2A8-1)* The following questions are based on Chart 13205TR, Block Island Sound, and the supporting publications.

On 7 September, you are approaching Block Island Sound from sea.
Your vessel has a draft of 20 feet. Equipment on board your vessel includes gyrocompass, magnetic compass, depth finder, and radar.

A deviation table is not included with this question. Course is given as True.

cht_5_8_2_2a8_1

64. *(5.8.2.2A9-1)* The following questions are based on Chart 13205TR, Block Island Sound, and the supporting publications.

You are turning for 12.4 knots.
Your draft is 28 feet.
The gyro error is 2°E.
Your course is 340°T.
Your height of eye is 36 feet.

DEVIATION TABLE

Magnetic
Heading	Deviation
315°	1°E
330°	1°W
345°	3°W
360°	5°W

cht_5_8_2_2a9_1

73. *(5.8.2.2B1-1)* The following questions are to be answered using chart 12221 TR, Chesapeake Bay Entrance, and supporting publications.

Your vessel is enroute from New York, NY, to Baltimore, MD.
Your vessel's draft is 29 feet, and your height of eye is 54 feet.

Your present course is 206°T and your speed is 18 knots.
Use 10°W variation where required.

cht_5_8_2_2b1_1

82. *(5.8.2.2B2-1)* The following questions are to be answered using Chart 12221 TR, Chesapeake Bay Entrance, and supporting publications.

You are southbound along the coast on a course of 180°T and the engine speed is 14 knots.
Your draft is 16 feet.
Gyro error is 2°W.
Use 10°W variation where required.

cht_5_8_2_2b2_1

91. *(5.8.2.2B3-1)* The following questions are to be answered using Chart 12221 TR, Chesapeake Bay Entrance, and supporting publications.

Your present course is 200°T and your vessel's engines are turning RPMs for 16 knots.
Your height of eye is 55 feet and your vessel's draft is 32 feet.

Use 10°W variation where required.

cht_5_8_2_2b3_1

100.

(5.8.2.2B4-1) The following questions are to be answered using Chart 12221 TR, Chesapeake Bay Entrance, and supporting publications.

It is July 13th and you are on a voyage to Baltimore.
You are observing daylight savings time.
You are turning for 9.8 knots.
The maximum draft is 18 feet.
The gyro error is 2°E.
The visibility is obscured by patchy fog.
Use 10°W variation where required.

DEVIATION TABLE

Magnetic
Heading	Deviation
315°	1.0°W
330°	0.5°W
345°	0.5°E
000°	2.0°E
015°	3.0°E
030°	1.5°E

cht_5_8_2_2b4_1

109. *(5.8.2.2B6-1)* The following questions are to be answered using Chart 12221 TR, Chesapeake Bay Entrance, and supporting publications.

You are on an oceanographic research vessel equipped with standard navigational equipment.
The gyro error is 2°W.
The maximum draft is 13 feet.
Use 10°W variation where required.

DEVIATION TABLE

Magnetic Heading	Deviation
060°	1°W
075°	0°
090°	1°E

cht_5_8_2_2b6_1

118. *(5.8.2.2B7-1)* The following questions are based on Chart 12221TR, Chesapeake Bay Entrance, and the supporting publications.

Your present course is 202°T and your vessel's engines are turning RPMs for 18 knots.
Your height of eye is 54 feet (16.5 meters) and your vessel's draft is 28 feet (8.5 meters).
Use 10°W variation where required.

A deviation table is not included with this question. Course is given as True. Use 10°W variation where required.

cht_5_8_2_2b7_1

127. *(5.8.2.2C1-1)* The following questions are to be answered using Chart 12354 TR, Long Island Sound - Eastern Part, and supporting publications.

Your vessel is enroute to New Haven, CT.
You are proceeding at a reduced speed of 9.8 knots on a course of 243°T.
Your height of eye is 45 feet and your vessel's deep draft is 33 feet.

A deviation table is not included with this question. Course is given as True.

cht_5_8_2_2c1_1

136. *(5.8.2.2C2-1)* The following questions should be answered using Chart 12354TR, Long Island Sound - Eastern Part, and the supporting publications.

You are turning for 12.7 knots.
Your vessel's deep draft is 16 feet.
Gyro error is 2°W.
Use 14°W for variation where required.

DEVIATION TABLE

Magnetic Heading	Deviation
045°	3.0°E
060°	3.0°E
075°	1.5°E
090°	0.5°W

cht_5_8_2_2c2_1

145. *(5.8.2.2C3-1)* The following questions should be answered using Chart 12354TR, Long Island Sound - Eastern Part, and the supporting publications.

You are on a coastwise voyage from Bridgeport, Conn., to Boston, Mass.
You intend to divert to a position off New Haven, Conn., to evacuate an injured crew member.
Your height of eye is 53 feet and your vessel's deep draft is 34 feet.
Gyro error is 2°W.
Use 14°W variation where required.

cht_5_8_2_2c3_1

154. *(5.8.2.2C4-1)* The following questions are to be answered using Chart 12354 TR, Long Island Sound - Eastern Part, and supporting publications.

You are turning for 12.5 knots and on a course of 255°T.
Your vessel's deep draft is 24 feet. Gyro error is 3°E.
Use 14°W variation where required.

DEVIATION TABLE

Magnetic Heading	Deviation
240°	2°W
255°	0°
270°	2°E
285°	4°E

cht_5_8_2_2c4_1

136. *(5.8.2.3A10-1)* The following questions are based on Chart 13205TR, Block Island Sound, and the supporting publications.

Your vessel draws 8 feet (2.4 meters)
Your height of eye is 20 feet (6.1 meters).
Gyro error is 3°E
Variation is 15°W

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

DEVIATION TABLE

Magnetic Heading	Deviation
000°	1.5°E
030°	2.5°W
060°	2.5°W
090°	2.0°W
120°	1.0°W
150°	0.5°W
180°	0.0°
210°	1.0°E
240°	1.5°E
270°	2.0°E
300°	1.0°E
330°	0.5°W

cht_5_8_2_3a10_1

151. *(5.8.2.3A11-1)* The following questions are based on Chart 13205TR, Block Island Sound, and the supporting publications.

Your draft is 18 feet (5.4 meters)
Your height of eye is 20 feet (6.1 meters)
Gyro error is 3°W
Variation is 15°W

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

DEVIATION TABLE

Magnetic Heading	Deviation
000°	1.5°E
030°	2.5°W
060°	2.5°W
090°	2.0°W
120°	1.0°W
150°	0.5°W
180°	0.0°
210°	1.0°E
240°	1.5°E
270°	2.0°E
300°	1.0°E
330°	0.5°W

cht_5_8_2_3a11_1

166. *(5.8.2.3A12-1)* The following questions are based on Chart 13205TR, Block Island Sound, and the supporting publications.

Your vessel draws 8 feet (2.4 meters)
Your height of eye is 24 feet (7.3 meters)
Gyro error is 2°W
Variation is 15°W

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

DEVIATION TABLE

Magnetic Heading	Deviation
030°	3.0°E
060°	1.0°E
090°	1.0°W
120°	3.0°W
150°	4.0°W
180°	4.0°W
210°	3.0°W
240°	1.0°W
270°	1.0°E
300°	3.0°E
330°	4.0°E
360°	4.0°E

cht_5_8_2_3a12_1

181. *(5.8.2.3A13-1)* The following questions are based on Chart 13205TR, Block Island Sound, and the supporting publications.

Your vessel draws 8 feet (2.4 meters)
Your height of eye is 24 feet (7.3 meters)
Gyro error is 2°E
Variation is 15°W

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

DEVIATION TABLE

Magnetic Heading	Deviation
030°	3.0°E
060°	1.0°E
090°	1.0°W
120°	3.0°W
150°	4.0°W
180°	4.0°W
210°	3.0°W
240°	1.0°W
270°	1.0°E
300°	3.0°E
330°	4.0°E
360°	4.0°E

cht_5_8_2_3a13_1

196. *(5.8.2.3A14-1)* The following questions are based on Chart 13205TR, Block Island Sound, and the supporting publications.

Gyro error is 2°W
Variation is 15°W

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

DEVIATION TABLE

Magnetic
Heading	Deviation
000°	0°
030°	1.0°W
060°	3.0°W
090°	2.0°W
120°	1.0°W
150°	0°
180°	0°
210°	1.0°E
240°	2.0°E
270°	1.5°E
300°	1.0°E
330°	0°

cht_5_8_2_3a14_1

211. *(5.8.2.3A15-1)* The following questions are based on Chart 13205TR, Block Island Sound, and the supporting publications.

Gyro error is 2°E
Variation is 15°W

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

DEVIATION TABLE

Magnetic
Heading	Deviation
000°	0°
030°	1.0°W
060°	3.0°W
090°	2.0°W
120°	1.0°W
150°	0°
180°	0°
210°	1.0°E
240°	2.0°E
270°	1.5°E
300°	1.0°E
330°	0°

cht_5_8_2_3a15_1

(5.8.2.3A1-1) The following questions are based on Chart 13205TR, Block Island Sound, and the supporting publications.

Your vessel has a draft of 12 feet (3.7 meters)
Your height of eye is 16 feet (4.8 meters)
Gyro error is 2°E
Variation is 15°W

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

DEVIATION TABLE

Magnetic Heading	Deviation
000°	2.0°E
030°	3.0°E
060°	4.0°E
090°	2.0°E
120°	1.0°E
150°	1.0°W
180°	2.0°W
210°	3.5°W
240°	3.0°W
270°	3.5°W
300°	0.0°
330°	1.5°E

cht_5_8_2_3a1_1

(5.8.2.3A2-1) The following questions are based on Chart 13205TR, Block Island Sound, 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 15°W

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

DEVIATION TABLE

Magnetic Heading	Deviation
000°	2.0°E
030°	3.0°E
060°	4.0°E
090°	2.0°E
120°	1.0°E
150°	1.0°W
180°	2.0°W
210°	3.5°W
240°	3.0°W
270°	3.5°W
300°	0.0°
330°	1.5°E

cht_5_8_2_3a2_1

(5.8.2.3A3-1) The following questions are based on Chart 13205TR, Block Island Sound, and the supporting publications.

Your vessel has a draft of 11 feet (3.4 meters)
Your height of eye is 32 (9.7 meters)
Gyro error is 2°W
Variation is 15°W

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

DEVIATION TABLE

Magnetic Heading	Deviation
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

cht_5_8_2_3a3_1

. *(5.8.2.3A4-1)* The following questions are based on Chart 13205TR, Block Island Sound, and the supporting publications.

Gyro error is 2°E
Variation is 15°W

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

DEVIATION TABLE

Magnetic Heading	Deviation
000°	0°
030°	1°W
060°	3°W
090°	2°W
120°	1°W
150°	0°
180°	0°
210°	1°E
240°	2°E
270°	1.5°E
300°	1°E
330°	0°

cht_5_8_2_3a4_1