## Navigation Problems-Chart Plot

| ID \# | Question | Choice A | Choice B | Choice C | Choice D |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Your GPS position is LAT $36^{\circ} 59.0^{\prime} \mathrm{N}$, LONG $75^{\circ} 48.6^{\prime} \mathrm{W}$. What is the course per standard magnetic compass to a position one mile south of Cape Charles Buoy "14" (which is positioned at LAT $37^{\circ} 07.4^{\prime} \mathrm{N}$, LONG $75^{\circ} 41.0^{\prime} \mathrm{W}$ )? | 045 ${ }^{\circ} \mathrm{psc}$ | 049 ${ }^{\circ} \mathrm{psc}$ | 053 ${ }^{\circ} \mathrm{psc}$ | $057^{\circ} \mathrm{psc}$ |
| 2 | Your GPS position is LAT $36^{\circ} 59.0^{\prime} \mathrm{N}$, LONG $75^{\circ} 48.6^{\prime} \mathrm{W}$. What is the course per standard magnetic compass to a position one mile east of Cape Charles Lighted Bell Buoy "14" (LAT $37^{\circ} 07.4^{\prime} \mathrm{N}$, LONG $75^{\circ} 41.0^{\prime} \mathrm{W}$ )? | 040 ${ }^{\circ} \mathrm{psc}$ | 045 ${ }^{\circ} \mathrm{psc}$ | 049 ${ }^{\circ} \mathrm{psc}$ | 053 ${ }^{\circ} \mathrm{psc}$ |
| 3 | Your GPS position is LAT $37^{\circ} 07.5^{\prime} \mathrm{N}$, LONG $75^{\circ} 39.1^{\prime} \mathrm{W}$. What is the course per standard magnetic compass (psc) to a position 0.3 mile due north of North Chesapeake Entrance Buoy NCA (LL \#375)? | $222^{\circ} \mathrm{psc}$ | $228^{\circ} \mathrm{psc}$ | $231^{\circ} \mathrm{psc}$ | $234^{\circ} \mathrm{psc}$ |
| 4 | Your GPS position is LAT $37^{\circ} 01.5^{\prime} \mathrm{N}$, LONG $75^{\circ} 31.7^{\prime} \mathrm{W}$. What is the course per standard magnetic compass to Chesapeake Light? | $243{ }^{\circ}$ | $240^{\circ}$ | $237^{\circ}$ | $231^{\circ}$ |
| 5 | Your GPS position is LAT $36^{\circ} 55.2^{\prime} \mathrm{N}$, LONG $75^{\circ} 33.1^{\prime} \mathrm{W}$. What is the course per standard magnetic compass to Rudee Inlet (LAT $36^{\circ} 49.8^{\prime} \mathrm{N}$, LONG $75^{\circ} 58.0^{\prime} \mathrm{W}$ )? | $246.0^{\circ} \mathrm{psc}$ | $254.5^{\circ} \mathrm{psc}$ | $261.0^{\circ} \mathrm{psc}$ | $265.5^{\circ} \mathrm{psc}$ |
| 6 | What is the course psc from Chesapeake Light to North Chesapeake Entrance Buoy NCA? | $313^{\circ} \mathrm{psc}$ | $317{ }^{\circ} \mathrm{psc}$ | $321^{\circ} \mathrm{psc}$ | $325^{\circ} \mathrm{psc}$ |
| 7 | What is the course per standard magnetic compass from Chesapeake Light to North Chesapeake Entrance Lighted Whistle Buoy NCA? | $316^{\circ} \mathrm{psc}$ | $321^{\circ} \mathrm{psc}$ | $323^{\circ} \mathrm{psc}$ | $326^{\circ} \mathrm{psc}$ |
| 8 | What is the first course per standard magnetic compass (psc) in the outbound southeasterly traffic lane of the Chesapeake Bay entrance traffic separation scheme? | $133^{\circ} \mathrm{psc}$ | $138^{\circ} \mathrm{psc}$ | $143^{\circ} \mathrm{psc}$ | $148^{\circ} \mathrm{psc}$ |
| 9 | What is the base course per standard magnetic compass while southbound in the middle leg of York Spit Channel? | $161.0^{\circ} \mathrm{psc}$ | $165.5^{\circ} \mathrm{psc}$ | $180.0^{\circ} \mathrm{psc}$ | $184.0^{\circ} \mathrm{psc}$ |
| 10 | What is the base course (psc) in the inbound northeasterly traffic lane of the Chesapeake Bay entrance traffic separation scheme? | $261{ }^{\circ} \mathrm{psc}$ | $258{ }^{\circ} \mathrm{psc}$ | $250^{\circ} \mathrm{psc}$ | $244^{\circ} \mathrm{psc}$ |
| 11 |  |  |  |  |  |
| 12 | Your GPS position is LAT $41^{\circ} 10.0^{\prime} \mathrm{N}$, LONG $72^{\circ} 52.5^{\prime} \mathrm{W}$. What is the course per standard magnetic compass to a position one mile due south of Falkner Island Light? | $065^{\circ} \mathrm{psc}$ | $081{ }^{\circ} \mathrm{psc}$ | 093 ${ }^{\circ} \mathrm{psc}$ | 097 ${ }^{\circ} \mathrm{psc}$ |


| 13 | Your present position is LAT $41^{\circ} 05.5^{\prime} \mathrm{N}$, LONG $72^{\circ} 38.0^{\prime} \mathrm{W}$. Assuming that there are no set and drift, what course must you steer per standard magnetic compass (psc) to arrive at a position 0.5 mile due south of New Haven Lighted whistle Buoy NH? | $315.5^{\circ} \mathrm{psc}$ | $310.5^{\circ} \mathrm{psc}$ | $290.5^{\circ} \mathrm{psc}$ | $284.5^{\circ} \mathrm{psc}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 14 | Your present position is LAT $41^{\circ} 05.5^{\prime} \mathrm{N}$, LONG $72^{\circ} 38.0^{\prime} \mathrm{W}$. Assuming that there is no set and drift, what course must you steer per standard magnetic compass (psc) to arrive at a position midway between New Haven Harbor Channel buoys \#1 and \#2? | $137^{\circ} \mathrm{psc}$ | $309^{\circ} \mathrm{psc}$ | $315^{\circ} \mathrm{psc}$ | $319^{\circ} \mathrm{psc}$ |
| 15 | Your present position is LAT $41^{\circ} 05.5^{\prime} \mathrm{N}$, LONG $72^{\circ} 38.0^{\prime} \mathrm{W}$. Assuming there is no set and drift, what course must you steer per standard magnetic compass (psc) to arrive at a position 3 miles due north of Horton Point Light? | $077^{\circ} \mathrm{psc}$ | 081 ${ }^{\circ} \mathrm{psc}$ | 085 ${ }^{\circ} \mathrm{psc}$ | $088^{\circ} \mathrm{psc}$ |
| 16 | Your present position is LAT $41^{\circ} 05.5^{\prime} \mathrm{N}$, LONG $72^{\circ} 38.0^{\prime} \mathrm{W}$. Assuming that there is no set and drift, what course must you steer per standard magnetic compass (psc) to arrive at a position 5 miles due south of Saybrook Breakwater Light? | $089^{\circ} \mathrm{psc}$ | 080 ${ }^{\circ} \mathrm{psc}$ | $077^{\circ} \mathrm{psc}$ | 066${ }^{\circ} \mathrm{psc}$ |
| 17 | Your present position is LAT $41^{\circ} 05.5^{\prime} \mathrm{N}$, LONG $72^{\circ} 38.0^{\prime} \mathrm{W}$. Assuming that there is no set and drift, what course must you steer per standard magnetic compass (psc) to arrive at a position 2 miles due west of Twenty-Eight Foot Shoal Lighted Buoy (LAT $41^{\circ} 09.3^{\prime} \mathrm{N}$, LONG $72^{\circ} 30.5^{\prime} \mathrm{W}$ )? | 055 ${ }^{\circ} \mathrm{psc}$ | 059 ${ }^{\circ} \mathrm{psc}$ | $064{ }^{\circ} \mathrm{psc}$ | 069 ${ }^{\circ} \mathrm{psc}$ |
| 18 | Your 2230 position is LAT $41^{\circ} 07.4^{\prime} \mathrm{N}$, LONG $72^{\circ} 44.0^{\prime} \mathrm{W}$. Assuming that there are no set and drift, what course must you steer per standard magnetic compass (psc) to leave TwentyEight Foot Shoal Lighted Buoy (LAT $41^{\circ} 09.3^{\prime} \mathrm{N}$, LONG $72^{\circ} 30.4^{\prime} \mathrm{W}$ ) 1 mile abeam to port? | $084^{\circ} \mathrm{psc}$ | 091 ${ }^{\circ} \mathrm{psc}$ | 094 ${ }^{\circ} \mathrm{psc}$ | 098${ }^{\circ} \mathrm{psc}$ |
| 19 | Your 2230 position is LAT $41^{\circ} 07.4^{\prime} \mathrm{N}$, LONG $72^{\circ} 44.0^{\prime} \mathrm{W}$. Assuming that there is no set and drift, what course must you steer per standard magnetic compass to leave Twenty-Eight Foot Shoal Lighted Buoy 1 mile abeam to starboard? | 086${ }^{\circ} \mathrm{psc}$ | 091 ${ }^{\circ} \mathrm{psc}$ | 094 ${ }^{\circ} \mathrm{psc}$ | 098 ${ }^{\circ} \mathrm{psc}$ |
| 20 | Your GPS position is LAT $41^{\circ} 08.5^{\prime} \mathrm{N}$, LONG $72^{\circ} 28.8^{\prime} \mathrm{W}$. What course must you steer per standard magnetic compass (psc) to leave Cornfield Lighted Whistle Buoy "CF" 0.5 mile abeam to starboard? | $032^{\circ} \mathrm{psc}$ | 048 ${ }^{\circ} \mathrm{psc}$ | 055 ${ }^{\circ} \mathrm{psc}$ | 067${ }^{\circ} \mathrm{psc}$ |
| 21 | Your GPS position is LAT $41^{\circ} 08.5^{\prime} \mathrm{N}$, LONG $72^{\circ} 28.8^{\prime} \mathrm{W}$. What course must you steer per standard magnetic compass (psc) to leave Cornfield Lighted Whistle Buoy "CF" 0.5 mile abeam to port? | 064 ${ }^{\circ} \mathrm{psc}$ | 077 ${ }^{\circ} \mathrm{psc}$ | $088^{\circ} \mathrm{psc}$ | 092 ${ }^{\circ} \mathrm{psc}$ |


| 22 | Your present position is LAT $41^{\circ} 07.4^{\prime} \mathrm{N}$, LONG $72^{\circ} 44.0^{\prime} \mathrm{W}$. Assuming that there is no set and drift, what course must you steer per standard magnetic compass (psc) to a position of LAT $41^{\circ} 08.5^{\prime} \mathrm{N}$, LONG $72^{\circ} 28.8^{\prime} \mathrm{W}$ ? | 073 ${ }^{\circ} \mathrm{psc}$ | 084 ${ }^{\circ} \mathrm{psc}$ | 091 ${ }^{\circ} \mathrm{psc}$ | 097ºpsc |
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| 23 |  |  |  |  |  |
| 24 | Determine the course per standard magnetic compass from the entrance to Quonochontaug Pond (LAT $41^{\circ} 19.8^{\prime} \mathrm{N}$, LONG $71^{\circ} 43.2^{\prime} \mathrm{W}$ ) to the entrance to Great Salt Pond on Block Island. | $129.5^{\circ} \mathrm{psc}$ | $134.0^{\circ} \mathrm{psc}$ | $156.0^{\circ} \mathrm{psc}$ | $159.0^{\circ} \mathrm{psc}$ |
| 25 | Determine the course per standard magnetic compass from Cerberus Shoal Buoy 9 (LAT $41^{\circ} 10.4^{\prime} \mathrm{N}$, LONG $71^{\circ} 57.1^{\prime} \mathrm{W}$ W) to the entrance to Quonochontaug Pond (LAT $41^{\circ} 19.8^{\prime} \mathrm{N}$, LONG $71^{\circ} 43.2^{\prime} \mathrm{W}$ ). | 030 ${ }^{\circ} \mathrm{psc}$ | 036 ${ }^{\circ} \mathrm{psc}$ | 059 ${ }^{\circ} \mathrm{psc}$ | 067º$p$ pc |
| 26 | Determine the course per standard magnetic compass from Cerberus Shoal Buoy 9 (LAT $41^{\circ} 10.4^{\prime} \mathrm{N}$, LONG $71^{\circ} 57.1^{\prime} \mathrm{W}$ ) to a position 0.2 mile south of Race Rock Light (LAT $41^{\circ} 14.6^{\prime} \mathrm{N}$, LONG $72^{\circ} 02.8^{\prime} \mathrm{W}$ ). | $326.5^{\circ} \mathrm{psc}$ | $324.0^{\circ} \mathrm{psc}$ | $298.5^{\circ} \mathrm{psc}$ | $296.0^{\circ} \mathrm{psc}$ |
| 27 | Determine the course per standard magnetic compass from 0.2 mile south of Race Rock Light (LAT $41^{\circ} 14.6^{\prime} \mathrm{N}$, LONG $72^{\circ} 02.8^{\prime} \mathrm{W}$ ) to the entrance of the channel to Lake Montauk (west of Montauk Point). | $137.0^{\circ} \mathrm{psc}$ | $152.0^{\circ} \mathrm{psc}$ | $165.5^{\circ} \mathrm{psc}$ | $168.5^{\circ} \mathrm{psc}$ |
| 28 | Determine the course per standard magnetic compass from the entrance to Ninigret Pond (LAT $41^{\circ} 21.3^{\prime} \mathrm{N}$, LONG $71^{\circ} 38.3^{\prime} \mathrm{W}$ ) to the entrance to Great Salt Pond on Block Island. | $192.0^{\circ} \mathrm{psc}$ | $184.0^{\circ} \mathrm{psc}$ | $154.5^{\circ} \mathrm{psc}$ | $152.5^{\circ} \mathrm{psc}$ |
| 29 | You are 3 miles due east of Montauk Point Light. What is the course per standard magnetic compass to a position one mile due south of Block Island Southeast Point Light? | 070.0 ${ }^{\circ}$ | $076.5^{\circ}$ | $082.5^{\circ}$ | 087.5 ${ }^{\circ}$ |
| 30 | You are 3 miles due east of Montauk Point Light. What is the course per standard magnetic compass to LAT $41^{\circ} 00.0^{\prime} \mathrm{N}$, LONG 71³0.0'W? | $145.5^{\circ} \mathrm{psc}$ | $142.5^{\circ} \mathrm{psc}$ | $138.5^{\circ} \mathrm{psc}$ | $127.0^{\circ} \mathrm{psc}$ |
| 31 | You are 3 miles due east of Montauk Point Light. What is the course per standard magnetic compass to a position 0.5 mile due south of Race Rock Light? | $324^{\circ} \mathrm{psc}$ | $328^{\circ} \mathrm{psc}$ | $331{ }^{\circ} \mathrm{psc}$ | $339^{\circ} \mathrm{psc}$ |
| 32 | You are 3 miles due east of Montauk Point Light. What is the course per standard magnetic compass to a position 1.5 miles due east of Watch Hill Point Light? | $341^{\circ} \mathrm{psc}$ | $337^{\circ} \mathrm{psc}$ | $011^{\circ} \mathrm{psc}$ | 007ºpsc |
| 33 | You are 3 miles due east of Montauk Point Light. What is the course per standard magnetic compass to LAT $41^{\circ} 00.0^{\prime} \mathrm{N}$, LONG 71³0.0'W? | $108^{\circ} \mathrm{psc}$ | $122^{\circ} \mathrm{psc}$ | $124^{\circ} \mathrm{psc}$ | $130^{\circ} \mathrm{psc}$ |
| 34 |  |  |  |  |  |


| 35 | At 1712 your GPS indicates a position of LAT $36^{\circ} 54.8^{\prime} \mathrm{N}$, LONG $75^{\circ} 39.8^{\prime} \mathrm{W}$. You are on course $319^{\circ}$ per standard magnetic compass at a speed of 9.9 knots. At 1800 your GPS indicates your position at LAT $37^{\circ} 00.0^{\prime} \mathrm{N}$, LONG $75^{\circ} 45.8^{\prime} \mathrm{W}$. What were the set and drift? | $262^{\circ} \mathrm{T}$ at 0.9 knot | $267^{\circ} \mathrm{T}$ at 1.3 knots | $087^{\circ} \mathrm{T}$ at 1.2 knots | 093 ${ }^{\circ} \mathrm{T}$ at 0.8 knot |
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| 36 | At 0939 your GPS position is LAT $36^{\circ} 57.0^{\prime} \mathrm{N}$, LONG $75^{\circ} 41.0^{\prime} \mathrm{W}$. You are on course $119^{\circ}$ per standard magnetic compass at a speed of 12.8 knots. At 1017 your GPS indicates your position as LAT $36^{\circ} 54.2^{\prime} \mathrm{N}$, LONG $75^{\circ} 33.1^{\prime} \mathrm{W}$. What were the set and drift? | $280^{\circ} \mathrm{T}$ at 1.0 knot | $275{ }^{\circ} \mathrm{T}$ at 1.8 knots | $091^{\circ} \mathrm{T}$ at 1.6 knots | $103^{\circ} \mathrm{T}$ at 1.1 knots |
| 37 | At 1239 your GPS indicates a position of LAT $36^{\circ} 55.2^{\prime} \mathrm{N}$, LONG $75^{\circ} 33.1^{\prime} \mathrm{W}$. You are on course $281^{\circ}$ per standard magnetic compass at a speed of 9.2 knots. At 1318 your GPS indicates your position as LAT $36^{\circ} 54.8^{\prime} \mathrm{N}$, LONG $75^{\circ} 39.8^{\prime} \mathrm{W}$. What were the set and drift? | $130^{\circ} \mathrm{T}$ at 1.2 knots | $156^{\circ} \mathrm{T}$ at 0.6 knot | $352^{\circ} \mathrm{T}$ at 1.3 knots | $335^{\circ} \mathrm{T}$ at 1.0 knot |
| 38 | At 0817 your GPS indicates a position of LAT $37^{\circ} 01.6^{\prime} \mathrm{N}$, LONG $75^{\circ} 31.7^{\prime} \mathrm{W}$. You are on course $182^{\circ}$ per standard magnetic compass at a speed of 9.2 knots. At 0913 your GPS indicates your position at LAT $36^{\circ} 52.3^{\prime} \mathrm{N}$, LONG $75^{\circ} 30.8^{\prime} \mathrm{W}$. What were the set and drift? | $121^{\circ} \mathrm{T}$ at 0.8 knot | $139^{\circ} \mathrm{T}$ at 1.1 knots | $219^{\circ} \mathrm{T}$ at 1.1 knots | $298{ }^{\circ} \mathrm{T}$ at 0.7 knot |
| 39 | At 1354 your GPS indicates a position of LAT $37^{\circ} 00.0^{\prime} \mathrm{N}$, LONG $75^{\circ} 45.8^{\prime} \mathrm{W}$. You are on course $088^{\circ}$ per standard magnetic compass at a speed of 9.5 knots. At 1500 your GPS indicates your position as LAT $37^{\circ} 01.6^{\prime} \mathrm{N}$, LONG $75^{\circ} 31.7^{\prime} \mathrm{W}$. What were the set and drift? | $273^{\circ} \mathrm{T}$ at 0.8 knot | $241^{\circ} \mathrm{T}$ at 1.1 knots | $061^{\circ} \mathrm{T}$ at 1.3 knots | 092 ${ }^{\circ} \mathrm{T}$ at 0.9 knot |
| 40 | At 0919 your position is LAT $37^{\circ} 00.0^{\prime} \mathrm{N}$, LONG $75^{\circ} 30.0^{\prime} \mathrm{W}$. You are on course $270^{\circ} \mathrm{T}$ at 8.7 knots. At 1000 your position is LAT $36^{\circ} 59.5^{\prime} \mathrm{N}$, LONG $75^{\circ} 37.0^{\prime} \mathrm{W}$. What was the current? | $137^{\circ}$ at 0.6 knot | $150^{\circ}$ at 1.0 knot | $331^{\circ}$ at 0.7 knot | $347^{\circ}$ at 0.7 knot |
| 41 | At 0919 your position is LAT $37^{\circ} 00.0^{\prime} \mathrm{N}$, LONG $75^{\circ} 30.0^{\prime} \mathrm{W}$. You are on course $270^{\circ} \mathrm{T}$ at 8.7 knots. At 1031 your position is LAT $36^{\circ} 59.5^{\prime} \mathrm{N}$, LONG $75^{\circ} 44.9^{\prime} \mathrm{W}$. What was the set and drift? | $239^{\circ}$ at 0.8 knot | $252^{\circ}$ at 1.3 knots | $060^{\circ}$ at 0.7 knot | $073^{\circ}$ at 1.2 knots |
| 42 | At 0919 your position is LAT $37^{\circ} 00.0^{\prime} \mathrm{N}$, LONG $75^{\circ} 30.0^{\prime} \mathrm{W}$. You are on course $270^{\circ} \mathrm{T}$ at 10.5 knots. At 1020 your position is LAT $36^{\circ} 59.5^{\prime} \mathrm{N}$, LONG $75^{\circ} 44.9^{\prime} \mathrm{W}$. What was the current? | $026^{\circ}$ at 0.7 knot | $046^{\circ}$ at 1.0 knot | $226^{\circ}$ at 0.8 knot | $246{ }^{\circ}$ at 1.4 knots |
| 43 | At 0919 your position is LAT $37^{\circ} 00.0^{\prime} \mathrm{N}$, LONG $75^{\circ} 30.0^{\prime} \mathrm{W}$. You are on course $270^{\circ} \mathrm{T}$ at 8.7 knots. At 1000 your position is LAT $37^{\circ} 00.5^{\prime} \mathrm{N}$, LONG $75^{\circ} 37.0^{\prime} \mathrm{W}$. What was the set and drift? | $010^{\circ}$ at 0.5 knot | $017^{\circ}$ at 1.0 knot | $020^{\circ}$ at 0.4 knot | $032^{\circ}$ at 0.9 knot |


| 44 | At 0919 your position is LAT $37^{\circ} 00.0^{\prime} \mathrm{N}$, LONG $75^{\circ} 30.0^{\prime} \mathrm{W}$. You are on course $270^{\circ} \mathrm{T}$ at 7.8 knots. At 1035 your position is LAT $37^{\circ} 00.5^{\prime} \mathrm{N}$, LONG $75^{\circ} 43.8^{\prime} \mathrm{W}$. What was the set and drift? | $281^{\circ}$ at 0.7 knot | $292^{\circ}$ at 1.0 knot | $305^{\circ}$ at 1.3 knots | $113^{\circ}$ at 1.2 knots |
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| 45 |  |  |  |  |  |
| 46 | At 1620 your GPS indicates a position of LAT $41^{\circ} 09.0^{\prime} \mathrm{N}$, LONG $72^{\circ} 40.0^{\prime} \mathrm{W}$. You are on course $134^{\circ}$ per standard magnetic compass at a speed of 10 knots. At 1700 your GPS indicates your position as LAT $41^{\circ} 05.3^{\prime} \mathrm{N}$, LONG $72^{\circ} 33.7^{\prime} \mathrm{W}$. What were the set and drift? | $067^{\circ} \mathrm{T}$ at 1.7 knots | $078^{\circ} \mathrm{T}$ at 1.1 knots | $243^{\circ} \mathrm{T}$ at 1.0 knot | $249{ }^{\circ} \mathrm{T}$ at 1.6 knots |
| 47 | At 1645 your GPS position is LAT $41^{\circ} 09.2^{\prime} \mathrm{N}$, LONG $72^{\circ} 36.9^{\prime} \mathrm{W}$. You are steering course $262^{\circ}$ per standard magnetic compass at a speed of 12 knots. At 1721 you fix your position by plotting several compass bearings on nearby known fixed objects. These result in a position of LAT $41^{\circ} 07.2^{\prime} \mathrm{N}$, LONG $72^{\circ} 44.9^{\prime} \mathrm{W}$. What were your set and drift? | 040 ${ }^{\circ} \mathrm{T}$ at 0.8 knot | $030^{\circ} \mathrm{T}$ at 1.7 knots | $225^{\circ} \mathrm{T}$ at 0.9 knot | $242^{\circ} \mathrm{T}$ at 1.1 knots |
| 48 | At 1815 your GPS position is LAT $41^{\circ} 09.2^{\prime} \mathrm{N}$, LONG $72^{\circ} 36.9^{\prime} \mathrm{W}$. You are steering course $285^{\circ}$ per standard magnetic compass at a speed of 16 knots. At 1909 you fix your position by plotting several compass bearings on nearby known fixed objects. These result in a position of LAT $41^{\circ} 08.5^{\prime} \mathrm{N}$, LONG $72^{\circ} 53.7^{\prime} \mathrm{W}$. What were your set and drift? | $292^{\circ} \mathrm{T}$ at 1.8 knots | $243^{\circ} \mathrm{T}$ at 1.0 knot | $118^{\circ} \mathrm{T}$ at 1.9 knots | $111^{\circ} \mathrm{T}$ at 2.1 knots |
| 49 | At 1300 your GPS position is LAT $41^{\circ} 09.2^{\prime} \mathrm{N}$, LONG $72^{\circ} 36.9^{\prime} \mathrm{W}$. You are steering course $291^{\circ}$ per standard magnetic compass at a speed of 8 knots. At 1345 you fix your position by plotting several compass bearings on nearby known fixed objects. These result in a position of LAT $41^{\circ} 09.9^{\prime} \mathrm{N}$, LONG $72^{\circ} 46.1^{\prime} \mathrm{W}$. Which statement is TRUE with respect to the combined effects of wind and current experienced since 1300 ? | There has been no set and drift. | Set and drift are westerly at approximately 0.9 knot. | Your speed over the bottom is approximately 9.2 knots. | Set and drift are easterly at approximately 1.0 knot. |
| 50 | At 2245 your GPS position is LAT $41^{\circ} 01.75^{\prime} \mathrm{N}$, LONG $72^{\circ} 48.40^{\prime} \mathrm{W}$. You are steering course $086^{\circ}$ per standard magnetic compass at a speed of 6.0 knots. At 2400 you fix your position by plotting several compass bearings on nearby known fixed objects. These result in a position of LAT $41^{\circ} 04.20^{\prime} \mathrm{N}$, LONG $72^{\circ} 38.85^{\prime} \mathrm{W}$. What were your set and drift? | $162^{\circ} \mathrm{T}$ at .2 knot | $180^{\circ} \mathrm{T}$ at . 4 knot | $339^{\circ} \mathrm{T}$ at .5 knot | 007${ }^{\circ}$ at . 4 knot |


| 51 | At 0620 your GPS position is LAT $41^{\circ} 01.8^{\prime} \mathrm{N}$, LONG $72^{\circ} 48.40^{\prime} \mathrm{W}$. You are steering course $274^{\circ}$ per standard magnetic compass at a speed of 10 knots. At 0735 you fix your position by plotting several compass bearings on nearby known fixed objects. These result in a position of LAT $40^{\circ} 59.50^{\prime} \mathrm{N}$, LONG $73^{\circ} 06.50^{\prime} \mathrm{W}$. What were your set and drift? | $304^{\circ} \mathrm{T}$ at 0.8 knot | $276{ }^{\circ} \mathrm{T}$ at 1.2 knots | 099 ${ }^{\circ} \mathrm{T}$ at 0.5 knot | 094 ${ }^{\circ} \mathrm{T}$ at 1.3 knots |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 52 | At 0915 your GPS position is LAT $41^{\circ} 04.9^{\prime} \mathrm{N}$, LONG $72^{\circ} 42.1^{\prime} \mathrm{W}$. You are on course $085^{\circ}$ per standard magnetic compass at a speed of 6 knots. At 1030 your GPS position is 0.5 mile due south of Twenty-Eight Foot Shoal Lighted Buoy "TE". What were your set and drift? | $042^{\circ} \mathrm{T}$ at 2.4 knots | 045 ${ }^{\circ} \mathrm{T}$ at 1.9 knots | $221^{\circ} \mathrm{T}$ at 2.0 knots | $225^{\circ} \mathrm{T}$ at 2.3 knots |
| 53 | At 0912 your GPS position is LAT $41^{\circ} 04.9^{\prime} \mathrm{N}$, LONG $72^{\circ} 42.1^{\prime} \mathrm{W}$. You are on course $085^{\circ}$ per standard magnetic compass at a speed of 6 knots. At 1052 your GPS position is 0.5 mile due south of Twenty-Eight Foot Shoal Lighted Buoy "TE". What were your set and drift? | $145^{\circ} \mathrm{T}$ at 1.2 knots | $148^{\circ} \mathrm{T}$ at 0.9 knot | $320^{\circ} \mathrm{T}$ at 1.3 knots | $325^{\circ} \mathrm{T}$ at 0.7 knot |
| 54 | At 1825 your GPS position is LAT $41^{\circ} 04.9^{\prime} \mathrm{N}$, LONG $72^{\circ} 42.1^{\prime} \mathrm{W}$. You are on course $085^{\circ}$ per standard magnetic compass at a speed of 10 knots. At 1910 your GPS position is 1 mile due south of Twenty-Eight Foot Shoal Lighted Buoy. What were your set and drift? | $233^{\circ} \mathrm{T}$ at 2.9 knots | $227^{\circ} \mathrm{T}$ at 2.5 knots | 054 ${ }^{\circ} \mathrm{T}$ at 2.8 knots | 051 ${ }^{\circ} \mathrm{T}$ at 2.1 knots |
| 55 | At 1922 your GPS position is LAT $41^{\circ} 04.9^{\prime} \mathrm{N}$, LONG $72^{\circ} 42.1^{\prime} \mathrm{W}$. You are on course $085^{\circ}$ per standard magnetic compass at a speed of 10 knots. At 2019 your GPS position is 1 mile due south of Twenty-Eight Foot Shoal Lighted Buoy "TE". What were your set and drift? | $343^{\circ} \mathrm{T}$ at 0.7 knot | $340^{\circ} \mathrm{T}$ at 1.2 knots | $164^{\circ} \mathrm{T}$ at 0.9 knot | $161^{\circ} \mathrm{T}$ at 1.1 knots |
| 56 | At 1645 your GPS position is LAT $41^{\circ} 04.9^{\prime} \mathrm{N}$, LONG $72^{\circ} 42.1^{\prime} \mathrm{W}$. You are on course $072^{\circ}$ per standard magnetic compass at a speed of 14 knots. At 1727 another GPS fix places your vessel 1 mile due north of Twenty-Eight Foot Shoal Lighted Buoy TE. What were your set and drift? | $032^{\circ} \mathrm{T}$ at 1.2 knot | 026 ${ }^{\circ} \mathrm{T}$ at 1.1 knot | $207^{\circ} \mathrm{T}$ at 0.9 knot | $212^{\circ} \mathrm{T}$ at 1.2 knots |
| 57 |  |  |  |  |  |
| 58 | At 1020 your position is LAT $41^{\circ} 11.0^{\prime} \mathrm{N}$, LONG $71^{\circ} 50.0^{\prime} \mathrm{W}$. You are on course $056^{\circ}$ per standard magnetic compass at 9.2 knots. At 1112 your position is LAT $41^{\circ} 15.9^{\prime} \mathrm{N}$, LONG $71^{\circ} 41.7^{\prime} \mathrm{W}$. What were the set and drift? | $130^{\circ} \mathrm{T}$ at 0.9 knot | $141^{\circ} \mathrm{T}$ at 1.2 knots | $331^{\circ} \mathrm{T}$ at 0.8 knot | $346^{\circ} \mathrm{T}$ at 1.1 knots |


| 59 | At 0947 your position is LAT $41^{\circ} 15.9^{\prime} \mathrm{N}$, LONG $71^{\circ} 41.7^{\prime} \mathrm{W}$. You are on course $182^{\circ}$ per magnetic compass at 11.3 knots. At 1020 your position is LAT $41^{\circ} 09.2^{\prime} \mathrm{N}$, LONG $71^{\circ} 40.6^{\prime} \mathrm{W}$. What were the set and drift? | $211^{\circ} \mathrm{T}$ at 1.0 knot | $229^{\circ} \mathrm{T}$ at 2.0 knots | $058^{\circ} \mathrm{T}$ at 1.8 knots | $043{ }^{\circ} \mathrm{T}$ at 1.1 knots |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 60 | At 1922 your position is LAT $41^{\circ} 09.2^{\prime} \mathrm{N}$, LONG $71^{\circ} 40.6^{\prime} \mathrm{W}$. You are on course $028^{\circ}$ per standard magnetic compass at 6.4 knots. At 2046 your position is LAT $41^{\circ} 17.2^{\prime} \mathrm{N}$, LONG $71^{\circ} 38.6^{\prime} \mathrm{W}$. What were the set and drift? | $235^{\circ} \mathrm{T}$ at 0.8 knot | $247^{\circ} \mathrm{T}$ at 1.1 knots | $049^{\circ} \mathrm{T}$ at 0.7 knot | $062^{\circ} \mathrm{T}$ at 1.0 knots |
| 61 | At 1516 your position is LAT $41^{\circ} 11.3^{\prime} \mathrm{N}$, LONG $71^{\circ} 48.6^{\prime} \mathrm{W}$. You are on course $300^{\circ}$ per standard magnetic compass at 9.4 knots. At 1600 your position is LAT $41^{\circ} 14.0^{\prime} \mathrm{N}$, LONG $71^{\circ} 58.1^{\prime} \mathrm{W}$. What were the set and drift? | $142^{\circ} \mathrm{T}$ at 1.9 knots | $153^{\circ} \mathrm{T}$ at 1.4 knots | $332^{\circ} \mathrm{T}$ at 1.5 knots | $347^{\circ} \mathrm{T}$ at 1.1 knots |
| 62 | At 2038 your position is LAT $41^{\circ} 09.2^{\prime} \mathrm{N}$, LONG $71^{\circ} 40.6^{\prime} \mathrm{W}$. You are on course $301^{\circ}$ per standard magnetic compass at 7.2 knots. At 2152 your position is LAT $41^{\circ} 11.3^{\prime} \mathrm{N}$, LONG $71^{\circ} 48.6^{\prime} \mathrm{W}$. What were the set and drift? | $080^{\circ} \mathrm{T}$ at 1.0 knot | $096^{\circ} \mathrm{T}$ at 2.0 knots | $261^{\circ} \mathrm{T}$ at 1.2 knots | $277^{\circ} \mathrm{T}$ at 0.9 knot |
| 63 | At 0726 you depart Lake Montauk with light 1 close aboard and set course $013.5^{\circ}$ per standard magnetic compass at 7.6 knots. At 0812 your GPS position is LAT $41^{\circ} 10.0^{\prime} \mathrm{N}$, LONG $71^{\circ} 55.9^{\prime} \mathrm{W}$. What is the current? | $151^{\circ} \mathrm{T}$ at 1.0 knot | $164^{\circ} \mathrm{T}$ at 0.7 knot | $334^{\circ} \mathrm{T}$ at 1.1 knots | $321^{\circ} \mathrm{T}$ at 0.8 knot |
| 64 | At 0726 you depart Lake Montauk with light 1 close aboard and set course $310.5^{\circ}$ per standard magnetic compass at 7.6 knots. At 0812 your GPS position is LAT $41^{\circ} 08.1^{\prime} \mathrm{N}$, LONG $72^{\circ} 03.7^{\prime} \mathrm{W}$. What is the current? | $151^{\circ} \mathrm{T}$ at 1.0 knot | $164^{\circ} \mathrm{T}$ at 0.7 knot | $334{ }^{\circ} \mathrm{T}$ at 1.4 knot | $321^{\circ} \mathrm{T}$ at 0.8 knot |
| 65 | At 0726 you depart Lake Montauk with light 1 close aboard and set course $065^{\circ}$ per standard magnetic compass at 6.7 knots. At 0912 your GPS position is LAT $41^{\circ} 12.8^{\prime} \mathrm{N}$, LONG $71^{\circ} 48.2^{\prime} \mathrm{W}$. What is the current? | $151^{\circ} \mathrm{T}$ at 1.0 knot | $164^{\circ} \mathrm{T}$ at 0.7 knot | $287^{\circ} \mathrm{T}$ at 2.0 knots | $321^{\circ} \mathrm{T}$ at 0.8 knot |
| 66 | At 0726 you depart Lake Montauk with light 1 close aboard and set course $309^{\circ}$ per standard magnetic compass at 6.7 knots. At 0818 your GPS position is LAT $41^{\circ} 07.1^{\prime} \mathrm{N}$, LONG $72^{\circ} 02.6^{\prime} \mathrm{W}$. What is the current? | $102^{\circ} \mathrm{T}$ at 0.6 knot | $164^{\circ} \mathrm{T}$ at 0.7 knot | $334{ }^{\circ} \mathrm{T}$ at 0.9 knot | $321^{\circ} \mathrm{T}$ at 0.6 knot |
| 67 | At 0726 you depart Lake Montauk with light 1 close aboard and set course $065^{\circ}$ per standard magnetic compass at 6.7 knots. At 0912 your GPS position is LAT $41^{\circ} 10.5^{\prime} \mathrm{N}$, LONG $71^{\circ} 46.6^{\prime} \mathrm{W}$. What is the current? | $151^{\circ} \mathrm{T}$ at 1.2 knots | $164^{\circ} \mathrm{T}$ at 0.7 knot | $227^{\circ} \mathrm{T}$ at 0.9 knot | $240^{\circ} \mathrm{T}$ at 1.4 knots |
| 68 |  |  |  |  |  |
| 69 | The abandoned lighthouse west of Cape Henry Light is | painted black and white | a low mound of rubble | a gray, pyramidal structure | a steel skeleton structure |


| 70 | The area around Cape Charles is _ـ_ ${ }^{\text {. }}$ | low and bare, but the land back of it is high and wooded | composed of low to medium rolling hills | well defined with rocky outcroppings | marked by high, barren hills |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 71 | Fishermans Island (LAT $37^{\circ} 05.0^{\prime} \mathrm{N}$, LONG $75^{\circ} 57.7^{\prime} \mathrm{W}$ ) is | privately owned | sparsely wooded and awash at spring tides | $\begin{aligned} & \text { a high rocky } \\ & \text { promontory with marshy } \\ & \text { backwater } \end{aligned}$ | a National Wildlife Refuge |
| 72 | What is the distance from Norfolk to Philadelphia for a deep draft vessel via the Chesapeake Bay and C and D Canal ? | 209 miles | 245 miles | 286 miles | 302 miles |
| 73 | What is the distance from Chesapeake Bay entrance to Baltimore? | 150 nm | 162 nm | 173 nm | 247 nm |
| 74 | You wish to anchor and fish in the regulated navigation area in the vicinity of LAT $37^{\circ} 02^{\prime} \mathrm{N}$, LONG $76^{\circ} 01^{\prime} \mathrm{W}$. Which of the following statements is TRUE? | Anchoring is prohibited in this area due to the danger of unexploded mines on the bottom. | You may anchor in this area only in the event of an emergency such as loss of main propulsion. | You may anchor in this area if your vessel is less than 65 feet in length or if you have the Captain of the Port's permission. | Any vessel can anchor without restriction as the regulations only apply to vessels underway. |
| 75 | What correction should be applied to the charted depths of the Poquoson River at York Point at the PM low water on 18 December 1983? | +1.9 feet | -0.1 feet | -0.4 feet | No correction is necessary |
| 76 | What is the time (DST ZD +4) of the AM high tide at York Point, Poquoson River on 8 September 1983? | 0955 | 1048 | 1055 | 1102 |
| 77 | What is the velocity of the first maximum flood current in Lynnhaven Roads on 23 July 1983? | 0.4 knot | 0.5 knot | 0.8 knot | 1.3 knots |
| 78 | What will be the average direction of the current in Lynnhaven Roads at 1000 DST (ZD +4 ) on 23 July 1983? | $305^{\circ} \mathrm{T}$ | $125^{\circ} \mathrm{T}$ | 070 ${ }^{\circ} \mathrm{T}$ | Almost slack water |
| 79 |  |  |  |  |  |
| 80 | Charles Island (LAT $41^{\circ} 11.5^{\prime} \mathrm{N}$, LONG $73^{\circ} 03.4^{\prime} \mathrm{W}$ ) is | a high, rocky pinnacle with steep cliffs | a low, sandy island barren of all vegetation | identified by a tall prominent flagpole | low and partly covered by trees |
| 81 | What time will high water occur at Saybrook Jetty on the morning of 29 October 1983? | 0145 | 0255 | 0405 | 0920 |
| 82 | What was the height of the high water at Saybrook Jetty on the afternoon of 18 February 1983? | 1.4 ft . | 2.0 ft . | 2.4 ft . | 2.9 ft . |
| 83 | What best describes the condition of the tidal current at New London Harbor Entrance, at 0945 on 3 March 1983? | It is slack water. | The current has reached its maximum flood velocity. | It has reached its maximum ebb velocity. | The current is approaching slack water. |
| 84 | What is the maximum speed permitted in the Main Entrance Channel to Port Jefferson Harbor? | 3 mph | 5 mph | 7 mph | 12 mph |


| 85 | At what time will the first maximum flood occur 1 mile east of Old Field Point on 29 April 1983? (You are keeping daylight saving time ZD +4). | 0957 | 1059 | 1328 | 1423 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 86 | What will be the height of the high water at Mount Sinai Harbor on the morning of 26 August 1983? | 4.1 feet | 6.3 feet | 7.2 feet | 8.4 feet |
| 87 | What best describes the structure from which Stratford Point Light is shown? | Brown conical tower with white horizontal band in center of light on black pier | Red conical tower on brown cylindrical pier | White octagonal house on brown cylindrical pier | White conical tower, with brown band midway of height |
| 88 | What is the maximum speed permitted in Clinton Harbor? | 6 mph | 8 mph | 10 mph | 12 mph |
| 89 | According to the U.S. Coast Pilot, what is the depth of the channel between State Pier No. 1 and the U.S. Navy Submarine Base in New London Harbor? | 40 feet (12.1 meters) | 38 feet (11.5 meters) | 36 feet (10.9 meters) | 34 feet (10.3 meters) |
| 90 | Which statement is FALSE with regard to Plum Island Harbor West Dolphin Light? | The light is maintained from sundown to 0130 daily. | The light is white. | The light is maintained by the U.S. Dept. of Agriculture. | The light is located on a dolphin. |
| 91 | What will be the height of the tide at Horton Pt., New York, on 16 June 1983, at 1845 DST (ZD +4)? | 0.2 foot | 2.7 feet | 4.1 feet | 5.5 feet |
| 92 | What will be the velocity of the tidal current outside the breakwater at New Haven Hbr. entrance on 26 May 1983 at 1045 DST (ZD +4)? | 0.0 knot | 0.3 knot | 0.5 knot | 1.3 knots |
| 93 |  |  |  |  |  |
| 94 | Block Island is ___ | surrounded by wide sandy beaches | a low, marshy island | hilly with elevations to 200 feet ( 60.5 m ) | a national bird sanctuary |
| 95 | Great Salt Pond on Block Island is _ | entered through a dredged cut | not accessible in easterly gales | available for vessels up to a maximum draft of 8 feet ( 2.4 m ) | not affected by the tide |
| 96 | What is the velocity of the first PM (Daylight Savings Time) maximum ebb current at Plum Gut on 10 August 1983? | 3.3 knots | 4.0 knots | 4.5 knots | 5.4 knots |
| 97 | Point Judith Harbor of Refuge (LAT $41^{\circ} 22^{\prime} \mathrm{N}$, LONG $71^{\circ} 30^{\prime} \mathrm{W}$ ) | is used only by tows | has moorings for small craft along the breakwater | is easily entered in all sea conditions | is entered through either the East Gap or the West Gap |
| 98 | What is the time of the first PM (Daylight Savings Time) maximum ebb current at Plum Gut on 10 August 1983? | 1231 | 1249 | 1340 | 1445 |
| 99 | What is the height of the tide at Great Salt Pond on Block Island at the afternoon high water (daylight savings time) on 1 July 1983? | 3.9 feet | 3.0 feet | 2.4 feet | 2.1 feet |
| 100 | What is the height of the tide at Great Salt Pond, on Block Island, at the morning high water (daylight savings time) on 1 July 1983? | 1.3 feet | 2.3 feet | 3.2 feet | There is no morning high water |


| 101 | What is the time (Daylight Savings Time) of the first high tide on 1 July 1983 at Great Salt Pond on Block Island? | 0027 | 0448 | 1158 | 1203 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 102 | The passage between Great Gull Island and Plum Island $\qquad$ - | is subject to weak and variable tidal currents | uncovers at extreme low water | should be avoided | shows a whirlpool at maximum ebb current when accompanied by NW gales |
| 103 | What is the velocity of the maximum ebb current approximately 1.1 miles ENE of Little Gull Island in the afternoon of 25 April 1983? | 5.5 knots | 4.7 knots | 4.2 knots | 1.3 knots |
| 104 |  |  |  |  |  |
| 105 | At 1256 your GPS position is LAT $36^{\circ} 57.0^{\prime} \mathrm{N}$, LONG $75^{\circ} 41.0^{\prime} \mathrm{W}$. At 1336 your position is LAT $37^{\circ} 07.5^{\prime} \mathrm{N}$, LONG $75^{\circ} 39.1^{\prime} \mathrm{W}$. What was the speed made good between the fixes? | 14.6 knots | 15.2 knots | 16.0 knots | 18.6 knots |
| 106 | At 1256 your GPS position is LAT $36^{\circ} 57.0^{\prime} \mathrm{N}$, LONG $75^{\circ} 41.0^{\prime} \mathrm{W}$. At 1331 your position is LAT $37^{\circ} 07.5^{\prime} \mathrm{N}$, LONG $75^{\circ} 39.1^{\prime} \mathrm{W}$. What was the speed made good between the fixes? | 14.6 knots | 15.2 knots | 16.6 knots | 18.3 knots |
| 107 | At 1614 your GPS position is LAT $37^{\circ} 01.6^{\prime} \mathrm{N}$, LONG $75^{\circ} 31.7^{\prime} \mathrm{W}$. At 1703 your position is LAT $36^{\circ} 57.0^{\prime} \mathrm{N}$, LONG $75^{\circ} 41.0^{\prime} \mathrm{W}$. What was the course made good between the fixes? | $238{ }^{\circ} \mathrm{T}$ | $242^{\circ} \mathrm{T}$ | $247^{\circ} \mathrm{T}$ | $250^{\circ} \mathrm{T}$ |
| 108 | At 0856 your GPS position is LAT $37^{\circ} 01.6^{\prime} \mathrm{N}$, LONG $75^{\circ} 31.7^{\prime} \mathrm{W}$. At 0945 your position is LAT $36^{\circ} 57.0^{\prime} \mathrm{N}$, LONG $75^{\circ} 41.0^{\prime} \mathrm{W}$. What was the speed made good between the fixes? | 8.4 knots | 8.9 knots | 9.6 knots | 10.7 knots |
| 109 | At 1422 your GPS position is LAT $37^{\circ} 07.5^{\prime} \mathrm{N}$, LONG $75^{\circ} 39.1^{\prime} \mathrm{W}$. At 1549 your position is LAT $36^{\circ} 57.0^{\prime} \mathrm{N}$, LONG $75^{\circ} 41.0^{\prime} \mathrm{W}$. What was the course made good between the fixes? | $185^{\circ} \mathrm{T}$ | $188^{\circ} \mathrm{T}$ | $194^{\circ} \mathrm{T}$ | $198^{\circ} \mathrm{T}$ |
| 110 | At 1919 your position is LAT $37^{\circ} 00.0^{\prime} \mathrm{N}$, LONG $75^{\circ} 30.0^{\prime} \mathrm{W}$. At 2000 your position is LAT $36^{\circ} 59.5^{\prime} \mathrm{N}$, LONG $75^{\circ} 37.0^{\prime} \mathrm{W}$. What was the speed made good? | 5.6 knots | 6.6 knots | 8.2 knots | 9.1 knots |
| 111 | At 1919 your position is LAT $37^{\circ} 00.0^{\prime} \mathrm{N}$, LONG $75^{\circ} 30.0^{\prime} \mathrm{W}$. At 1950 your position is LAT $36^{\circ} 59.5^{\prime} \mathrm{N}$, LONG $75^{\circ} 37.0^{\prime} \mathrm{W}$. What is the speed made good? | 5.6 knots | 8.2 knots | 9.1 knots | 10.9 knots |
| 112 | At 1919 your position is LAT $37^{\circ} 00.0^{\prime} \mathrm{N}$, LONG $75^{\circ} 30.0^{\prime} \mathrm{W}$. At 2031 your position is LAT $36^{\circ} 59.5^{\prime} \mathrm{N}$, LONG $75^{\circ} 44.9^{\prime} \mathrm{W}$. What was the speed made good? | 8.2 knots | 9.3 knots | 10.0 knots | 10.9 knots |
| 113 | At 1919 your position is LAT $37^{\circ} 00.0^{\prime} \mathrm{N}$, LONG $75^{\circ} 30.0^{\prime} \mathrm{W}$. At 2011 your position is LAT $36^{\circ} 59.5^{\prime} \mathrm{N}$, LONG $75^{\circ} 44.9^{\prime} \mathrm{W}$. What was the speed made good? | 13.7 knots | 12.0 knots | 11.6 knots | 10.9 knots |


| 114 | At 1919 your position is LAT $37^{\circ} 00.5^{\prime} \mathrm{N}$, LONG $75^{\circ} 43.8^{\prime} \mathrm{W}$. At 2019 your position is LAT $37^{\circ} 00.0^{\prime} \mathrm{N}$, LONG $75^{\circ} 30.0^{\prime} \mathrm{W}$. What is the course made good? | 090T | $093^{\circ} \mathrm{T}$ | 096T | 099 ${ }^{\circ} \mathrm{T}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 115 |  |  |  |  |  |
| 116 | At 1035 your GPS position of LAT $41^{\circ} 05.3^{\prime} \mathrm{N}$, LONG $72^{\circ} 33.7^{\prime} \mathrm{W}$. At 1103 your position is LAT $41^{\circ} 09.0^{\prime} \mathrm{N}$, LONG $72^{\circ} 40.0^{\prime} \mathrm{W}$. What was your speed made good? | 6.1 knots | 9.5 knots | 13.0 knots | 14.8 knots |
| 117 | At 1520 your GPS position is LAT $41^{\circ} 13.1^{\prime} \mathrm{N}$, LONG $72^{\circ} 16.1^{\prime} \mathrm{W}$. At 1630 your position is LAT $41^{\circ} 17.5^{\prime} \mathrm{N}$, LONG $72^{\circ} 04.7^{\prime} \mathrm{W}$. What were your true course and speed made good? | $344^{\circ}$ at 8.2 knots | $077^{\circ}$ at 9.5 knots | $063{ }^{\circ}$ at 8.3 knots | $059^{\circ}$ at 8.1 knots |
| 118 | At 1018 your position is LAT $41^{\circ} 14.4^{\prime} \mathrm{N}$, LONG $72^{\circ} 07.2^{\prime} \mathrm{W}$. At 1036 your vessels position is LAT $41^{\circ} 13.1^{\prime} \mathrm{N}$, LONG $72^{\circ} 16.1^{\prime} \mathrm{W}$. What was your true course and speed made good? | $259{ }^{\circ}$ at 22.6 knots | $245^{\circ}$ at 23.1 knots | 079 ${ }^{\circ}$ at 22.8 knots | $065^{\circ}$ at 25.5 knots |
| 119 | At 2115 your position is LAT $41^{\circ} 14.4^{\prime} \mathrm{N}$, LONG $72^{\circ} 07.2^{\prime} \mathrm{W}$. At 0015 your position is LAT $41^{\circ} 03.3^{\prime} \mathrm{N}$, LONG $72^{\circ} 37.9^{\prime} \mathrm{W}$. What was your true course made good? | $062^{\circ} \mathrm{T}$ | 076T | $245^{\circ} \mathrm{T}$ | $259^{\circ} \mathrm{T}$ |
| 120 | At 2115 your GPS position is LAT $41^{\circ} 03.3^{\prime} \mathrm{N}$, LONG $72^{\circ} 37.9^{\prime} \mathrm{W}$. At 0027 your position is LAT $41^{\circ} 14.4^{\prime} \mathrm{N}$, LONG $72^{\circ} 07.2^{\prime} \mathrm{W}$. What was your speed made good? | 7.0 knots | 7.5 knots | 8.0 knots | 8.5 knots |
| 121 | At 2125 your GPS position is LAT $41^{\circ} 05.7^{\prime} \mathrm{N}$, LONG $72^{\circ} 46.5^{\prime} \mathrm{W}$. At 2208 your position is LAT $41^{\circ} 03.3^{\prime} \mathrm{N}$, LONG $72^{\circ} 37.9^{\prime} \mathrm{W}$. What was your course made good by standard magnetic compass? | $123^{\circ} \mathrm{psc}$ | $287^{\circ} \mathrm{psc}$ | $303{ }^{\circ} \mathrm{psc}$ | $326^{\circ} \mathrm{psc}$ |
| 122 | At 2021 your position is LAT $41^{\circ} 09.7^{\prime} \mathrm{N}$, LONG $72^{\circ} 59.8^{\prime} \mathrm{W}$. At 2057 your position is LAT $41^{\circ} 00.5^{\prime} \mathrm{N}$, LONG $72^{\circ} 49.5^{\prime} \mathrm{W}$. What are your true course and speed made good? | $140^{\circ}$ at 20 knots | $145^{\circ}$ at 18 knots | $316^{\circ}$ at 19 knots | $320^{\circ}$ at 17 knots |
| 123 | At 1930 your GPS position is LAT $41^{\circ} 00.5^{\prime} \mathrm{N}$, LONG $72^{\circ} 49.5^{\prime} \mathrm{W}$. At 2018 your position is LAT $41^{\circ} 08.6^{\prime} \mathrm{N}$, LONG $72^{\circ} 41.6^{\prime} \mathrm{W}$. What was your true course and speed made good? | $219^{\circ}$ at 10.1 knots | $214^{\circ}$ at 12.5 knots | $036{ }^{\circ}$ at 12.6 knots | $039^{\circ}$ at 11.2 knots |
| 124 | At 1930 your GPS position is LAT $41^{\circ} 08.6^{\prime} \mathrm{N}$, LONG $72^{\circ} 41.6^{\prime} \mathrm{W}$. At 2024 your position is LAT $41^{\circ} 00.5^{\prime} \mathrm{N}$, LONG $72^{\circ} 49.5^{\prime} \mathrm{W}$. What is your true course and speed made good? | $219^{\circ}$ at 10.1 knots | $216^{\circ}$ at 11.2 knots | $039{ }^{\circ}$ at 9.9 knots | $036^{\circ}$ at 11.1 knots |
| 125 | At 0647 your position is LAT $41^{\circ} 08.6^{\prime} \mathrm{N}$, LONG $72^{\circ} 41.6^{\prime} \mathrm{W}$. At 0729 your position is LAT $41^{\circ} 10.3^{\prime} \mathrm{N}$, LONG $72^{\circ} 29.2^{\prime} \mathrm{W}$. What were your true course and speed made good? | $074{ }^{\circ}$ at 9.5 knots | $080^{\circ}$ at 13.6 knots | $253^{\circ}$ at 9.7 knots | $258^{\circ}$ at 13.5 knots |


| 126 | At 0647 a GPS fix places your vessel 1 mile due south of buoy "8C" (buoy position LAT $41^{\circ} 10.8^{\prime} \mathrm{N}$, LONG $72^{\circ} 29.4^{\prime} \mathrm{W}$ ). At 0753 another GPS fix places your vessel at LAT $41^{\circ} 08.6^{\prime} \mathrm{N}$, LONG $72^{\circ} 41.6^{\prime} \mathrm{W}$. What were your true course and speed made good? | $088^{\circ}$ at 9.6 knots | $192^{\circ}$ at 8.8 knots | $263{ }^{\circ}$ at 8.5 knots | $268^{\circ}$ at 9.1 knots |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 127 |  |  |  |  |  |
| 128 | At 2016 your GPS position is LAT $41^{\circ} 07.6^{\prime} \mathrm{N}$, LONG $71^{\circ} 37.8^{\prime} \mathrm{W}$. At 2128 your GPS position is LAT $41^{\circ} 00.4^{\prime} \mathrm{N}$, LONG $71^{\circ} 29.4^{\prime} \mathrm{W}$. What was the speed made good between the two positions? | 11.9 knots | 10.2 knots | 8.0 knots | 7.4 knots |
| 129 | At 2016 your GPS position is LAT $41^{\circ} 07.6^{\prime} \mathrm{N}$, LONG $71^{\circ} 33.8^{\prime} \mathrm{W}$. At 2128 your position is LAT $41^{\circ} 00.4^{\prime} \mathrm{N}$, LONG $71^{\circ} 29.4^{\prime} \mathrm{W}$. What was the speed made good between the two positions? | 11.9 knots | 10.2 knots | 8.9 knots | 6.7 knots |
| 130 | At 1016 your GPS position is LAT $41^{\circ} 07.6^{\prime} \mathrm{N}$, LONG $71^{\circ} 38.5^{\prime} \mathrm{W}$. At 1104 your position is LAT $41^{\circ} 00.4^{\prime} \mathrm{N}$, LONG $71^{\circ} 29.4^{\prime} \mathrm{W}$. What was the speed made good between the two positions? | 10.9 knots | 11.7 knots | 12.5 knots | 13.6 knots |
| 131 | At 1016 your GPS position is LAT $41^{\circ} 07.6^{\prime} \mathrm{N}$, LONG $71^{\circ} 37.9^{\prime} \mathrm{W}$. At 1104 your position is LAT $41^{\circ} 00.2^{\prime} \mathrm{N}$, LONG $71^{\circ} 29.4^{\prime} \mathrm{W}$. What was the true course made good between the two positions? | $134^{\circ} \mathrm{T}$ | ${ }^{139}{ }^{\circ} \mathrm{T}$ | $143^{\circ} \mathrm{T}$ | $145^{\circ} \mathrm{T}$ |
| 132 | At 1016 your position is LAT $41^{\circ} 07.6^{\prime} \mathrm{N}$, LONG $71^{\circ} 38.5^{\prime} \mathrm{W}$. At 1116 your position is LAT $41^{\circ} 01.4^{\prime} \mathrm{N}$, LONG $71^{\circ} 29.4^{\prime} \mathrm{W}$. What was the course made good between the two positions? | $132^{\circ} \mathrm{T}$ | $135^{\circ} \mathrm{T}$ | $140^{\circ} \mathrm{T}$ | $143^{\circ} \mathrm{T}$ |
| 133 | At 1014 you depart the entrance to Lake Montauk with light "1" close aboard. Your course is $066^{\circ}$ per standard magnetic compass, and the speed is 8.6 knots. At 1230 your position is LAT $41^{\circ} 20.0^{\prime} \mathrm{N}$, LONG $71^{\circ} 40.0^{\prime} \mathrm{W}$. What is the speed made good? | 8.0 knots | 8.3 knots | 8.6 knots | 8.9 knots |
| 134 | At 1014 you depart the entrance to Lake Montauk with Light " 1 " close aboard. Your course is $066^{\circ}$ per standard magnetic compass, and the speed is 8.6 knots. At 1238 your position is LAT $41^{\circ} 20.0^{\prime} \mathrm{N}$, LONG $71^{\circ} 40.0^{\prime} \mathrm{W}$. What is the speed made good? | 8.2 knots | 8.6 knots | 8.9 knots | 9.2 knots |
| 135 | At 1014 you depart the entrance to Lake Montauk with light "1" close aboard. Your course is $066^{\circ}$ per standard magnetic compass, and the speed is 8.6 knots. At 1222 your position is LAT $41^{\circ} 20.0^{\prime} \mathrm{N}$, LONG $71^{\circ} 40.0^{\prime} \mathrm{W}$. What is the speed made good? | 8.4 knots | 8.6 knots | 9.2 knots | 9.6 knots |


| 136 | At 1014 you depart the entrance to Lake Montauk with light "1" close aboard. Your course is $066^{\circ}$ per standard magnetic compass, and the speed is 8.6 knots. At 1232 your position is LAT $41^{\circ} 20.0^{\prime} \mathrm{N}$, LONG $71^{\circ} 40.0^{\prime} \mathrm{W}$. What is the speed made good? | 8.2 knots | 8.5 knots | 8.9 knots | 9.2 knots |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 137 | At 1014 you depart the entrance to Lake Montauk with light "1" close aboard. Your course is $066^{\circ}$ per standard magnetic compass, and the speed is 8.6 knots. At 1232 your position is LAT $41^{\circ} 20.0^{\prime} \mathrm{N}$, LONG $71^{\circ} 40.0^{\prime} \mathrm{W}$. What is the course made good? | 036 ${ }^{\circ} \mathrm{T}$ | 040 ${ }^{\circ} \mathrm{T}$ | 044 ${ }^{\circ} \mathrm{T}$ | ${ }^{047}{ }^{\circ} \mathrm{T}$ |
| 138 |  |  |  |  |  |
| 139 | What is the true heading to steer outbound in Thimble Shoal Channel if your engines are turning for 8.0 knots, the current is $050^{\circ} \mathrm{T}$ at 1.0 knot and a northerly wind causes $3^{\circ}$ of leeway? | $111^{\circ} \mathrm{T}$ | $104^{\circ} \mathrm{T}$ | ${ }^{101}{ }^{\circ} \mathrm{T}$ | 098T |
| 140 | What is the true heading to steer inbound in the York River Entrance Channel if your engines are turning for 9.5 knots, the current is $076^{\circ} \mathrm{T}$ at 1.2 knots, and a southwesterly wind causes $3^{\circ}$ of leeway? | $313^{\circ} \mathrm{T}$ | $308^{\circ} \mathrm{T}$ | $303{ }^{\circ} \mathrm{T}$ | $300^{\circ} \mathrm{T}$ |
| 141 | You are eastbound in the Thimble Shoal Channel. What is the true heading to steer if the engines are turning for 9.5 knots, the current is $110^{\circ} \mathrm{T}$ at 1.2 knots, and a southerly wind causes $3^{\circ}$ of leeway? | $111^{\circ}$ | $108^{\circ}$ | $105^{\circ}$ | $100^{\circ}$ |
| 142 | What is the true heading to steer inbound in York River Entrance Channel if your engines are turning for 9.8 knots, the current is $220^{\circ} \mathrm{T}$ at 1.2 knots, and a northeasterly wind causes $3^{\circ}$ of leeway? | $319^{\circ} \mathrm{T}$ | $315^{\circ} \mathrm{T}$ | $301{ }^{\circ} \mathrm{T}$ | $298{ }^{\circ} \mathrm{T}$ |
| 143 | What is the true heading to steer in York River Entrance Channel if your engines are turning for 10.2 knots, the current is $220^{\circ} \mathrm{T}$ at 1.2 knots and a southwesterly wind causes $3^{\circ}$ of leeway? | $316^{\circ} \mathrm{T}$ | $313^{\circ} \mathrm{T}$ | $309{ }^{\circ} \mathrm{T}$ | $300^{\circ} \mathrm{T}$ |
| 144 | Your position is LAT $37^{\circ} 00.0^{\prime} \mathrm{N}$, LONG $75^{\circ} 30.0^{\prime} \mathrm{W}$. What is the course to steer per standard magnetic compass to arrive at LAT $36^{\circ} 59.0^{\prime} \mathrm{N}$, LONG $75^{\circ} 48.5^{\prime} \mathrm{W}$, if the current is $043^{\circ} \mathrm{T}$ at 1.3 knots, a south-southeasterly wind is causing $3^{\circ}$ of leeway, and you are turning for 8.7 knots? | $260.5^{\circ} \mathrm{psc}$ | $264.0^{\circ} \mathrm{psc}$ | $268.0^{\circ} \mathrm{psc}$ | $271.5^{\circ} \mathrm{psc}$ |
| 145 | Your position is LAT $37^{\circ} 00.0^{\prime} \mathrm{N}$, LONG $75^{\circ} 30.0^{\prime} \mathrm{W}$. What is the course to steer per standard magnetic compass to arrive at LAT $36^{\circ} 59.0^{\prime} \mathrm{N}$, LONG $75^{\circ} 48.5^{\prime} \mathrm{W}$, if you are turning for 8.7 knots, the current is $039^{\circ} \mathrm{T}$ at 1.3 knots, and a northwesterly wind is causing $3^{\circ}$ of leeway? | $264.0^{\circ}$ | $267.5^{\circ}$ | $270.0^{\circ}$ | $273.0^{\circ}$ |


| 146 | Your position is LAT $37^{\circ} 00.0^{\prime} \mathrm{N}$, LONG $75^{\circ} 30.0^{\prime} \mathrm{W}$. What is the course to steer per standard magnetic compass to arrive at LAT $36^{\circ} 59.0^{\prime} \mathrm{N}$, LONG $75^{\circ} 48.5^{\prime} \mathrm{W}$, if you are turning for 7.8 knots, the current is $139^{\circ} \mathrm{T}$ at 1.3 knots, and a northwesterly wind is causing $3^{\circ}$ of leeway? | $290.0^{\circ} \mathrm{psc}$ | $286.0^{\circ} \mathrm{psc}$ | $283.5^{\circ} \mathrm{psc}$ | $280.5^{\circ} \mathrm{psc}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 147 | Your position is LAT $37^{\circ} 00.9^{\prime} \mathrm{N}$, LONG $75^{\circ} 30.0^{\prime} \mathrm{W}$. What is the course to steer per magnetic compass to arrive at LAT $36^{\circ} 59.0^{\prime} \mathrm{N}$, LONG $75^{\circ} 48.5^{\prime} \mathrm{W}$, if you are turning for 7.8 knots the current is $339^{\circ} \mathrm{T}$ at 1.3 knots, and a northwesterly wind is causing $3^{\circ}$ of leeway? | $265^{\circ} \mathrm{psc}$ | 267 ${ }^{\circ} \mathrm{psc}$ | 269 ${ }^{\circ} \mathrm{psc}$ | $271^{\circ} \mathrm{psc}$ |
| 148 | Your position is LAT $37^{\circ} 00.0^{\prime} \mathrm{N}$, LONG $75^{\circ} 30.0^{\prime} \mathrm{W}$. What is the course to steer per standard magnetic compass to arrive at LAT $36^{\circ} 59.0^{\prime} \mathrm{N}$, LONG $75^{\circ} 48.5^{\prime} \mathrm{W}$, if you are making 7.8 knots, the current is $239^{\circ} \mathrm{T}$ at 1.3 knots, and a southeasterly wind is causing $3^{\circ}$ of leeway? | $271{ }^{\circ} \mathrm{psc}$ | $274{ }^{\circ} \mathrm{psc}$ | $278{ }^{\circ} \mathrm{psc}$ | $282^{\circ} \mathrm{psc}$ |
| 149 |  |  |  |  |  |
| 150 | What is the course to steer between Port Jefferson Approach buoy "PJ" and New Haven Lighted Buoy "NH"? Your engine speed is 12 knots and you allow for a current of $93^{\circ} \mathrm{T}$ at 0.8 knot. A NW'ly wind causes $3^{\circ}$ leeway. | $030^{\circ} \mathrm{T}$ | ${ }^{034}{ }^{\circ} \mathrm{T}$ | $0^{\circ}{ }^{\circ} \mathrm{T}$ | 044 ${ }^{\circ} \mathrm{T}$ |
| 151 | What course should you steer by standard magnetic compass (psc) between Horton Pt. Light and Falkner Island Light, if the set and drift of the current are $040^{\circ} \mathrm{T}$ at 0.9 knot, and a westerly wind will cause $2^{\circ}$ of leeway? Your engines are making turns for 10 knots. | $314.0^{\circ} \mathrm{psc}$ | $319.0^{\circ} \mathrm{psc}$ | $324.5{ }^{\circ} \mathrm{psc}$ | $328.5^{\circ} \mathrm{psc}$ |
| 152 | What course should you steer by your standard magnetic compass (psc), between New Haven Light and Stratford Pt. Light, if the set and drift of the current are $345^{\circ} \mathrm{T}$ at 3.0 knots, and a northerly wind will cause $1^{\circ}$ of leeway? Your engines are making turns for 18.0 knots. | $245.0^{\circ} \mathrm{psc}$ | $247.0^{\circ} \mathrm{psc}$ | $264.0^{\circ} \mathrm{psc}$ | $266.5^{\circ} \mathrm{psc}$ |
| 153 | What is the true course to steer between Falkner Island Light and Horton Point Light, if the set and drift of the current are $041^{\circ}$ at 2.4 knots, and a northeasterly wind will cause $4^{\circ}$ of leeway? Your engines are making turns for 15 knots. | $116^{\circ} \mathrm{T}$ | $124^{\circ} \mathrm{T}$ | $134{ }^{\circ} \mathrm{T}$ | $142^{\circ} \mathrm{T}$ |
| 154 | Your engines are making turns for 8 knots and a northerly wind is causing $3^{\circ}$ of leeway. There is a current of $220^{\circ} \mathrm{T}$ at 1.5 knots. What is the course to steer between Branford Reef Light and Faulkner Island Light? | 084 ${ }^{\circ} \mathrm{T}$ | ${ }^{095}{ }^{\circ} \mathrm{T}$ | $102^{\circ} \mathrm{T}$ | $108^{\circ} \mathrm{T}$ |


| 155 | What is the true course to steer between Stratford Shoal (Middle Ground Light) and New Haven Light, if the set and drift of the current are $048^{\circ} \mathrm{T}$ at 2 knots, and a southeasterly wind will cause $2^{\circ}$ of leeway? Your engines are making turns for 10 knots. | $032^{\circ} \mathrm{T}$ | $037{ }^{\circ} \mathrm{T}$ | 039 ${ }^{\circ} \mathrm{T}$ | 041 ${ }^{\circ} \mathrm{T}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 156 | What course should you steer by standard magnetic compass between Mattituck Inlet and Branford Reef Light, if the set and drift of the current are $027^{\circ}$ at 2.5 knots, and a northeasterly wind will cause $1^{\circ}$ of leeway? Your engines are turning for 12 knots. | $295^{\circ} \mathrm{psc}$ | $305^{\circ} \mathrm{psc}$ | $317^{\circ} \mathrm{psc}$ | $320^{\circ} \mathrm{psc}$ |
| 157 | What course should you steer by your standard magnetic compass (psc) between Horton Pt. Light and a position 2 miles due south of Branford Reef Light, if the set and drift of the current are $111^{\circ} \mathrm{T}$ at 2.5 knots, and a southwesterly wind will cause $4^{\circ}$ of leeway? (Your engines are turning for 18 knots.) | $306^{\circ} \mathrm{psc}$ | $301^{\circ} \mathrm{psc}$ | $295{ }^{\circ} \mathrm{psc}$ | $275{ }^{\circ} \mathrm{psc}$ |
| 158 | What is the true course to steer from a position 2 miles due south of Branford Reef Light to Horton Pt. Light, if the set and drift of the current are $247^{\circ} \mathrm{T}$ at 3 knots, and a southwesterly wind will cause $3^{\circ}$ of leeway? (Your engines are making turns for 10 knots.) | $104^{\circ} \mathrm{T}$ | $100^{\circ} \mathrm{T}$ | ${ }^{095}{ }^{\circ} \mathrm{T}$ | $0^{\circ} 7^{\circ} \mathrm{T}$ |
| 159 | What course should you steer by your standard magnetic compass (psc) from a position 2 miles due south of Branford Reef Light to Horton Pt. Light, if the set and drift of the current are $065^{\circ} \mathrm{T}$ at 2 knots, and a northerly wind will cause $2^{\circ}$ of leeway? Your engines are turning for 14 knots. | $113^{\circ} \mathrm{psc}$ | $118^{\circ} \mathrm{psc}$ | $128^{\circ} \mathrm{psc}$ | $134^{\circ} \mathrm{psc}$ |
| 160 | What is the true course to steer between Horton Pt. Light and a position 2 miles due south of Branford Reef Light, if the set and drift of the current are $40^{\circ} \mathrm{T}$ at 1.5 knots, and an easterly wind will cause $3^{\circ}$ of leeway? Your engines are making turns for 12 knots. | $277^{\circ} \mathrm{T}$ | ${ }^{283}{ }^{\circ} \mathrm{T}$ | $2^{287}{ }^{\circ} \mathrm{T}$ | $291{ }^{\circ} \mathrm{T}$ |
| 161 | What is the true course to steer between the entrance to Great Salt Pond (LAT $41^{\circ} 12.0^{\prime} \mathrm{N}$, LONG $71^{\circ} 35.6^{\prime} \mathrm{W}$ ) and the entrance to Quonochontaug Pond (LAT $41^{\circ} 19.8^{\prime} \mathrm{N}$, LONG $71^{\circ} 43.2^{\prime} \mathrm{W}$ ), if you are turning for 8.5 knots, and you allow for a current of $247^{\circ} \mathrm{T}$ at 1.2 knots, and an easterly wind is causing $2^{\circ}$ of leeway? |  |  |  |  |
| 162 |  | $314^{\circ} \mathrm{T}$ | $320^{\circ} \mathrm{T}$ | $328^{\circ} \mathrm{T}$ | $333{ }^{\circ} \mathrm{T}$ |


| 163 | You are turning for 7.5 knots and a westerly wind is causing $2^{\circ}$ of leeway. There is a current of $047^{\circ} \mathrm{T}$ at 1.2 knots. What course should you steer between the entrance to Quonochontaug Pond (LAT $41^{\circ} 19.8^{\prime} \mathrm{N}$, LONG $71^{\circ} 43.2^{\prime} \mathrm{W}$ ) and the entrance to Great Salt Pond (LAT $41^{\circ} 12.0^{\prime} \mathrm{N}$, LONG $71^{\circ} 35.6^{\prime} \mathrm{W}$ )? | $156^{\circ} \mathrm{T}$ | $155^{\circ} \mathrm{T}$ | $144^{\circ} \mathrm{T}$ | $140^{\circ} \mathrm{T}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 164 | What is the true course to steer between the entrance to Lake Montauk (LAT $41^{\circ} 04.8^{\prime} \mathrm{N}$, LONG $71^{\circ} 56.3^{\prime} \mathrm{W}$ ) and Winnapaug Pond entrance) LAT $41^{\circ} 19.6^{\prime} \mathrm{N}$, LONG $71^{\circ} 45.8^{\prime} \mathrm{W}$ ), if you are turning for 9.5 knots, allow for a current of $075^{\circ} \mathrm{T}$ at 1.2 knots, and a westerly wind is causing $3^{\circ}$ of leeway? | $021{ }^{\circ} \mathrm{T}$ | 024 ${ }^{\circ} \mathrm{T}$ | $07^{\circ} \mathrm{T}$ | $029^{\circ} \mathrm{T}$ |
| 165 | What is the true course to steer between the entrance to Winnapaug Pond (LAT $41^{\circ} 19.6^{\prime} \mathrm{N}$, LONG $71^{\circ} 45.8^{\prime} \mathrm{W}$ ) and the entrance to Lake Montauk (LAT $41^{\circ} 04.8^{\prime} \mathrm{N}$, LONG $71^{\circ} 56.3^{\prime} \mathrm{W}$ ), if you are turning for 8.5 knots, allowing for a current of $095^{\circ} \mathrm{T}$ at 0.9 knot, and an easterly wind is causing $3^{\circ}$ of leeway? | $200^{\circ} \mathrm{T}$ | $2^{208}{ }^{\circ} \mathrm{T}$ | $211^{\circ} \mathrm{T}$ | $214^{\circ} \mathrm{T}$ |
| 166 | What is the true course to steer between the entrance to Winnapaug Pond (LAT $41^{\circ} 19.6^{\prime} \mathrm{N}$, LONG $71^{\circ} 45.8^{\prime} \mathrm{W}$ ) and the entrance to Lake Montauk (LAT $41^{\circ} 04.8^{\prime} \mathrm{N}$, LONG $71^{\circ} 56.3^{\prime} \mathrm{W}$ ), if you are turning for 6.5 knots, allow for a current of $295^{\circ} \mathrm{T}$ at 0.9 knot, and an easterly wind is causing $4^{\circ}$ of leeway? | $196^{\circ} \mathrm{T}$ | $200^{\circ} \mathrm{T}$ | $213^{\circ} \mathrm{T}$ | $217^{\circ} \mathrm{T}$ |
| 167 | Your position is 3 miles due east of Montauk Point Light. What is the course to steer to arrive one mile due south of Block Island Southeast Point Light, if you are turning for 8.6 knots, the current is $130^{\circ}$ at 1.2 knots, and a northerly wind causes $3^{\circ}$ of leeway? | $0^{061}{ }^{\circ}$ | 064 ${ }^{\circ} \mathrm{T}$ | $0^{66}{ }^{\circ} \mathrm{T}$ | 070ํ |
| 168 | Your position is 3 miles due east of Montauk Point Light. What is the course to steer to arrive at LAT $41^{\circ} 00.0^{\prime} \mathrm{N}$, LONG $71^{\circ} 30.0^{\prime} \mathrm{W}$, if you are turning for 8.7 knots, the current is $130^{\circ}$ at 1.2 knots, and a northerly wind causes $3^{\circ}$ of leeway? | $112^{\circ} \mathrm{T}$ | $108^{\circ} \mathrm{T}$ | $105^{\circ} \mathrm{T}$ | $10{ }^{\circ} \mathrm{T}$ |
| 169 | Your position is 3 miles due east of Montauk Point Light. What is the course to steer to arrive at LAT $41^{\circ} 00.0^{\prime} \mathrm{N}$, LONG $71^{\circ} 30.0^{\prime} \mathrm{W}$, if you are turning for 7.8 knots, the current is $130^{\circ}$ at 1.2 knots, and a southerly wind causes $3^{\circ}$ of leeway? | $112^{\circ} \mathrm{T}$ | $108^{\circ} \mathrm{T}$ | $105^{\circ} \mathrm{T}$ | $10{ }^{\circ} \mathrm{T}$ |


| 170 | Your position is 3 miles due east of Montauk Point Light. What is the course to steer to arrive at LAT $41^{\circ} 00.0^{\prime} \mathrm{N}$, LONG $71^{\circ} 30.0^{\prime} \mathrm{W}$, if you are turning for 7.8 knots, the current is $330^{\circ}$ at 1.2 knots, and a southerly wind causes $3^{\circ}$ of leeway? | $117^{\circ} \mathrm{T}$ | $112^{\circ} \mathrm{T}$ | $104^{\circ} \mathrm{T}$ | $10{ }^{\circ} \mathrm{T}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 171 | Your position is 3 miles due east of Montauk Point Light. What is the true course to steer to arrive one mile due south of Block Island Southeast Point Light, if you are turning for 6.8 knots, the current is $330^{\circ}$ at 1.2 knots, and a southerly wind causes $3^{\circ}$ of leeway? | 081 ${ }^{\circ} \mathrm{T}$ | 084 ${ }^{\circ} \mathrm{T}$ | ${ }^{087}{ }^{\circ} \mathrm{T}$ | $090^{\circ} \mathrm{T}$ |
| 172 |  |  |  |  |  |
| 173 | You sight Wolf Trap Light in line with New Point Comfort Spit Light "2" bearing $040^{\circ}$ per standard magnetic compass. You are on course $319^{\circ}$ per standard magnetic compass. Based on this, you $\qquad$ | know the compass error is $8^{\circ} \mathrm{W}$ | should apply $3^{\circ}$ Easterly deviation to the bearing | know the deviation table is incorrect | should suspect the compass may be affected by a local magnetic disturbance |
| 174 | You sight Thimble Shoal Light in line with Old Point Comfort Light bearing $267^{\circ}$ per standard magnetic compass. You are on course $182^{\circ}$ psc. Based on this, you know $\qquad$ | the existing deviation is correct for that heading | you should adjust your compass | the compass error is $2^{\circ} \mathrm{W}$ | the variation is $11^{\circ} \mathrm{W}$ |
| 175 | You sight Thimble Shoal Light in line with Old Point Comfort Light bearing $265^{\circ}$ per standard magnetic compass. You are on course $135^{\circ}$ psc. Based on this, you know $\qquad$ | there is no compass error | there is a local magnetic disturbance | you should swing your vessel and check the deviation table | the deviation is $0^{\circ}$ |
| 176 | You sight Wolf Trap Light in line with New Point Comfort Spit Light "2" bearing $048^{\circ}$ per standard magnetic compass. You are on course $203^{\circ}$ psc. Based on this, you know $\qquad$ | the compass error is $12^{\circ} \mathrm{W}$ | the deviation is $9^{\circ} \mathrm{W}$ | that the deviation table is in error | the deviation is $3^{\circ} \mathrm{E}$ for bearings of $048^{\circ}$ per standard magnetic compass |
| 177 | You sight Wolf Trap Light in line with New Point Comfort Spit Light "2" bearing $234^{\circ}$ per standard magnetic compass. You are on course $329^{\circ}$ psc. Based on this, you $\qquad$ | know the compass error is $8^{\circ} \mathrm{W}$ | should swing the vessel to check the deviation table | know the deviation is $1^{\circ} \mathrm{W}$ | know the deviation table is accurate for that bearing |
| 178 | While in the Back River, you sight the two tanks along the Northwest Branch (vicinity LAT $37^{\circ} 05.6^{\prime} \mathrm{N}$, LONG $76^{\circ} 22.0^{\prime} \mathrm{W}$ ) in line bearing $274^{\circ} \mathrm{psc}$. If your vessel is heading $300^{\circ} \mathrm{psc}$, what is TRUE? | There is no deviation. | The deviation is equal to the variation. | The deviation is $9^{\circ} \mathrm{E}$. | The deviation is $0^{\circ}$ only for a bearing of $274^{\circ} \mathrm{psc}$. |
| 179 | While in the Back River, you sight the two tanks along the Northwest Branch (vicinity LAT $37^{\circ} 05.6^{\prime} \mathrm{N}$, LONG $76^{\circ} 22.0^{\prime} \mathrm{W}$ ) in line bearing $277^{\circ}$ per standard magnetic compass. If your vessel is heading $243^{\circ} \mathrm{psc}$, what is TRUE? | There is no deviation. | The deviation table is incorrect. | The compass error is $12^{\circ} \mathrm{W}$. | The deviation is $3^{\circ} \mathrm{E}$ for bearings of $277^{\circ} \mathrm{psc}$. |


| 180 | You sight Tue Marshes Light (LAT $37^{\circ} 14.1^{\prime} \mathrm{N}$, LONG $76^{\circ} 23.2^{\prime} \mathrm{W}$ ) in line with Goodwin Thorofare Light "16" (LAT $37^{\circ} 13.7^{\prime} \mathrm{N}$, LONG $76^{\circ} 25.0^{\prime} \mathrm{W}$ ) bearing $267^{\circ}$ per standard magnetic compass. What is TRUE if your vessel's heading is $056^{\circ} \mathrm{psc}$ ? | The compass error is $13^{\circ} \mathrm{E}$. | The deviation table is in error and should be corrected. | The deviation is $4^{\circ} \mathrm{E}$. | The deviation table is correct for a heading of $056^{\circ} \mathrm{psc}$. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 181 | You sight Tue Marshes Light (LAT $37^{\circ} 14.1^{\prime} \mathrm{N}$, LONG $76^{\circ} 23.2^{\prime} \mathrm{W}$ ) in line with Goodwin Thorofare Light "16" (LAT $37^{\circ} 13.7^{\prime} \mathrm{N}$, LONG $76^{\circ} 25.0^{\prime} \mathrm{W}$ ) bearing $262^{\circ}$ per standard magnetic compass. What is TRUE if your vessel's heading is $119^{\circ} \mathrm{psc}$ ? | The compass error is $10^{\circ} \mathrm{W}$. | The deviation table must be corrected for the change in date. | The deviation is $1^{\circ} \mathrm{W}$. | The deviation table is correct for a heading of $119^{\circ} \mathrm{psc}$. |
| 182 | You sight Tue Marshes Light (LAT $37^{\circ} 14.1^{\prime} \mathrm{N}$, LONG $76^{\circ} 23.2^{\prime} \mathrm{W}$ ) in line with Goodwin Thorofare Light "16" (LAT $37^{\circ} 13.7^{\prime} \mathrm{N}$, LONG $76^{\circ} 25.0^{\prime} \mathrm{W}$ ) dead ahead bearing $264^{\circ}$ per standard magnetic compass. Which statement is TRUE? | The compass error is $11^{\circ} \mathrm{W}$. | The deviation table must be corrected for the change in date. | The deviation is $1^{\circ} \mathrm{W}$ for a bearing of $264^{\circ}$ only. | The variation is $9^{\circ} \mathrm{W}$ for a bearing of $264^{\circ}$ only. |
| 183 |  |  |  |  |  |
| 184 | You are on course $119^{\circ}$ psc. You sight New Haven Outer Channel Range Rear Light in line with the Outer Channel Range Front Light bearing $346^{\circ}$ per standard magnetic compass. This indicates that $\qquad$ . | you should swing the vessel to determine the deviation | the existing deviation table is correct for that heading | your compass is affected by a local magnetic disturbance | the compass error is $16^{\circ} \mathrm{W}$ |
| 185 | Your vessel is steady on a heading of $203^{\circ}$ per standard magnetic compass when you sight New Haven Light and New Haven Outer Channel Range Front Light in line over the stern. This information indicates that the $\qquad$ | existing deviation table is correct for this heading | compass error is $17^{\circ} \mathrm{W}$ | deviation table is in error for this heading | deviation is $1^{\circ} \mathrm{E}$ |
| 186 | Your vessel is steady on a heading of $310^{\circ}$ per standard magnetic compass when you sight Stratford Point Light and Igor I. Sikorsky Airport Aero Beacon in line dead ahead. This information indicates that the $\qquad$ | existing deviation table is correct for this heading | deviation is $1^{\circ} \mathrm{E}$ | variation is $18^{\circ} \mathrm{W}$ for this area | compass error is $10^{\circ} \mathrm{W}$ |
| 187 | You sight Stratford Shoal (Middle Ground) Light and Old Field Pt. Light in line and bearing $200^{\circ}$ per standard magnetic compass. What is the deviation of the compass? | $7^{\circ} \mathrm{E}$ | $7^{\circ} \mathrm{W}$ | $3^{\circ} \mathrm{E}$ | $3^{\circ} \mathrm{W}$ |
| 188 | Your vessel is steady on a heading of $160^{\circ}$ per standard magnetic compass when you sight Southwest Ledge Light and New Haven Outer Channel Range Rear Light in line dead astern. What is the deviation of the compass based on this observation? | $2^{\circ} \mathrm{E}$ | $2^{\circ} \mathrm{W}$ | $5^{\circ} \mathrm{E}$ | $5^{\circ} \mathrm{W}$ |
| 189 | You sight Bartlett Reef Light (LAT 41¹6.5'N, LONG $72^{\circ} 08.2^{\prime} \mathrm{W}$ ) in line with New London Harbor Light (LAT $41^{\circ} 19.0^{\prime} \mathrm{N}$, LONG $72^{\circ} 05.4^{\prime} \mathrm{W}$ ) and bearing $059^{\circ}$ per standard magnetic compass. What is the compass deviation? | $4^{\circ} \mathrm{E}$ | $4^{\circ} \mathrm{W}$ | $10^{\circ} \mathrm{E}$ | $10^{\circ} \mathrm{W}$ |


| 190 | You sight Stratford Pt. Light in line with the Igor I. Sikorsky Airport Aero Beacon bearing $319^{\circ}$ per standard magnetic compass. What is the compass deviation? | $4^{\circ} \mathrm{W}$ | $4^{\circ} \mathrm{E}$ | $18^{\circ} \mathrm{W}$ | $18^{\circ} \mathrm{E}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 191 | You sight Stratford Pt. Light in line with the Igor I. Sikorsky Airport Aero Beacon bearing $319^{\circ}$ per standard magnetic compass. What is the compass error? | $4^{\circ} \mathrm{E}$ | $10^{\circ} \mathrm{W}$ | $14^{\circ} \mathrm{E}$ | $18^{\circ} \mathrm{W}$ |
| 192 | You sight South West Ledge Light in line with New Haven Outer Channel Range Rear Light bearing $338.5^{\circ}$ per standard magnetic compass. What is the deviation? | $3^{\circ} \mathrm{E}$ | $4^{\circ} \mathrm{W}$ | $6^{\circ} \mathrm{E}$ | $9^{\circ} \mathrm{W}$ |
| 193 | You sight New Haven Outer Channel Range Rear Light in line with the Outer Channel Range Front Light bearing $343^{\circ}$ per standard magnetic compass. What is your compass error? | $5^{\circ} \mathrm{E}$ | $5^{\circ} \mathrm{W}$ | $9^{\circ} \mathrm{E}$ | $9^{\circ} \mathrm{W}$ |
| 194 |  |  |  |  |  |
| 195 | You are on course $244^{\circ}$ per standard magnetic compass when you sight Block Island Southeast Point Light in line with Block Island Aero Beacon bearing $326^{\circ}$ per standard magnetic compass. Based on this you $\qquad$ _. | should swing your vessel to check the deviation table | know the compass error is $12^{\circ} \mathrm{W}$ | should suspect that there is a local magnetic disturbance | should apply $3^{\circ} \mathrm{W}$ deviation to any bearing (psc) while on a heading of $244^{\circ} \mathrm{psc}$ |
| 196 | You are on course $055^{\circ}$ per standard magnetic compass when you sight Block Island Southeast Point Light in line with the Block Island Aero Beacon bearing $319^{\circ}$ per standard magnetic compass. Based on this you $\qquad$ _. | should use $4^{\circ} \mathrm{W}$ deviation on true courses of $040^{\circ}$ | know the compass error is $19^{\circ} \mathrm{W}$ | know the deviation table is correct for that heading | should apply $4^{\circ} \mathrm{W}$ deviation to all bearings |
| 197 | You are on course $203^{\circ}$ per standard magnetic compass when you sight Block Island North Light in line with the Block Island Aero Beacon bearing $194^{\circ}$ per standard magnetic compass. Based on this you $\qquad$ | know the correct deviation is $3^{\circ} \mathrm{W}$ | should swing your vessel to check the deviation table | should apply $15^{\circ} \mathrm{W}$ compass error to all compass readings | know you are steering a true course of $185^{\circ}$ |
| 198 | You are on course $056^{\circ}$ per standard magnetic compass when you sight Block Island North Light in line with the Block Island Aero Beacon bearing $193^{\circ}$ per standard magnetic compass. Based on this you $\qquad$ | know the compass error is $4^{\circ} \mathrm{E}$ | should swing your vessel to check for deviation | know the deviation table is correct for that heading | should use $3^{\circ} \mathrm{W}$ deviation on bearings of $193^{\circ} \mathrm{psc}$ |
| 199 | You are on course $302^{\circ}$ per standard magnetic compass when you sight Block Island Southeast Point Light in line with the Block Island Aero Beacon bearing $323^{\circ}$ per standard magnetic compass. Based on this you $\qquad$ -. | know the deviation table is correct for that heading | know the deviation is $15^{\circ} \mathrm{E}$ | should swing your vessel to check the deviation table | know the deviation is equal to the variation |


| 200 | You sight North Dumpling Island Light in line with Latimer Reef Light (LAT $41^{\circ} 18.2^{\prime} \mathrm{N}$, LONG $71^{\circ} 56.0^{\prime} \mathrm{W}$ ) bearing $095^{\circ}$ per standard magnetic compass. If your vessel was heading $056^{\circ}$ per standard magnetic compass at the time, which of the following is TRUE? | You should subtract $15^{\circ}$ Compass error for bearings of $095^{\circ}$. | The deviation table is correct for all bearings of $095^{\circ}$. | The vessel should be swung, and the deviation table checked. | The compass error is $19^{\circ} \mathrm{W}$ for all headings. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 201 | You sight North Dumpling Island Light in line with Latimer Reef Light (LAT $41^{\circ} 18.2^{\prime} \mathrm{N}$, LONG $71^{\circ} 56.0^{\prime} \mathrm{W}$ ) bearing $093^{\circ}$ per standard magnetic compass. If your vessel was heading $185^{\circ}$ per standard magnetic compass at the time, which of the following is TRUE? | The compass error is $2^{\circ} \mathrm{W}$. | The deviation is $17^{\circ} \mathrm{W}$. | The deviation is $2^{\circ} \mathrm{W}$ for all bearings of $093^{\circ}$. | The deviation table is correct for that heading. |
| 202 | You sight North Dumpling Island Light in line with Latimer Reef Light (LAT $41^{\circ} 18.2^{\prime} \mathrm{N}$, LONG $71^{\circ} 56.0^{\prime} \mathrm{W}$ ) bearing $094^{\circ}$ per standard magnetic compass. If your vessel was heading $207^{\circ}$ per standard magnetic compass at the time, which of the following is TRUE? | The deviation table is correct for that heading. | The deviation by observation is $3^{\circ} \mathrm{E}$. | The compass error is $12^{\circ} \mathrm{W}$. | You should subtract $18^{\circ}$ from all bearings of $094^{\circ}$. |
| 203 | You sight North Dumpling Island Light in line with Latimer Reef Light (LAT $41^{\circ} 18.2^{\prime} \mathrm{N}$, LONG $71^{\circ} 56.0^{\prime} \mathrm{W}$ ) bearing $089^{\circ}$ per standard magnetic compass. If your vessel was heading $297^{\circ}$ per standard magnetic compass at the time, which of the following is TRUE? | The deviation table is correct for that heading. | The deviation equals the variation. | You should swing your vessel to check the deviation table. | The compass error is $13^{\circ} \mathrm{W}$ for all bearings of $089^{\circ} \mathrm{psc}$. |
| 204 | You sight North Dumpling Island Light in line with Latimer Reef Light (LAT $41^{\circ} 18.2^{\prime} \mathrm{N}$, LONG $71^{\circ} 56.0^{\prime} \mathrm{W}$ ) bearing $091^{\circ}$ per standard magnetic compass. If your vessel was heading $246^{\circ}$ per standard magnetic compass at the time, which of the following is TRUE? | The deviation table is correct. | The compass error is $18^{\circ} \mathrm{W}$ for that heading. | The deviation is equal to the variation. | The deviation is equal to but of opposite sign to the variation. |
| 205 |  |  |  |  |  |
| 206 | You are on course $135^{\circ}$ per standard magnetic compass when you take the following bearings per standard magnetic compass: Cape Henry Light $266^{\circ}$ Cape Charles Light $353^{\circ}$ Chesapeake Light $124^{\circ}$ What is your position? | $\begin{aligned} & \text { LAT } 36^{\circ} 57.3^{\prime} \mathrm{N}, \text { LONG } \\ & 75^{\circ} 50.9^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 36^{\circ} 57.5^{\prime} \mathrm{N}, \text { LONG } \\ & 75^{\circ} 50.1^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 36^{\circ} 57.6^{\prime} \mathrm{N}, \text { LONG } \\ & 75^{\circ} 51.6^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 35^{\circ} 57.9^{\prime} \mathrm{N}, \text { LONG } \\ & 75^{\circ} 50.8^{\prime} \mathrm{W} \end{aligned}$ |
| 207 | You are on course $056^{\circ}$ per standard magnetic compass when you take the following bearings: Cape Henry Light $262^{\circ}$ psc Cape Charles Light $344^{\circ}$ psc Chesapeake Light $125^{\circ}$ psc What is your position? | $\begin{aligned} & \text { LAT } 36^{\circ} 58.4^{\prime} \mathrm{N}, \text { LONG } \\ & 75^{\circ} 49.1^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 36^{\circ} 58.1^{\prime} \mathrm{N}, \text { LONG } \\ & 75^{\circ} 50.0^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 36^{\circ} 57.8^{\prime} \mathrm{N}, \text { LONG } \\ & 75^{\circ} 49.2^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 36^{\circ} 57.6^{\prime} \mathrm{N}, \text { LONG } \\ & 75^{\circ} 49.8^{\prime} \mathrm{W} \end{aligned}$ |
| 208 | You are on course $262^{\circ}$ per standard magnetic compass when you take the following bearings: Cape Henry Light $252^{\circ}$ psc Cape Charles Light $003^{\circ}$ psc Chesapeake Light $131^{\circ}$ psc What is your position? | $\begin{aligned} & \text { LAT } 36^{\circ} 59.0^{\prime} \mathrm{N}, \text { LONG } \\ & 75^{\circ} 52.9^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 36^{\circ} 58.1^{\prime} \mathrm{N}, \text { LONG } \\ & 75^{\circ} 52.6^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 36^{\circ} 57.9^{\prime} \mathrm{N}, \text { LONG } \\ & 75^{\circ} 53.2^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 36^{\circ} 58.6^{\prime} \mathrm{N}, \text { LONG } \\ & 75^{\circ} 52.2^{\prime} \mathrm{W} \end{aligned}$ |
| 209 | You are on course $056^{\circ}$ psc, when you take the following bearings: <br> New Point Comfort Spit Light "2" $260^{\circ}$ psc Horn Harbor Entrance Light "HH" $285^{\circ}$ psc Wolf Trap Light $336^{\circ}$ psc What is the position of the fix? | $\begin{aligned} & \text { LAT } 37^{\circ} 19.3^{\prime} \mathrm{N}, \text { LONG } \\ & 76^{\circ} 08.5^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 37^{\circ} 19.3^{\prime} \mathrm{N}, \text { LONG } \\ & 76^{\circ} 08.8^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 37^{\circ} 19.2^{\prime} \mathrm{N}, \text { LONG } \\ & 76^{\circ} 08.2^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 37^{\circ} 19.2^{\prime} \mathrm{N}, \text { LONG } \\ & 76^{\circ} 08.7^{\prime} \mathrm{W} \end{aligned}$ |


| 210 | You are on course $203^{\circ}$ per standard magnetic compass when you take the following bearings: New Point Comfort Spit Light "2" $267^{\circ}$ psc Horn Harbor Entrance Light HH $304^{\circ}$ psc Wolf Trap Light $006^{\circ}$ psc What is the position of the fix? | $\begin{aligned} & \text { LAT } 37^{\circ} 18.9^{\prime} \mathrm{N}, \text { LONG } \\ & 76^{\circ} 10.4^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 37^{\circ} 18.8^{\prime} \mathrm{N}, \text { LONG } \\ & 76^{\circ} 10.8^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 37^{\circ} 18.7^{\prime} \mathrm{N}, \text { LONG } \\ & 76^{\circ} 11.1^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 37^{\circ} 18.5^{\prime} \mathrm{N}, \text { LONG } \\ & 76^{\circ} 10.7^{\prime} \mathrm{W} \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 211 | You are on course $300^{\circ}$ per standard magnetic compass (psc) when you take the following bearings: New Point Comfort Spit Light " 2 " $240^{\circ}$ psc Horn Harbor Entrance Light HH $268^{\circ}$ psc Wolf Trap Light $003^{\circ}$ psc What is the position of the fix? | $\begin{aligned} & \text { LAT } 37^{\circ} 20.8^{\prime} \mathrm{N}, \text { LONG } \\ & 76^{\circ} 09.6^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \hline \text { LAT } 37^{\circ} 20.8^{\prime} \mathrm{N}, \text { LONG } \\ & 76^{\circ} 11.0^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \hline \text { LAT } 37^{\circ} 20.9^{\prime} \mathrm{N}, \text { LONG } \\ & 76^{\circ} 11.5^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 37^{\circ} 21.1^{\prime} \mathrm{N}, \text { LONG } \\ & 76^{\circ} 08.2^{\prime} \mathrm{W} \end{aligned}$ |
| 212 | You are on course $319^{\circ}$ per standard magnetic compass when you take the following bearings: <br> New Point Comfort Spit Light "2" $244^{\circ}$ psc <br> Horn Harbor Entrance Light "HH" $267^{\circ}$ psc <br> Wolf Trap Light $335^{\circ} \mathrm{psc}$ <br> What is the position of the fix? | $\begin{aligned} & \text { LAT } 37^{\circ} 20.9^{\prime} \mathrm{N}, \text { LONG } \\ & 76^{\circ} 09.7^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 37^{\circ} 21.0^{\prime} \mathrm{N}, \text { LONG } \\ & 76^{\circ} 09.2^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \hline \text { LAT } 37^{\circ} 21.0^{\prime} \mathrm{N}, \text { LONG } \\ & 76^{\circ} 09.9^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 37^{\circ} 21.1^{\prime} \mathrm{N}, \text { LONG } \\ & 76^{\circ} 09.5^{\prime} \mathrm{W} \end{aligned}$ |
| 213 | You are on course $027^{\circ}$ per magnetic compass when you take the following bearings per magnetic compass: <br> New Point Comfort Spit Light "2" $253^{\circ}$ <br> Horn Harbor Entrance Light HH $282^{\circ}$ <br> Wolf Trap Light $348^{\circ}$ <br> What is the position of the fix? | $\begin{aligned} & \text { LAT } 37^{\circ} 19.4^{\prime} \mathrm{N}, \text { LONG } \\ & 76^{\circ} 09.5^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 37^{\circ} 19.4^{\prime} \mathrm{N}, \text { LONG } \\ & 76^{\circ} 09.8^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \hline \text { LAT } 37^{\circ} 19.7^{\prime} \mathrm{N}, \text { LONG } \\ & 76^{\circ} 10.3^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 37^{\circ} 19.7^{\prime} \mathrm{N}, \text { LONG } \\ & 76^{\circ} 09.9^{\prime} \mathrm{W} \end{aligned}$ |
| 214 |  |  |  |  |  |
| 215 | You are on course $243^{\circ}$ per standard magnetic compass when you take the following bearings: Falkner Island Light $342^{\circ}$ psc Mattituck Inlet Light $207^{\circ}$ psc Horton Point Light $112^{\circ}$ psc What is your position? | $\begin{aligned} & \text { LAT } 41^{\circ} 05.9^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 32.7^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 05.7^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 31.8^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 05.5^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 32.6^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 05.3^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 31.9^{\prime} \mathrm{W} \end{aligned}$ |
| 216 | You are on course $062^{\circ}$ per standard magnetic compass when you take the following bearings: Branford Reef Light $060^{\circ}$ psc Stratford Point Light $272^{\circ}$ psc New Haven Light $324^{\circ}$ psc What is your position? | $\begin{aligned} & \text { LAT } 41^{\circ} 07.1^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 53.4^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 10.5^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 52.8^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \hline \text { LAT } 41^{\circ} 11.6^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 50.0^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 13.3^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 48.7^{\prime} \mathrm{W} \end{aligned}$ |
| 217 | You are on course $087^{\circ}$ per standard magnetic compass (psc) when you take the following bearings: Falkner Island Light $022.0^{\circ}$ psc Horton Point Light-111.5${ }^{\circ}$ psc Mt. Sinai Breakwater Light $-254.0^{\circ}$ psc What is your position? | LAT $41^{\circ} 13.6^{\prime} \mathrm{N}$, LONG $72^{\circ} 46.6^{\prime} \mathrm{W}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 10.5^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 40.5^{\prime} \mathrm{W} \end{aligned}$ | LAT $41^{\circ} 07.0^{\prime} \mathrm{N}$, LONG $72^{\circ} 44.5^{\prime} \mathrm{W}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 06.8^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 40.7^{\prime} \mathrm{W} \end{aligned}$ |
| 218 | You are on course $082^{\circ}$ per standard magnetic compass (psc) when you take the following bearings: New London Ledge Light - $036.5^{\circ}$ psc Little Gull Island Light - $157.0^{\circ}$ psc Saybrook Break Water Light $-294.5^{\circ}$ psc What is your position? | $\begin{aligned} & \text { LAT } 41^{\circ} 02.3^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 04.5^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 09.5^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 07.1^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 13.6^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 07.5^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 14.1^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 12.8^{\prime} \mathrm{W} \end{aligned}$ |


| 219 | You are on course $209^{\circ}$ per standard magnetic compass when you take the following bearings: New Haven Light - $331.5^{\circ}$ psc Branford Reef Light - $066.5^{\circ}$ psc Old Field Point Light $240.5^{\circ} \mathrm{psc}$ What is your position? | $\begin{aligned} & \text { LAT } 41^{\circ} 10.5^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 52.8^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 11.3^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 49.9^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 13.6^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 53.0^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 14.5^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 48.8^{\prime} \mathrm{W} \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 220 | You are on course $240^{\circ}$ per standard magnetic compass when you take the following bearings: Old Field Point Light $253^{\circ}$ psc New Haven Light $357^{\circ}$ psc Mattituck Inlet Light $126^{\circ}$ psc What is your position? | LAT $41^{\circ} 04.5^{\prime} \mathrm{N}$, LONG $72^{\circ} 49.2^{\prime} \mathrm{W}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 05.7^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 50.2^{\prime} \mathrm{W} \end{aligned}$ | LAT $41^{\circ} 05.9^{\prime} \mathrm{N}$, LONG $72^{\circ} 53.1^{\prime} \mathrm{W}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 08.6^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 53.5^{\prime} \mathrm{W} \end{aligned}$ |
| 221 | You are on course $083^{\circ}$ per standard magnetic compass when you take the following bearings: Branford Reef Light $344.5^{\circ}$ psc Falkner Island Light $053.5^{\circ}$ psc Mattituck Inlet Light $141.5^{\circ}$ psc What is your position? | $\begin{aligned} & \text { LAT } 41^{\circ} 10.4^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 43.0^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 09.6^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 44.9^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 08.4^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 43.7^{\prime} \mathrm{W} \end{aligned}$ | LAT $41^{\circ} 08.0^{\prime} \mathrm{N}$, LONG $72^{\circ} 44.8^{\prime} \mathrm{W}$ |
| 222 | You are on course $239^{\circ}$ per standard magnetic compass when you take the following bearings: Falkner Island Light $314^{\circ}$ psc Duck Island West Breakwater Light 2DI 039ºpsc Horton Point Light $157^{\circ}$ psc What is your position? | $\begin{aligned} & \text { LAT } 41^{\circ} 09.9^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 32.0^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 09.3^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 33.0^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 10.5^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 32.1^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 11.6^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 33.6^{\prime} \mathrm{W} \end{aligned}$ |
| 223 | You are on course $061^{\circ}$ per standard magnetic compass when you take the following bearings: Bartlett Reef Light $070^{\circ}$ psc Saybrook Breakwater Light 010ºpsc Horton Pt. Light $218^{\circ}$ psc What is your position? | $\begin{aligned} & \text { LAT } 41^{\circ} 10.4^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 19.6^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 11.2^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 20.6^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 13.7^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 23.9^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 15.4^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 24.3^{\prime} \mathrm{W} \end{aligned}$ |
| 224 | You are on course $262^{\circ}$ per standard magnetic compass when you take the following bearings: Saybrook Breakwater Light $338.5^{\circ}$ psc Little Gull Island Light - $107.5^{\circ}$ psc Horton Point Light $-240.0^{\circ}$ psc What is your position? | $\begin{aligned} & \text { LAT } 41^{\circ} 11.9^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 16.7^{\prime} \mathrm{N} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 12.6^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 17.2^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 13.0^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 17.7^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 12.1^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 17.3^{\prime} \mathrm{W} \end{aligned}$ |
| 225 | You are on course $242^{\circ}$ per standard magnetic compass (psc) when you take the following bearings: Stratford Point Light $325^{\circ}$ psc Old Field Point Light $239^{\circ}$ psc Middle Ground Light $270^{\circ} \mathrm{psc}$ What is your position? | $\begin{aligned} & \text { LAT } 41^{\circ} 04.4^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 59.5^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 05.1^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 59.3^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 05.4^{\prime} \mathrm{N}, \text { LONG } \\ & 73^{\circ} 00.1^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 04.8^{\prime} \mathrm{N}, \text { LONG } \\ & 73^{\circ} 59.3^{\prime} \mathrm{W} \end{aligned}$ |
| 226 |  |  |  |  |  |
| 227 | You are on course $073^{\circ}$ per standard magnetic compass when you take the following bearings: Watch Hill Point Light $037^{\circ}$ psc Montauk Point Light $179^{\circ}$ psc Race Rock Light $289^{\circ}$ psc What is your position? | LAT $41^{\circ} 13.6^{\prime} \mathrm{N}$, LONG $71^{\circ} 54.6^{\prime} \mathrm{W}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 13.7^{\prime} \mathrm{N}, \text { LONG } \\ & 71^{\circ} 53.8^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 13.7^{\prime} \mathrm{N}, \text { LONG } \\ & 71^{\circ} 54.9^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 13.8^{\prime} \mathrm{N}, \text { LONG } \\ & 71^{\circ} 54.3^{\prime} \mathrm{W} \end{aligned}$ |
| 228 | You are on course $298^{\circ}$ per standard magnetic compass when you take the following bearings: Block Island Southeast Point Light - 058 ${ }^{\circ}$ psc Block Island Aero Beacon-005psc Montauk Point Light $-268^{\circ}$ psc What is your position? | $\begin{aligned} & \text { LAT } 41^{\circ} 08.3^{\prime} \mathrm{N}, \text { LONG } \\ & 71^{\circ} 35.0^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 08.2^{\prime} \mathrm{N}, \text { LONG } \\ & 71^{\circ} 34.4^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 08.1^{\prime} \mathrm{N}, \text { LONG } \\ & 71^{\circ} 33.8^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 08.0^{\prime} \mathrm{N}, \text { LONG } \\ & 71^{\circ} 34.1^{\prime} \mathrm{W} \end{aligned}$ |


| 229 | You are on course $282^{\circ}$ per standard magnetic compass when you take the following bearings: Point Judith Light - $073^{\circ}$ psc Block Island North Light - $156^{\circ}$ psc Watch Hill Point Light $293^{\circ}$ psc What is your position? | $\begin{aligned} & \text { LAT } 41^{\circ} 17.0^{\prime} \mathrm{N}, \text { LONG } \\ & 71^{\circ} 38.2^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 17.1^{\prime} \mathrm{N}, \text { LONG } \\ & 71^{\circ} 39.1^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 17.2^{\prime} \mathrm{N}, \text { LONG } \\ & 71^{\circ} 38.7^{\circ} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 17.2^{\prime} \mathrm{N}, \text { LONG } \\ & 71^{\circ} 37.8^{\prime} \mathrm{W} \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 230 | You are on course $025^{\circ}$ per standard magnetic compass when you take the following bearings: Point Judith Light - $072^{\circ} \mathrm{psc}$ Block Island North Point Light - $118^{\circ}$ psc Watch Hill Light $306^{\circ}$ psc What s your position?) | $\begin{aligned} & \text { LAT } 41^{\circ} 14.9^{\prime} \mathrm{N}, \text { LONG } \\ & 71^{\circ} 43.2^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 15.1^{\prime} \mathrm{N}, \text { LONG } \\ & 71^{\circ} 44.0^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 15.4^{\prime} \mathrm{N}, \text { LONG } \\ & 71^{\circ} 43.1^{\prime} \mathrm{W} \end{aligned}$ | LAT $41^{\circ} 15.6^{\prime} \mathrm{N}$, LONG $71^{\circ} 42.8^{\prime} \mathrm{W}$ |
| 231 | You are on course $137^{\circ}$ per standard magnetic compass when you take the following bearings: Watch Hill Point Light $051^{\circ}$ psc Montauk Point Light - $184^{\circ}$ psc Race Rock Light $279^{\circ} \mathrm{psc}$ What is your position? | LAT $41^{\circ} 15.2^{\prime} \mathrm{N}$, LONG $71^{\circ} 54.4^{\prime} \mathrm{W}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 15.1^{\prime} \mathrm{N}, \text { LONG } \\ & 71^{\circ} 53.8^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 15.1^{\prime} \mathrm{N}, \text { LONG } \\ & 71^{\circ} 54.9^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 15.0^{\prime} \mathrm{N}, \text { LONG } \\ & 71^{\circ} 53.7^{\prime} \mathrm{W} \end{aligned}$ |
| 232 | You are on course $087^{\circ}$ per standard magnetic compass when you take the following bearings: Little Gull Island Light $277^{\circ}$ psc Race Rock Light $303^{\circ}$ psc Latimer Reef Light $025^{\circ}$ psc What is your position? | $\begin{aligned} & \text { LAT } 41^{\circ} 13.1^{\prime} \mathrm{N}, \text { LONG } \\ & 71^{\circ} 57.5^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 13.1^{\prime} \mathrm{N}, \text { LONG } \\ & 71^{\circ} 56.9^{\prime} \mathrm{W} \end{aligned}$ | LAT $41^{\circ} 13.0^{\prime} \mathrm{N}$, LONG $71^{\circ} 58.0^{\prime} \mathrm{W}$ | LAT $41^{\circ} 12.9^{\prime} \mathrm{N}$, LONG $71^{\circ} 57.2^{\prime} \mathrm{W}$ |
| 233 | You are on course $053^{\circ}$ per standard magnetic compass when you take the following bearings: Little Gull Island Light $275^{\circ}$ psc Race Rock Light $296^{\circ}$ psc Latimer Reef Light $011^{\circ}$ psc What is your position? | $\begin{aligned} & \text { LAT } 41^{\circ} 12.9^{\prime} \mathrm{N}, \text { LONG } \\ & 71^{\circ} 56.3^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 13.2^{\prime} \mathrm{N}, \text { LONG } \\ & 71^{\circ} 56.0^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 13.4^{\prime} \mathrm{N}, \text { LONG } \\ & 71^{\circ} 55.5^{\prime} \mathrm{W} \end{aligned}$ | LAT $41^{\circ} 13.8^{\prime} \mathrm{N}$, LONG $71^{\circ} 56.1^{\prime} \mathrm{W}$ |
| 234 | You are on course $246^{\circ}$ per standard magnetic compass when you take the following bearings: Little Gull Island Light $286^{\circ}$ Race Rock Light $308^{\circ}$ Latimer Reef Light $018^{\circ}$ What is your position? | $\begin{aligned} & \text { LAT } 41^{\circ} 12.6^{\prime} \mathrm{N}, \text { LONG } \\ & 71^{\circ} 55.7^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 12.6^{\prime} \mathrm{N}, \text { LONG } \\ & 71^{\circ} 56.6^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 12.7^{\prime} \mathrm{N}, \text { LONG } \\ & 71^{\circ} 56.0^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 13.1^{\prime} \mathrm{N}, \text { LONG } \\ & 71^{\circ} 56.1^{\prime} \mathrm{W} \end{aligned}$ |
| 235 | You are on course $302^{\circ}$ per standard magnetic compass when you take the following bearings: Little Gull Island Light $283^{\circ}$ psc Race Rock Light $311^{\circ}$ psc Latimer Reef Light $027^{\circ}$ psc What is your position? | $\begin{aligned} & \text { LAT } 41^{\circ} 12.2^{\prime} \mathrm{N}, \text { LONG } \\ & 71^{\circ} 57.6^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 12.4^{\prime} \mathrm{N}, \text { LONG } \\ & 71^{\circ} 57.4^{\prime} \mathrm{W} \end{aligned}$ | LAT $41^{\circ} 12.4^{\prime} \mathrm{N}$, LONG $71^{\circ} 57.9^{\prime} \mathrm{W}$ | LAT $41^{\circ} 12.6^{\prime} \mathrm{N}$, LONG $71^{\circ} 57.6^{\prime} \mathrm{W}$ |
| 236 | You are on course $157^{\circ}$ per standard magnetic compass when you take the following bearings: Little Gull Island Light $276^{\circ}$ psc Race Rock Light $301^{\circ}$ psc Latimer Reef Light $028^{\circ}$ psc What is your position? | $\begin{aligned} & \text { LAT } 41^{\circ} 13.5^{\prime} \mathrm{N}, \text { LONG } \\ & 71^{\circ} 57.9^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 13.5^{\prime} \mathrm{N}, \text { LONG } \\ & 71^{\circ} 57.4^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 13.6^{\prime} \mathrm{N}, \text { LONG } \\ & 71^{\circ} 57.0^{\prime} \mathrm{W} \end{aligned}$ | LAT $41^{\circ} 13.6^{\prime} \mathrm{N}$, LONG $71^{\circ} 57.8^{\prime} \mathrm{W}$ |
| 237 |  |  |  |  |  |
| 238 | Your 1302 position is LAT $37^{\circ} 14.7^{\prime} \mathrm{N}$, LONG $76^{\circ} 22.7^{\prime} \mathrm{W}$. You are turning for 9.6 knots. What is your ETA at Trestle C of the Chesapeake Bay Bridge and Tunnel if you follow York River Entrance Channel? | 1516 | 1505 | 1500 | 1451 |
| 239 | Your 1152 position is LAT $37^{\circ} 23.9^{\prime} \mathrm{N}$, LONG $76^{\circ} 05.5^{\prime} \mathrm{W}$. You are turning for 10.3 knots. What is your ETA at Trestle C of the Chesapeake Bay Bridge and Tunnel if you follow York Spit Channel? | 1404 | 1349 | 1342 | 1339 |


| 240 | Your 1312 position is LAT $37^{\circ} 10.9^{\prime} \mathrm{N}$, LONG $75^{\circ} 29.6^{\prime} \mathrm{W}$. You are turning for 8.3 knots. What is your ETA at LAT $37^{\circ} 21.9^{\prime} \mathrm{N}$, LONG 7542.6'W? | 1449 | 1456 | 1502 | 1511 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 241 | Your 1426 position is LAT $37^{\circ} 10.9^{\prime} \mathrm{N}$, LONG $75^{\circ} 29.6^{\prime} \mathrm{W}$. You are turning for 9.3 knots. What is your ETA at Chesapeake Light? | 1616 | 1621 | 1626 | 1633 |
| 242 | Your 0916 position is LAT $37^{\circ} 10.9^{\prime} \mathrm{N}$, LONG $75^{\circ} 29.6^{\prime} \mathrm{W}$. You are turning for 12.3 knots. What is your ETA at North Chesapeake Bay Entrance Buoy NCA? | 1035 | 1043 | 1051 | 1101 |
| 243 | At 0919 you are in Chesapeake Channel between Trestle B and Trestle C of the Chesapeake Bay Bridge and Tunnel. What is your ETA to a point between York Spit Channel Buoys " 35 " and " 36 " if you are making 11.3 knots and follow the buoyed channel? | 1025 | 1028 | 1033 | 1037 |
| 244 | At 0919 you are in Chesapeake Channel between Trestle B and Trestle C of the Chesapeake Bay Bridge and Tunnel. What is your ETA between York River Entrance Channel Buoys "17" and "18" if you are making 11.3 knots? | 1034 | 1039 | 1044 | 1049 |
| 245 | At 0914 you are in Chesapeake Channel between Trestle B and Trestle C of the Chesapeake Bay Bridge and Tunnel. What is your ETA at North Chesapeake Entrance Buoy NCA if you are making good 10.9 knots (Use the buoyed channel and appropriate sea lane)? | 1038 | 1044 | 1049 | 1055 |
| 246 | At 0919 you are inbound, approximately 3.3 miles east of Cape Henry with buoy "15" close aboard to port. What is your ETA between Trestle B and Trestle C of the Chesapeake Bay Bridge and Tunnel if you are making 11.3 knots? | 1010 | 1014 | 1019 | 1025 |
| 247 | At 0914 you are in Chesapeake Bay southeast inbound lane with buoy "CBJ" close aboard to port. What is your ETA at Thimble Shoal Channel Buoy "19" if you are making 10.9 knots? | 1034 | 1038 | 1046 | 1042 |
| 248 |  |  |  |  |  |
| 249 | Your 2108 position is LAT $41^{\circ} 10.0^{\prime} \mathrm{N}$, LONG $72^{\circ} 30.0^{\prime} \mathrm{W}$. You are turning for 12.5 knots. What is your ETA at Buoy NH (LAT $41^{\circ} 12.1^{\prime} \mathrm{N}$, LONG $72^{\circ} 53.8^{\prime} \mathrm{W}$ )? | 2133 | 2227 | 2235 | 2248 |
| 250 | At 1222 your position is LAT $41^{\circ} 05.5^{\prime} \mathrm{N}$, LONG $72^{\circ} 47.3^{\prime} \mathrm{W}$. You are making turns for 14.5 knots. What is your ETA at TwentyEight Foot Shoal Lighted Buoy (LAT $41^{\circ} 09.3^{\prime} N$, LONG $72^{\circ} 30.5^{\prime} \mathrm{W}$ )? | 1309 | 1317 | 1321 | 1328 |


| 251 | At 0829 your position is LAT $41^{\circ} 02.9^{\prime} \mathrm{N}$, LONG $72^{\circ} 57.4^{\prime} \mathrm{W}$. You are making turns for 8.5 knots. What is your ETA at a position midway between buoys "1" and "2" at the entrance of New Haven Outer Channel? | 0925 | 0931 | 0938 | 0944 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 252 | At 2102 your position is LAT $41^{\circ} 02.9^{\prime} \mathrm{N}$, LONG $72^{\circ} 57.4^{\prime} \mathrm{W}$. You are making turns for 16 knots. What is your ETA at a position 5 miles due south of Falkner Island Light? | 2149 | 2155 | 2159 | 2204 |
| 253 | At 1815 your position is LAT $41^{\circ} 05.5^{\prime} \mathrm{N}$, LONG $72^{\circ} 47.3^{\prime} \mathrm{W}$. You are making turns for 12.6 knots. What is your ETA at Plum Island Mid Channel Buoy PI (LAT $41^{\circ} 13.3^{\prime} \mathrm{N}$, LONG $72^{\circ} 10.8^{\prime} \mathrm{W}$ )? | 2019 | 2028 | 2032 | 2038 |
| 254 | At 1715 your position is LAT $41^{\circ} 00.0^{\prime} \mathrm{N}$, LONG $72^{\circ} 40.0^{\prime} \mathrm{W}$. You are making turns for 15.5 knots. What is your ETA at a position 1.5 miles due south of Stratford Shoal Middle Ground Light? | 1820 | 1824 | 1828 | 1832 |
| 255 | Your 1600 position is LAT $41^{\circ} 08.0^{\prime} \mathrm{N}$, LONG $72^{\circ} 44.8^{\prime} \mathrm{W}$. You are making turns for 14 knots. What is your ETA at Mattituck Inlet? | 1636 | 1643 | 1647 | 1651 |
| 256 | Your 1600 position is LAT $41^{\circ} 08.0^{\prime} \mathrm{N}$, LONG $72^{\circ} 44.8^{\prime} \mathrm{W}$. You are making turns for 10 knots. What is your ETA at TwentyEight Foot Shoal Lighted Buoy "TE" (LAT 4100.3'N LONG $72^{\circ} 30.5^{\prime} \mathrm{W}$ )? | 1647 | 1651 | 1702 | 1706 |
| 257 | Your 2215 position is LAT $41^{\circ} 05.4^{\prime} \mathrm{N}$, LONG $72^{\circ} 59.4^{\prime} \mathrm{W}$. You are making 15 knots. What is your ETA at Twenty-Eight Foot Shoal Lighted Buoy (LAT $41^{\circ} 09.3^{\prime} \mathrm{N}$, LONG $72^{\circ} 30.5^{\prime} \mathrm{W}$ )? | 2338 | 2343 | 2349 | 2354 |
| 258 | Your 1830 position is LAT $41^{\circ} 05.4^{\prime} \mathrm{N}$, LONG $72^{\circ} 59.4^{\prime} \mathrm{W}$. You are making turns for 9 knots. What is your ETA at Mattituck Inlet? | 2044 | 2052 | 2059 | 2106 |
| 259 | Your 0620 position is LAT $40^{\circ} 59.5^{\prime} \mathrm{N}$, LONG $73^{\circ} 00.5^{\prime} \mathrm{W}$. You are making turns for 8 knots. What is your ETA at LAT $41^{\circ} 08.0^{\prime} \mathrm{N}$, LONG $72^{\circ} 44.8^{\prime} \mathrm{W}$ ? | 0748 | 0802 | 0809 | 0814 |
| 260 |  |  |  |  |  |
| 261 | Your position is LAT $41^{\circ} 15.2^{\prime} \mathrm{N}$, LONG $71^{\circ} 50.1^{\prime} \mathrm{W}$ at 1347. You are turning for 6.9 knots. What is your ETA at Shagwong Reef Buoy "7SR"? | 1506 | 1515 | 1521 | 1527 |
| 262 | At 1523 your position is LAT $41^{\circ} 08.2^{\prime} \mathrm{N}$, LONG $71^{\circ} 34.4^{\prime} \mathrm{W}$. You are turning for 8.7 knots. What is your ETA at Shagwong Reef Buoy "7SR"? | 1653 | 1700 | 1711 | 1718 |
| 263 | At 2330 your position is LAT $41^{\circ} 16.9^{\prime} \mathrm{N}$, LONG $71^{\circ} 38.2^{\prime} \mathrm{W}$. You are turning for 9.3 knots. What is your ETA at the entrance to Great Salt Pond on Block Island? | 2355 | 0005 | 0012 | 0019 |


| 264 | At 0943, your position is LAT $41^{\circ} 14.8^{\prime} \mathrm{N}$, LONG $71^{\circ} 54.3^{\prime} \mathrm{W}$. You are turning for 12.2 knots. What is your ETA at the entrance to Great Salt Pond on Block Island? | 1054 | 1048 | 1040 | 1032 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 265 | At 0242 your position is LAT $41^{\circ} 16.8^{\prime} \mathrm{N}$, LONG $71^{\circ} 39.9^{\prime} \mathrm{W}$. You are turning for 9.3 knots. What is your ETA at the West Gap of Pt. Judith Harbor of Refuge? | 0319 | 0325 | 0329 | 0336 |
| 266 | At 1048 you are in the entrance to Great Salt Pond on Block Island with buoy " 5 " close aboard. What is your ETA at the west gap of Point Judith Harbor of Refuge if you make good 8.3 knots? | 1149 | 1154 | 1158 | 1203 |
| 267 | At 1048 you are in the entrance to Great Salt Pond on Block Island with buoy " 5 " close aboard. What is your ETA at the west gap of Point Judith Harbor of Refuge if you make good 11.3 knots? | 1144 | 1154 | 1159 | 1205 |
| 268 | At 1103 your position is LAT $41^{\circ} 12.5 \mathrm{~N}$, LONG $71^{\circ} 37.4 \mathrm{~W}$. What is your ETA at the west gap of Point Judith Harbor of Refuge if you make good 11.3 knots? | 1144 | 1154 | 1159 | 1205 |
| 269 | At 1103 you are in the entrance to Great Salt Pond on Block Island with buoy " 5 " close aboard. What is your ETA at light "1" at the mouth of the approaches to Lake Montauk if you make good 8.2 knots? | 1249 | 1254 | 1259 | 1310 |
| 270 | At 1113 you are in the entrance to Great Salt Pond on Block Island with buoy " 5 " close aboard. What is your ETA at light "1" at the mouth of the approaches to Lake Montauk if you make good 9.6 knots? | 1310 | 1301 | 1254 | 1249 |
| 271 |  |  |  |  |  |
| 272 | The soundings on this chart are measured in ___ . | feet | yards | fathoms | meters |
| 273 | The approach channel to the town of Cape Charles (LAT $37^{\circ} 16^{\prime} \mathrm{N}$, LONG $76^{\circ} 01^{\prime} \mathrm{W}$ ) has what controlling depth? | 9 feet | 17 feet | 20 feet | 40 feet |
| 274 | The shoal spanned by Trestle B of the Chesapeake Bay Bridge and Tunnel is $\qquad$ . | Chesapeake shoal | the Middle ground | Lynnhaven roads | the Tail of the Horseshoe |
| 275 | You are considering anchoring approximately three miles northeast of Chesapeake Light. After examining the chart you decide not to because of the $\qquad$ | large number of wrecks | coral being designated as a special protected area | danger of unexploded mines | area being designated as a National Marine Sanctuary |
| 276 | What are the bottom characteristics of Nautilus Shoal (LAT $37^{\circ} 03^{\prime} \mathrm{N}$, LONG $75^{\circ} 56^{\prime} \mathrm{W}$ )? | Sand and shells | Hard sand | Fine gray sand | Mud and sand |
| 277 | In the northern quadrant of the circle surrounding Chesapeake Bay Entrance Junction Buoy CBJ the number 20 over a bracket appears 5 times. What do these indicate? | Markers or piles are 20 feet above mean low water. | The maximum draft permitted in this area is 20 feet. | Obstructions have been cleared by a wire drag to 20 feet. | Bench marks used to measure channel depths while dredging. |


| 278 | The soundings on the chart are based on the depth of water available at $\qquad$ | mean low water | mean lower low water | mean high water | mean high water springs |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 279 | You are navigating 1 mile north of Cape Henry Lighthouse at the southern entrance to Chesapeake Bay. You observe that this area is bounded on the chart by magenta bands. This indicates a(n) $\qquad$ | fish trap area | explosive anchorage | pilotage area | danger zone |
| 280 | What type of bottom can be expected at the northern end of York Spit Channel? | Hard clay | Fine gray sand | Soft black mud | Mud and sand |
| 281 |  |  |  |  |  |
| 282 | You are going to anchor at Gardiners Bay in LAT $41^{\circ} 04.5^{\prime} \mathrm{N}$, LONG $72^{\circ} 13.0^{\prime} \mathrm{W}$. What type of bottom should you expect? | Streaked mud | Sand | Hard rocks | Soft mud |
| 283 | You are planning to anchor in Orient Harbor at LAT $41^{\circ} 07.9^{\prime} \mathrm{N}$, LONG $72^{\circ} 18.5^{\prime} \mathrm{W}$. Assuming that normal conditions exist, how much anchor cable should you put out? | 16 to 18 feet | 40 to 60 feet | 80 to 112 feet | 120 to 140 feet |
| 284 | You are planning to anchor in Orient Harbor at LAT $41^{\circ} 07.9^{\prime} \mathrm{N}$, LONG $72^{\circ} 18.5^{\prime} \mathrm{W}$. What type of bottom should you expect? | Sticky | Soft | Stiff | Streaky |
| 285 | Your vessel has become disabled and is dead in the water. Your GPS set fixes your position at LAT $41^{\circ} 12.1^{\prime} \mathrm{N}$, LONG $72^{\circ} 43.5^{\prime} \mathrm{W}$. You decide to anchor at this position. Which type of bottom should you expect? | Soft clay and sand | Soft mud and shell | Hard sand and rocks | Blue mud and gray sand |
| 286 | Your vessel has become disabled and is dead in the water. Your GPS position is LAT $41^{\circ} 12.1^{\prime} \mathrm{N}$, LONG $72^{\circ} 43.5^{\prime} \mathrm{W}$. You decide to anchor at this position. Under normal conditions, how much anchor chain should you expect to put out? | 80 to 190 feet | 190 to 240 feet | 245 to 343 feet | 345 to 420 feet |
| 287 | At 0400 your vessel is dead in the water and in heavy fog. Your GPS position is LAT $41^{\circ} 12.1^{\prime} \mathrm{N}$, LONG $72^{\circ} 43.5^{\prime} \mathrm{W}$. Bottom samples are taken and indicate a composition of soft mud and shell. Your fathometer reads 40 feet. If the vessel draws 9 feet of water, which of the following is TRUE? | The bottom samples and fathometer reading prove the fix is reliable. | The bottom samples and fathometer readings indicate that the fix is unreliable. | The information collected indicates that the fathometer may be in error. | The information collected indicates that the chart is most likely in error. |
| 288 | You are planning to anchor your vessel at LAT $41^{\circ} 01.1^{\prime} \mathrm{N}$, LONG $73^{\circ} 02.8^{\prime} \mathrm{W}$. What type of bottom should you expect at this position? | Gray sand | Soft mud | Gray mud | Hard sand |
| 289 | Your position is LAT $41^{\circ} 03.0^{\prime} \mathrm{N}$, LONG $72^{\circ} 42.1^{\prime} \mathrm{W}$. If your draft is 8 ft , what should your fathometer read at this position? | 80 ft | 88 ft | 96 ft | 99 ft |
| 290 | You plan to anchor your vessel at LAT $41^{\circ} 00.5^{\prime} \mathrm{N}$, LONG $73^{\circ} 02.8^{\prime} \mathrm{W}$. What type of bottom should you expect at this position? | Gray sand | Soft mud | Hard sand | Gray mud |


| 291 | You plan to anchor your vessel at LAT $41^{\circ} 05.1^{\prime} \mathrm{N}$, LONG $72^{\circ} 59.3^{\prime} \mathrm{W}$. Assuming that normal conditions exist, how much anchor cable should you put out? | 150 to 300 feet | 300 to 440 feet | 440 to 600 feet | 640 to 750 feet |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 292 |  |  |  |  |  |
| 293 | The soundings on this chart are measured in ___ . | feet | yards | \|meters | fathoms |
| 294 | What type of bottom is found off the southern coast of Long Island? | Blue Mud | Shingle | Brown Sand | Shells |
| 295 | The four soundings in the vicinity of LAT $41^{\circ} 12.2^{\prime} \mathrm{N}$, LONG $71^{\circ} 33.0^{\prime} \mathrm{W}$, that are underlined with a bracket indicate $\qquad$ | that no bottom was found at the sounding depth indicated | a submerged rock not dangerous to surface navigation | the height a rock uncovers at low water springs | a submerged danger that is cleared to the indicated depth by a wire drag |
| 296 | You are proceeding from a point 4 miles due east of Montauk Point enroute to Long Island Sound via The Race. You should expect the soundings to $\qquad$ . | remain fairly constant | increase rapidly at first then remain constant until through the Race | start increasing when north of Montauk Point | be inaccurate due to sound absorption by the mud bottom |
| 297 | A vessel anchoring in the middle of Cherry Harbor, 1 mile off Gardiner's Island, will find what type of bottom? | Rocky | Shells | Mud | Silt |
| 298 | What soundings are indicated by a blue tint on this chart? | 30 fathoms or more | 30 feet or less | 30 feet or more | 30 fathoms or less |
| 299 | The broken magenta lines starting at Montauk Point and running generally ENE to Block Island indicate $\qquad$ | recommended tracks to Block Island | a submerged cable area | a military exercise area | demarcation lines for application of the COLREGS |
| 300 | Areas enclosed by a long and short dashed magenta line indicate $\qquad$ | cable areas | dumping grounds | fish trap areas | precautionary areas |
| 301 | The bottom approximately three miles to the ESE of Block Island Southeast Point has | gravel | shale | stones | grit |
| 302 | Sounding contours in unshaded water areas are at what interval? | 10 foot up to 100 ft depths then at 30 foot intervals | 30 foot intervals | 10 fathom intervals | The interval will vary to ensure any major underwater hazard is highlighted. |
| 303 | Sounding contours in unshaded water areas are at what interval? | 10 foot up to 100 ft depths then at 30 foot intervals | 30 foot intervals up to 180 feet | 10 fathom intervals | The interval will vary to ensure any major underwater hazard is highlighted. |
| 304 |  |  |  |  |  |
| 305 | Local magnetic disturbances of up to how many degrees have been noted from Cape Henry to Currituck Beach Light? | 2 degrees | 6 degrees | 11 degrees | 17 degrees |
| 306 | Why are there no buoys charted at the approach to Sand Shoal Inlet (LAT $37^{\circ} 16^{\prime} \mathrm{N}$, LONG $75^{\circ} 46^{\prime} \mathrm{W}$ )? | No buoys are stationed there. | They frequently shift position due to heavy weather. | They are frequently shifted to conform to the changing channel. | The buoys are being replaced with fixed lights. |


| 307 | What chart should you use in Lynnhaven Bay (west of Cape Henry)? | 12221 | 12256 | 12205 | 12254 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 308 | NOAA weather broadcasts can be received on what frequency while navigating off Cape Henry? | 162.45 MHz | 162.55 MHz | 162.65 MHz | 162.70 MHz |
| 309 | The broken magenta lines (long and short dashes) in and around Mobjack Bay (LAT $37^{\circ} 20^{\prime} \mathrm{N}$, LONG $76^{\circ} 22^{\prime} \mathrm{W}$ ) indicate $\qquad$ | amphibious training areas | grounds for dredge spoil | fish trap areas | gunnery exercise areas |
| 310 | What is the horizontal clearance of the navigation opening of Trestle B of the Chesapeake Bay Bridge and Tunnel? | 21 feet | 70 feet | 75 feet | 300 feet |
| 311 | The level of mean high water at Old Point Comfort is how many feet above the sounding datum? | 1.5 feet | 2.2 feet | 2.5 feet | 3.5 feet |
| 312 | A note on the chart indicates that currents in excess of how many knots can be expected in the vicinity of the Chesapeake Bay Bridge and Tunnel? | 3.00 knots | 2.20 knots | 1.75 knots | 1.50 knots |
| 313 | Anchorage regulations for this area may be obtained from $\qquad$ -. | Office of the Commander 5th Coast Guard District | Commanding General, Corps of Engineers, Washington, DC | Virginia - Maryland Pilots Association | Chesapeake Bay Port Authority, Hampton, VA |
| 314 | Anchorage regulations for this area may be obtained from $\qquad$ -. | Commanding General, Corps of Engineers, Washington, D.C. | Office of the Commander 5th Coast Guard District | Virginia - Maryland Pilots Association | Chesapeake Bay Port Authority, Hampton VA |
| 315 | Anchorage regulations for this area may be obtained from $\qquad$ -. | Chesapeake Bay Port Authority, Hampton VA | Virginia - Maryland Pilots Association | Office of the Commander 5th Coast Guard District | Commanding General, Corps of Engineers, Washington, D.C. |
| 316 | In addition to those found in the Coast Pilot, information concerning anchorage regulations for this area may be obtained from $\qquad$ —. | Chesapeake Bay Port Authority, Hampton VA | Virginia - Maryland Pilots Association | Commanding General, Corps of Engineers, Washington, D.C. | Office of the Commander 5th Coast Guard District |
| 317 | Anchorage regulations for this area may be obtained from | Office of Commander 2nd Coast Guard District | District Engineer, Corps of Engineers, Norfolk, VA | Virginia - Maryland Pilots Association | Chesapeake Bay Port Authority, Hampton VA |
| 318 |  |  |  |  |  |
| 319 | You are operating in the area approximately 2 miles southeast of Kelsey Point when you realize that your vessel's intended track will carry you over the wreck charted at LAT $41^{\circ} 13.5^{\prime} \mathrm{N}$, LONG $72^{\circ} 29.6^{\prime} \mathrm{W}$. Which statement is TRUE? | The chart indicates the exact position of the wreck. | The wreck has been cleared by wire drag to a depth of 39 ft . | The wreck represents a danger to surface navigation. | The wreck is visible above the sounding datum. |
| 320 | Which chart would you use for more detailed information on the Connecticut River? | 12354 | 12370 | 12371 | 12375 |
| 321 | NOAA Weather Broadcasts for the New London area may be received by turning your radio to $\qquad$ | 162.550 MHz | 162.475 MHz | 162.400 MHz | 162.350 MHz |


| 322 | What is the significance of the broken magenta lines which roughly parallel the shore between Roanoke Point and Orient Point on Long Island? | They mark the limits of breakers in that area. | These lines warn the mariner of submerged rocks. | They mark the boundary lines of fish trap areas. | These lines warn the mariner of submerged pipelines. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 323 | What is the danger associated with anchoring your vessel within a 300 yard radius of Gardiners Point? | An unusually strong current exists in this area. | The bottom is not suitable for holding the anchor. | Submerged pilings may exist in this area. | Your anchor could become fouled on undetonated explosives. |
| 324 | The chart symbol surrounding Saybrook Breakwater Light warns mariners that the navigational light structure is | no longer maintained | protected by riprap | privately maintained | awash at high tide |
| 325 | The chart symbol depicted at LAT $40^{\circ} 58.5^{\prime} \mathrm{N}$, LONG $72^{\circ} 43.4^{\prime} \mathrm{W}$ indicates a(n) $\qquad$ | abandoned lighthouse | light ship | wreck with only its mast visible | wreck showing a portion of the hull above the sounding datum |
| 326 | The chart symbol depicted at LAT $41^{\circ} 13.5^{\prime} \mathrm{N}$, LONG $72^{\circ} 29.7^{\prime} \mathrm{W}$ indicates $\qquad$ - | the exact position of a dangerous wreck | the approximate position of a wreck dangerous to surface navigation | a wreck cleared by wire drag to a depth of 39 feet | a wreck not dangerous to surface navigation |
| 327 | Which chart, of the same scale, continues eastward from this chart? | 13205 | 13212 | 13214 | 13216 |
| 328 | Which chart would you use if you planned to continue westward beyond the coverage of this chart? | 12363 | 12373 | 13205 | 13218 |
| 329 |  |  |  |  |  |
| 330 | The trapezoidal shaped areas enclosed by a thin broken magenta line and located along the south coast of Long Island are $\qquad$ . | designated training areas for Navy amphibious craft | disposal areas for unexploded munitions | fish trap areas | anchorage areas for small craft |
| 331 | The precautionary area southeast of Block Island refers to a | recommended traffic lane | military exercise area | national marine refuge | dumping ground for hazardous wastes |
| 332 | A vessel enroute to Long Island Sound from sea will enter waters governed by the Inland Rules of the Road $\qquad$ | when crossing the Territorial Sea boundary | between Montauk Point and Block Island | when north of latitude $41^{\circ} 10.0^{\prime} \mathrm{N}$ | when passing through The Race |
| 333 | On the south and the east coasts of Block Island are circles with a dot in the center and labeled CUP. This is a $\qquad$ . | conspicuous object | steep depression in the surrounding hills that resembles a cup | domed structure useful for navigation | calling-up-point used for traffic control |
| 334 | The Ruins (LAT $41^{\circ} 08.5^{\prime} \mathrm{N}$, LONG $72^{\circ} 08.8^{\prime} \mathrm{W}$ ) is | a classic example of 18th century military fortifications | in an area of unpredictable, treacherous currents | restricted to surface navigation due to fishery conservation projects nearby | prohibited to the public |


| 335 | When approaching Block Island Sound from Long Island Sound, you will enter waters governed by the International Rules of the Road when you $\qquad$ | pass through The Race | cross the territorial sea boundary | exit Block Island Sound to the east or south | None of the above, as Long Island Sound is governed by the International Rules of the Road |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 336 | Montauk Point Light is 168 feet above what reference level? | Mean low water | Mean tide level | Ground level | Mean high water |
| 337 | The irregular black line around a charted light such as Race Rock Light indicates that it is $\qquad$ | unwatched | surrounded by riprap | a minor light | constructed on an artificial island |
| 338 | Your position is LAT $41^{\circ} 12.4^{\prime} \mathrm{N}$, LONG $71^{\circ} 53.2^{\prime} \mathrm{W}$. You are on course $163^{\circ} \mathrm{T}$ enroute to sea. If you maintain this course and your speed is 10 knots, the bearing and range to Montauk Point Light when abeam, is $\qquad$ | $073{ }^{\circ} \mathrm{T}, 1.1$ miles | $253{ }^{\circ} \mathrm{T}, 1.2$ miles | $073{ }^{\circ} \mathrm{T}, 1.4$ miles | $253{ }^{\circ} \mathrm{T}, 1.5$ miles |
| 339 |  |  |  |  |  |
| 340 | At 0800 your vessel is at mile 110 on the Columbia River. You are steaming in an easterly direction. At 0854 Lady Island Range is in line dead astern and Government Island Upper Range is in line on your port quarter. What speed have you averaged? | 8.1 mph | 8.5 mph | 9.4 mph | 10.2 mph |
| 341 | At 1745 Lady Island Range is in line dead ahead and Government Island Upper Range is in line on your starboard bow. Your vessel is steaming in a westerly direction. At 1851 you pass under the Interstate 5 highway bridge. What speed have you averaged? | 10 mph | 11 mph | 12 mph | 13 mph |
| 342 | At 1630 your vessel exits Bonneville Lock steaming in a westerly direction. What speed must you average to arrive at the Interstate 5 highway bridge with an ETA of 2120? | 6 mph | 7 mph | 8 mph | 9 mph |
| 343 | At 1430 your vessel passes under the Interstate 5 highway bridge east bound. Your engines are making RPM's for 12 mph . If the current is ebbing at 3 mph , what is your ETA at Bonneville Lock? | 1744 | 1753 | 1834 | 1848 |
| 344 | At 1745 Lady Island Upper Range is in line dead astern and Washougal Lower Range is in line on the starboard bow. You are steaming in an easterly direction. What speed must you average to arrive abeam of Cape Horn Light No. 67 at 1839? | 9.3 mph | 9.8 mph | 10.2 mph | 10.8 mph |
| 345 |  |  |  |  |  |
| 346 | Your vessel is awaiting lockage at Bonneville Lock. The staff gauge on the guide wall reads $18^{\prime}-06{ }^{\prime \prime}$. What is the maximum vessel draft allowed to enter the lock? | 17'-00" | 17'-06" | 18'-00" | 18'-06" |
| 347 | What signal is given by air horn to indicate that Bonneville Lock is ready for entrance? | two long blasts | two short blasts | one short blast | one long blast |


| 348 | You are approaching Bonneville Lock and Dam and desire lockage. Which call sign should you use to contact the lock? | WUJ 33 | WUJ 34 | WUJ 41 | WUJ 45 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 349 | You are approaching Bonneville Lock and Dam. Which FMradio channel should be used to communicate with the lockmaster? | 13 | 14 | 15 | 16 |
| 350 |  |  |  |  |  |
| 351 | What is the length of the city wharf at The Dalles on the Columbia River? | 20 feet | Over 1000 feet | 800 feet | 600 feet |
| 352 | At what scheduled time can the draw of the Burlington Northern railroad bridge, across the Columbia River, at mile 328.0 be opened on signal without prior notice? | 6:00 am to 6:00 pm | 6:00 pm to 6:00 am | 8:00 pm to 4:00 am | 8:00 am to 4:00 pm |
| 353 | What is the minimum clearance for the bridge across the entrance to the Wind River at Home Valley, WA.? | 14 feet | 26 feet | 34 feet | 38 feet |
| 354 | What is the vertical clearance of the fixed bridge across the entrance to Rock Creek at Stevenson, Washington? | 19 feet | 36 feet | 54 feet | 70 feet |
| 355 | The mooring float at Beacon Rock State Park is restricted to pleasure boats, what is the maximum duration of mooring in the state park? | 1 night | 2 nights | 5 nights | 7 nights |
| 356 |  |  |  |  |  |
| 357 | What is the height above the water of Government Island Upper Range, lower light? | 35 feet | 24 feet | 38 feet | 42 feet |
| 358 | What are the characteristics of Washougal Light on the Columbia River? | Equal interval green, 6 seconds | Quick flashing red, 2 seconds | Flashing green, 4 seconds | Flashing red, 2.5 seconds |
| 359 | What are the characteristics of the upper light of Government Island Lower Range, on the Columbia River? | Isophase red, 6 seconds | Green group flashing, 6 seconds | Quick flashing red, 6 seconds | Isophase green, 6 seconds |
| 360 | What is the height above the water of light No. 84 on the Columbia River below Bonneville lock \& dam? | 10 feet | 4 feet | 14 feet | 24 feet |
| 361 | What is a characteristic of light No. "68A" on the Columbia River below Bonneville Lock? | The light shows an isophase characteristic. | The light is 3 meters above the water. | The light is equipped with a radar reflector. | The light is green in color. |
| 362 |  |  |  |  |  |
| 363 | You are underway and steaming in an easterly direction on the Columbia River. Your vessel is positioned in the middle half of Cape Horn Channel and is abeam of Cape Horn Light. What should your fathometer read at this position, if the staff gauge at Portland reads 0 feet and your draft is 9 feet? | 16 feet | 18 feet | 23 feet | 24 feet |


| 364 | You are underway and proceeding in an easterly direction on the Columbia River. Your vessel is positioned in the right outside quarter of McGowans Channel and is abeam of light No. 88. What should your fathometer read at this position, if the staff gauge at Portland reads +15.0 feet and your draft is 9 feet? | 22 feet | 52 feet | 43 feet | 31 feet |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 365 | You are underway and steaming in an easterly direction on the Columbia River. After bringing Fisher Quarry Channel Range in line over your bow, you move to the left outside quarter of the channel. What should your fathometer read at this position, if the staff gauge at Portland reads +12.5 feet and your draft is 9 feet? | 7.5 feet | 29.5 feet | 41.5 feet | 51.5 feet |
| 366 | You are underway and proceeding in an easterly direction on the Columbia River. You position your vessel in the middle of the channel and bring Government Island Lower Range in line over your bow. What should your fathometer read at this position, if the staff gauge at Portland reads 10.0 feet and your draft is 9 feet? | 18 feet | 24 feet | 28 feet | 31 feet |
| 367 |  |  |  |  |  |
| 368 | Your vessel is westbound in the Tomahawk Bar Channel approaching the Interstate Highway Bridge. The water level is 15.0 feet above the Columbia River Datum. Your vessel profile indicates the distance from the keel to the highest point is 72.25 feet and your draft is 9.5 feet. What will be the vertical clearance passing under the bridge in the raised position? | 72.25 feet | 81.25 feet | 90.75 feet | 100.25 feet |
| 369 | Your vessel is westbound approaching the Interstate Highway Bridge in the Tomahawk Bar Channel. The water level is 3.0 feet above the Columbia River Datum. Your vessel profile indicates the distance from the keel to the highest point is 49.75 feet and your draft is 9.5 feet. What will be the vertical clearance passing under the bridge in the raised position? | 115.75 feet | 121.75 feet | 134.75 feet | 137.75 feet |
| 370 | Your vessel is approaching the Interstate Highway Bridge in the Alternate Barge Channel. The water level is 3.0 feet below the Columbia River Datum. Your vessel profile indicates the distance from the keel to the highest point is 49.75 feet and your draft is 9.5 feet. Your tow has an air draft of 41.25 feet. What is the minimal vertical clearance you will encounter while passing under the bridge? | 33.75 feet | 34.75 feet | 39.75 feet | 40.75 feet |


| 371 | Your vessel is approaching the Interstate Highway Bridge in the Alternate Barge Channel. The water level is 2.0 feet above the Columbia River Datum. Your vessel has an air draft of 55.5 feet and your draft is 9.5 feet. What is the minimal vertical clearance you will encounter while passing under the bridge? | 9.0 feet | 14.5 feet | 18.5 feet | 26.0 feet |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 372 | Your vessel is approaching the Interstate Highway Bridge in the Barge Channel. The water level is 1.5 feet above the Columbia River Datum. Your vessel has an air draft of 43.5 feet and your draft is 9.5 feet. What is the minimal vertical clearance if you are in the center span while passing under the bridge? | 23.5 feet | 20.5 feet | 11 feet | 13 feet |
| 373 | Your vessel is at mile marker 120 and has an air draft of 52.5 feet. The water level is 4.3 feet above Columbia River Datum. What will the vertical clearance be when your vessel passes under the North Channel Overhead Power Cables? | 76.2 feet | 80.5 feet | 84.8 feet | 93.2 feet |
| 374 |  |  |  |  |  |
| 375 | What is the length of The Bonneville Dam Lock on the Columbia River? | 475 feet | 500 feet | 675 feet | 1200 feet |
| 376 | Where would you look for information on the restricted areas shown on the chart immediately above and below the spillway at The Dalles Lock \& Dam ? | Light List - Vol II | Coast Pilot 7 Chapter 2 | Notice to Mariners | Sailing directions |
| 377 | Where would you tune your radio to receive a VHF-FM weather broadcast for the Columbia River in the vicinity of Government Island? | KIH-32-162.40 MHz | KBA-99-162.40 MHz | KIG-98-162.55 MHz | KEC-62-162.55 MHz |
| 378 | Clearances of bridges and overhead cables below Bonneville Dam refer to heights in feet above mean $\qquad$ | Iower low water | high water | low water | sea level |
| 379 | Contour elevations on this chart refer to heights in feet above mean $\qquad$ . | lower low water | high water | low water | sea level |
| 380 |  |  |  |  |  |
| 381 | How many nautical miles are between mile 105 and mile 234 on the Columbia River? | 112.1 | 119.5 | 129.0 | 148.4 |
| 382 | How many nautical miles are between mile 44 and mile 163 on the Columbia River? | 98.6 | 103.4 | 119.5 | 136.9 |
| 383 | At 2200 your vessel is at mile 95 proceeding in an easterly direction on the Columbia River. At 0400 the following morning, you pass the 125 mile mark. How many nautical miles have you traveled since 2200? | 22.6 | 24.3 | 26.1 | 34.5 |
| 384 | At 0800 your vessel is at mile 110 proceeding in an easterly direction on the Columbia River. At 1030 Reed Island is abeam to port as you pass the 125 mile mark. What has been your average speed in knots? | 4.3 knots | 5.2 knots | 8.7 knots | 10.0 knots |


| 385 | At 0800 your vessel is at mile 110 on the Columbia River. Thirty minutes later your vessel is at mile 115. What is your speed in knots? | 4.3 knots | 5.7 knots | 7.8 knots | 8.7 knots |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 386 | The following questions are to be answered using chart 12221 TR, Chesapeake Bay Entrance, and supportng publications. Your vessel is enroute from New York, NY, to Baltimore, Your vessel's draft is 29 feet, and your height ye is 54 feet. Your present course is $206^{\circ} \mathrm{T}$ and your speed is 18 knots. Use $10^{\circ} \mathrm{W}$ variation where required. |  |  |  |  |
| 387 | At 0705 your position is Latitude $37^{\circ} 20.8^{\prime} \mathrm{N}$ Longitude $75^{\circ}$ 29.9' W. If a northwesterly breeze is causing 3 degrees leeway what is the true course to steer in order to pass Hog Island Lighted Bell Buoy "12" at a distance abeam of two miles? | $212^{\circ} \mathrm{T}$ | $209^{\circ} \mathrm{T}$ | $206{ }^{\circ} \mathrm{T}$ | $203{ }^{\circ} \mathrm{T}$ |
| 388 | At 0725 you determined your vessel's position to be $37^{\circ} 15.5^{\prime} \mathrm{N}$, $75^{\circ} 33.2^{\prime} \mathrm{W}$. Assuming that you make good your course of $206^{\circ}$ true and a speed of 18 knots, at what time would you expect to be abeam of Cape Charles Lighted Bell Buoy "14"? | 0750 | 0754 | 0758 | 0802 |
| 389 | At about what time will you see Chesapeake Light if visibility is exceptionally clear? | 0729 | 0733 | 0738 | 0742 |
| 390 | At 0741 you are still steering a course of $206^{\circ}$ true, with a speed of 18 knots. At this time you observe Cape Charles Lighted Bell Buoy " 14 " bearing $222^{\circ}$ true and Hog Island Lighted Bell Buoy "12" bearing $015^{\circ}$ true. What were the set and drift experienced since 0725? | $259{ }^{\circ}$ true at 3.2 knots | 049 ${ }^{\circ}$ true at 2.5 knots | $240^{\circ}$ true at 1.9 knots | $042^{\circ}$ true at 3.3 knots |
| 391 | From your 0741 position, you wish to change course in order to pass 2.2 miles easterly of Cape Charles Lighted Bell Buoy "14". Your engine speed is now 14.0 knots. You estimate the current to be $240^{\circ}$ true at 1.8 knots. What is the true course to steer to make good the desired course? | $179^{\circ}$ true | $185^{\circ}$ true | $190^{\circ}$ true | $197^{\circ}$ true |
| 392 | At 0811 your vessel's position is $37^{\circ} 04.9^{\prime} \mathrm{N}, 75^{\circ} 39.7^{\prime} \mathrm{W}$. You are steering a course of $220^{\circ}$ true at a speed of 14.0 knots. At what time would you expect the buoys in the northeasterly traffic scheme to line up, if you do not correct for a southwesterly current of 1.8 knots? | 0826 | 0831 | 0841 | 0846 |
| 393 | At 0841 Chesapeake Light bears $164^{\circ}$ true, Cape Charles Light bears $312^{\circ}$ true, and Cape Henry Light bears $247^{\circ}$ true. What was your course made good since 0811? | $226^{\circ}$ true | $230^{\circ}$ true | $233{ }^{\circ}$ true | $237^{\circ}$ true |
| 394 | From your 0841 position, you are steering a course of $241^{\circ}$ true to the northeasterly inbound channel entrance, your speed is now 15 knots. What is your ETA abeam of buoy "NCA" (LL\#375)? | 0850 | 0855 | 0901 | 0911 |


| 395 | As you pass through the Chesapeake Bay Bridge and Tunnel, you take a bearing of $047^{\circ} \mathrm{pgc}$ along trestle C when it is in line. The helmsman reports the vessel's heading as $316^{\circ} \mathrm{pgc}$ and $329^{\circ} \mathrm{psc}$. What is the deviation on that heading? | $3^{\circ} \mathrm{E}$ | $1^{\circ} \mathrm{E}$ | $1^{\circ} \mathrm{W}$ | $9^{\circ} \mathrm{W}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 396 | 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 $243^{\circ} \mathrm{T}$. Your height of eye is 45 feet and your vessel's deep draft is 33 feet. |  |  |  |  |
| 397 | At 0930 you obtain a position from the following information: Race Rock Light bears $110^{\circ} \mathrm{T}$ at a range of 1.4 miles, and Goshen Point bears $330^{\circ} \mathrm{T}$ at a range of 3.3 miles. What are your present latitude and longitude? | $41^{\circ} 16.0^{\prime} \mathrm{N}, 72^{\circ} 09.5^{\prime} \mathrm{W}$ | 41¹5.1'N, 7204.6'W | $41^{\circ} 17.4^{\prime} \mathrm{N}, 72^{\circ} 06.0^{\prime} \mathrm{W}$ | $41^{\circ} 14.6^{\prime} \mathrm{N}, 72^{\circ} 03.0^{\prime} \mathrm{W}$ |
| 398 | At 1000 buoy "PI" is abeam to starboard a distance of 0.5 mile. From this position, with a set of $295^{\circ}$ and a drift of 1.6 knots, what course must you steer to arrive at a point with Buoy "TE" one mile abeam to starboard? | $247{ }^{\circ} \mathrm{T}$ | $249^{\circ} \mathrm{T}$ | $251{ }^{\circ} \mathrm{T}$ | $253^{\circ} \mathrm{T}$ |
| 399 | At 1130, Horton Point Light bears $172^{\circ}$ true at a range of 3.45 nm <br> The fathometer reads 81 ft . Your position is $\qquad$ | north of your intended track line | $41^{\circ} 09.4{ }^{\prime} \mathrm{N}, 72^{\circ} 22.6^{\prime} \mathrm{W}$ | three miles southeast of Six Mile Reef Buoy "8A" | 4108.5'N, $72^{\circ} 27.3^{\prime} \mathrm{W}$ |
| 400 | At 1155 your vessel's position is LAT $41^{\circ} 09.0^{\prime} N$, LONG $72^{\circ} 34.4^{\prime} \mathrm{W}$. If you make good a course of $282^{\circ} \mathrm{T}$ and a speed of 10.0 knots, when will you arrive at New Haven Harbor Lighted Whistle Buoy "NH"? | 1315 | 1320 | 1325 | 1330 |
| 401 | From your 1155 position, you steer a course of $282^{\circ} \mathrm{T}$ at a speed of 9.5 knots. You obtain the following bearings: <br> 1205: Falkner Island Light bears $318^{\circ} \top$ <br> 1225: Falkner Island Light bears $355^{\circ} \top$ <br> Your 1225 running fix is $\qquad$ . | north of your intended track | 3.1 miles SSW of Falkner Island Light | ahead of the DR position | south of your intended track |
| 402 | At 1245 the GPS shows your position to be LAT $41^{\circ} 10.3^{\prime} \mathrm{N}$, LONG $72^{\circ} 44.2^{\prime} \mathrm{W}$. You are steering a course of $284^{\circ} \mathrm{T}$ at an engine speed of 13.0 knots. At what time would you expect the New Haven Harbor Outer Range to be in line if you have a current setting $112^{\circ} \mathrm{T}$ at 1.2 knots? | 1318 | 1323 | 1328 | 1343 |


| 403 | At the time of your 1245 position, which statement is TRUE? | Your fathometer should indicate a reading of approximately 47 feet. | Bradford Reef is 5.7 miles on the starboard bow. | You are in a danger area. | You must follow the International Rules of the Road. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 404 | After departing the New Haven terminals, your 1800 position puts the New Haven Harbor Lighted Bell Buoy "NH" bearing $130^{\circ} \mathrm{T}$ at a range of 0.2 mile. From this position you set a course to leave Stratford Shoal Middle Ground Light 1.0 mile off your starboard beam. Your speed is 12.5 knots. At 1845 you determine your position to be LAT $41^{\circ} 05.5^{\prime} \mathrm{N}$, <br> LONG $73^{\circ} 03.1^{\prime} \mathrm{W}$. What were the set and drift of the current? | $294{ }^{\circ} \mathrm{T}$ at 0.5 knot | $294{ }^{\circ} \mathrm{T}$ at 0.8 knot | $114^{\circ} \mathrm{T}$ at 0.5 knot | $114^{\circ} \mathrm{T}$ at 0.8 knot |
| 405 | From your 1845 position, you desire to leave Stratford Shoal Middle Ground Light 1.0 mile off your starboard beam at 1900. Which course and speed would you order if you allow for a 2.0 knot current with a set of $180^{\circ} \mathrm{T}$ ? | $205^{\circ} \mathrm{T}$ at 9.2 knots | $208^{\circ} \mathrm{T}$ at 11.4 knots | $215^{\circ} \mathrm{T}$ at 9.2 knots | $225^{\circ} \mathrm{T}$ at 11.5 knots |
| 406 | The following questions are to be answered using chart 13205 TR, Block Island Sound, and supporting publications. Your vessel is on a course of $090^{\circ} \mathrm{T}$ with a speed of 14 knots. Your draft is 37 feet and your height of eye is 56 feet. |  |  |  |  |
| 407 | At 1705 Race Rock Light bears $099^{\circ}$ True; Orient Point Light bears $176^{\circ}$ True; Bartlett Reef Light bears $083^{\circ}$ True. What is your vessel's position? | $\begin{aligned} & \text { LAT } 41^{\circ} 15.0^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 14.3^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 15.4^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 16.6^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 15.9^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 14.0^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 16.4^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 14.2^{\prime} \mathrm{W} \end{aligned}$ |
| 408 | If there is no set or drift, at what time would you be abeam of Bartlett Reef Light? | 1719 | 1724 | 1729 | 1734 |
| 409 | At 1718, Bartlett Reef Light bears $050^{\circ} \mathrm{T}$ at a distance of 1.5 miles. From this position, you change course to $128^{\circ}$ T. At 1750 Race Rock Light bears $336^{\circ}$ T, Little Gull Island Light bears $285^{\circ} \mathrm{T}$, and Montauk Point Light bears $134^{\circ} \mathrm{T}$. What were the set and drift of the current you encountered since $1718 ?$ | $245^{\circ} \mathrm{T}$ at 0.9 knots | $245^{\circ} \mathrm{T}$ at 1.7 knots | 065 ${ }^{\circ} \mathrm{T}$ at 1.7 knots | $065^{\circ} \mathrm{T}$ at 0.9 knots |
| 410 | If your fathometer is set on fathoms, what should your fathometer read at 1750? | 8.5 fathoms | 10.2 fathoms | 14.7 fathoms | 51.0 fathoms |
| 411 | At 1756 you determined your vessel's position to be $41^{\circ} 10.4^{\prime} \mathrm{N}$, $71^{\circ} 59.2^{\prime} \mathrm{W}$. From this position, you wish to change course to head for a point 5 miles west of Block Island North Light. With a reported set of $050^{\circ} \mathrm{T}$, a drift of 2.0 knots and turning RPM's for 14 knots, which course should you steer to make good your desired course? | 070T | ${ }^{075}{ }^{\circ} \mathrm{T}$ | $0^{08}{ }^{\circ} \mathrm{T}$ | ${ }^{085}{ }^{\circ} \mathrm{T}$ |


| 412 | At 1844 Watch Hill Point bears $323^{\circ}$ true and Block Island North Light bears $084^{\circ}$ true <br> Which statement is TRUE? | Your fathometer reads 97 feet | You are governed by the Inland Rules of the Road. | You are to the left (north) of your desired course line. | Your vessel is approximately 8.7 miles off Sandy Point. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 413 | From your 1850 position of $41^{\circ} 12.8^{\prime} \mathrm{N}, 71^{\circ} 44.1^{\prime} \mathrm{W}$, you change course to $060^{\circ} \mathrm{T}$. If you make the course good, what will be your predicted distance off Point Judith Light when the Light bears $015^{\circ} \mathrm{T}$ ? | 1.2 miles | 1.9 miles | 2.7 miles | 3.4 miles |
| 414 | You are making good a course of $060^{\circ} \mathrm{T}$ at a speed of 13.5 knots. At 1855 Block Island North Light bears 086ºT; at 1910 Block Island North Light bears $108^{\circ}$ T; and at 1930 the same light bears $184^{\circ} \mathrm{T}$. Which statement is TRUE about your 1930 running fix position? | You are on the edge of a cable area. | The bottom is mud, sand, and clay. | The wavy magenta lines to the north through east of your position are designated lobstering areas. | You are inside the 120 fathom curve |
| 415 | At 1942 Point Judith bears $030^{\circ} \mathrm{T}$ and has a range of 3.6 miles and Sandy Point has a range of 5.3 miles. What was your speed made good from your 1850 position? | 12.5 knots | 13.0 knots | 13.5 knots | 14.0 knots |
| 416 | The following questions are to be answered using chart 1 are on a voyage to Baltimore. You are observing daylight is $2^{\circ} \mathrm{E}$. The visibility is obscured by patchy fog. Use $10^{\circ} \mathrm{W}$ <br> DEVIATION TABLE | 221 TR, Chesapeake savings time. You are variation where requir | Bay Entrance, and sup turning for 9.8 knots. ed. | porting publications. It The maximum draft is 18 | is July 13th and you 8 feet. The gyro error |
| 417 | At 2038 you are on course $272^{\circ} \mathrm{T}$ when Chesapeake Light is bearing $348^{\circ}$ true at a range of 5.3 nm <br> Based on this fix, which statement is TRUE? | You are inside a ten fathom depth curve. | You are less than five miles from Chesapeake Light. | You are 0.6 mile north of a wreck. | You are inside the contiguous zone. |
| 418 | You are proceeding towards the inbound lane of the Chesapeake Bay entrance deep water route. What is your ETA to abeam of the "CB" Buoy? | 2058 | 2104 | 2109 | 2115 |


| 419 | Your ETA at Chesapeake Bay Bridge and Tunnel between trestles B + C is 2300. If your engine speed is 9.8 knots, what will be your approximate speed over the ground, at that time, allowing for the predicted current? | 7.0 knots | 8.2 knots | 11.4 knots | 12.5 knots |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 420 | At buoy "CB" you change course to follow the inbound traffic lane. What is the course to steer per gyro compass if you correct your heading for a current of $315^{\circ}$ at 1.0 knot and allow $3^{\circ}$ leeway for northeasterly winds? | $297^{\circ} \mathrm{pgc}$ | 299pgc | $302^{\circ} \mathrm{pgc}$ | $305^{\circ} \mathrm{pgc}$ |
| 421 | At 2216 CBJ Buoy is close abeam to port. Your lookout reports several sound signals with their relative bearings. Which would you judge to be coming from a vessel? | A bell, broad on the port bow | A whistle, broad on the starboard beam | A bell, dead ahead | A gong, two points on the starboard quarter |
| 422 | As you enter Chesapeake Bay, visibility improves. At 2235 you are between Chesapeake Channel Buoys " 5 " and " 6 " in the 41 foot dredged section of Chesapeake Channel. At that time, you change course to pass between buoys " 9 " and " 10 ". If buoys "11" and "12" are extinguished, your best leading light to keep you in deep water in the Chesapeake Channel, as you approach the Chesapeake Bay Bridge and Tunnel, would be | fixed red light on trestle "C" | fixed green light on trestle "B" | fixed red light on trestle "B" | Thimble Shoal Light |
| 423 | At 2306, as you pass through Trestle "C", you take a gyro bearing of the trestle when it is in line. The bearing is $049.0^{\circ}$. What is the gyro error? | $0^{\circ}$ | $1.5^{\circ} \mathrm{E}$ | $1.0^{\circ} \mathrm{W}$ | $2.5^{\circ} \mathrm{W}$ |
| 424 | As you proceed up York Spit Channel, what are the three base courses that you must steer to conform to the channel, if steering by standard magnetic compass? | $337.5^{\circ}, 359.5^{\circ}, 028.0^{\circ}$ | $337.5^{\circ}, 357.5^{\circ}, 026.0^{\circ}$ | $324.0^{\circ}, 352.5^{\circ}, 009.5^{\circ}$ | $340.0^{\circ}, 000.5^{\circ}, 025.0^{\circ}$ |
| 425 | You are abeam of buoy "18" at 2325. What is your ETA at Baltimore if you average 9.5 knots? | 1342 | 1400 | 1424 | 1456 |
| 426 | The following questions are to be answered using chart 123 for 12.7 knots. Your vessel's deep draft is 16 feet. Gyro e <br> DEVIATION TABLE | 3354 TR, Long Island rror is $2^{\circ} \mathrm{W}$. Use $14^{\circ} \mathrm{W}$ | Sound - Eastern Part, variation where requi | nd supporting publicat d. | ns. You are turning |


| 427 | At 2127 you take the following round of bearings: <br> Old Field Point Light $224.0^{\circ}$ pgc <br> Middle Ground Light $320.5^{\circ} \mathrm{pgc}$ <br> Stratford Point Light $348.0^{\circ}$ pgc <br> Based on the above fix, which statement is TRUE? | At 2127, your fathometer reads about 17 fathoms. | You are south of Mt. Misery Shoal. | You will experience a 1 knot westward setting ebb current | You have lost sight of the red light at Old Field Point. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 428 | At 2127 you are on course $076^{\circ} \mathrm{T}$. What is your ETA at a position where Twenty Eight Foot Shoal Lighted Bell Buoy "TE" is abeam to port? | 2316 | 2324 | 2332 | 2345 |
| 429 | At 2200 Middle Ground Light is bearing $270^{\circ}$ true at 9 nm <br> Which statement is TRUE? | The vessel did not experience any set and drift. | You are being set to the left of the track. | The set is towards the southwest. | The drift is 0.6 knot. |
| 430 | You alter course to make good $076^{\circ} \mathrm{T}$ from your 2200 fix, and estimate you will make 13.6 knots over the ground. If the visibility is 5.5 miles, what is the earliest time you will sight Falkner Island Light? (nominal range 13 miles) | The light is visible at $2200$ | 2221 | 2236 | You will not sight the light |
| 431 | At 2214 you receive a "Securite" call requesting you to remain at least 2 miles away from underwater work taking place at LAT $41^{\circ} 07.8^{\prime} \mathrm{N}$, LONG $72^{\circ} 34.6^{\prime} \mathrm{W}$. If you change course at 2220 and allow $3^{\circ}$ leeway for southerly winds which course will you steer per gyrocompass to comply with this request? No allowance made for current. | 079 ${ }^{\circ} \mathrm{pgc}$ | 083 ${ }^{\circ} \mathrm{pgc}$ | 086 ${ }^{\circ} \mathrm{pgc}$ | 089 ${ }^{\circ} \mathrm{pgc}$ |
| 432 | At 2236 Falkner Island Light bears $024^{\circ}$ true at a range of 8.6 nm <br> What was the speed made good along the track line since your 2200 fix? | 12.7 knots | 13.5 knots | 13.9 knots | 14.2 knots |
| 433 | At 2310 your position is LAT $41^{\circ} 05.5^{\prime} \mathrm{N}$, LONG $72^{\circ} 33.7^{\prime} \mathrm{W}$ and you change course to make good $068^{\circ} \mathrm{T}$. A radar speed check using Twenty Eight Foot Shoal Buoy indicates your speed over the ground is 13.6 knots. At 2325 Horton Point Light bears $129^{\circ} \mathrm{T}$. At 2341 the same light bears $194^{\circ} \mathrm{T}$. What is the position of your 2341 running fix? | $\begin{aligned} & \text { LAT } 41^{\circ} 07.9^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 25.9^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 08.3^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 25.8^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 08.5^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 25.6^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 08.8^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 25.2^{\prime} \mathrm{W} \end{aligned}$ |
| 434 | At 2342 the gyro alarm sounds and you commence steering by standard magnetic compass. If you allow $3^{\circ}$ leeway for southerly winds and do not correct for any existing current, what is the course to steer by standard magnetic compass to make good $068^{\circ} T$ ? | 054.0 ${ }^{\circ}$ | 079.5 ${ }^{\circ}$ | 081.0 ${ }^{\circ}$ | 084.5 ${ }^{\circ}$ |


| 435 | At 2350 the gyro is restored to service. At 0016 the visibility improves. At 0028 you sight Bartlett Reef Light in line with New London Harbor Light bearing $039^{\circ}$ pgc. What is the gyro error? | $2^{\circ} \mathrm{E}$ | $0^{\circ}$ | $2^{\circ} \mathrm{W}$ | $4^{\circ} \mathrm{W}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 436 | The following questions are to be answered using chart 1320 turning for 12.1 knots. Your draft is 22 feet. The gyro error <br> DEVIATION TABLE <br> HEADING MAG DEVIATION | 205 TR, Block Island is $3^{\circ} \mathrm{W}$. Use a variatio | Sound, and supporting of $14^{\circ} \mathrm{W}$ where requ | publications. There ar red. | fog patches. You are |
| 437 | At 2009 you are leaving New London Harbor with buoy "2" close abeam to port, Bartlett Reef Light is at a range of 2.9 nm . What is the true course to the Race that will leave Race Rock Light 0.8 mile abeam to port? | $164^{\circ}$ | $166^{\circ}$ | $169^{\circ}$ | $172^{\circ}$ |
| 438 | At 2016 you sight N. Dumpling Light in line with Latimer Reef Light (FI $6 \mathrm{sec}, 55 \mathrm{ft}$ ) bearing $079^{\circ} \mathrm{pgc}$. At the time of the bearing the helmsman reported he was steering $164^{\circ}$ pgc and $172^{\circ}$ per standard magnetic compass. What is the deviation for that heading? | $3^{\circ} \mathrm{E}$ | $1^{\circ} \mathrm{E}$ | $5^{\circ} \mathrm{W}$ | $2^{\circ} \mathrm{W}$ |
| 439 | At which point in the voyage is your vessel bound by the International Rules of the Roads (COLREGS)? | At the mouth of New London Harbor | Upon entering Block Island Sound | After crossing the line of the Territorial Sea | After passing between Montauk Point and Lewis Point on Block Island |
| 440 | You will pass through the Race at approximately the time of maximum ebb current. As you APPROACH the Race from New London, you will be set . $\qquad$ | to the left of the track line | to the right of the track line | forward along the track line | towards New London along the track line |
| 441 | At 2030 you take the following radar ranges: <br> Race Rock Light 2.1 miles Latimer Reef Light 6.4 miles <br> If you estimate an average current of $080^{\circ} \mathrm{T}$ at 1.5 knots, which course will you steer per gyrocompass to leave Endeavor Shoals Gong Buoy bearing $270^{\circ} \mathrm{T}$ at 1.5 miles? | $115^{\circ}$ | $118^{\circ}$ | $124^{\circ}$ | $127^{\circ}$ |


| 442 | The light on Block Island Sound South Entrance Obstruction Buoy "BIS" is reported extinguished. Which of the following will serve as a positive warning that you are being set onto the obstruction? | Radar ranges to Southwest Point of less than 7.9 miles | Soundings of less than 50 feet | Shagwong Reef Lighted Bell Buoy "7SR" 3.1 miles off abeam | Race Rock Light bearing $299^{\circ} \mathrm{T}$ and decreasing |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 443 | At 2103 you take the following set of bearings: <br> Watch Hill Point Light bears $005^{\circ}$ true Montauk Point Light bears $170^{\circ}$ true <br> Determine your 2103 fix. | $\begin{aligned} & \text { LAT } 41^{\circ} 09.2^{\prime} \mathrm{N}, \text { LONG } \\ & 71^{\circ} 52.5^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 09.1^{\prime} \mathrm{N}, \text { LONG } \\ & 71^{\circ} 52.2^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 09.0^{\prime} \mathrm{N}, \text { LONG } \\ & 71^{\circ} 52.9^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 08.8^{\prime} \mathrm{N}, \text { LONG } \\ & 71^{\circ} 52.5^{\prime} \mathrm{W} \end{aligned}$ |
| 444 | You round Montauk Point and steer to make good $206^{\circ}$ T. Speed is increased to 13.0 knots. The current, if any, is unknown. The visibility has improved and is estimated to be 5 miles. At 2144 Montauk Point Light bears $273^{\circ}$ T. At 2202 the same light bears $320^{\circ} \mathrm{T}$. Which statement concerning your 2202 running fix is TRUE? | You are inside the lobster pot area. | The fathometer reads about 12 fathoms. | You are inside of the 90 foot curve. | You are outside the boundary of the Territorial Sea and Contiguous Zone. |
| 445 | At 2229 the gyro fails. What is the course to steer per standard magnetic compass to make good $206^{\circ}$ T, if you allow $3^{\circ}$ leeway for southeasterly winds? | $187^{\circ}$ | $191^{\circ}$ | $217^{\circ}$ | $220^{\circ}$ |
| 446 | 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 $180^{\circ} \mathrm{T}$ and the engine speed is 14 knots. Your draft is 16 feet. Gyro error is $2^{\circ} \mathrm{W}$. Use $10^{\circ} \mathrm{W}$ variation where required. |  |  |  |  |
| 447 | At 2000 Hog Island Lighted Bell Buoy "12" bears $199^{\circ}$ true and Buoy "GM" bears $249^{\circ}$ true <br> Your position is $\qquad$ _. | $37^{\circ} 35.0^{\prime} \mathrm{N}, 75^{\circ} 32.2^{\prime} \mathrm{W}$ | $37^{\circ} 23.5^{\prime} \mathrm{N}, 75^{\circ} 32.2^{\prime} \mathrm{W}$ | $37^{\circ} 03.5^{\prime} \mathrm{N}, 75^{\circ} 32.2^{\prime} \mathrm{W}$ | $37^{\circ} 03.5^{\prime} \mathrm{N}, 75^{\circ} 02.2^{\prime} \mathrm{W}$ |
| 448 | From your 2000 position you change course to $206^{\circ}$ T. What time would you expect to be abeam of Hog Island Buoy "12"? | 2021 | 2026 | 2031 | 2040 |
| 449 | You should expect to pass how far off buoy "12"? | 0.8 mile | 1.2 miles | 1.7 miles | 2.1 miles |
| 450 | At 2030 you take the following bearings: <br> Sand Shoal Inlet South Light - $275^{\circ}$ T <br> Cape Charles Light -235T <br> The set and drift from 2000 to 2030 are $\qquad$ | $088^{\circ}$ at 0.7 knot | $088^{\circ}$ at 1.4 knots | $268^{\circ}$ at 0.7 knot | $268{ }^{\circ}$ at 1.4 knots |
| 451 | From your 2030 fix you change course to $195^{\circ} \mathrm{T}$, and leave the engine speed at 14 knots. <br> At 2045, your position is L $37^{\circ} 13.50^{\prime} \mathrm{N}$ Long $075^{\circ} 38.05^{\prime} \mathrm{W}$ <br> Which statement is TRUE? | Cape Charles Light bears $050^{\circ}$ relative. | Chesapeake Light bears $190^{\circ}$ relative. | Your fathometer reading is approximately 40 fathoms. | Your vessel is located in a restricted area. |


| 452 | You continue to steer $195^{\circ}$ T. You pass Cape Charles Lighted Bell Buoy "14", 0.9 miles abeam to starboard at 2111. Your speed made good from 2045 to 2111 is . $\qquad$ | 13.7 knots | 14.1 knots | 14.5 knots | 14.8 knots |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 453 | Your course made good from 2045 to 2111 is ___ | $187^{\circ} \mathrm{T}$ | $190^{\circ} \mathrm{T}$ | $193{ }^{\circ} \mathrm{T}$ | $196^{\circ} \mathrm{T}$ |
| 454 | If you are going to head directly for Chesapeake Light from your 2111 fix, what is the course to make good? | $190^{\circ} \mathrm{T}$ | $193{ }^{\circ} \mathrm{T}$ | $196^{\circ} \mathrm{T}$ | $199^{\circ} \mathrm{T}$ |
| 455 | At 2200 , you alter course to $204^{\circ} \mathrm{T}$, at 14 knots. You expect a current on this leg of the trip, setting $325^{\circ}$ at 1.5 knots. Which course should you steer per gyro compass to make good the true course? | $184^{\circ} \mathrm{pgc}$ | $190^{\circ} \mathrm{pgc}$ | 194* ${ }^{\circ} \mathrm{pgc}$ | $201{ }^{\circ} \mathrm{pgc}$ |
| 456 | The following questions are to be answered using chart 12354 TR, Long Island Sound - Eastern Part, and 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 $2^{\circ} \mathrm{W}$. Use $14^{\circ} \mathrm{W}$ variation where required. |  |  |  |  |
| 457 | At 0820 Old Field Point Light bears $206^{\circ}$ per gyrocompass, and Stratford Shoals Middle Ground Light bears $322^{\circ}$ per gyrocompass. The radar range to Middle Ground Light is 1.5 miles. Your 0820 fix gives you a position of $\qquad$ | $\begin{aligned} & \text { LAT } 41^{\circ} 02.6^{\prime} \mathrm{N}, \text { LONG } \\ & 73^{\circ} 05.2^{\prime} \mathrm{W} \end{aligned}$ | LAT $41^{\circ} 02.5^{\prime} \mathrm{N}$, LONG $73^{\circ} 04.9^{\prime} \mathrm{W}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 02.3^{\prime} \mathrm{N}, \text { LONG } \\ & 73^{\circ} 05.2^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 02.0^{\prime} \mathrm{N}, \text { LONG } \\ & 73^{\circ} 05.1^{\prime} \mathrm{W} \end{aligned}$ |
| 458 | From your 0820 position you change course to your rendezvous position, one mile due south of buoy "NH", speed 14.5 knots. You estimate the current to be $260^{\circ} \mathrm{T}$ at 0.5 knot. The wind is northwesterly at 20 knots and you estimate $2^{\circ}$ leeway. What is your course per gyrocompass (pgc) to the rendezvous position, if you correct your heading for current and leeway? | 039 ${ }^{\circ}$ | 041 ${ }^{\circ}$ | 043 ${ }^{\circ}$ | 045 ${ }^{\circ}$ |
| 459 | At 0847 you take a round of bearings as follows: <br> Middle Ground Shoal Light - $237^{\circ}$ pgc <br> Stratford Point Light $-289^{\circ}$ pgc <br> New Haven Light $\quad-019^{\circ} \mathrm{pgc}$ <br> What were the set and drift since your 0820 position? | Set $180^{\circ} \mathrm{T}$, drift 0.6 kt | Set $360{ }^{\circ} \mathrm{T}$, drift 0.3 kt | Set $180^{\circ} \mathrm{T}$, drift 0.3 kt | Set $360^{\circ} \mathrm{T}$, drift 0.6 kt |
| 460 | From your 0847 fix, you change course to arrive at the rendezvous position and, correcting for current, you estimate your speed over the ground at 15 knots. What is your ETA at the rendezvous? | 0902 | 0905 | 0908 | 0911 |


| 461 | At 1022 when you complete the evacuation, you get underway on course $098^{\circ} \mathrm{T}$ and order turns for 14.5 knots. You take the following round of bearings at that time: <br> Stratford Point Light - $260^{\circ}$ per gyrocompass <br> New Haven Light - $326^{\circ}$ per gyrocompass <br> SW Ledge Light - $358^{\circ}$ per gyrocompass <br> Determine your ETA and distance off when abeam of Falkner Island Light, if there are no set and drift? | 1102, 3.0 miles | 1108, 3.3 miles | 1114, 3.1 miles | 1118, 3.3 miles |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 462 | As you cross the New Haven Outer Channel range, you observe the range in line bearing $335.5^{\circ}$ per gyrocompass. The helmsman reports that he was heading $100^{\circ}$ per gyrocompass, and that the standard magnetic compass read $109^{\circ}$ at the time of the observation. What are the gyro error and deviation of the standard magnetic compass on this heading? | Gyro error $2^{\circ} \mathrm{E}$, deviation $3^{\circ} \mathrm{E}$ | Gyro error $0^{\circ}$, deviation $2^{\circ} \mathrm{W}$ | Gyro error $2^{\circ} \mathrm{W}$, deviation $9^{\circ} \mathrm{W}$ | Gyro error $2^{\circ} \mathrm{W}$, deviation $3^{\circ} \mathrm{E}$ |
| 463 | At 1038 Branford Reef Light bears $019^{\circ}$ pgc, Falkner Island Light bears $075^{\circ} \mathrm{pgc}$, and the radar range to Branford Reef Light is 3.0 miles. Which statement is TRUE of your 1038 position? | You are required by regulation to change course to avoid steaming through the dumping ground. | You are making more speed over the ground, since your 1022 fix, than indicated by your engine RPM. | You are abeam of Townshend Ledge | Your fathometer reads about 25 feet. |
| 464 | The north shore of Long Island, from Horton Point to Orient Point, is $\qquad$ . | bluff and rocky | low and sparsely wooded | marked by long sandy beaches at low water | marshy and backed with sand dunes |
| 465 | The visibility is excellent. When Race Rock Light Tower breaks the horizon, how far will you be from the Tower? | 8.5 miles | 9.6 miles | 14.0 miles | 17.9 miles |
| 466 | 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 $111^{\circ} \mathrm{T}$ and your vessel's engines are turning RPMs for 13 knots. |  |  |  |  |
| 467 | At 1930 Race Rock Light bears $111^{\circ} \mathrm{T}$, and Little Gull Island Light bears $172^{\circ} \mathrm{T}$. Which of the following is your position at 1930? | $\begin{aligned} & \text { LAT } 41^{\circ} 15.6^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 09.6^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 16.1^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 08.3^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 15.3^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 12.9^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 15.8^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 07.1^{\prime} \mathrm{W} \end{aligned}$ |
| 468 | From your 1930 position, you set a course of $150^{\circ} \mathrm{T}$. Your engine speed is 13 knots. What will be your distance off Valiant Rock Bell Buoy "1A" when abeam, if you make good your true course of $150^{\circ}$ ? | 0.8 mile | 1.0 miles | 1.2 miles | 1.4 miles |
| 469 | Available information indicates that there is a set and drift in this area of $290^{\circ} \mathrm{T}$ at 2 knots. Allowing for this set and drift, what course must you steer to make good a true course of $150^{\circ}$, while maintaining an engine speed of 13 knots, from your 1930 position? | $141^{\circ} \mathrm{T}$ | $145^{\circ} \mathrm{T}$ | $149^{\circ} \mathrm{T}$ | $153^{\circ} \mathrm{T}$ |


| 470 | The speed you can expect to make good over your course while steering to make $150^{\circ} \mathrm{T}$ is $\qquad$ | 11.0 knots | 11.4 knots | 14.0 knots | 14.4 knots |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 471 | At 1949 Little Gull Island Light bears $270^{\circ} \mathrm{T}$ and is 1.7 miles off. From this position, you change course to $118^{\circ} \mathrm{T}$ and increase engine speed to 18 knots. If you make good your course and speed, at what time should Shagwong Reef Lighted Bell Buoy "7SR" bear $180^{\circ} \mathrm{T}$ ? | 2016 | 2019 | 2022 | 2025 |
| 472 | At 2027 you obtain a radar range to Shagwong Point of 3.4 miles and a tangent bearing to the east end of Long Island of $172^{\circ} \mathrm{T}$. Which statement is TRUE? | You are to the left of your DR track. | You are inside a precautionary area. | Your speed made good from 1949 to 2027 is 14.0 knots. | Your course made good from 1949 to 2027 is $111^{\circ} \mathrm{T}$. |
| 473 | From your 2027 position you change course to $106^{\circ} \mathrm{T}$, while maintaining an engine speed of 18 knots. Your ETA at a position where Block Island Sound South Entrance Obstruction Lighted Buoy "BIS" is abeam is $\qquad$ -. | 2039 | 2043 | 2047 | 2050 |
| 474 | At 2054 Block Island Southeast Point Light bears $054^{\circ} \mathrm{T}$ at 6.9 miles and Southwest Ledge Lighted Bell Buoy 2 is 1.6 miles off to port. The set and drift from 2027 to 2054 is $\qquad$ | $12{ }^{\circ} \mathrm{T}$ at 3.1 knots | $127^{\circ} \mathrm{T}$ at 1.4 knots | $307^{\circ} \mathrm{T}$ at 3.1 knots | $307^{\circ} \mathrm{T}$ at 1.4 knots |
| 475 | From your 2054 position, you change course to $066^{\circ}$ T. Maintaining course and speed of 18 knots, at what time can you expect to first cross the 90 -foot curve if you experience no set and drift? | 2105 | 2111 | 2117 | 2125 |
| 476 | The following questions are to be answered using chart 12221 TR, Chesapeake Bay Entrance, and supporting publications. Your present course is $200^{\circ} \mathrm{T}$ 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 $10^{\circ} \mathrm{W}$ variation where required. |  |  |  |  |
| 477 | At 2045, buoy "GM" is at a range of 6.45 miles. Hogs Island Bell Buoy " 12 " is at a range of 5.25 miles. <br> Your vessel's position is $\qquad$ . | $\begin{aligned} & \text { LAT } 37^{\circ} 22.8^{\prime} \mathrm{N}, \text { LONG } \\ & 75^{\circ} 30.8^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 37^{\circ} 22.3^{\prime} \mathrm{N}, \text { LONG } \\ & 75^{\circ} 31.7^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 37^{\circ} 22.0^{\prime} \mathrm{N}, \text { LONG } \\ & 75^{\circ} 29.3^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 37^{\circ} 21.8^{\prime} \mathrm{N}, \text { LONG } \\ & 75^{\circ} 30.7^{\prime} \mathrm{W} \end{aligned}$ |
| 478 | From your 2045 position, you set a course to pass 1.5 miles due east of the charted position of Hog Island Lighted Bell Buoy "12". The known set and drift in the area are $068^{\circ} \mathrm{T}$ at 3 knots. What is the course to steer, with no change in engine speed, to make good your desired course? | $200^{\circ} \mathrm{T}$ | $203{ }^{\circ} \mathrm{T}$ | $206^{\circ} \mathrm{T}$ | $209^{\circ} \mathrm{T}$ |
| 479 | The speed that you can expect to make good, while steering to make good your desired course, is $\qquad$ | 13.5 knots | 14.3 knots | 15.1 knots | 15.9 knots |
| 480 | At 2129 Cape Charles Light bears $253^{\circ}$, Hog Island Lighted Bell Buoy " 12 " bears $351^{\circ} \mathrm{T}$, and Cape Charles Lighted Bell Buoy " 14 " bears $230^{\circ} \mathrm{T}$. Which statement is TRUE? | The fathometer reads about 62 feet (18.9 meters). | The bottom is hard sand and oysters. | You are to seaward of the contiguous zone. | You are governed by the International Rules of the Road. |


| 481 | From your 2129 position you reduce engine speed to 14 knots. What is the course to make good from your 2129 position to arrive 0.3 mile north of Lighted Whistle Buoy "NCA" (LL\#375) assuming no set and drift? | $216^{\circ} \mathrm{T}$ | $219^{\circ} \mathrm{T}$ | $222^{\circ} \mathrm{T}$ | $225^{\circ} \mathrm{T}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 482 | At 2207 Cape Charles Light bears $276^{\circ}$, Chesapeake Light bears $194^{\circ} \mathrm{T}$, and Cape Charles Lighted Bell Buoy "14" bears $312^{\circ} \mathrm{T}$ and is 2.0 miles off. What were the set and drift of the current acting on your vessel from 2129 to 2207? | $258^{\circ} \mathrm{T}$ at 2.4 knots | $258^{\circ} \mathrm{T}$ at 1.5 knots | $078^{\circ} \mathrm{T}$ at 1.5 knots | 078 ${ }^{\circ} \mathrm{T}$ at 2.4 knots |
| 483 | From your 2207 position you adjust your course to arrive 0.3 mile north of Lighted Whistle Buoy "NCA". If you make good 14 knots, at what time will Cape Charles Light be abeam? | 2242 | 2245 | 2247 | 2250 |
| 484 | At 2259 Cape Henry Light bears $250^{\circ} \mathrm{T}$, Chesapeake Light bears $122^{\circ} \mathrm{T}$, and North Chesapeake Entrance Lighted Whistle Buoy "NCA" has a radar range of 1.8 miles. Which statement is TRUE? | The course made good is $226^{\circ} \mathrm{T}$. | You are in the red sector of Cape Henry Light. | You are in a submerged submarine transit lane. | Chesapeake Light is 7.6 miles off. |
| 485 | From your 2259 fix, you alter course to $250^{\circ}$ T. At 2300 Cape Henry Light bears $250^{\circ}$ T. At 2326 Cape Henry Light bears $252^{\circ} \mathrm{T}$. Which statement is TRUE? | You are being set to the right. | The bearing change should be expected as you transit the inbound lane. | You should alter course to starboard. | You should slow to reduce the effect of the current. |
| 486 | The following questions are to be answered using chart 1 oceanographic research vessel equipped with standard n variation where required. <br> DEVIATION TABLE <br> HEADING MAG DEVIATION | 221 TR, Chesapeake vigational equipment. | Bay Entrance, and su <br> The gyro error is $2^{\circ} \mathrm{W}$ | porting publications. You The maximum draft is | are on an 13 feet. Use $10^{\circ} \mathrm{W}$ |
| 487 | Chesapeake Channel is temporarily closed to traffic. At 2215 you anchor on the following bearings: <br> What is your 2215 position? | $\begin{aligned} & \text { LAT } 37^{\circ} 18.3^{\prime} \mathrm{N}, \text { LONG } \\ & 76^{\circ} 10.9^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 37^{\circ} 18.2^{\prime} \mathrm{N}, \text { LONG } \\ & 76^{\circ} 11.2^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 37^{\circ} 18.1^{\prime} \mathrm{N}, \text { LONG } \\ & 76^{\circ} 10.8^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 37^{\circ} 18.0^{\prime} \mathrm{N}, \text { LONG } \\ & 76^{\circ} 11.2^{\prime} \mathrm{W} \end{aligned}$ |
| 488 | While you are at anchor, what will serve as a positive warning that you are drifting towards the wrecks located to the NW and SW of your 2215 position? | A constant bearing on New Point Comfort Light. | The bearing of Wolf Trap Light changing to the right | Increasing soundings | The bearing of Wolf Trap Light changing to the left |


| 489 | What course per gyrocompass would you need to steer from the anchorage to York Spit Channel buoy "29"? | $172^{\circ} \mathrm{pgc}$ | $175^{\circ} \mathrm{pgc}$ | $178^{\circ} \mathrm{pgc}$ | $181^{\circ} \mathrm{pgc}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 490 | When you get underway, you will take the most direct route to buoy "CBJ", while remaining west of York Spit Channel. You will be turning for 9.7 knots and estimate an average ebb of 0.3 knot during the transit. How long will it take to steam from the anchor position to buoy "CBJ"? | 2h 16m | 2h 33m | 2h 42m | 2h 51m |
| 491 | The area bounded by the buoys "C51" to "C47A" to "M6" to "M14", west of your anchorage, is $\qquad$ | a training area for naval small craft | restricted to oil and mineral exploration | an anchorage for ammunition barges | a fish trap area |
| 492 | As you transit the Chesapeake Bay Bridge and Tunnel, you take a gyro bearing of trestle C when it is in line. The gyro bearing was $050^{\circ}$. At that time, the helmsman noted that he was heading $139^{\circ} \mathrm{pgc}$ and $146^{\circ}$ per standard magnetic compass. What is the deviation? | $2^{\circ} \mathrm{E}$ | $0^{\circ}$ | $2^{\circ} \mathrm{W}$ | $4^{\circ} \mathrm{W}$ |
| 493 | At 1042 you take the following round of bearings: <br> Cape Henry Light $259^{\circ} \mathrm{T}$ <br> Chesapeake Light $101^{\circ} \mathrm{T}$ <br> Cape Charles Light $006^{\circ} \top$ <br> From this position, you set course $070^{\circ} \mathrm{T}$ at a speed of 9.5 knots. <br> What is the course per standard magnetic compass? | 069.5 ${ }^{\circ} \mathrm{psc}$ | $060.5^{\circ} \mathrm{psc}$ | 079.5 ${ }^{\circ} \mathrm{psc}$ | 080.5 ${ }^{\circ} \mathrm{psc}$ |
| 494 | At 1126 you take the following set of bearings: <br> Chesapeake Light bears $143^{\circ}$ true Cape Henry Light bears $254^{\circ}$ true. <br> What was the current encountered since your 1042 fix? | Set $272^{\circ}$, Drift 0.6 knot | Set $272^{\circ}$, Drift 0.8 knot | Set 092 ${ }^{\circ}$, Drift 0.6 knot | Set 092 ${ }^{\circ}$, Drift 0.8 knot |
| 495 | You continue on course from your 1126 fix. At 1131 Cape Charles Light bears $322^{\circ}$. At 1135 you change course to $000^{\circ}$ T. At 1149 Cape Henry Light bears $247^{\circ} \mathrm{T}$. Which statement concerning your 1149 running fix is TRUE? | Your fathometer reads 47 feet. | You are in a danger area. | Chesapeake Light is due south of you. | You are north of Smith Island Shoal. |


| 496 | 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 $255^{\circ} \mathrm{T}$. Your vessel's deep draft is 24 feet. Gyro error is $3^{\circ} \mathrm{E}$. Use $14^{\circ} \mathrm{W}$ variation where required. <br> DEVIATION TABLE |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 497 | At 2216 your position is LAT $41^{\circ} 16.0^{\prime} \mathrm{N}$, LONG $72^{\circ} 08.0^{\prime} \mathrm{W}$. Which statement is TRUE? | You are in the red sector of New London Harbor Light. | Your fathometer reads approximately 40 feet. | You will cross the Colregs Demarcation Line if you continue on your present course. | Little Gull Island Light bears $339^{\circ} \mathrm{T}$ at 4.3 miles. |
| 498 | If you estimate $3^{\circ}$ leeway due to northerly winds, which course will you steer per standard magnetic compass (psc) to make good $255^{\circ} \mathrm{T}$ ? | $267^{\circ} \mathrm{psc}$ | $270^{\circ} \mathrm{psc}$ | $272^{\circ} \mathrm{psc}$ | $274{ }^{\circ} \mathrm{psc}$ |
| 499 | You sight Bartlett Reef Light in range with New London Harbor Light bearing $038^{\circ} \mathrm{pgc}$. At the time of the bearing, the helmsman reports he was heading $253^{\circ} \mathrm{pgc}$ and $269^{\circ}$ per standard magnetic compass. What is the deviation for that heading? | $1^{\circ} \mathrm{E}$ | $1^{\circ} \mathrm{W}$ | $4^{\circ} \mathrm{E}$ | $4^{\circ} \mathrm{W}$ |
| 500 | At 2255 you take the following visual bearings. <br> Saybrook Breakwater Light $333^{\circ}$ pgc <br> Little Gull Island Light $094^{\circ} \mathrm{pgc}$ <br> Horton Point Light $\quad 211^{\circ} \mathrm{pgc}$ <br> What is your position? | $\begin{aligned} & \hline \text { LAT } 41^{\circ} 13.6^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 19.2^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 13.8^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 19.6^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 14.0^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 19.0^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 14.2^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 19.7^{\prime} \mathrm{W} \end{aligned}$ |
| 501 | At 2308 your position is LAT $41^{\circ} 12.7^{\prime} \mathrm{N}$, LONG $72^{\circ} 22.8^{\prime} \mathrm{W}$. You steer a course to make good $255^{\circ} \mathrm{T}$ from this position. At 2310 you receive a distress call from a vessel anchored 2.1 miles due north of Mattituck Inlet Light. If you change course at 2314, what is the course to steer per gyrocompass to arrive at the distress site if you allow $2^{\circ}$ leeway for northerly winds, $3^{\circ} \mathrm{E}$ gyro error and correct your course for a current of $073^{\circ} \mathrm{T}$ at 1.3 knots? | $208^{\circ} \mathrm{pgc}$ | $212^{\circ} \mathrm{pgc}$ | $216^{\circ} \mathrm{pgc}$ | $220^{\circ} \mathrm{pgc}$ |
| 502 | Based on the information in the previous question, what is your ETA at the distress scene? | 0006 | 0010 | 0016 | 0021 |


| 503 | At 2347 you are advised that your assistance is no longer needed. At 2350 you change course to make good $268^{\circ} \mathrm{T}$. At 0015 you take the following round of bearings: <br> Kelsey Point Breakwater light $024^{\circ}$ pgc <br> $\begin{array}{ll}\text { Horton Point Light } & 100^{\circ} \mathrm{pgc} \\ \text { Falkner Island Light } & 333^{\circ} \mathrm{pgc}\end{array}$ <br> At 0030 Falkner Island Lt. bears $000^{\circ} \mathrm{T}$ at 5.9 miles. <br> What is the course and speed made good between 0015 and 0030? | CMG 262${ }^{\circ}$, SMG 10.4 knots | CMG $268^{\circ}$ T, SMG 10.8 <br> knots | CMG $268^{\circ}$ T, SMG 10.4 knots | CMG $272^{\circ}$ T, SMG 10.8 knots |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 504 | At 0030 you alter course and speed to make good $265^{\circ} \mathrm{T}$ at 10 knots. What is your ETA at a point where Stratford Shoal Middle Ground Light is abeam? | 0218 | 0223 | 0228 | 0233 |
| 505 | At 0100 you notice that the wind has become SSW'ly and has freshened. At 0200 you sight Stratford Point Lighted Bell Buoy " 18 " bearing $268^{\circ} \mathrm{pgc}$. At 0215 the buoy bears $269^{\circ} \mathrm{pgc}$. Which statement is TRUE? | You should alter course to the right to increase the rate of the bearing change. | You are making more speed over the ground than you estimated. | You should alter course to decrease the distance that you will pass off Middle Ground Shoal. | You can hold the present course and safely pass buoy "18". |
| 506 | The following questions are to be answered using chart 132 and your vessel's draft is 34 feet. The gyro error is $2^{\circ} E$. <br> DEVIATION TABLE | 05 TR, Block Island S are keeping dayligh | ound, and supporting savings time ( $\mathrm{ZT}+4$ ). | publications. Your heig Use $15^{\circ} \mathrm{W}$ variation wh | ht of eye is 42 feet re required. |


| 507 | At 0400 your position is: <br> Latitude $40^{\circ} 50.2^{\prime}$ North Longitude $071^{\circ} 36.2^{\prime}$ West <br> From your 0400 fix, you steer a course to make good $347^{\circ} \mathrm{T}$ at 12.5 knots. Visibility is good. What is the earliest time you can expect to raise Montauk Point Light? (Nominal range - 24 miles, height above water - 168 feet) | The light is visible at 0400. | 0426 | 0435 | 0442 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 508 | You estimate the current to be $125^{\circ}$ at 0.6 knot, and the wind is westerly causing $3^{\circ}$ of leeway. What course should you steer per gyro compass to make good $347^{\circ} \mathrm{T}$ while turning for 12.5 knots? | $340^{\circ} \mathrm{pgc}$ | $343^{\circ} \mathrm{pgc}$ | $346^{\circ} \mathrm{pgc}$ | $349^{\circ} \mathrm{pgc}$ |
| 509 | At 0445 you take the following lines of position: <br> What was the current encountered since your 0400 fix? | $004^{\circ}, 0.7$ knot | 004 ${ }^{\circ}$, 0.9 knot | $184^{\circ}, 0.7$ knot | $184^{\circ}, 0.9$ knot |
| 510 | At 0455 you encounter fog and slow to 5 knots. At 0500, you obtain a radar fix from the following information: <br> Radar range to Montauk Point is 9.1 miles. <br> Tangent bearing to western edge of Block Is. Is $015^{\circ} \mathrm{pgc}$. Distance off the nearest part of Block Is. is 5.9 miles. What is your 0500 position? | $\begin{aligned} & \text { LAT } 41^{\circ} 02.8^{\prime} \mathrm{N}, \text { LONG } \\ & 71^{\circ} 39.5^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 02.9^{\prime} \mathrm{N}, \text { LONG } \\ & 71^{\circ} 39.8^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 03.1^{\prime} \mathrm{N}, \text { LONG } \\ & 71^{\circ} 39.6^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 03.5^{\prime} \mathrm{N}, \text { LONG } \\ & 71^{\circ} 39.3^{\prime} \mathrm{W} \end{aligned}$ |
| 511 | Based on your 0500 fix, which statement is TRUE? | You are seaward of the 120 fathom curve. | The course made good between 0445 and 0500 was $345^{\circ} \mathrm{T}$. | You should alter course to port to clear Southwest Ledge Shoal. | A radar contact bearing $020^{\circ} \mathrm{T}$ at 4.8 miles is buoy "2A". |
| 512 | At 0520 your position is LAT $41^{\circ} 07.2^{\prime} \mathrm{N}$, LONG $71^{\circ} 41.6^{\prime} \mathrm{W}$. You set course to leave Race Rock Light abeam to starboard at 0.5 mile. What is the course to steer per standard magnetic compass? (Assume no current) | $301.5^{\circ}$ | $305.0^{\circ}$ | $307.5^{\circ}$ | $309.0^{\circ}$ |
| 513 | Visibility becomes variable in patchy fog and you maintain 5 knots speed. At 0610 you sight Montauk Point Light bearing $239^{\circ} \mathrm{pgc}$, and at 0630 you sight Watch Hill Point Light bearing $333^{\circ} \mathrm{pgc}$. What is the position of your 0630 running fix? | $\begin{aligned} & \text { LAT } 41^{\circ} 08.3^{\prime} \mathrm{N}, \text { LONG } \\ & 71^{\circ} 45.4^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 08.2^{\prime} \mathrm{N}, \text { LONG } \\ & 71^{\circ} 45.8^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 08.1^{\prime} \mathrm{N}, \text { LONG } \\ & 71^{\circ} 45.1^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 08.0^{\prime} \mathrm{N}, \text { LONG } \\ & 77^{\circ} 45.2^{\prime} \mathrm{W} \end{aligned}$ |


| 514 | At 0630 you increase speed to 12.0 knots. At 0645 Race Rock Light bears $294^{\circ}$ pgc. At 0700 Race Rock Light bears $293^{\circ} \mathrm{pgc}$. Based on this, you should $\qquad$ . | alter course to port | maintain course and speed | alter course to starboard | maintain course and reduce speed |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 515 | The Tidal Current Tables indicate the following for the Race:    <br> SLACK WATER    <br> 0328   $\quad$ MAXIMUM $\quad$ CURRENT | 3.9 knots, ebbing | 3.9 knots, flooding | 3.5 knots, ebbing | 3.5 knots, flooding |
| 516 | The following questions are to be answered using chart 1 and your vessel's draft is 16 feet. The gyro error is $2^{\circ} \mathrm{E}$. T <br> DEVIATION TABLE | 205 TR, Block Island ere is a light haze. Us | Sound, and support $15^{\circ} \mathrm{W}$ variation wh | publications. Your required. | ht of eye is 36 feet |
| 517 | At 2212 your position is LAT $40^{\circ} 51^{\prime} \mathrm{N}$, LONG $71^{\circ} 53.5^{\prime} \mathrm{W}$. <br> What is the course to steer, per gyrocompass from your 2212 position, to leave Montauk Point Buoy "MP" abeam to port at 1 mile if easterly winds are causing $3^{\circ}$ of leeway? | 027 ${ }^{\circ} \mathrm{pgc}$ | $030^{\circ} \mathrm{pgc}$ | $032^{\circ} \mathrm{pgc}$ | 035 ${ }^{\circ} \mathrm{pgc}$ |
| 518 | What is the earliest time you should sight Montauk Point Light (nominal range - 24 miles) if you are turning for 9.2 knots? Visibility is 5 nautical miles. | The light is visible at 2212 | 2221 | 2243 | You will not sight the light on this course. |


| 519 | At 2245 visibility improves and Montauk Point Light bears $355^{\circ} \mathrm{pgc}$. At 2314 Montauk Point Light bears $331^{\circ} \mathrm{pgc}$, and at 2329 the light bears $311^{\circ} \mathrm{pgc}$. Based on your 2329 running fix which statement is TRUE? | You are shoreward of the 90 foot curve. | Your fathometer reads about 136 feet. | You are being set to the left of the track. | You allowed too much leeway for the easterly winds. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 520 | At 2346 Montauk Point Light bears $285^{\circ} \mathrm{pgc}$, and the radar range to Montauk Point is 5.9 miles. You are steering to make good $034^{\circ} \mathrm{T}$. In order to remain westward of Southwest Ledge you should $\qquad$ | come left when South East Point Light bears $057^{\circ}$ true | remain on your present course and you will clear Southwest Ledge | keep Block Island North Light bearing $033^{\circ} \mathrm{T}$ or less | alter course to the right when Block Island Aerobeacon bears 055ำ |
| 521 | At 2352 you hear a MAYDAY call from a vessel reporting her position as 1.5 miles due east of Block Island Southeast Point Light. What is the course to steer, per gyrocompass to the distress site, if you change course at midnight and allow $1^{\circ}$ leeway for easterly winds? | 049.5 ${ }^{\circ} \mathrm{pgc}$ | $052.5^{\circ} \mathrm{pgc}$ | $055.5^{\circ} \mathrm{pgc}$ | 059.0 ${ }^{\circ} \mathrm{pgc}$ |
| 522 | At 0040 you are south of Lewis Point when you receive word that the distress is terminated. You alter course to head for The Race. At 0052 you take the following relative bearings because the starboard gyro repeater is inoperative. Your heading at each bearing was $285^{\circ} \mathrm{pgc}$. What is your 0052 position? <br> Race Rock Light $002^{\circ}$ <br> Watch Hill Light $034^{\circ}$ <br> Block Island North Light $122^{\circ}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 08.8^{\prime} \mathrm{N}, \text { LONG } \\ & 71^{\circ} 41.4^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 09.0^{\prime} \mathrm{N}, \text { LONG } \\ & 71^{\circ} 42.3^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 09.0^{\prime} \mathrm{N}, \text { LONG } \\ & 71^{\circ} 41.1^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 09.1^{\prime} \mathrm{N}, \text { LONG } \\ & 71^{\circ} 41.7^{\prime} \mathrm{W} \end{aligned}$ |
| 523 | You continue to steer $285^{\circ} \mathrm{pgc}$ from your 0052 fix. Your speed is 9.2 knots. What is the course per standard magnetic compass? | $273.5^{\circ}$ | $276.0^{\circ}$ | $298.0^{\circ}$ | $302.0^{\circ}$ |
| 524 | At 0100 Race Rock Light bears $001^{\circ}$ relative, and at 0110 it bears $000^{\circ}$ relative. Based on this you know you $\qquad$ | are being set to the right of the track | are making good more than 9.2 knots | are making good less than 9.2 knots | have an unknown gyro error |
| 525 | In order to check your compasses, you sight Race Rock Light in line with New London Harbor Light bearing $336^{\circ}$ per gyrocompass. The helmsman reports the vessel was heading $275.0^{\circ} \mathrm{pgc}$ and $290.5^{\circ}$ per standard magnetic compass at the time of the observation. Which statement is TRUE? | The gyro error is now $2^{\circ} \mathrm{E}$. | The deviation table is correct for that heading. | The vessel should be swung to check the deviation table. | The compass error is $0.5^{\circ} \mathrm{W}$. |
| 526 | The following questions are to be answered using chart 13205 TR, Block Island Sound, and supporting publications. Your vessel is on a course of $048^{\circ} \mathrm{T}$ with a speed of 13.5 knots. Your draft is 39 feet and your height of eye is 58 feet. The Gyro Error is $2^{\circ}$ east. |  |  |  |  |
| 527 | At 2100 your position is $40^{\circ} 44.1^{\prime} \mathrm{N}, 072^{\circ} 07.6^{\prime} \mathrm{W}$. From this position at what time will Montauk Point light become visible if the luminious range is 8 nm ? | 2221 | 2227 | 2235 | 2315 |
| 528 | At 2146 your position is $40^{\circ} 51.3^{\prime} \mathrm{N}, 071^{\circ} 59.2^{\prime} \mathrm{W}$. If your engine speed has been 13 knots, what was the current you encountered since 2100? | $120^{\circ}$ true @ 1.1 knots | $120^{\circ}$ true @ 1.4 knots | $300^{\circ}$ true @ 1.1 knots | $300^{\circ}$ true @ 1.4 knots |


| 529 | At 2146 what is the approximate reading on your fathometer if it is set on feet? | 85 feet | 105 feet | 121 feet | 166 feet |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 530 | At 2146 you slow down to 12 knots. The reported current in the area is $320^{\circ}$ @ 2 knots. What is the course to steer to pass to the southeast of Buoy "MP" @ 2 nm? | 055 ${ }^{\circ}$ | 061 ${ }^{\circ}$ | 066 ${ }^{\circ}$ | 071 ${ }^{\circ}$ |
| 531 | At 2246 your position is $40^{\circ} 58.5^{\prime} \mathrm{N}, 071^{\circ} 47.8^{\prime} \mathrm{W}$. You determine that $\qquad$ | the depth of the water below your keel is 120 feet | there is a submerged unexploded ordnance area within 4 nm of your position | your vessel is within the $\mathbf{1 2 0}$ foot contour curve | your vessel is beyond the 120 foot contour curve |
| 532 | From your 2243 position a northeasterly wind is causing $3^{\circ}$ of leeway, there is no current, what is the course to steer and your ETA at the point 2 nm southeast of Buoy "MP"? | 055 ${ }^{\circ}$ true, 2301 | $057^{\circ}$ true, 2311 | 058 ${ }^{\circ}$ true, 2311 | 061 ${ }^{\circ}$ true, 2301 |
| 533 | At 2310 Buoy "MP" is bearing $305^{\circ}$ true @ a range of 2.5 nm . From this position you change course to $005^{\circ}$ true. If there is no set and drift what is your distance off Southwest Ledge Buoy "2" when it is on your starboard beam? | 0.9 nm | 1.1 nm | 1.5 nm | 1.9 nm |
| 534 | At 2344 you are on a course of $293^{\circ}$ true, Montauk Point Light is bearing $235^{\circ} \mathrm{pgc}$ at a range of 6.8 nm . At 2357 Montauk Point Light is bearing $215^{\circ}$ true. You increase speed to 14.5 knots. At 0012 Montauk Point Light is bearing $177^{\circ}$ true. Which statement about your 0012 running fix is true? | you are being set to the north | your fathometer is reading 14 fathoms | you are governed by the Inland Rules of the Road | the fathometer trace shows that you have passed over the 89 foot sounding |
| 535 | At 0016 your position is $41^{\circ} 10.3^{\prime} \mathrm{N}, 071^{\circ} 53.0^{\prime} \mathrm{W}$. You are steering $296^{\circ}$ true and there is no set and drift. At 0049 Race Rock Light is on your starboard beam. What was your speed made good from your 0016 position? | 13.8 knots | 14.4 knots | 15.0 knots | 15.6 knots |


| 536 | The following questions are based on chart 12221TR, Ch (3 meters), and your height of eye is 20 feet ( 6.1 meters). <br> DEVIATION TABLE | sapeake Bay Entrance Use $10^{\circ} \mathrm{W}$ variation wh | , and the supporting p here required. The gyro | ublications. Your vesse o error is $3^{\circ} \mathrm{E}$. | has a draft of 10 feet |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 537 | You are on course $192^{\circ} \mathrm{pgc}$ at 12 knots. At 1900 your position is: Latitude $37^{\circ} 22.6^{\prime}$ North Longitude $075^{\circ} 35.7^{\prime}$ West <br> Which of the following is true? | if you maintain course and speed you will pass Hog Island Bell Buoy "2" to starboard | you are inside the 3 nm territorial sea | your fathometer reads 30' | None of the above |
| 538 | What course should you steer using the standard magnetic compass (psc) to make good the course of $192^{\circ} \mathrm{pgc}$ ? | $188^{\circ} \mathrm{psc}$ | $195^{\circ} \mathrm{psc}$ | $203{ }^{\circ} \mathrm{psc}$ | $205{ }^{\circ} \mathrm{psc}$ |
| 539 | At 1920, the buoy forward of your starboard beam is | an interrupted quick flashing buoy | Hog Island Lighted Bell Buoy | South Light Buoy | Sand Shoal Inlet Lighted Buoy "A" |
| 540 | At 1930 , your position is LAT $37^{\circ} 16.7^{\prime} \mathrm{N}$, LONG $75^{\circ} 37.7^{\prime} \mathrm{W}$. The depth of water is approximately $\qquad$ | 30 feet ( 9.1 meters) | 40 feet (12.1 meters) | 50 feet (15.1 meters) | 60 feet (18.1 meters) |
| 541 | At 1950 , your position is LAT $37^{\circ} 12.3^{\prime} \mathrm{N}$, LONG $75^{\circ} 38.6^{\prime} \mathrm{W}$. The set and drift from 1930 to 1950 were $\qquad$ | $150^{\circ} \mathrm{T}$ at 0.6 knot | $150^{\circ} \mathrm{T}$ at 1.6 knots | $330^{\circ} \mathrm{T}$ at 0.6 knot | $330^{\circ} \mathrm{T}$ at 1.6 knots |
| 542 | Assume set and drift have no effect on your vessel. If you change course to $187^{\circ} \mathrm{pgc}$ from your 1950 position, how close will you pass Cape Charles Lighted Bell Buoy "14"? | 0.1 mile | 0.5 mile | 1.1 mile | 1.7 miles |


| 543 | At 2020, you obtain a fix using the following information: <br> Cape Charles Lighted Bell Buoy "14" bears $333^{\circ}$ pgc Cape Charles Light bears $271.5^{\circ} \mathrm{pgc}$ <br> Your longitude is ـ. $\qquad$ | 75 ${ }^{\circ} 38.9^{\prime} \mathrm{W}$ | 75³9.1'W | 75³9.3'W | 7540.5'W |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 544 | At 2020, what is the course to steer to enter the inbound lane of North Chesapeake Entrance traffic separation scheme if a northwesterly wind causes $3^{\circ}$ of leeway? | $227^{\circ} \mathrm{pgc}$ | $224^{\circ} \mathrm{pgc}$ | $221^{\circ} \mathrm{pgc}$ | $215^{\circ} \mathrm{pgc}$ |
| 545 | If you make good 12 knots, what is the ETA at North Chesapeake Channel Entrance Buoy "NCA" (LL \#375)? | 2116 | 2111 | 2106 | 2101 |
| 546 | At 2100, Cape Charles Light bears $321^{\circ} \mathrm{pgc}$, and Cape Henry Light bears $247^{\circ} \mathrm{pgc}$. Your latitude is $\qquad$ | $37^{\circ} 00.0^{\prime} \mathrm{N}$ | $36^{\circ} 59.7$ 'N | $36^{\circ} 59.4$ N | $36^{\circ} 59.1{ }^{\prime} \mathrm{N}$ |
| 547 | If the visibility is 3 miles, at what range will you lose sight of Chesapeake Light? | The light has never been visible. | 6.4 miles | 8.3 miles | 12.1 miles |
| 548 | At 2100, you alter course to $250^{\circ} \mathrm{T}$ and reduce speed to 7 knots. You enter the traffic separation scheme on the inbound side. At 2200, your fix shows you crossing a broken purple line on the chart, and you observe North Chesapeake Entrance Lighted Gong Buoy "NCD" to port. This area is $\qquad$ . | a precautionary area centered on buoy "CBJ" | a pilotage area | an area with local magnetic disturbances | in inland waters |
| 549 | What course per standard magnetic compass (psc) is the same as $247^{\circ} \mathrm{pgc}$ ? | $240^{\circ} \mathrm{psc}$ | $246^{\circ} \mathrm{psc}$ | $257{ }^{\circ} \mathrm{psc}$ | 260 ${ }^{\circ} \mathrm{psc}$ |
| 550 | At 2215, Cape Henry Light bears $242^{\circ} \mathrm{pgc}$, Cape Charles Light bears $010.5^{\circ} \mathrm{pgc}$, and Chesapeake Channel Tunnel North Light bears $319^{\circ} \mathrm{pgc}$. You are heading $271^{\circ} \mathrm{pgc}$. What is the relative bearing of Thimble Shoal Light? | $280^{\circ}$ | $332^{\circ}$ | $014{ }^{\circ}$ | 017 ${ }^{\circ}$ |
| 551 | While navigating inbound in the Thimble Shoal Channel system you must $\qquad$ | navigate in the main channel when between Trestles A \& B | maintain a minimum speed of 6 knots | remain 1500 yards (1360 meters) from large naval vessels | use the north auxiliary channel |
| 552 | The following questions should be answered using chart 12354TR, Long Island Sound - Eastern Part, and the supporting publications. The draft of your vessel is 12 feet ( 3.6 meters) and your height of eye is 25 feet ( 7.6 meters). Gyro error is $2^{\circ} \mathrm{W}$. Your assumed speed is 7.5 knots. "Per standard magnetic compass" is abbreviated "psc". Use a variation of $14^{\circ} \mathrm{W}$ for the entire plot. |  |  |  |  |
| 553 | You are in New Haven Outer Channel and sight the range markers in line directly over the stern. Your heading at the time is $168^{\circ}$ per standard magnetic compass. What is the magnetic compass error? | $14^{\circ} \mathrm{W}$ | $1^{\circ} \mathrm{W}$ | $1^{\circ} \mathrm{E}$ | $0^{\circ}$ |


| 554 | At 0720, you are in the outer channel between buoy "1" and buoy "2" and change course to pass Townshend Ledge Lighted Bell Buoy "10A" abeam to port at 0.1 miles. What is the course to steer per gyro compass if a northerly wind causes $2^{\circ}$ of leeway? | $120^{\circ} \mathrm{pgc}$ | $118^{\circ} \mathrm{pgc}$ | $116^{\circ} \mathrm{pgc}$ | $114^{\circ} \mathrm{pgc}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 555 | At 0740, you obtain the following radar data: <br> Branford Reef Light bears $068^{\circ}$ true @ 3.0 nm <br> What is your position? | $\begin{aligned} & \text { LAT } 41^{\circ} 12.0^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 51.3^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 12.0^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 51.8^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 12.1^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 51.5^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 12.1^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 52.0^{\prime} \mathrm{W} \end{aligned}$ |
| 556 | From your 0740 position, you change course to pass 1.1 miles north of Falkner Island Light. Which of the following is true? | you should consult the sailing directions for pilotage requirements | you will pass 1.5 nm off Branford Reef Light | your course will keep you clear of the 18' shoal | None of the above |
| 557 | At 0802, the radar range and bearing to Branford Reef Light are $350^{\circ} \mathrm{pgc}$ at 0.8 mile, and the north point of Falkner Island are $090^{\circ} \mathrm{pgc}$ at 6.7 miles. What were the set and drift that you encountered since 0740? | Set $085^{\circ} \mathrm{T}$, drift . 2 knot | Set 085 ${ }^{\circ} \mathrm{T}$, drift . 6 knot | Set $265^{\circ} \mathrm{T}$, drift . 2 knot | Set $265^{\circ} \mathrm{T}$, drift . 6 knot |
| 558 | Falkner Island Light is shown ___ | 46 feet (13.9 meters) above sea level | only from 1 June to 10 October | from a white octagonal tower | with a six-second period |
| 559 | If there is no current, what is the course per standard magnetic compass from your 0802 fix to a position 1.1 miles north of Falkner Island Light? | $064^{\circ} \mathrm{psc}$ | 068ºpsc | 091 ${ }^{\circ} \mathrm{psc}$ | 095 ${ }^{\circ} \mathrm{psc}$ |
| 560 | At 0830, you want the latest weather forecasts for the Falkner Island area. On what frequency do you set your FM radio for this information? | 2182 kHz | 162.80 Mhz | 156.65 Mhz | 162.55 Mhz |
| 561 | At 0844, the range to the north end of Falkner Island is 2.0 miles and the left tangent bearing is $102^{\circ} \mathrm{T}$. If the height of the tide is +1.0 foot, what is the approximate depth of the water under the keel? | 14 ft (4.2 meters) | 19 ft (5.8 meters) | 22 ft (6.7 meters) | 29 ft (8.8 meters) |
| 562 | At 0925, you plot the following: <br> Falkner Island Light bearing $252^{\circ}$ true @ 1.8 nm <br> If you correct for a current setting $035^{\circ} \mathrm{T}$ at 0.5 knot, what true course will you steer from the 0925 position to arrive at a position 0.5 mile south of Long Sand Shoal West End Horn Buoy "W"? | 089 ${ }^{\circ} \mathrm{T}$ | $092^{\circ} \mathrm{T}$ | 095 ${ }^{\circ} \mathrm{T}$ | $102^{\circ} \mathrm{T}$ |
| 563 | If you correct for the current in the preceding question ( $035^{\circ} \mathrm{T}$ at 0.5 knot) and maintain an engine speed of 7.5 knots, what is your ETA 0.5 mile south of buoy "W"? | 1016 | 1021 | 1026 | 1030 |


| 564 | At 0946, the radar range to Hammonasset Point is 2.5 miles. The range to the eastern most point of Falkner Island is 3.3 miles, and the range to Horton Point is 10.1 miles. What is your position at 0946? | LAT 41¹3.1'N, LONG $72^{\circ} 34.8^{\prime} \mathrm{W}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 13.0^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 34.5^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 12.8^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 35.1^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 12.8^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 34.4^{\prime} \mathrm{W} \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 565 | Long Sand Shoal ___ | shoals gradually on the north and south sides | is hard and lumpy | shows breakers when northerly winds exceed 10 knots | has gray sand with scattered shells |
| 566 | During extreme low water, the soundings near Saybrook may require corrections up to $\qquad$ | 1 foot (+. 3 meters) | -2 feet (-. 6 meters) | -3.5 feet (-1.1 meters) | The sounding datum is based on extreme low water and no correction is necessary |
| 567 | As you enter New London Harbor, you are steering on the entrance range. The lights are in line over the bow as you are heading $352^{\circ} \mathrm{pgc}$. What is the gyro error? | $2^{\circ} \mathrm{E}$ | $0^{\circ}$ | $1^{\circ} \mathrm{W}$ | $3^{\circ} \mathrm{W}$ |
| 568 | The following questions should be answered using chart vessel is 14 feet ( 4.2 meters). The gyro error is $3^{\circ} \mathrm{W}$. "Per plot. <br> DEVIATION TABLE | 2221TR, Chesapeake <br> standard magnetic com | Bay Entrance, and the mpass" is abbreviated | supporting publication psc". Use a variation | s. The draft of your $10^{\circ} \mathrm{W}$ for the entire |
| 569 | Your 1600 position is LAT $37^{\circ} 22.5^{\prime} \mathrm{N}$, LONG $75^{\circ} 32.3^{\prime} \mathrm{W}$. The depth of water is about | 38 feet (11.5 meters) | 45 feet (13.6 meters) | 52 feet (15.8 meters) | 59 feet (17.3 meters) |


| 570 | If there is no current, what is the course per gyro compass from your 1600 position to point "A" located 0.5 mile due east of Hog Island Lighted Bell Buoy "12"? | $190^{\circ} \mathrm{pgc}$ | $193^{\circ} \mathrm{pgc}$ | 196ºpgc | $199^{\circ} \mathrm{pgc}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 571 | At 1630, you reach point " A " and come right to $204^{\circ} \mathrm{T}$. Your engine speed is 12 knots. Your 1715 position is LAT $37^{\circ} 09.8^{\prime} \mathrm{N}$, LONG $75^{\circ} 37.4^{\prime} \mathrm{W}$. The current was $\qquad$ | $067^{\circ} \mathrm{T}$ at 1.1 knots | $067^{\circ} \mathrm{T}$ at 1.5 knots | $247^{\circ} \mathrm{T}$ at 1.1 knots | $247^{\circ} \mathrm{T}$ at 1.6 knots |
| 572 | From your 1715 fix you steer $214^{\circ} \mathrm{T}$ at 12 knots. At 1800, you take the following bearings: <br> Cape Charles Light bearing $296^{\circ}$ true Cape Henry light bearing $242^{\circ}$ true <br> Your 1800 position is $\qquad$ . | $\begin{aligned} & \text { LAT } 37^{\circ} 02.8^{\prime} \mathrm{N}, \text { LONG } \\ & 75^{\circ} 43.9^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 37^{\circ} 02.9^{\prime} \mathrm{N}, \text { LONG } \\ & 75^{\circ} 43.1^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 37^{\circ} 03.0^{\prime} \mathrm{N}, \text { LONG } \\ & 75^{\circ} 43.3^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 37^{\circ} 03.1^{\prime} \mathrm{N}, \text { LONG } \\ & 75^{\circ} 42.8^{\prime} \mathrm{W} \end{aligned}$ |
| 573 | At 1815 , your position is LAT $37^{\circ} 01.0^{\prime} \mathrm{N}$, LONG $75^{\circ} 42.7^{\prime} \mathrm{W}$. If there is no current, what is the course per standard magnetic compass to arrive at a point 0.3 mile due north of North Chesapeake Entrance Lighted Whistle Buoy "NCA"? | $249.0^{\circ} \mathrm{psc}$ | $251.5^{\circ} \mathrm{psc}$ | $255.0^{\circ} \mathrm{psc}$ | $257.0^{\circ} \mathrm{psc}$ |
| 574 | From your 1815 position, you want to make good course $263^{\circ}$ T. Your engines are turning RPMs for 12 knots. The current is $050^{\circ} \mathrm{T}$ at 1.9 knots. Adjusting your course for set and drift, at what time should you expect to enter the red sector of Cape Henry Light? | 1851 | 1857 | 1904 | 1911 |
| 575 | At 1920, Cape Henry Light bears $231^{\circ} \mathrm{pgc}$, and Chesapeake Channel Tunnel North Light bears $294^{\circ} \mathrm{pgc}$. If your heading is $268^{\circ} \mathrm{T}$, what is the relative bearing of Chesapeake Light? | $213^{\circ}$ | $201^{\circ}$ | $194^{\circ}$ | $179^{\circ}$ |
| 576 | Which statement concerning your 1920 position is TRUE? | You are entering a restricted area. | You are governed by the Inland Rules of the Road. | You are within the Chesapeake Bay Entrance traffic separation scheme. | On your present course Trestle "C" of the Chesapeake Bay Bridge - Tunnel is dead ahead. |
| 577 | From your 1920 position, you change course to enter Chesapeake Channel between buoys 9 and 10. What is the course per gyrocompass? | $271^{\circ} \mathrm{pgc}$ | $274{ }^{\circ} \mathrm{pgc}$ | $277^{\circ} \mathrm{pgc}$ | $280^{\circ} \mathrm{pgc}$ |
| 578 | At 2000, your position is LAT $37^{\circ} 04.1^{\prime} \mathrm{N}$, LONG $76^{\circ} 05.6^{\prime} \mathrm{W}$. You change course for the Eastern Shore. At 2037, Old Plantation Flats Light bears $033^{\circ} \mathrm{pgc}$, and York Spit Light bears $282^{\circ} \mathrm{pgc}$. The course made good from your 2000 position was $\qquad$ . | 006 ${ }^{\circ}$ T | $014^{\circ} \mathrm{T}$ | $0^{\circ} 0^{\circ} \mathrm{T}$ | $0^{\circ} 8^{\circ} \mathrm{T}$ |


| 579 | At 2037, you change course and wish to make good a course of $016^{\circ} \mathrm{T}$. There is no current, but an easterly wind is causing $3^{\circ}$ leeway. What course per standard magnetic compass should you steer to make good the course $016^{\circ}$ ? | 022 ${ }^{\circ} \mathrm{psc}$ | 025 ${ }^{\circ} \mathrm{psc}$ | $028^{\circ} \mathrm{psc}$ | $031{ }^{\circ} \mathrm{psc}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 580 | Your height of eye is 25 feet ( 7.6 meters). If the visibility is 11 nautical miles, what is the luminous range of Wolf Trap Light? | 8.2 miles | 12.0 miles | 16.0 miles | 17.0 miles |
| 581 | Which chart provides more detail of Cape Charles harbor and its approaches? | 12238 | 12225 | 12224 | 12222 |
| 582 | At 2123 , your position is LAT $37^{\circ} 20.0^{\prime} \mathrm{N}$, LONG $76^{\circ} 03.0^{\prime} \mathrm{W}$. What is your distance offshore of Savage Neck? | 1.7 miles | 2.5 miles | 3.6 miles | 10.9 miles |
| 583 | From your 2123 position, you are approximately 42 miles from Crisfield, MD. If you are making good a speed of 11 knots, at what time should you arrive at Crisfield, MD? | 2359 | 0037 | 0112 | 0149 |
| 584 | The following questions are to be answered by using char feet ( 4.2 meters). Use $10^{\circ} \mathrm{W}$ variation where required. T <br> DEVIATION TABLE | 12221TR, Chesape he gyro error is $3^{\circ} \mathrm{E}$. | ke Bay Entrance, and | e supporting public | ns. Your draft is 14 |
| 585 | Your 1600 position is LAT $37^{\circ} 22.5^{\prime} \mathrm{N}$, LONG $75^{\circ} 32.3^{\prime} \mathrm{W}$. The depth of water under the keel is about $\qquad$ | 38 feet (11.5 meters) | 45 feet (13.6 meters) | 52 feet (15.8 meters) | 59 feet (17.3 meters) |
| 586 | If there is no current, what is the course per gyro compass from your 1600 position to point A located 0.5 mile due east of Hog Island Lighted Bell Buoy "12"? | $190^{\circ} \mathrm{pgc}$ | $193^{\circ} \mathrm{pgc}$ | $196^{\circ} \mathrm{pgc}$ | $199^{\circ} \mathrm{pgc}$ |


| 587 | At 1630, you reach point A and come right to $204^{\circ}$ T. Your engine speed is 12 knots. Your 1715, position is LAT $37^{\circ} 09.8^{\prime} \mathrm{N}$, LONG $75^{\circ} 37.4^{\prime} \mathrm{W}$. The current was $\qquad$ | $067^{\circ} \mathrm{T}$ at 1.1 knots | $246^{\circ} \mathrm{T}$ at 1.1 knots | $067^{\circ} \mathrm{T}$ at 1.5 knots | $246^{\circ} \mathrm{T}$ at 1.5 knots |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 588 | From your 1715 fix, you steer $214^{\circ} \mathrm{T}$ at 12 knots. At 1800 , you take the following bearings: <br> Cape Charles Light bearing $296^{\circ}$ true Cape Henry light bearing $242^{\circ}$ true <br> Your 1800 position is $\qquad$ _. | $\begin{aligned} & \text { LAT } 37^{\circ} 02.9^{\prime} \mathrm{N}, \text { LONG } \\ & 75^{\circ} 43.1^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 37^{\circ} 02.9^{\prime} \mathrm{N}, \text { LONG } \\ & 75^{\circ} 43.9^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 37^{\circ} 03.0^{\prime} \mathrm{N}, \text { LONG } \\ & 75^{\circ} 43.3^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 37^{\circ} 03.1^{\prime} \mathrm{N}, \text { LONG } \\ & 75^{\circ} 42.8^{\prime} \mathrm{W} \end{aligned}$ |
| 589 | At 1815 , your position is LAT $37^{\circ} 01.0^{\prime} \mathrm{N}$, LONG $75^{\circ} 42.7^{\prime} \mathrm{W}$. If there is no current, what is the course per standard magnetic compass to arrive at a point 0.3 mile due north of North Chesapeake Entrance Lighted Whistle Buoy "NCA" (LL\#375)? | $249.0^{\circ}$ | $251.5^{\circ}$ | $255.0^{\circ}$ | $257.0^{\circ}$ |
| 590 | From your 1815 position, you want to make good a course of $263^{\circ} \mathrm{T}$. Your engines are turning RPM's for 12 knots. The current is $050^{\circ} \mathrm{T}$ at 1.9 knots. Adjusting your course for set and drift, at what time should you expect to enter the red sector of Cape Henry Light? | 1849 | 1854 | 1859 | 1904 |
| 591 | At 1920, Cape Henry Light bears $225^{\circ} \mathrm{pgc}$, and Chesapeake Channel Tunnel North Light bears $288^{\circ} \mathrm{pgc}$. If your heading is $268^{\circ} \mathrm{T}$, what is the relative bearing of Chesapeake Light? | $194^{\circ}$ | $205^{\circ}$ | $213^{\circ}$ | $220^{\circ}$ |
| 592 | Which statement concerning your 1920 position is TRUE? | You are entering a restricted area. | You are governed by the Inland Rules of the Road. | You are within the Chesapeake Bay Entrance traffic separation scheme. | You can expect differences of as much as $6^{\circ}$ from the normal magnetic variation of the area. |
| 593 | From your 1920 position, you change course to enter Chesapeake Channel between buoys 9 and 10. What is the course per standard magnetic compass (psc) ? | $286^{\circ} \mathrm{psc}$ | $283{ }^{\circ} \mathrm{psc}$ | 280 ${ }^{\circ} \mathrm{psc}$ | $274{ }^{\circ} \mathrm{psc}$ |
| 594 | At 2000, your position is LAT $37^{\circ} 04.1^{\prime} \mathrm{N}$, LONG $76^{\circ} 05.6^{\prime} \mathrm{W}$. You change course for the Eastern Shore. At 2037, Old Plantation Flats Light bears $033^{\circ} \mathrm{pgc}$, and York Spit Light bears $282^{\circ} \mathrm{pgc}$. The course made good from your 2000 position is $\qquad$ | $359^{\circ} \mathrm{T}$ | $006^{\circ} \mathrm{T}$ | 014 ${ }^{\circ} \mathrm{T}$ | $020^{\circ} \mathrm{T}$ |
| 595 | At 2037, you change course to make good a course of $016^{\circ} \mathrm{T}$. There is no current, but a westerly wind is causing $3^{\circ}$ leeway. What course per standard magnetic compass (psc) should you steer to make good the course $016^{\circ} T$ ? | 031 ${ }^{\circ} \mathrm{psc}$ | 028 ${ }^{\circ} \mathrm{psc}$ | 025 ${ }^{\circ} \mathrm{psc}$ | $022^{\circ} \mathrm{psc}$ |


| 596 | Your height of eye is 25 feet ( 7.6 meters). If the visibility is 5.5 nautical miles, what is the luminous range of Wolf Trap Light? | 7.5 miles | 12.0 miles | 16.0 miles | 17.0 miles |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 597 | If you want a more detailed chart of the area at your 2115 DR position, which chart should you use? | 12222 | 12224 | 12225 | 12238 |
| 598 | At 2123 , your position is LAT $37^{\circ} 20.0^{\prime} \mathrm{N}$, LONG $76^{\circ} 03.0^{\prime} \mathrm{W}$. What is your distance offshore of Savage Neck? | 4.3 miles | 3.4 miles | 2.6 miles | 1.7 miles |
| 599 | From your 2123 position, you are approximately 42 miles from Crisfield, MD. If you are making good a speed of 13 knots, at what time should you arrive at Crisfield, MD? | 2359 | 0037 | 0112 | 0148 |
| 600 | The following questions are to be answered by using cha is 11 feet ( 3.3 meters). Use $14^{\circ} \mathrm{W}$ for variation where req <br> DEVIATION TABLE | 12354TR, Long Island uired. The gyro error is | Sound - Eastern Part $3^{\circ} \mathrm{E}$. | , and the supporting pub | blications. Your draft |
| 601 | At 0700, Stratford Shoal Middle Ground Light bears $137^{\circ} \mathrm{pgc}$. From your radar, you get a bearing of $007^{\circ} \mathrm{pgc}$ to the south tip of Stratford Point with a range of 4.5 miles. What is your 0700 position? | $\begin{aligned} & \text { LAT } 41^{\circ} 04.6^{\prime} \mathrm{N}, \text { LONG } \\ & 73^{\circ} 07.0^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 04.6^{\prime} \mathrm{N}, \text { LONG } \\ & 73^{\circ} 07.4^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 04.7^{\prime} \mathrm{N}, \text { LONG } \\ & 73^{\circ} 07.2^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 04.8^{\prime} \mathrm{N}, \text { LONG } \\ & 73^{\circ} 07.0^{\prime} \mathrm{W} \end{aligned}$ |
| 602 | At 0725 , you are heading $054^{\circ} \mathrm{T}$, and Stratford Point Light is abeam to port at 3.1 miles. The current is $135^{\circ} \mathrm{T}$ at 1.8 knots. If you make turns for an engine speed of 8 knots, which course must you steer to make good $048^{\circ}$ T? | 035 ${ }^{\circ} \mathrm{T}$ | 042 ${ }^{\circ} \mathrm{T}$ | 047 ${ }^{\circ} \mathrm{T}$ | 055 ${ }^{\circ} \mathrm{T}$ |


| 603 | Which structure should you look for while trying to locate Southwest Ledge Light? | White conical tower with a brown band midway of height | White octagonal house on a cylindrical pier | Conical tower, upper half white, lower half brown | Black skeleton tower on a granite dwelling |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 604 | At 0830, you obtained the following radar information: <br> Branford Reef Light bearing $079^{\circ}$ true @ 4.2 nm <br> What is your vessel's position? | $\begin{aligned} & \text { LAT } 41^{\circ} 12.4^{\prime} \mathrm{N}, \text { LONG } \\ & 73^{\circ} 56.0^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 40^{\circ} 17.4^{\prime} \mathrm{N}, \text { LONG } \\ & 73^{\circ} 54.0^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 12.0^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 53.8^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 12.4^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 53.8^{\prime} \mathrm{W} \end{aligned}$ |
| 605 | From your 0830 position, you wish to make good $097^{\circ}$. There is no current, but a southerly wind is producing $3^{\circ}$ leeway. What course should you steer per standard magnetic compass in order to make good your true course? | $118^{\circ} \mathrm{psc}$ | $115^{\circ} \mathrm{psc}$ | $112^{\circ} \mathrm{psc}$ | $109^{\circ} \mathrm{psc}$ |
| 606 | At 0845, you are on a course of $097^{\circ} \mathrm{T}$, and Townshend Ledge Buoy " 10 A " is close abeam to port. With a westerly current of 1.2 knots, what speed will you have to turn for from your 0845 position in order to arrive abeam of Six Mile Reef Buoy "8C" at 1030? | 8.5 knots | 9.7 knots | 10.9 knots | 12.1 knots |
| 607 | At 0910, your DR position is LAT $41^{\circ} 11.9^{\prime} \mathrm{N}$, LONG $72^{\circ} 47.8^{\prime} \mathrm{W}$. Your vessel is on course $097^{\circ} \mathrm{T}$ at 9.5 knots, and the weather is foggy. At 0915, Branford Reef Light is sighted through a break in the fog bearing $318^{\circ}$ T. At 0945, Falkner Island Light is sighted bearing $042^{\circ} \mathrm{T}$. What is your 0945 running fix position? | $\begin{aligned} & \text { LAT } 41^{\circ} 11.1^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 41.2^{\prime} \mathrm{W} \end{aligned}$ | LAT $41^{\circ} 11.3^{\prime} \mathrm{N}$, LONG $72^{\circ} 41.3^{\prime} \mathrm{W}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 11.4^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 41.0^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 11.5^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 40.7^{\prime} \mathrm{W} \end{aligned}$ |
| 608 | What do the dotted lines around Goose Island and Kimberly Reef represent? | Limiting danger | Breakers | Depth contours | Tide rips |
| 609 | At 1100 , your position is LAT $41^{\circ} 11.3^{\prime} \mathrm{N}$, LONG $72^{\circ} 28.0^{\prime} \mathrm{W}$. You are steering a course of $069^{\circ} \mathrm{T}$ to leave Black Point one mile off your port beam. It has been reported that the Long Sand Shoal Buoys and Hatchett Reef Buoys are off station. Which of the following will serve as a line marking the hazards and keep your vessel in safe water? | Danger bearing to Black Point of not more than $064^{\circ} \mathrm{T}$ | Maintaining a 7 nm range off Orient Point | A bearing to Little Gull Island Light of not less than 090 | A distance to Saybrook Breakwater Light of not less than 1.3 miles |
| 610 | Little Gull Island Light is ___ | lighted only during daytime when the sound signal is in operation | maintained only from May 1 to Oct 1 | lighted throughout 24 hours | obscured by trees from $253^{\circ}$ to $352^{\circ}$ |
| 611 | At 1210, you are in position LAT $41^{\circ} 14.3^{\prime} \mathrm{N}$, LONG $72^{\circ} 16.5^{\prime} \mathrm{W}$. What is the depth of water below your keel? | 97 feet (29.4 meters) | 108 feet (32.7 meters) | 119 feet (36.1 meters) | 125 feet (37.9 meters) |
| 612 | From your 1210 position, you are steering a course of $083^{\circ} \mathrm{T}$. Your engines are turning RPMs for 10 knots. The set and drift of the current are $310^{\circ}$ at 1.7 knots. At what time should you expect to enter the red sector of New London Harbor Light? | 1241 | 1249 | 1256 | 1309 |


| 613 | Your vessel is entering New London Harbor Channel. If there is no current, what should you steer per gyro compass to stay on the range? | $351^{\circ}$ | $354{ }^{\circ}$ | $357^{\circ}$ | 006 ${ }^{\circ}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 614 | On chart 12354, the datum from which heights of objects are taken is $\qquad$ . | mean high water | mean low water | lowest low water | mean lower low water |
| 615 | The red sector of New London Harbor Light covers from | 040 $-310^{\circ}$ | $000^{\circ}-041^{\circ}$ | $208^{\circ}-220^{\circ}$ | $204^{\circ}-239^{\circ}$ |
| 616 | The following questions should be answered using chart 1 your vessel is 11 feet ( 3.3 meters). Gyro error is $3^{\circ} \mathrm{W}$. "Pe plot. <br> DEVIATION TABLE | 2354TR, Long Island standard magnetic co | Sound - Eastern Part, a mpass" is abbreviated | and the supporting pub "psc". Use a variation | ications. The draft of of $14^{\circ} \mathrm{W}$ for the entire |
| 617 | At 0700, Stratford Shoal Middle Ground Light bears $143^{\circ} \mathrm{pgc}$ at 1.8 miles. What is your 0700 position? | $\begin{aligned} & \text { LAT } 41^{\circ} 04.8^{\prime} \mathrm{N}, \text { LONG } \\ & 73^{\circ} 06.7^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 05.0^{\prime} \mathrm{N}, \text { LONG } \\ & 73^{\circ} 07.6^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 05.1^{\prime} \mathrm{N}, \text { LONG } \\ & 73^{\circ} 06.8^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 05.3^{\prime} \mathrm{N}, \text { LONG } \\ & 73^{\circ} 07.9^{\prime} \mathrm{W} \end{aligned}$ |
| 618 | At 0725, Stratford Point Light bears $327^{\circ} \mathrm{pgc}$ at 3.1 miles. At this time, you wish to change course to $048^{\circ} \mathrm{T}$. The current is $135^{\circ} \mathrm{T}$ at 1.8 knots. Your engine speed is 8 knots. What course must you steer to make good $048^{\circ}$ ? | 035 ${ }^{\circ} \mathrm{T}$ | $0^{3}{ }^{\circ} \mathrm{T}$ | 041 ${ }^{\circ} \mathrm{T}$ | $0^{04}{ }^{\circ} \mathrm{T}$ |
| 619 | Which structure should you look for while trying to locate Stratford Point Light? | White conical tower with a brown band midway of height | White octagonal house on a cylindrical pier | Conical tower, upper half white, lower half brown | Black skeleton tower on a granite dwelling |
| 620 | At 0830, you obtain the following radar information:: <br> Branford Reef Light bearing $079^{\circ}$ true @ 4.35 nm <br> What is your vessel's position? | $\begin{aligned} & \text { LAT } 41^{\circ} 12.1^{\prime} \mathrm{N}, \text { LONG } \\ & 73^{\circ} 53.8^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 40^{\circ} 12.2^{\prime} \mathrm{N}, \text { LONG } \\ & 73^{\circ} 54.4^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 12.3^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 53.6^{\prime} \mathrm{W} \end{aligned}$ | LAT $41^{\circ} 12.4^{\prime} \mathrm{N}$, LONG 72ํㅗ4.0'W |


| 621 | From your 0830 position, you wish to make good $097^{\circ}$. There is no current, but a southerly wind is producing $4^{\circ}$ leeway. What course should you steer per standard magnetic compass in order to make good your true course? | $101^{\circ} \mathrm{psc}$ | $108^{\circ} \mathrm{psc}$ | $110^{\circ} \mathrm{psc}$ | $115^{\circ} \mathrm{psc}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 622 | You make good $097^{\circ} \mathrm{T}$ from your 0830 fix. With a westerly current of 1.2 knots, what engine speed will you have to turn for from your 0830 position in order to arrive abeam of Six Mile Reef Buoy "8C" at 1030? | 9.7 knots | 10.5 knots | 10.9 knots | 12.1 knots |
| 623 | At 0910, your DR position is LAT $41^{\circ} 11.9^{\prime} \mathrm{N}$, LONG $72^{\circ} 47.8^{\prime} \mathrm{W}$. Your vessel is on course $097^{\circ} \mathrm{T}$ at 9.5 knots, and the weather is foggy. At 0915, Branford Reef Light is sighted through a break in the fog bearing $318^{\circ} \mathrm{T}$. At 0945, Falkner Island Light is sighted bearing $042^{\circ} \mathrm{T}$. What is your 0945 running fix position? | LAT $41^{\circ} 11.3^{\prime} \mathrm{N}$, LONG $72^{\circ} 41.2^{\prime} \mathrm{W}$ | LAT $41^{\circ} 11.3^{\prime} \mathrm{N}$, LONG $72^{\circ} 41.0^{\prime} \mathrm{W}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 11.5^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 40.7^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 11.6^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 41.0^{\prime} \mathrm{W} \end{aligned}$ |
| 624 | What do the dotted lines around Goose Island and Kimberly Reef represent? | Danger soundings | Breakers | Tide rips | Depth contours |
| 625 | At 1100 , your position is LAT $41^{\circ} 11.3^{\prime} \mathrm{N}$, LONG $72^{\circ} 28.0^{\prime} \mathrm{W}$. You are steering a course of $069^{\circ} \mathrm{T}$ to leave Black Point one mile off your port beam. It has been reported that the Long Sand Shoal Buoys and Hatchett Reef Buoys are off station. What will serve to keep your vessel in safe water and away from these hazards? | Maintaining a 7 nm range off Orient Point | Danger bearing to Black Point of not more than $064^{\circ}{ }^{\top}$ | A bearing to Little Gull Island Light of not less than 090 | A distance to Saybrook Breakwater Light of not less than 1.3 miles |
| 626 | Orient Point Light is ___ | lighted only during daytime when the sound signal is in operation | maintained only from May 1 to Oct 1 | 64 feet (19.4 meters) above mean low water | lighted throughout 24 hours |
| 627 | At 1210, you are in position LAT $41^{\circ} 14.3^{\prime} \mathrm{N}$, LONG $72^{\circ} 16.5^{\prime} \mathrm{W}$. What is the charted depth of water? | 97 feet (29.4 meters) | 108 feet (32.7 meters) | 119 feet (36.1 meters) | 125 feet (37.9 meters) |
| 628 | From your 1210 position, you are making good a course of $083^{\circ} \mathrm{T}$. Your engines are turning RPMs for 10 knots. The set and drift of the current are $310^{\circ}$ at 1.7 knots. At what time should you expect to enter the red sector of New London Harbor Light? | 1243 | 1249 | 1253 | 1301 |
| 629 | Your vessel is proceeding up New London Harbor Channel, and you are in line with the range. What would be your course per standard magnetic compass? | $352^{\circ}$ | $354{ }^{\circ}$ | $002{ }^{\circ}$ | 007 ${ }^{\circ}$ |
| 630 | New London Harbor is ___ | limited to vessels drawing less than 36 feet ( 10.8 meters) | closed during the winter season | subject to dangerous freshets in the fall | difficult to enter at night |
| 631 | The distance from New London to the east entrance of the Cape Cod Canal is . $\qquad$ | 66 miles | 77 miles | 89 miles | 136 miles |


| 632 | The following questions are based on chart 12354TR, Lon 8.5 feet ( 2.6 meters). Use $14^{\circ} \mathrm{W}$ variation where required. <br> DEVIATION TABLE | g Island Sound - Eas | rn Part, and the su | rting publications. | vessel has a draft of |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 633 | What type of bottom is found at Long Sand Shoal? | Rocky | Muddy | Sandy | Hard |
| 634 | You are southeast of Saybrook Breakwater Light passing Saybrook Bar Lighted Bell Buoy "8". This buoy marks | shoal water | a tide rips area | the junction with the Connecticut River | a sunken wreck |
| 635 | At 0005 , on 26 January, your position is LAT $41^{\circ} 11.8^{\prime} \mathrm{N}$, LONG $72^{\circ} 20.5^{\prime} \mathrm{W}$. From this position, you plot a course to steer to a point one half mile north of Mattituck Breakwater Light "MI" with an engine speed of 9.0 knots. If there are no set and drift, what course should you steer? | $207^{\circ} \mathrm{psc}$ | $213^{\circ} \mathrm{psc}$ | $220^{\circ} \mathrm{psc}$ | $235{ }^{\circ} \mathrm{psc}$ |
| 636 | At 0045, you obtain the following bearings: <br> Rocky Point lookout tower $072^{\circ} \mathrm{T}$ <br> Horton Point lighthouse $213^{\circ} \mathrm{T}$ <br> What were the set and drift between 0005 and 0045? | $272^{\circ}$ true, 0.9 knot | $272^{\circ}$ true, 1.4 knots | 092${ }^{\circ} \mathrm{true}, 0.9$ knot | 092True, 1.4 knots |
| 637 | You alter course from your 0045 position to head for a point 0.5 mile north of Mattituck Breakwater Light "MI". If the visibility is 10 miles and you make good 9 knots, at approximately what time will you lose sight of Saybrook Breakwater Light? | You have already lost sight at 0045 | 0055 | 0120 | The light is visible all the way to Mattituck Inlet |


| 638 | At 0100, you obtain the following bearings: <br> Rocky Point Lookout Tower $062^{\circ} \mathrm{T}$ <br> Horton Point Lighthouse $189^{\circ} \mathrm{T}$ <br> What was the speed made good between 0045 and $0100 ?$ | 7.4 knots | 8.0 knots | 8.7 knots | 9.2 knots |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 639 | From your 0100 position, you change course to $258^{\circ}$ per standard magnetic compass. Your engine speed is 10.0 knots. A short time later, your fathometer reads 51 feet ( 15.5 meters) under the keel. What is the water depth? | 38.5 feet (11.7 meters) | 43.5 feet (13.2 meters) | 51.0 feet (15.5 meters) | 59.5 feet (18.0 meters) |
| 640 | According to the DR track line from your 0100 position, how far off Roanoke Point Shoal Buoy "5" should you be when the buoy is abeam? | 0.2 mile | 0.6 mile | 1.3 miles | 1.8 miles |
| 641 | At 0130, you obtain the following bearings: <br> Horton Point Lighthouse $\quad 078^{\circ} \top$ <br> Mattituck Breakwater Light tower $196^{\circ} \mathrm{T}$ <br> What were the course and speed made good between 0100 and 0130? | $246{ }^{\circ} \mathrm{T}$ at 9.8 knots | $253^{\circ} \mathrm{T}$ at 9.4 knots | $259^{\circ} \mathrm{T}$ at 9.8 knots | $267^{\circ} \mathrm{T}$ at 9.4 knots |
| 642 | From your 0130 position, you take the following radar ranges: <br> Mattituck Inlet Light @ 4.6 nm <br> Falkner Island Light @ 10.75 <br> What is the latitude and longitude of the fix? | $\begin{aligned} & \text { LAT } 41^{\circ} 00.8^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 40.8^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 01.2^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 40.4^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 01.6^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 40.0^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \hline \text { LAT } 41^{\circ} 02.0^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 39.5^{\prime} \mathrm{W} \end{aligned}$ |
| 643 | At 0209, your position is LAT $41^{\circ} 01.8^{\prime} \mathrm{N}$, LONG $72^{\circ} 40.8^{\prime} \mathrm{W}$. What course should you steer per standard magnetic compass to make good $278^{\circ}$ magnetic? (assume no set and drift) | $262.0^{\circ} \mathrm{psc}$ | $265.0^{\circ} \mathrm{psc}$ | $275.5^{\circ} \mathrm{psc}$ | $280.5^{\circ} \mathrm{psc}$ |
| 644 | The south coast of Long Island Sound between Mattituck Inlet and Port Jefferson is $\qquad$ | composed of high rocky bluffs | a high, flat plateau with sheer cliffs | fringed by rocky shoals | low and marshy with isolated beaches |
| 645 | At 0300, your position is LAT $41^{\circ} 01.7^{\prime} \mathrm{N}$, LONG $72^{\circ} 55.1^{\prime} \mathrm{W}$. From this position you steer a course of $289^{\circ}$ per standard magnetic compass at an engine speed of 10.0 knots. At what time can you first expect to see Stratford Shoal Middle Ground Light if the luminous range is 8.0 miles? | 0303 | 0309 | 0312 | 0318 |


| 646 | You must arrive at your final destination by 0800. The distance from your 0300 position to the final destination is 40.5 miles. What minimum speed must be made good to arrive on time? | 8.1 knots | 8.5 knots | 9.3 knots | 9.6 knots |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 647 | You are northwest of Port Jefferson Harbor steering $242^{\circ}$ per standard magnetic compass. As you continue westward, you see that the Port Jefferson Range Front Light and Rear Light come into line. If the deviation table is correct, the bearing of the range should be $\qquad$ | $140^{\circ} \mathrm{psc}$ | $146^{\circ} \mathrm{psc}$ | $157^{\circ} \mathrm{psc}$ | $160^{\circ} \mathrm{psc}$ |
| 648 | The following questions should be answered using chart n vessel has a draft of 9 feet ( 2.7 meters). You are turning f <br> DEVIATION TABLE | number 1235 <br> or 7.5 knots | Island S <br> hht of eye | n Part, an meters) | ing public for the |
| 649 | As you enter the New Haven Outer Channel, you sight the range markers in line directly over the stern. Your heading at the time is $155.5^{\circ}$ per gyrocompass. What is the gyro error? | $1.0^{\circ} \mathrm{E}$ | $1.0^{\circ} \mathrm{W}$ | $2.0^{\circ} \mathrm{W}$ | $0^{\circ}$ |
| 650 | At 0720, you are in the outer channel between buoy "1" and buoy "2" and change course to pass Townshend Ledge Lighted Bell Buoy "10A" abeam to port at 200 yards. What is your ETA off the buoy? | 0734 | 0738 | 0741 | 0745 |


| 651 | At 0740, you obtain the following radar information: Branford Reef Light bearing $070^{\circ}$ true @ 2.55 nm What is your position? | $\begin{aligned} & \text { LAT } 41^{\circ} 12.6^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 51.3^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 12.6^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 51.8^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 12.4^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 51.6^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 12.3^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 52.0^{\prime} \mathrm{W} \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 652 | From your 0740 position, you change course to pass 1.1 miles north of Falkner Island Light. Which of the following is true? | You should consult the sailing directions for pilotage requirements. | You will pass 1.5 nm off Branford Reef Light. | Your course will keep you clear of the 18' shoal. | None of the above. |
| 653 | At 0802, Branford Reef Light bears $348^{\circ} \mathrm{T}$ at 0.75 mile, and the north point of Falkner Island bears $088^{\circ} \mathrm{T}$ at 6.7 miles. What were the set and drift since 0740 ? | Set 040${ }^{\circ}$, drift . 3 knot | Set $220^{\circ} \mathrm{T}$, drift . 9 knot | Set $220^{\circ} \mathrm{T}$, drift . 3 knot | You are making good your intended course and speed. |
| 654 | What publication contains information on the navigational hazards in the vicinity of Falkner Island? | The navigational regulations in Title 46 Code of Federal Regulations | Inland Navigation Rules | U.S. Coast Guard Light List | U.S. Coast Pilot |
| 655 | If there is no current, what is the course per standard magnetic compass from your 0802 fix to the position 1.1 miles north of Falkner Island Light? | 064 ${ }^{\circ}$ | 068 ${ }^{\circ}$ | 095 ${ }^{\circ}$ | 099 ${ }^{\circ}$ |
| 656 | At 0830, you wish to get the latest weather forecasts for the Falkner Island area. On what frequency would you set your FM radio for this information? | 2181 kHz | 156.65 Mhz | 156.80 Mhz | 162.40 Mhz |
| 657 | At 0844, the range to the north end of Falkner Island is 2.0 miles and the left tangent bearing is $102^{\circ} \mathrm{T}$. What is the approximate charted depth of the water? | 14 ft (4.2 meters) | 19 ft (5.8 meters) | 22 ft (6.7 meters) | 29 ft (8.8 meters) |
| 658 | At 0925, you obtain the following radar information: <br> Falkner Island Light bearing $252^{\circ}$ true @ 1.65 nm <br> If you correct for a current setting $215^{\circ} \mathrm{T}$ at 0.5 knot , what course will you steer from the 0925 position to arrive at a position 0.5 mile south of Long Sand Shoal West End Horn Buoy "W"? | ${ }^{089}{ }^{\circ} \mathrm{T}$ | ${ }^{093}{ }^{\circ} \mathrm{T}$ | ${ }^{096}{ }^{\circ} \mathrm{T}$ | $102^{\circ} \mathrm{T}$ |
| 659 | If you correct for the current in the preceding question ( $215^{\circ} \mathrm{T}$ at 0.5 knot ) and maintain an engine speed of 7.5 knots, what is your ETA 0.5 mile south of buoy "W"? | 1016 | 1021 | 1026 | 1030 |
| 660 | At what approximate distance would you expect Bartlett Reef Light to break the horizon, if the visibility is 27 nautical miles? | 5.9 nm | 6.9 nm | 12.0 nm | 12.8 nm |
| 661 | Long Sand Shoal | indicate shoals gradually on the north and south sides | shows breakers when northerly winds exceed 10 knots | is hard and lumpy | has gray sand with scattered shells |


| 662 | At 1200, your position is 2.0 miles southwest of Bartlett Reef Light. Your heading is $075^{\circ} \mathrm{T}$. Visibility is less than 0.2 mile in fog and rain. Which of the following signals is most likely to be from another vessel? | Whistle from $125^{\circ}$ relative | Whistle from $075^{\circ}$ relative | Bell from 350 ${ }^{\circ}$ relative | Horn from $330^{\circ}$ relative |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 663 | What chart should you use after you enter New London Harbor? | 13211 | 13213 | 13214 | 13272 |
| 664 | The following questions are based on chart 12221TR, Ch meters). Use $10^{\circ} \mathrm{W}$ variation where required. The gyro er <br> DEVIATION TABLE | esapeake Bay Entrance, ror is $3^{\circ} \mathrm{E}$. | , and the supporting | ublications. Your heig | of eye is 25 feet (7.6 |
| 665 | The National Weather Service provides 24 hour weather broadcasts to vessels transiting the Chesapeake Bay Bridge Tunnel area on which frequency? | 147.45 MHz | 162.55 MHz | 181.15 MHz | 202.35 MHz |
| 666 | At 1752 , your position is LAT $37^{\circ} 04.3^{\prime} \mathrm{N}$, LONG $76^{\circ} 06.4^{\prime} \mathrm{W}$. On a flood current you should expect to be set to the $\qquad$ | north northwest | south southwest | east southeast | east |
| 667 | Your 1752 position places you ___ | less than 0.5 mile westward of York Spit Channel | less than 0.5 mile eastward of York Spit Channel | greater than 0.5 mile westward of York Spit Channel | greater than 0.5 mile eastward of York Spit Channel |
| 668 | What is the average velocity of the maximum flood current at the Tail of the Horseshoe? | 0.6 knot | 0.9 knot | 1.3 knots | 1.6 knots |


| 669 | From your 1752 position, you steer $307^{\circ}$ pgc at 9 knots. At 1805, you obtain the following visual bearings: <br> Old Pt. Comfort Light $232^{\circ} \mathrm{pgc}$. <br> Chesapeake Bay Tunnel North Light $130^{\circ} \mathrm{pgc}$. <br> What are the latitude and longitude of you 1805 position? | $\begin{aligned} & \text { LAT } 37^{\circ} 06.1^{\prime} \mathrm{N}, \text { LONG } \\ & 76^{\circ} 08.1^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 37^{\circ} 06.0^{\prime} \mathrm{N}, \text { LONG } \\ & 76^{\circ} 08.4^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 37^{\circ} 05.9^{\prime} \mathrm{N}, \text { LONG } \\ & 76^{\circ} 07.7^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 37^{\circ} 05.9^{\prime} \mathrm{N}, \text { LONG } \\ & 76^{\circ} 08.0^{\prime} \mathrm{W} \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 670 | At 1810, you sight a buoy on your starboard side labeled "19".This buoy marks $\qquad$ | a submerged obstruction in York Spit Channel | the visibility limit of the red sector of Cape Henry Light | the side of York Spit Channel | the junction of the York Spit and York River Entrance Channels |
| 671 | Based on a DR, at approximately 1817 you would expect to | enter a traffic separation zone | depart a regulated area | cross a submerged pipeline | depart a restricted area |
| 672 | At 1845, you obtain the following bearings: <br> Your latitude is $\qquad$ . | $37^{\circ} 10.7^{\prime} \mathrm{N}$ | $37^{\circ} 10.9^{\prime} \mathrm{N}$ | $37^{\circ} 11.0^{\prime} \mathrm{N}$ | $37^{\circ} 11.2^{\prime} \mathrm{N}$ |
| 673 | Your 1900 position is LAT $37^{\circ} 12.9^{\prime} \mathrm{N}$, LONG $76^{\circ} 13.5^{\prime} \mathrm{W}$. You change course to $317^{\circ} \mathrm{pgc}$ and slow to 8.0 knots. What is the course per standard magnetic compass? | $331{ }^{\circ} \mathrm{psc}$ | $329^{\circ} \mathrm{psc}$ | $311^{\circ} \mathrm{psc}$ | $309^{\circ} \mathrm{psc}$ |
| 674 | If the visibility is 11 miles, what is the luminous range of New Point Comfort Spit Light "4"? | 0.5 mile | 3.8 miles | 4.3 miles | 5.0 miles |
| 675 | According to your track line, how far off New Point Comfort Spit Light " 4 " will you be when abeam of this light? | 0.9 mile | 1.2 miles | 1.5 miles | 1.8 miles |
| 676 | At 1930, you take a fix using the following radar ranges: <br> $\begin{array}{lr}\text { York Spit Light - } & 3.6 \text { miles } \\ \text { New Point Comfort Spit Light "2" - } 2.0 \text { miles }\end{array}$ York Spit Swash Channel Light "3" - 2.5 miles <br> Your longitude is $\qquad$ | 76¹6.5'W | 76¹6.8'W | 76¹7.0'W | 76¹7.2'W |
| 677 | What was the speed made good from 1845 to 1930? | 6.2 knots | 7.5 knots | 8.3 knots | 9.4 knots |
| 678 | What is the height above water of Davis Creek Channel Light "1"? | 6 feet (1.8 meters) | 15 feet (4.6 meters) | 17 feet (5.2 meters) | 24 feet (7.3 meters) |
| 679 | If you have 17.3 miles to reach your destination from your 2000 position and want to be there at 2230, what speed should you make good? | 5.7 knots | 6.1 knots | 6.5 knots | 6.9 knots |


| 680 | The following questions are based on chart 12221TR, Ch feet ( 2.4 meters). Use $10^{\circ} \mathrm{W}$ variation where required. Th <br> DEVIATION TABLE | sapeake Bay Entranc gyro error is $2^{\circ} \mathrm{W}$. | and the supporting $p$ our height of eye is 26 | ublications. Your vess eet. | I has a draft of 8.0 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 681 | At 1730 , your position is LAT $37^{\circ} 13.9^{\prime} \mathrm{N}$, LONG $76^{\circ} 26.4^{\prime} \mathrm{W}$. You are steering course $088^{\circ}$ per standard magnetic compass (psc) at an engine speed of 8.0 knots. What is your distance off Tue Marshes Light at 1730? | 2.6 miles | 2.8 miles | 3.0 miles | 3.2 miles |
| 682 | What is the maximum allowable speed of vessels underway up river from Tue Marshes Light? | 6 knots | 8 knots | 10 knots | 12 knots |
| 683 | At 1750 , your position is LAT $37^{\circ} 14.5^{\prime} \mathrm{N}$, LONG $76^{\circ} 22.9^{\prime} \mathrm{W}$. What was the course made good between 1730 and 1750? | 072 ${ }^{\circ} \mathrm{T}$ | 075 ${ }^{\circ} \mathrm{T}$ | $0{ }^{\circ}{ }^{\circ} \mathrm{T}$ | $080^{\circ} \mathrm{T}$ |
| 684 | At 1800, Tue Marshes Light bears $264.5^{\circ} \mathrm{pgc}$, York Spit Swash Channel Light " 3 " bears $007^{\circ} \mathrm{pgc}$. Your position is | $\begin{aligned} & \text { LAT } 37^{\circ} 15.5^{\prime} \mathrm{N}, \text { LONG } \\ & 76^{\circ} 19.8^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 37^{\circ} 15.2^{\prime} \mathrm{N}, \text { LONG } \\ & 76^{\circ} 20.3^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 37^{\circ} 15.0^{\prime} \mathrm{N}, \text { LONG } \\ & 76^{\circ} 20.0^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 37^{\circ} 14.5^{\prime} \mathrm{N}, \text { LONG } \\ & 76^{\circ} 20.1^{\prime} \mathrm{W} \end{aligned}$ |
| 685 | What course should you steer per standard magnetic compass in order to navigate down the center of York River Entrance Channel (ignore set and drift)? | $139^{\circ} \mathrm{psc}$ | $141^{\circ} \mathrm{psc}$ | $147^{\circ} \mathrm{psc}$ | $149^{\circ} \mathrm{psc}$ |
| 686 | You have just passed York River Entrance Channel Lighted Buoys "13" and "14". The chart shows a light approximately 1.0 mile off your port beam with a light characteristic "Fl 6 sec ". What is the name of this light? | Mobjack Bay Entrance Light | New Point Comfort Spit Light "4" | York Spit Light | York River Entrance Channel Light "1" |


| 687 | At 1930, your vessel is between York River Entrance Channel Lighted Buoys "1YR" and "2". From this position, you change course to $142^{\circ} \mathrm{pgc}$ at an engine speed of 8.0 knots. At 2001, you obtain the following information: <br> Chesapeake Channel Tunnel North Light - $131^{\circ} \mathrm{pgc}$; Thimble Shoal Light - $248^{\circ} \mathrm{pgc}$ <br> What were the set and drift between 1930 and 2001? | $127^{\circ}$ at 1.1 knot | $127^{\circ}$ at 0.5 knot | $307^{\circ}$ at 1.1 knot | $307^{\circ}$ at 0.5 knot |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 688 | At 2015, your vessel is at the Chesapeake Bay Bridge and Tunnel midway between buoys "13" and "14". If the height of tide is -1 foot (-0.3 meters), what is the approximate depth of water? | 53 feet (15.5 meters) | 46 feet (13.9 meters) | 40 feet (12.1 meters) | 35 feet (10.6 meters) |
| 689 | If you steer $143^{\circ} \mathrm{pgc}$ from your 2015 position at an engine speed of 8.0 knots, at what time would you reach a point midway between buoys "11" and "12" (ignore set and drift)? | 2023 | 2029 | 2032 | 2037 |
| 690 | At 2015, you alter course to $154^{\circ} \mathrm{pgc}$. What is the course per standard magnetic compass (psc)? | $162^{\circ} \mathrm{psc}$ | $157^{\circ} \mathrm{psc}$ | $152^{\circ} \mathrm{psc}$ | $142^{\circ} \mathrm{psc}$ |
| 691 | Which of the following concerning Thimble Shoal Channel is TRUE? | Only deep-draft passenger ships and large naval vessels may use the main channel. | The channel is 14.5 miles in length. | A tow drawing 20 feet is excluded from the main channel. | Thimble Shoal Channel is in international waters. |
| 692 | At 2118, you obtain the following bearings: <br> Cape Henry Light - $148^{\circ} \mathrm{pgc}$ <br> Cape Charles Light - $033^{\circ} \mathrm{pgc}$ <br> Thimble Shoal Light - $291^{\circ} \mathrm{pgc}$ <br> From this position, you proceed to Norfolk, VA, a distance of approximately 26.0 miles. To arrive at Norfolk at 0200 the next day, what is the speed to make good from your 2118 position to arrive at this time? | 5.0 knots | 5.5 knots | 6.0 knots | 6.5 knots |
| 693 | What is your 2118 position? | $\begin{aligned} & \hline \text { LAT } 36^{\circ} 57.0^{\prime} \mathrm{N}, \text { LONG } \\ & 76^{\circ} 01.5^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \hline \text { LAT } 36^{\circ} 57.4^{\prime} \mathrm{N}, \text { LONG } \\ & 76^{\circ} 01.9^{\prime} \mathrm{W} \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \text { LAT } 36^{\circ} 57.8^{\prime} \mathrm{N}, \text { LONG } \\ & 76^{\circ} 01.5^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 36^{\circ} 58.2^{\prime} \mathrm{N}, \text { LONG } \\ & 76^{\circ} 02.4^{\prime} \mathrm{W} \end{aligned}$ |
| 694 | From your 2118 position, you steer a course of $288^{\circ} \mathrm{T}$ at an engine speed of 7.0 knots. At 2120 visibility is suddenly reduced to 2 miles. At what time can you expect Old Point Comfort Light to become visible again? | 2136 | 2143 | 2202 | 2233 |
| 695 | If the Old Point Comfort main light was inoperative what emergency light would be shown? | Flashing yellow | Alternating red and white | Light of reduced intensity | Strobe light |


| 696 | The following questions are based on chart 12221TR, Ch feet ( 2.7 meters). Your height of eye is 15 feet ( 4.6 meters). <br> DEVIATION TABLE | sapeake Bay Entra <br> s). Use $10^{\circ} \mathrm{W}$ varia | , and the supporti where required. T | ublications. Your vess yro error is $2^{\circ} \mathrm{W}$. | has a draft of 9.0 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 697 | At 1400 , your position is LAT $37^{\circ} 14.7^{\prime} \mathrm{N}$, LONG $76^{\circ} 22.3^{\prime} \mathrm{W}$. From this position, you head for the York River Entrance Channel Buoy "17". What should you steer per standard magnetic compass for this heading? | $108^{\circ} \mathrm{psc}$ | $119^{\circ} \mathrm{psc}$ | $122^{\circ} \mathrm{psc}$ | $125^{\circ} \mathrm{psc}$ |
| 698 | At 1430 , your position is LAT $37^{\circ} 12.8^{\prime} \mathrm{N}$, LONG $76^{\circ} 17.7^{\prime} \mathrm{W}$. At this time, you come left and steer $045^{\circ} \mathrm{T}$. This course will lead you through a channel bordered by yellow buoys. The dashed magenta lines between the buoys mark $\qquad$ | York River Entrance Channel | New Point Comfort shoal area | the piloting channel for Mobjack Bay | the limits of fish trap areas |
| 699 | From your 1430 fix, you order turns for 8 knots. You steer $045^{\circ} \mathrm{T}$ and experience no set and drift. At what time would you expect to have New Point Comfort Spit Light "4" abeam? | 1452 | 1458 | 1504 | 1510 |
| 700 | At 1540 , your position is LAT $37^{\circ} 18.4^{\prime} \mathrm{N}$, LONG $76^{\circ} 10.5^{\prime} \mathrm{W}$. Which course should you steer per gyrocompass to head for the entrance to Cape Charles City? | $109^{\circ} \mathrm{pgc}$ | $117^{\circ} \mathrm{pgc}$ | $123^{\circ} \mathrm{pgc}$ | $129^{\circ} \mathrm{pgc}$ |


| 701 | You arrive at Cape Charles City at 1700 and depart at 1800. You are underway in Chesapeake Bay and encounter heavy fog. At 1830, you obtain the following radar readings: <br> Old Plantation Flats Light @ 1.9 nm New Point Comfort Spit Light "2" bearing 301 true @ 10.55 nm <br> What is your 1830 position? | $\begin{aligned} & \text { LAT } 37^{\circ} 10.3^{\prime} \mathrm{N}, \text { LONG } \\ & 76^{\circ} 04.5^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 37^{\circ} 10.3^{\prime} \mathrm{N}, \text { LONG } \\ & 76^{\circ} 06.5^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 37^{\circ} 12.3^{\prime} \mathrm{N}, \text { LONG } \\ & 76^{\circ} 04.4^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 37^{\circ} 12.3^{\prime} \mathrm{N}, \text { LONG } \\ & 76^{\circ} 06.5^{\prime} \mathrm{W} \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 702 | From your 1830 fix, you continue south on a course of $150^{\circ} \mathrm{T}$ turning RPMs for 6 knots. You encounter a flood current in the direction of $330^{\circ} \mathrm{T}$ at 2 knots. Adjusting your course for set and drift, which course would you steer to make good a course of $150^{\circ}$ T while turning RPMs for 6 knots? | $144^{\circ} \mathrm{T}$ | $150^{\circ} \mathrm{T}$ | $158^{\circ} \mathrm{T}$ | $162^{\circ} \mathrm{T}$ |
| 703 | Determine your 1915 position using the following information obtained at 1915. <br> Visual bearings <br> Cape Charles Light $107^{\circ}$ pgc <br> Cape Henry Light $172^{\circ} \mathrm{pgc}$ <br> Radar Bearing and Range <br> Chesapeake Channel Tunnel South Light $189^{\circ}$ pgc at 7.2 miles | $\begin{aligned} & \text { LAT } 37^{\circ} 03.5^{\prime} \mathrm{N}, \text { LONG } \\ & 76^{\circ} 05.9^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 37^{\circ} 03.5^{\prime} \mathrm{N}, \text { LONG } \\ & 76^{\circ} 09.3^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 37^{\circ} 05.9^{\prime} \mathrm{N}, \text { LONG } \\ & 76^{\circ} 03.5^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 37^{\circ} 09.3^{\prime} \mathrm{N}, \text { LONG } \\ & 76^{\circ} 03.1^{\prime} \mathrm{W} \end{aligned}$ |
| 704 | From your 1915 fix you come right and steer a course of $200^{\circ} \mathrm{T}$. At 2000, your position is LAT $37^{\circ} 05.5^{\prime} \mathrm{N}$, LONG $76^{\circ} 07.0^{\prime} \mathrm{W}$. Your intention is to pass through Chesapeake Channel. If there are no set and drift, what course would you steer per standard magnetic compass to make good a course of $145^{\circ} \mathrm{T}$ ? | $134^{\circ}$ | $139^{\circ}$ | $151^{\circ}$ | $156{ }^{\circ}$ |
| 705 | At 2100, you have passed through the Chesapeake Bay Bridge and Tunnel and determine your position to be LAT $37^{\circ} 01.3^{\prime} \mathrm{N}$, LONG $76^{\circ} 03.0^{\prime} \mathrm{W}$. The current is flooding in a direction of $303^{\circ} \mathrm{T}$ at 2.5 knots. Adjusting your course for set and drift, which course would you steer while turning RPMs for 6 knots to make good a course of $175^{\circ} \mathrm{T}$ ? | $156^{\circ} \mathrm{T}$ | $164^{\circ} \mathrm{T}$ | ${ }^{183}{ }^{\circ} \mathrm{T}$ | $190^{\circ} \mathrm{T}$ |
| 706 | At 2150, your position is LAT $36^{\circ} 57.2^{\prime} \mathrm{N}$, LONG $76^{\circ} 01.3^{\prime} \mathrm{W}$. In this position on the chart, you note a light magenta line running in a direction of $030^{\circ} \mathrm{T}$. This line indicates the limits of | a precautionary area | a pilotage area | the Cape Henry Light red sector | chart 12222 |


| 707 | At 2200, you are in position LAT $36^{\circ} 57.5^{\prime} \mathrm{N}$, LONG $76^{\circ} 02.5^{\prime} \mathrm{W}$. You intend to travel up the Thimble Shoals auxiliary Channel to Hampton Roads. According to the Coast Pilot, what is the depth of the auxiliary channel on either side of the main channel? | 28 feet (8.5 meters) | 32 feet (9.8 meters) | 36 feet (11.0 meters) | 45 feet (13.7 meters) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 708 | From your 2200 fix, you steer course $288^{\circ} \mathrm{T}$ to travel up the Thimble Shoal North Auxiliary Channel. If you are making good 6.0 knots, at what time would you expect to pass buoy " 18 " at the west end of the channel? (There are no set and drift.) | 2239 | 2255 | 2315 | 2344 |
| 709 | At 2205, you are in Thimble Shoal North Auxiliary Channel abeam of lighted gong buoy " 4 ". At this time the visibility decreases to 5 miles. You continue to turn RPMs for 6 knots and experience no set and drift. What time would you expect Old Point Comfort Light (white sector) to become visible? | 2230 | 2240 | 2246 | 2258 |
| 710 | The mean high water level at Old Point Comfort is | 2.6 feet (0.8 meters) | 1.2 feet (0.4 meters) | 0.0 feet | -3.5 feet (-1.1 meters) |
| 711 | You are entering Norfolk Harbor and have just passed Craney Island. Which chart should you use for your final approach into Norfolk Harbor? | 12223 | 12238 | 12248 | 12253 |
| 712 | The following questions are based on chart 12221TR, Ch ( 8.2 meters). Use $10^{\circ} \mathrm{W}$ variation where required. There <br> DEVIATION TABLE | sapeake Bay Entran is no gyro error. | , and the supporting | ublications. The draf | your tow is 27 feet |


| 713 | Your 0200 position is LAT $37^{\circ} 23.5^{\prime} \mathrm{N}$, LONG $76^{\circ} 09.2^{\prime} \mathrm{W}$. Your speed is 8 knots, and your course is $095^{\circ} \mathrm{T}$. Which statement is TRUE? | The depth of the water in your vicinity is about 38 to 40 fathoms (69.1 meters to 72.7 meters). | You are less than a mile from a sunken wreck which could interfere with your tow. | The closest major aid to navigation is New Point Comfort Light. | You will pass through a disposal area on your present course. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 714 | At 0315, you obtain the following bearings: <br> Old Plantation Flats Light bearing $179.5^{\circ}$ true Wolf Trap Light bearing $271^{\circ}$ true <br> What is the true course from this position to the entrance of York Spit Channel? | $203^{\circ}$ | $208^{\circ}$ | $211^{\circ}$ | $217^{\circ}$ |
| 715 | From your 0315 position, what time can you expect to reach York Spit Channel Buoys "37" and "38"? | 0405 | 0412 | 0417 | 0423 |
| 716 | The engineer has advised that it will be necessary to secure the gyrocompass and the electronic equipment. From your 0315 position, what is your course per standard magnetic compass to York Spit Channel Buoy "38", if there is no current? | $212^{\circ} \mathrm{psc}$ | $214^{\circ} \mathrm{psc}$ | $216^{\circ} \mathrm{psc}$ | $218{ }^{\circ} \mathrm{psc}$ |
| 717 | Which chart could you use for greater detail of the area at the south end of York Spit Channel? | 12222 | 12224 | 12226 | 12254 |
| 718 | You leave York Spit Channel at buoy "14" at 0600 with an engine speed of 12 knots. You receive orders to rendezvous with the tug "Quicksilver" and her tow at Hog Island Bell Buoy "12". What is your ETA at the rendezvous point, if you pass through Chesapeake Channel to buoy "CBJ", through the outbound traffic separation lane to buoy "NCA" (LL\#375), and then to the rendezvous point? | 0830 | 0850 | 0910 | 0935 |
| 719 | You arrive at the rendezvous point, secure the tow, and head back southward. At 1200, you take the following bearings: <br> Cape Charles Light bearing $240.5^{\circ}$ true <br> Sand Shoal Inlet South Light bearing $289^{\circ}$ true <br> What is your 1200 position? | $\begin{aligned} & \text { LAT } 37^{\circ} 10.5^{\prime} \mathrm{N}, \text { LONG } \\ & 75^{\circ} 33.0^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 37^{\circ} 12.0^{\prime} \mathrm{N}, \text { LONG } \\ & 75^{\circ} 35.0^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 37^{\circ} 15.0^{\prime} \mathrm{N}, \text { LONG } \\ & 75^{\circ} 37.5^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 37^{\circ} 19.0^{\prime} \mathrm{N}, \text { LONG } \\ & 75^{\circ} 40.5^{\prime} \mathrm{W} \end{aligned}$ |
| 720 | From your noon position, if there is no set and drift, what is your course per standard magnetic compass to the "NCA" (LL \#375) buoy? | $215^{\circ} \mathrm{psc}$ | 217 ${ }^{\circ} \mathrm{psc}$ | $219^{\circ} \mathrm{psc}$ | $221^{\circ} \mathrm{psc}$ |


| 721 | Your gyro and electronic gear are again operating. At 1710, Chesapeake Light bears $137^{\circ} \mathrm{pgc}$ at 6.6 miles. The current is setting $160^{\circ} \mathrm{T}$ at 2 knots. At your speed of 6 knots, what is your true course to steer to remain in the inbound traffic lane? | $269^{\circ}$ | $265^{\circ}$ | $261^{\circ}$ | $250^{\circ}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 722 | At 1810, you obtain the following radar reading: Cape Henry Light bearing $252.5^{\circ}$ true @4.0 nm What is your position? | $\begin{aligned} & \hline \text { LAT } 36^{\circ} 56.0^{\prime} \mathrm{N}, \text { LONG } \\ & 75^{\circ} 58.5^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 36^{\circ} 55.4^{\prime} \mathrm{N}, \text { LONG } \\ & 75^{\circ} 56.0^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 36^{\circ} 54.9^{\prime} \mathrm{N}, \text { LONG } \\ & 75^{\circ} 53.8^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 36^{\circ} 56.8^{\prime} \mathrm{N}, \text { LONG } \\ & 75^{\circ} 55.6^{\prime} \mathrm{W} \end{aligned}$ |
| 723 | What speed have you made good from 1710 to 1810? | 4.2 knots | 4.9 knots | 5.5 knots | 6.3 knots |
| 724 | If you make good a speed of 6.0 knots from your 1810 position, what is your ETA at Chesapeake Channel Lighted Bell Buoy "2C"? | 1833 | 1845 | 1855 | 1900 |
| 725 | You passed Cape Henry Light at 0730 outbound at maximum flood. What approximate current can you expect on entering Chesapeake Channel? | Slack before ebb | Slack before flood | Ebb current | Flood current |
| 726 | The coastline by Cape Henry is best described as | rocky with pine scrubs | sandy hills about eighty feet high | low wetlands | low and thinly wooded with many beach houses |
| 727 | Inbound, the color of Cape Henry Light will ___ . | change before you reach Chesapeake Channel Lighted Bell Buoy "2C" | change after you reach Chesapeake Channel Lighted Bell Buoy "2C" | remain the same | alternate regardless of your position |


| 728 | The following questions are based on chart 12354TR, Long 12 feet ( 3.6 meters). Your height of eye is 16 feet ( 4.8 me <br> DEVIATION TABLE | g Island Sound - Eas ters). The gyro error | rn Part, and the supp $2^{\circ} \mathrm{E}$. Use $14^{\circ} \mathrm{W}$ varia | rting publications. Your ion where required. | vessel has a draft of |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 729 | You are on course $082^{\circ} \mathrm{T}$, and the engines are turning for 8 knots. At 0352, you take the following bearings: <br> Stratford Point Light $\quad 016^{\circ} \mathrm{pgc}$ Stratford Shoal (Middle Ground) Light $137^{\circ} \mathrm{pgc}$ <br> What is your 0352 position? | $\begin{aligned} & \text { LAT } 41^{\circ} 05.0^{\prime} \mathrm{N}, \text { LONG } \\ & 73^{\circ} 08.0^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 05.2^{\prime} \mathrm{N}, \text { LONG } \\ & 73^{\circ} 07.8^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 05.3^{\prime} \mathrm{N}, \text { LONG } \\ & 73^{\circ} 07.5^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 05.4^{\prime} \mathrm{N}, \text { LONG } \\ & 73^{\circ} 07.7^{\prime} \mathrm{W} \end{aligned}$ |
| 730 | If the visibility is 11 miles, what is the earliest time you can expect to see New Haven Light? | The light is visible at 0352. | 0414 | 0443 | You will not sight the light. |
| 731 | While on a heading of $082^{\circ} \mathrm{T}$, you sight Middle Ground Light in line with Old Field Point Light bearing $206^{\circ}$ per standard magnetic compass. From this you can determine the | variation | deviation table is correct for that heading | compass error is $17.5^{\circ} \mathrm{E}$ | deviation is $3.5^{\circ} \mathrm{E}$ for a bearing of $206^{\circ}$ per standard magnetic compass |
| 732 | The maximum ebb current at a location 4.3 miles south of Stratford Point will occur at 0413 . The predicted current will be 1.0 knot at $075^{\circ}$. What will be your course made good if you steer $082^{\circ} \mathrm{T}$ at 8 knots? | ${ }^{081}{ }^{\circ} \mathrm{T}$ | $083^{\circ} \mathrm{T}$ | $085^{\circ} \mathrm{T}$ | 087 ${ }^{\circ} \mathrm{T}$ |
| 733 | The characteristic of Branford Reef Light is ___ | flashing red every 4 seconds | flashing red every 3 seconds | flashing white every 6 seconds | flashing yellow every 4 seconds |


| 734 | At 0415, you take the following bearings: <br> Stratford Point Light $329.5^{\circ} \mathrm{pgc}$ <br> Middle Ground Light $223.5^{\circ} \mathrm{pgc}$ <br> Old Field Point Light $199.5^{\circ}$ pgc <br> Which statement is TRUE? | You are to the right of your intended track line. | The current's drift is greater than predicted. | The course made good since 0352 is $081^{\circ} \mathrm{T}$. | Your fathometer reads about 76 fathoms. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 735 | If you change course at 0420, what is the course to make good to leave Twenty Eight Foot Shoal Lighted Buoy abeam to port at 1 mile? | 079 ${ }^{\circ} \mathrm{T}$ | $082^{\circ} \mathrm{T}$ | 084 ${ }^{\circ} \mathrm{T}$ | 086 ${ }^{\circ} \mathrm{T}$ |
| 736 | At 0430, you take the following bearings: <br> Stratford Point Light bearing $307^{\circ}$ pgc Middle Ground Light bearing $239^{\circ}$ pgc <br> What is your 0430 position? | $\begin{aligned} & \text { LAT } 41^{\circ} 08.9^{\prime} \mathrm{N}, \text { LONG } \\ & 73^{\circ} 00.0^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 05.0^{\prime} \mathrm{N}, \text { LONG } \\ & 73^{\circ} 01.1^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 05.5^{\prime} \mathrm{N}, \text { LONG } \\ & 77^{\circ} 59.7^{\prime} \mathrm{W} \end{aligned}$ | LAT $41^{\circ} 05.8^{\prime} \mathrm{N}$, LONG $73^{\circ} 00.8^{\prime} \mathrm{W}$ |
| 737 | From your 0430 position, what is the course per standard magnetic compass to a position where Twenty-eight foot Shoal lighted buoy "TE" is abeam to port at 1 mile? | $082.5^{\circ}$ | 086.0 ${ }^{\circ}$ | 098.0 ${ }^{\circ}$ | $101.5^{\circ}$ |
| 738 | By 0430, the wind has increased, and the visibility cleared due to passage of a front. You estimate $3^{\circ}$ leeway due to NW'ly winds. What is the course per gyrocompass to pass 1.2 miles due south of Twenty-eight Foot Shoal Lighted Buoy "TE"? | 080 ${ }^{\circ}$ | $083^{\circ}$ | 086 ${ }^{\circ}$ | $090^{\circ}$ |
| 739 | At 0430, you change course and speed to make good $090^{\circ} \mathrm{T}$ at 10 knots. At 0433, you slow due to an engineering casualty and estimate you are making good 5.5 knots. At what time will Branford Reef Light bear $000^{\circ} \mathrm{T}$ ? | 0601 | 0609 | 0620 | 0624 |
| 740 | What is the approximate distance to New Bedford, MA, from your 0530 DR position, if your 0352 position was 7 miles from Bridgeport, CT? | 77 miles | 91 miles | 104 miles | 115 miles |
| 741 | At 0550, engineering repairs are complete and speed is increased to 9.6 knots. At 0630, Falkner Island Light bears $023^{\circ}$ pgc and Horton Point Light bears $097^{\circ}$ pgc. From your 0630 fix you steer to make good a course of $086^{\circ} \mathrm{T}$ while turning for 9.6 knots. At 0700, Falkner Island Light bears $336.0^{\circ} \mathrm{pgc}$ and Horton Point Light bears $105.5^{\circ} \mathrm{pgc}$. The radar range to the south tip of Falkner Island is 5.7 miles. Which statement is TRUE? | Your course made good from 0630 to 0700 was $082^{\circ} \mathrm{T}$. | The speed made good from 0630 to 0700 was 10.1 knots. | The current from 0630 to 0700 was $279^{\circ} \mathrm{T}$ at 0.6 knot. | You are making good your intended speed. |
| 742 | The south shore of Long Island Sound from Horton Point to Orient Point is $\qquad$ | low and marshy | bluff and rocky | marked by sandy beaches and wooded uplands | bound by gradual shoaling |


| 743 | If visibility permits, Orient Point Light will break the horizon at a range of about $\qquad$ . | 9.3 miles | 10.8 miles | 13.9 miles | 17.0 miles |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 744 | The following questions are based on chart 12221TR, Ch meters), and your height of eye is 24 feet ( 7.3 meters). <br> DEVIATION TABLE | sapeake Bay Entranc se variation $10^{\circ} \mathrm{W}$ whe | e, and the supporting e necessary. The gyro | ublications. Your vess error is $2^{\circ} \mathrm{W}$. | draws 11 feet (3.3 |
| 745 | At 0410, you take the following bearings:  <br> New Point Comfort Spit Light "2" $242^{\circ} \mathrm{T}$ <br> Wolf Trap Light $313^{\circ} \mathrm{T}$ <br> Horn Harbor Entrance Light "HH" $262^{\circ} \mathrm{T}$ <br>   <br>   <br> What is your 0410 position?  | $\begin{aligned} & \text { LAT } 37^{\circ} 21.0^{\prime} \mathrm{N}, \text { LONG } \\ & 76^{\circ} 08.1^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 37^{\circ} 21.0^{\prime} \mathrm{N}, \text { LONG } \\ & 76^{\circ} 08.8^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 37^{\circ} 21.1^{\prime} \mathrm{N}, \text { LONG } \\ & 76^{\circ} 07.9^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 37^{\circ} 21.2^{\prime} \mathrm{N}, \text { LONG } \\ & 76^{\circ} 08.2^{\prime} \mathrm{W} \end{aligned}$ |
| 746 | If the visibility is 5 miles and you are in the red sector, at what distance off should you sight Cape Henry Light? | 15 miles | 13 miles | 11 miles | 9 miles |
| 747 | From your 0410 fix, what is the course per standard magnetic compass to the entrance to York Spit Channel between buoys "37" and "38"? | $178^{\circ}$ | $176{ }^{\circ}$ | $156^{\circ}$ | $152^{\circ}$ |
| 748 | You are turning for 9 knots, a westerly wind is causing $3^{\circ}$ of leeway, and the current is $320^{\circ} \mathrm{T}$ at 1.2 knots. What true course should you steer to remain in the northern leg of York Spit Channel? | $191^{\circ} \mathrm{T}$ | 194T | $197{ }^{\circ} \mathrm{T}$ | ${ }^{203}{ }^{\circ} \mathrm{T}$ |
| 749 | If you are making 8.3 knots over the ground, what is your ETA at the first turning point in York Spit Channel between buoys "29" and "30"? | 0444 | 0456 | 0508 | 0522 |
| 750 | Which publication contains the specific information about navigating in York Spit Channel? | Light List | Coast Pilot | Chesapeake Bay Harbor- master's Regulations Manual | Navigator's Manual Chesapeake Bay |


| 751 | At 0530, the Coast Guard announces that Chesapeake Channel is closed indefinitely due to a collision occurring in the channel between Trestle "B" and "C" of the Chesapeake Bay Bridge and Tunnel. You exit York Spit Channel, leaving buoy " 20 " abeam to port at 0.1 mile, and alter course to leave Horseshoe Crossing Lighted Bell Buoy abeam to port at 0.2 mile. What is the course per gyrocompass? | $185^{\circ} \mathrm{pgc}$ | $187^{\circ} \mathrm{pgc}$ | $190^{\circ} \mathrm{pgc}$ | $193^{\circ} \mathrm{pgc}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 752 | After you enter Thimble Shoal Channel, you will alter course to pass between Trestle "A" and "B". Which channel should you use? | Thimble Shoal Main Channel or the South Auxiliary Channel | Any of the channels but keep to the right hand side | The South Auxiliary Channel | Thimble Shoal Main Channel |
| 753 | As you pass through the Chesapeake Bay Bridge and Tunnel, you sight Trestle " A " in line bearing $198^{\circ} \mathrm{pgc}$. What is the gyro error? | $2^{\circ} \mathrm{E}$ | $0^{\circ} \mathrm{E}$ | $2^{\circ} \mathrm{W}$ | $4^{\circ} \mathrm{W}$ |
| 754 | You sighted Trestle " $\mathrm{A}^{\mathrm{A}}$ in line at 0707 and are steering $108^{\circ} \mathrm{T}$. At 0731, Cape Henry Light bears $136^{\circ}$ T; Cape Charles Light bears $032.5^{\circ} \mathrm{T}$; and Thimble Shoal Tunnel South Light bears $282^{\circ} \mathrm{T}$. What was the speed made good between 0707 and 0731? | 8.3 knots | 8.8 knots | 9.2 knots | 9.4 knots |
| 755 | At 0731, approximately how much water is under your keel? | 31 feet (9.4 meters) | 45 feet (13.6 meters) | 48 feet (14.5 meters) | 54 feet (16.4 meters) |
| 756 | What is the distance from your 0731 fix to Wilmington, N.C.(LAT $34^{\circ} 14.0^{\prime} \mathrm{N}$, LONG $\left.77^{\circ} 57.0^{\prime} \mathrm{W}\right)$ ? | 339 miles | 363 miles | 402 miles | 486 miles |
| 757 | You will enter waters governed by the International Rules when $\qquad$ _. | you cross the territorial sea boundary line | abeam of buoy "CBJ" | you cross the boundary of the contiguous zone | Cape Charles Light bears $022^{\circ} \mathrm{T}$ |
| 758 | At 0812, you obtain the following radar information: Cape Henry Light bearing $287^{\circ}$ pgc @ 3.85 nm What is your 0812 position? | $\begin{aligned} & \text { LAT } 36^{\circ} 53.7^{\prime} \mathrm{N}, \text { LONG } \\ & 75^{\circ} 56.0^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 36^{\circ} 53.8^{\prime} \mathrm{N}, \text { LONG } \\ & 75^{\circ} 56.1^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 36^{\circ} 54.5^{\prime} \mathrm{N}, \text { LONG } \\ & 75^{\circ} 56.2^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 36^{\circ} 54.6^{\prime} \mathrm{N}, \text { LONG } \\ & 75^{\circ} 55.8^{\prime} \mathrm{W} \end{aligned}$ |
| 759 | At 0812, you are on course $132^{\circ} \mathrm{T}$. The standard magnetic compass reads $135^{\circ}$. What should you conclude? | The deviation table is correct for that heading. | You should adjust the magnetic compass. | Your compass may be influenced by a local magnetic disturbance. | The deviation is increasing as you go south. |


| 760 | The following questions are based on chart 12354TR, Lo 10 feet ( 3.1 meters). Your height of eye is 35 feet (10.6 <br> DEVIATION TABLE | g Island Sound - Eas eters). Use $14^{\circ} \mathrm{W}$ va | rn Part, and the sup ation where required | rting publications. Y | vessel has a draft of |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 761 | At 0345, you set a course to depart New London Harbor. Assuming no set and drift, which standard magnetic compass course must you steer to stay in the middle of the channel? | $175^{\circ} \mathrm{psc}$ | $187^{\circ} \mathrm{psc}$ | $190^{\circ} \mathrm{psc}$ | $192^{\circ} \mathrm{psc}$ |
| 762 | Which statement regarding the wreck 0.2 mile south of buoys " 1 " and "2" at the entrance to New London Harbor is TRUE? | The wreck presents a danger to all vessels with drafts in excess of 30 feet ( 9.1 meters). | The wreck is visible above the sounding datum between the months of March and June. | The wreck is shown on the chart, but its actual existence is doubtful. | The wreck was cleared by wire drag in 1982 and will not appear on future charts. |
| 763 | At 0530, your position is LAT $41^{\circ} 13.6^{\prime} \mathrm{N}$, LONG $72^{\circ} 08.5^{\prime} \mathrm{W}$. What is the color of New London Harbor Light? | Red | White | Green | Alternating white and green |
| 764 | From your 0530 position, you set a course of $271^{\circ} \mathrm{psc}$ with an engine speed of 9 knots. At 0645, Cornfield Safe-Water Buoy "CF" is abeam to port. What speed have you averaged since 0530? | 7.5 knots | 8.6 knots | 9.0 knots | 9.5 knots |
| 765 | At 0730 , your position is LAT $41^{\circ} 10.5^{\prime} \mathrm{N}$, LONG $72^{\circ} 32.2^{\prime} \mathrm{W}$. From this position you steer course $286^{\circ}$ psc with an engine speed of 9.0 knots. What is the approximate depth of water under your keel? | 52 feet (15.8 meters) | 57 feet (17.3 meters) | 62 feet (18.8 meters) | 67 feet (20.3 meters) |
| 766 | The broken magenta line which runs parallel to the shore between Roanoke Point and Mattituck Inlet marks a | pipeline | fish trap area | demarcation line | cable area |


| 767 | Assuming no current, at what time can you expect to be abeam of Townshend Ledge Lighted Buoy? | 0859 | 0902 | 0905 | 0910 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 768 | At 0730, visibility is 5.5 miles. At what time will you lose sight of Horton Point Light? | It is not visible at 0730 | 0751 | 0812 | 0825 |
| 769 | At 0820, you take the following bearings: <br> Branford Reef Light bearing $307^{\circ}$ true Falkner Island Light bearing $052^{\circ}$ true <br> What are the set and drift since 0730 ? | Set $052^{\circ} \mathrm{T}$, drift 1.1 knots | Set $052^{\circ} \mathrm{T}$, drift 1.3 knots | Set 236T, drift 1.1 knot | Set $236^{\circ} \mathrm{T}$, drift 1.3 knots |
| 770 | At 0820, you change course to $301^{\circ}$ psc and reduce speed to 7.5 knots. At 0900, you take the following visual bearings: <br> Branford Reef Light $023^{\circ} \mathrm{psc}$ <br> New Haven Light $293^{\circ} \mathrm{psc}$ <br> Tweed Airport Aerobeacon $332^{\circ}$ psc <br> Your 0900 position is $\qquad$ . | $\begin{aligned} & \text { LAT } 41^{\circ} 11.9^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 50.6^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 11.9^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 49.5^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 12.1^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 48.6^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 12.5^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 44.3^{\prime} \mathrm{W} \end{aligned}$ |
| 771 | At 0900, the current is flooding in a direction of $350^{\circ} \mathrm{T}$ at 1.2 knots. If your engines are turning RPMs for 9 knots, which course should you steer per standard magnetic compass to make good a course of $297^{\circ}$ true? | $302^{\circ} \mathrm{psc}$ | $311^{\circ} \mathrm{psc}$ | $317^{\circ} \mathrm{psc}$ | $319^{\circ} \mathrm{psc}$ |
| 772 | Which chart would you use for more detailed information on New Haven Harbor? | 12370 | 12371 | 12372 | 12373 |
| 773 | What true course and speed did you make good between 0730 and 0900? | $273^{\circ} \mathrm{T}, 8.7$ knots | $277^{\circ} \mathrm{T}, 8.4$ knots | $279^{\circ} \mathrm{T}, 8.0$ knots | $284^{\circ} \mathrm{T}, 7.5$ knots |
| 774 | As you enter the New Haven Outer Channel, you sight the outer range markers in line directly ahead. Your heading at this time is $347^{\circ} \mathrm{psc}$. What is your compass deviation by observation? | 0.5 ${ }^{\circ}$ East | $3.0^{\circ}$ East | $3.5^{\circ} \mathrm{West}$ | $4.5^{\circ}$ East |
| 775 | Which course should you change to per standard magnetic compass as you pass SW Ledge Light to remain in the channel? | 007ºpsc | 014 ${ }^{\circ} \mathrm{psc}$ | 021 ${ }^{\circ} \mathrm{psc}$ | 026 ${ }^{\circ} \mathrm{psc}$ |


| 776 | The following questions are based on chart 12354TR, Lon 12 feet ( 3.7 meters). Your height of eye is 24 feet ( 7.3 me <br> DEVIATION TABLE | g Island Sound - Eas ters). Use $14^{\circ} \mathrm{W}$ varia | rn Part, and the supp ion where required. | rting publications. Your | vessel has a draft of |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 777 | Your position is LAT $40^{\circ} 59.0^{\prime} \mathrm{N}$, LONG $73^{\circ} 06.2^{\prime} \mathrm{W}$. What is the course per standard magnetic compass to New Haven Harbor Lighted Whistle Buoy "NH"? | $035^{\circ}$ | 046 ${ }^{\circ}$ | 049 ${ }^{\circ}$ | $052^{\circ}$ |
| 778 | You depart from the position in the previous question at 2114 and make good 12 knots on a course of $040^{\circ}$. At what time will you sight New Haven Light if the visibility is 11 miles? | The light is visible at 2114. | 2140 | 2152 | 2159 |
| 779 | At 2142, you take the following bearings:  <br>   <br> Stratford Point Light $331^{\circ} \mathrm{T}$ <br> Stratford Shoal Middle Ground Light $280^{\circ} \mathrm{T}$ <br> Old Field Point Light $223^{\circ} \mathrm{T}$ <br>   <br> What is your 2142 position?  | $\begin{aligned} & \text { LAT } 41^{\circ} 03.0^{\prime} \mathrm{N}, \text { LONG } \\ & 73^{\circ} 01.7^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 03.1^{\prime} \mathrm{N}, \text { LONG } \\ & 73^{\circ} 02.1^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 03.1^{\prime} \mathrm{N}, \text { LONG } \\ & 73^{\circ} 01.3^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 03.3^{\prime} \mathrm{N}, \text { LONG } \\ & 73^{\circ} 01.9^{\prime} \mathrm{W} \end{aligned}$ |
| 780 | What was the speed made good between 2114 and 2142? | 12.3 knots | 12.0 knots | 11.7 knots | 11.4 knots |
| 781 | At 2142, you change course to make good $030^{\circ} \mathrm{T}$ and increase speed to 14 knots. You rendezvous with another vessel and receive fresh supplies while off New Haven Harbor lighted whistle buoy " NH ". What is the light characteristic of this buoy? | - | -- | - - | . |


| 782 | At 0109 you get underway, and at 0112 you take the following set of bearings: <br> Branford Reef Light bearing $051^{\circ}$ true <br> Stratford Point Light bearing $258^{\circ}$ true <br> What is your 0112 position? | $\begin{aligned} & \text { LAT } 41^{\circ} 11.2^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 51.7^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 11.4^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 50.5^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 11.4^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 51.3^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 11.8^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 51.5^{\prime} \mathrm{W} \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 783 | At 0112, what is the approximate depth under the keel? | 38 feet (11.5 meters) | 47 feet (14.2 meters) | 51 feet (15.5 meters) | 57 feet (17.3 meters) |
| 784 | At 0112, you are on course $124^{\circ} \mathrm{T}$ and turning for 12.0 knots. What course will you make good if the current is $255^{\circ} \mathrm{T}$ at 1.2 knots? | $132^{\circ}$ | $129^{\circ}$ | $120^{\circ}$ | $118^{\circ}$ |
| 785 | Branford Reef is ___ | completely submerged at all stages of the tide | a hard sand shoal | surrounded by rocks awash at low water spring tides | a small, low, sandy islet surrounded by shoal water |
| 786 | At 0112, the radar range to Branford Reef Light is 2.9 miles. At 0125, the range is 3.6 miles. What is the position of your 0125 running fix if you are steering $124^{\circ} \mathrm{T}$ at 12 knots? | $\begin{aligned} & \text { LAT } 41^{\circ} 09.7^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 48.1^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 09.7^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 48.7^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 09.8^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 47.2^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 10.2^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 47.7^{\prime} \mathrm{W} \end{aligned}$ |
| 787 | At 0130, your position is LAT $41^{\circ} 09.3^{\prime} \mathrm{N}$, LONG $72^{\circ} 46.9^{\prime} \mathrm{W}$ when you change course to $086^{\circ} \mathrm{T}$. If you make good $086^{\circ} \mathrm{T}$, what is the closest point of approach to Twenty-Eight Foot Shoal Lighted Buoy? | 0.7 mile | 0.9 mile | 1.1 miles | 1.2 miles |
| 788 | At 0200, you take the following bearings: <br> What were the set and drift from 0130? | $260^{\circ}$ at 0.5 knot | $080^{\circ}$ at 1.0 knot | $260^{\circ}$ at 1.0 knot | There is no current. |
| 789 | What is the distance from your 0200 position to the point where Twenty-Eight Foot Shoal lighted buoy is abeam to starboard? | 6.6 miles | 6.9 miles | 7.1 miles | 7.3 miles |
| 790 | The shoreline along Rocky Point should give a good radar return because $\qquad$ | the lookout tower is marked with radar reflectors | of offshore exposed rocks | submerged reefs cause prominent breakers | the shore is bluff and rocky |
| 791 | You sight Bartlett Reef Light in line with New London Harbor Light bearing $043^{\circ} \mathrm{pgc}$. You are heading $088^{\circ} \mathrm{pgc}$ and $098.5^{\circ}$ per standard magnetic compass at the time of the observation. Which statement is TRUE? | The true heading at the observation was $090^{\circ}$. | The deviation is $1.5^{\circ} \mathrm{E}$ by observation. | The magnetic compass error is $9.5^{\circ} \mathrm{W}$. | The gyro error is $2^{\circ} \mathrm{E}$. |


| 792 | The following questions are based on chart 13205TR, Blo meters). Your height of eye is 16 feet ( 4.8 meters). The <br> DEVIATION TABLE | ck Island Sound, and yro error is $2^{\circ} \mathrm{E}$. Use | he supporting publicatio $15^{\circ} \mathrm{W}$ variation where | ns. Your vessel has a equired. | draft of 12 feet (3.7 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 793 | At 0520, you take the following observations: <br> Point Judith Light $032^{\circ} \mathrm{pgc}$ <br> Point Judith Harbor of Refuge- Main Breakwater Center Light $308^{\circ} \mathrm{pgc}$ <br> What is the position of your 0520 fix? | $\begin{aligned} & \text { LAT } 41^{\circ} 20.8^{\prime} \mathrm{N}, \text { Long } \\ & 71^{\circ} 30.3^{\prime} \mathrm{W} \end{aligned}$ | LAT $41^{\circ} 20.8^{\prime} \mathrm{N}$, Long 71²9.7'W | $\begin{aligned} & \text { LAT } 41^{\circ} 20.6^{\prime} \mathrm{N}, \text { Long } \\ & 71^{\circ} 30.0^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 20.5^{\prime} \mathrm{N}, \text { Long } \\ & 71^{\circ} 29.8^{\prime} \mathrm{W} \end{aligned}$ |
| 794 | Point Judith Harbor of Refuge__. | is used mostly by towing vessels | has a maximum depth of 14 feet at MHW | is easily accessible in heavy southerly seas | is entered through the East Gap or the West Gap |
| 795 | At 0520 you are on course $243^{\circ} \mathrm{pgc}$ at 12 knots. What is the course per standard magnetic compass? | $263^{\circ} \mathrm{psc}$ | 258 ${ }^{\circ} \mathrm{psc}$ | $233^{\circ} \mathrm{psc}$ | $227^{\circ} \mathrm{psc}$ |
| 796 | The coastline between Point Judith and Watch Hill is | steep with rocky bluffs | low and marshy | sandy and broken by rocky points | heavily forested |
| 797 | In clear weather, how far away will you sight Point Judith Light? (use charted range of 20 miles as nominal range) | 9.2 nm | 10.6 nm | 12.3 nm | 14.0 nm |
| 798 | At what time will you cross the 60 foot curve if you make good 12 knots? | 0528 | 0534 | 0541 | 0544 |
| 799 | The two wavy magenta lines running to Green Hill Point represent $\qquad$ | recommended approaches to Green Hill Point | the red sector of Point Judith Light | prohibited fishing areas | submarine cables |


| 800 | At 0600 you take the following bearings: <br> Point Judith Light bearing $063^{\circ} \mathrm{pgc}$ Block Island North Reef Light bearing $144^{\circ}$ pgc <br> What is your 0600 position? | $\begin{aligned} & \text { LAT } 41^{\circ} 18.1^{\prime} \mathrm{N}, \text { LONG } \\ & 71^{\circ} 38.3^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 18.3^{\prime} \mathrm{N}, \text { LONG } \\ & 71^{\circ} 38.7^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 18.4^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 38.1^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 18.5^{\prime} \mathrm{N}, \text { LONG } \\ & 71^{\circ} 38.9^{\prime} \mathrm{W} \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 801 | What was the current between 0520 and 0600? | $201^{\circ}$ at 1.0 knot | $201^{\circ}$ at 1.5 knot | $021^{\circ}$ at 1.0 knot | $021^{\circ}$ at 1.5 knots |
| 802 | From your 0600 position, what is the course per gyrocompass to leave Watch Hill Light abeam to starboard at 2.0 miles if a southerly wind is producing $3^{\circ}$ of leeway? | $252^{\circ} \mathrm{pgc}$ | $256^{\circ} \mathrm{pgc}$ | 258 ${ }^{\circ} \mathrm{pgc}$ | 262 ${ }^{\circ} \mathrm{pgc}$ |
| 803 | At 0645, Watch Hill Point (left tangent) bears $314.5^{\circ} \mathrm{T}$ at 2.75 miles. What was the speed made good between 0600 and 0645? | 8.1 knots | 9.8 knots | 10.7 knots | 11.4 knots |
| 804 | At 0705, you take the following bearings: <br> Watch Hill Light $030.5^{\circ} \mathrm{pgc}$ <br> Latimer Reef Light $329.0^{\circ}$ pgc <br> Race Rock Light $262.0^{\circ} \mathrm{pgc}$ <br> What was the true course made good between 0645 and 0705? | $252^{\circ} \mathrm{T}$ | $256^{\circ} \mathrm{T}$ | $263{ }^{\circ} \mathrm{T}$ | $266^{\circ} \mathrm{T}$ |
| 805 | At 0705, you change course to head for The Race. You wish to leave Race Rock Light bearing due north at 0.4 mile. If the current is $100^{\circ} \mathrm{T}$, at 2.8 knots, and you are turning for 12.0 knots, what course (pgc) should you steer? | $250^{\circ} \mathrm{pgc}$ | $255^{\circ} \mathrm{pgc}$ | $263{ }^{\circ} \mathrm{pgc}$ | $267^{\circ} \mathrm{pgc}$ |
| 806 | You are bound for New London. Where will you cross the demarcation line and be governed by the Inland Rules of the Road? | You are already governed by the Inland Rules. | In the Race | Above the Thames River Bridge | You will not be governed by the Inland Rules. |
| 807 | In order to check your compasses, you sight North Dumpling Island Light in line with Latimer Reef Light bearing $074^{\circ}$ pgc. The helmsman was steering $303^{\circ} \mathrm{pgc}$ and $315^{\circ}$ per standard magnetic compass at the time. Which of the following is TRUE? | The gyro error is still $2^{\circ} \mathrm{E}$. | The deviation based on the observation is $15^{\circ} \mathrm{W}$. | The magnetic compass error is $12^{\circ} \mathrm{W}$. | The true line of the range is $072^{\circ}$. |


| 808 | The following questions should be answered using chart 132 is 12 feet ( 3.6 meters) and your height of eye is 16 feet ( 4 Use a variation of $15^{\circ} \mathrm{W}$ for the entire plot. <br> DEVIATION TABLE | 3205TR, Block Island 8 meters). The gyro | Sound and approach ror is $2^{\circ} \mathrm{W}$."Per stand | , and the supporting rd magnetic compass | ublications. Your draft is abbreviated "psc". |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 809 | At 0520 you take the following observations: <br> Point Judith Light $036^{\circ} \mathrm{pgc}$ <br> Point Judith Harbor of Refuge Main Breakwater Center Light $312^{\circ} \mathrm{pgc}$ <br> What is the position of your 0520 fix? | $\begin{aligned} & \text { LAT } 41^{\circ} 20.8^{\prime} \mathrm{N}, \text { Long } \\ & 71^{\circ} 29.7^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 20.8^{\prime} \mathrm{N}, \text { Long } \\ & 71^{\circ} 30.0^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 20.6^{\prime} \mathrm{N}, \text { Long } \\ & 71^{\circ} 30.0^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 20.5^{\prime} \mathrm{N}, \text { Long } \\ & 71^{\circ} 29^{\circ} 8^{\prime} \mathrm{W} \end{aligned}$ |
| 810 | Point Judith Harbor of Refuge ___ | is used mostly by towing vessels | has a maximum depth of 14 feet (4.3 meters) at MHW | West Gap has a controlling depth of 24 feet | is entered through the East Gap or the West Gap |
| 811 | At 0520, you are on course $243^{\circ} \mathrm{pgc}$ at 12 knots. What is the course per standard magnetic compass? | $262^{\circ} \mathrm{psc}$ | $258{ }^{\circ} \mathrm{psc}$ | $233^{\circ} \mathrm{psc}$ | $227^{\circ} \mathrm{psc}$ |
| 812 | The coastline between Point Judith and Watch Hill is | marked by waterfalls from the highland ponds | low and marshy | sandy and broken by rocky points | heavily forested |
| 813 | In clear weather, you will lose sight of Point Judith Light at what distance? (use charted range of 20 miles as nominal range) | 14.0 nm | 12.6 nm | 10.3 nm | 9.2 nm |
| 814 | At what time will you cross the 60 foot curve if you make good 12 knots? | 0527 | 0534 | 0541 | 0544 |


| 815 | The two wavy magenta lines running to Green Hill Point represent $\qquad$ | recommended approaches to Green Hill Point | submarine cables | prohibited fishing areas | fish trap areas |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 816 | At 0600 you take the following bearings: <br> Point Judith Light bearing $064^{\circ}$ pgc Block Island North Reef Light bearing $142^{\circ}$ pgc <br> What is your 0600 position? | $\begin{aligned} & \text { LAT } 41^{\circ} 17.1^{\prime} \mathrm{N}, \text { LONG } \\ & 71^{\circ} 38.3^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 17.3^{\prime} \mathrm{N}, \text { LONG } \\ & 71^{\circ} 38.7^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 17.4^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 38.1^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 17.6^{\prime} \mathrm{N}, \text { LONG } \\ & 71^{\circ} 38.9^{\prime} \mathrm{W} \end{aligned}$ |
| 817 | What was the current between 0520 and 0600? | $178{ }^{\circ}$ at 0.8 knot | $178{ }^{\circ}$ at 1.2 knot | $358^{\circ}$ at 0.8 knot | $358^{\circ}$ at 1.2 knots |
| 818 | From your 0600 position, what is the course per gyrocompass to leave Watch Hill Light abeam to starboard at 2.0 miles if a southerly wind is producing $3^{\circ}$ of leeway? | $251{ }^{\circ} \mathrm{pgc}$ | $254^{\circ} \mathrm{pgc}$ | $257^{\circ} \mathrm{pgc}$ | $261{ }^{\circ} \mathrm{pgc}$ |
| 819 | At 0645, Watch Hill Point (left tangent) bears $316.5^{\circ} \mathrm{pgc}$ at 2.75 miles. What was the speed made good between 0600 and 0645? | 8.1 knots | 9.8 knots | 10.3 knots | 11.4 knots |
| 820 | At 0705, you take the following bearings:  <br> Watch Hill Light $034.5^{\circ} \mathrm{pgc}$ <br> Latimer Reef Light $338.0^{\circ} \mathrm{pgc}$ <br> Race Rock Light $268.0^{\circ} \mathrm{pgc}$ <br>   <br> What was the true course made good between 0645 and  <br> 0705?  | $253{ }^{\circ} \mathrm{T}$ | $256{ }^{\circ} \mathrm{T}$ | $263^{\circ} \mathrm{T}$ | $266^{\circ} \mathrm{T}$ |
| 821 | At 0705, you change course to head for The Race. You wish to leave Race Rock Light bearing due north at 0.4 mile. If the current is $110^{\circ} \mathrm{T}$, at 2.8 knots, and you are turning for 12.0 knots, what course (pgc) should you steer? | $252^{\circ} \mathrm{pgc}$ | $257^{\circ} \mathrm{pgc}$ | $265^{\circ} \mathrm{pgc}$ | $271{ }^{\circ} \mathrm{pgc}$ |
| 822 | You are bound for New London. Where will you cross the demarcation line and be governed by the Inland Rules of the Road? | You are already governed by the Inland Rules. | Above the Thames River Bridge | In the Race | You will not be governed by the Inland Rules. |
| 823 | In order to check your compasses, you sight North Dumpling Island Light in line with Latimer Reef Light bearing $077^{\circ}$ pgc. The helmsman was steering $307^{\circ} \mathrm{pgc}$ and $320^{\circ}$ per standard magnetic compass at the time. Which statement is TRUE? | The gyro error by observation is $2^{\circ} \mathrm{E}$. | The deviation based on the observation is $15^{\circ} \mathrm{W}$. | The magnetic compass error is $14^{\circ} \mathrm{W}$. | The true line of the range is $079^{\circ}$. |



| 831 | At 0125 , you change course to make good $280^{\circ} \mathrm{T}$. What is the course per standard magnetic compass? | $290^{\circ} \mathrm{psc}$ | $2^{292}{ }^{\circ} \mathrm{psc}$ | 294 ${ }^{\circ} \mathrm{psc}$ | 296ºpsc |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 832 | If the current is $050^{\circ}$ at 0.9 knot, and a northerly wind causes $3^{\circ}$ of leeway. What is the course to steer per gyro compass to make good $280^{\circ} \mathrm{T}$ if you are turning for 9 knots? | $284^{\circ} \mathrm{pgc}$ | $279^{\circ} \mathrm{pgc}$ | $276{ }^{\circ} \mathrm{pgc}$ | $273^{\circ} \mathrm{pgc}$ |
| 833 | At 0200, you take the following bearings: <br> Mattituck Inlet Light bearing $125^{\circ} \mathrm{pgc}$ Falkner Island Light bearing $355^{\circ} \mathrm{pgc}$ <br> What is the position of your 0200 fix? | $\begin{aligned} & \hline \text { LAT } 41^{\circ} 03.9^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 38.9^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 03.8^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 39.1^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 03.7^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 38.5^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 03.5^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 38.8^{\prime} \mathrm{W} \end{aligned}$ |
| 834 | From your 0200 position, you change course to $272^{\circ} \mathrm{pgc}$. How far north of Stratford Shoal Middle Ground Light does this track pass? | 2.1 miles | 1.6 miles | 1.3 miles | 1.0 miles |
| 835 | What is your ETA at a point where Stratford Shoal Middle Ground Light bears $180^{\circ} \mathrm{T}$ if you make good 9.0 knots? | 0409 | 0416 | 0425 | 0433 |
| 836 | You anticipate a maximum flood current north of Stratford Shoal. You will be set in which general direction? | Northerly | Easterly | Southerly | Westerly |
| 837 | Stratford Shoal Middle Ground Light is ___ . | 13 foot high | a fixed white light | shown from a white tower | equipped with a HORN |
| 838 | After you raise Stratford Shoal Middle Ground Light, how will the bearings change if you pass to the north of the light? | The bearings will change to the left. | The bearings will remain steady. | The bearings will change to the right. | Magnetic compass bearings will change to the left and gyro compass bearings will change to the right. |
| 839 | What is the approximate distance from a point three miles south of Stratford Point to Perth Amboy, NJ? | 53 miles | 62 miles | 73 miles | 136 miles |


| 840 | The following questions should be answered using chart 25 feet ( 7.6 meters). The gyro error is $3^{\circ} \mathrm{W}$. "Per standard <br> DEVIATION TABLE | 2221TR, Chesapeake magnetic compass" is | Bay Entrance, and the abbreviated "psc". Use | supporting publication a variation of $10^{\circ} \mathrm{W}$ for | s. The height of eye is the entire plot. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 841 | The National Weather Service provides 24-hour weather broadcasts to vessels transiting the Chesapeake Bay Bridge Tunnel. The broadcasts may be found on $\qquad$ | 202.35 MHz | 181.15 MHz | 162.55 MHz | 147.45 MHz |
| 842 | At 1752 , your position is LAT $37^{\circ} 04.3^{\prime} \mathrm{N}$, LONG $76^{\circ} 06.4^{\prime} \mathrm{W}$. On an ebb current you should expect to be set to the $\qquad$ | north northeast | south southeast | south southwest | north northwest |
| 843 | Your 1752 position is ___ | less than 0.2 mile to the west of York Spit Channel | less than 0.2 mile to the east of York Spit Channel | more than 0.2 mile to the west of York Spit Channel | more than 0.2 mile to the east of York Spit Channel |
| 844 | What is the average velocity of the maximum ebb current in the channel west of Middle Ground? | 0.8 knot | 1.0 knot | 1.3 knots | 1.6 knots |
| 845 | From your 1752 position, you steer $313^{\circ}$ pgc at 9 knots. At 1805, you obtain the following visual bearings: <br> Old Pt. Comfort Light - $238^{\circ} \mathrm{pgc}$. <br> Chesapeake Bay Tunnel North Light - $136^{\circ}$ pgc. <br> What are the latitude and longitude of your 1805 position? | $\begin{aligned} & \text { LAT } 37^{\circ} 05.9^{\prime} \mathrm{N}, \text { LONG } \\ & 76^{\circ} 08.0^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 37^{\circ} 06.0^{\prime} \mathrm{N}, \text { LONG } \\ & 76^{\circ} 08.4^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \hline \text { LAT } 37^{\circ} 05.0^{\prime} \mathrm{N}, \text { LONG } \\ & 76^{\circ} 08.7^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 37^{\circ} 06.1^{\prime} \mathrm{N}, \text { LONG } \\ & 76^{\circ} 08.1^{\prime} \mathrm{W} \end{aligned}$ |
| 846 | At 1810, a red buoy bears $010^{\circ}$ relative. This buoy marks $\qquad$ . | the side of York Spit Channel | the visibility limit of the red sector of Cape Henry Light | a submerged obstruction in York Spit Channel | the York River Entrance Channel |


| 847 | Based on dead reckoning, at approximately 1817 you would expect to $\qquad$ . | enter a traffic separation zone | depart a restricted area | cross a submerged pipeline | depart a regulated area |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 848 | At 1845, you obtain the following Radar Ranges: <br> Old Plantation Flats Light @ 7.45nm New Point Comfort Spit Light "2" @ 7.35nm Your latitude is $\qquad$ . | $37^{\circ} 11.4{ }^{\prime} \mathrm{N}$ | $37^{\circ} 11.2^{\prime} \mathrm{N}$ | $37^{\circ} 10.9^{\prime} \mathrm{N}$ | $37^{\circ} 10.7{ }^{\prime} \mathrm{N}$ |
| 849 | Your 1900 position is LAT $37^{\circ} 12.9^{\prime} \mathrm{N}$, LONG $76^{\circ} 13.5^{\prime} \mathrm{W}$. You change course to $323^{\circ} \mathrm{pgc}$. What is the course per standard magnetic compass? | $309^{\circ} \mathrm{psc}$ | $311^{\circ} \mathrm{psc}$ | $329{ }^{\circ} \mathrm{psc}$ | $331^{\circ} \mathrm{psc}$ |
| 850 | If the visibility is 5 miles, what is the luminous range of New Point Comfort Spit Light "4"? | 0.5 mile | 3.4 miles | 4.8 miles | 5.0 miles |
| 851 | The yellow buoys on either side of your vessel that lead to Mobjack Bay mark $\qquad$ | the limits of the dredged channel | fish trap areas | underwater cable areas | ferry routes |
| 852 | At 1925, you take a fix using the following radar ranges: <br> York Spit Light - 3.4 miles away; <br> New Point Comfort Spit Light "2" - 2.1 miles away; <br> York Spit Swash Channel Light "3" - 2.7 miles away. Your longitude is $\qquad$ | 76¹6.6'W | 76¹6.8'W | 76¹7.0'W | 76¹7.2'W |
| 853 | What was the speed made good from 1900 to 1925? | 8.5 knots | 8.7 knots | 8.8 knots | 9.1 knots |
| 854 | What is the height above water of New Point Comfort Spit Light "2"? | 6 feet (1.8 meters) | 15 feet (4.6 meters) | 18 feet (5.5 meters) | 24 feet (7.3 meters) |
| 855 | If you have 16.3 miles to reach your destination from your 2000 position and want to be there at 2230, what speed should you make good? | 5.7 knots | 6.1 knots | 6.5 knots | 6.9 knots |


| 856 | The following questions should be answered using chart vessel is 8.0 feet. The gyro error is $2^{\circ} \mathrm{W}$. You are heading abbreviated "psc". Use a variation of $10^{\circ} \mathrm{W}$ for the entire <br> DEVIATION TABLE | 2221TR,Chesapeake down the York River lot. | Bay Entrance, and th bound for Norfolk, VA | supporting publications Per standard magnetic | The draft of your compass" is |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 857 | At 1730 , your position is LAT $37^{\circ} 13.9^{\prime} \mathrm{N}$, LONG $76^{\circ} 26.4^{\prime} \mathrm{W}$. What is your distance off Tue Marshes Light? | 2.2 miles | 2.6 miles | 3.0 miles | 3.4 miles |
| 858 | What is the maximum allowable speed of vessels underway up river from Tue Marshes Light? | 8 knots | 10 knots | 12 knots | 14 knots |
| 859 | At 1750 , your position is LAT $37^{\circ} 14.5^{\prime} \mathrm{N}$, LONG $76^{\circ} 22.9^{\prime} \mathrm{W}$. What was the speed made good between 1730 and 1750 ? | 7.5 knots | 7.8 knots | 8.1 knots | 8.7 knots |
| 860 | At 1800, Tue Marshes Light bears $270^{\circ} \mathrm{pgc}$, and York Spit Swash Channel Light " $3^{3}$ bears $007^{\circ} \mathrm{pgc}$. Your position is | $\begin{aligned} & \text { LAT } 37^{\circ} 14.0^{\prime} \mathrm{N}, \text { LONG } \\ & 76^{\circ} 19.8^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 37^{\circ} 14.2^{\prime} \mathrm{N}, \text { LONG } \\ & 76^{\circ} 20.3^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 37^{\circ} 14.2^{\prime} \mathrm{N}, \text { LONG } \\ & 76^{\circ} 20.1^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 37^{\circ} 14.5^{\prime} \mathrm{N}, \text { LONG } \\ & 76^{\circ} 20.0^{\prime} \mathrm{W} \end{aligned}$ |
| 861 | The short-long dashed, magenta lines parallel to York River Entrance Channel mark $\qquad$ | fish trap areas | naval exercise areas | underwater cables | recommended track lines |
| 862 | You have just passed York River Entrance Channel Lighted Buoys " 13 " and " 14 ". The chart shows a light approximately 1.0 mile off your port beam with a light characteristic "FI 6 sec". What is the name of this light? | Mobjack Bay Entrance Light | York Spit Light | New Point Comfort Spit Light "4" | York River Entrance Channel Light "1" |


| 863 | At 1930, your vessel is between York River Entrance Channel Lighted Buoys "1YR" and "2". From this position, you change course to $142^{\circ} \mathrm{pgc}$ at an engine speed of 8.0 knots. At 2000, you take the following bearings: Chesapeake Channel Tunnel North Light $-131^{\circ} \mathrm{pgc}$ Thimble Shoal Light $-247^{\circ} \mathrm{pgc}$ What were the set and drift between 1930 and 2000? | $140^{\circ} \mathrm{T}$ at 0.2 knot | $140^{\circ} \mathrm{T}$ at 0.4 knot | $320^{\circ} \mathrm{T}$ at 0.2 knot | $320^{\circ} \mathrm{T}$ at 0.4 knot |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 864 | At 2013, you sight Thimble Shoal Light in line with Old Point Comfort Light bearing $258^{\circ} \mathrm{pgc}$. At the time of the bearing, the vessel was headed $142^{\circ} \mathrm{pgc}$ and $151^{\circ} \mathrm{psc}$. Based on this, you | know the gyro error is $2^{\circ} \mathrm{E}$ | should adjust the magnetic compass | verified that the variation is $10^{\circ} \mathrm{W}$ | have checked the deviation table for a magnetic heading of $150^{\circ}$ |
| 865 | At 2015, your vessel is at the Chesapeake Bay Bridge and Tunnel midway between buoys "13" and "14". If the height of tide is -1 foot ( -.3 meter). What is the approximate depth under the keel? | 51 feet (15.5 meters) | 45 feet (13.6 meters) | 40 feet (12.1 meters) | 35 feet (10.6 meters) |
| 866 | If you steer $143^{\circ} \mathrm{pgc}$ at an engine speed of 8.0 knots from your 2015 position, at what time would you reach a point midway between buoys "11" and "12" (ignore set and drift)? | 2020 | 2029 | 2032 | 2039 |
| 867 | Which statement concerning Thimble Shoal Channel is TRUE? | The project width of the main channel is 1000 feet (304.8 meters) | The channel is 14.5 miles in length. | A tow drawing 30 feet (9.1 meters) is excluded from the main channel. | Thimble Shoal Channel is in international waters. |
| 868 | At 2118, you obtain the following information: Cape Henry Light $151^{\circ} \mathrm{pgc}$; Cape Charles Light $033^{\circ} \mathrm{pgc}$; Thimble Shoal Light $291^{\circ}$ pgc <br> What is your 2118 position? | $\begin{aligned} & \text { LAT } 36^{\circ} 57.4^{\prime} \mathrm{N}, \text { LONG } \\ & 76^{\circ} 01.9^{\prime} \mathrm{W} \end{aligned}$ | LAT $36^{\circ} 57.5^{\prime} \mathrm{N}$, LONG 7601.4'W | $\begin{aligned} & \text { LAT } 36^{\circ} 57.6^{\prime} \mathrm{N}, \text { LONG } \\ & 76^{\circ} 01.8^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 36^{\circ} 57.6^{\prime} \mathrm{N}, \text { LONG } \\ & 76^{\circ} 02.2^{\prime} \mathrm{W} \end{aligned}$ |
| 869 | From your 2118 position, you proceed to Norfolk, VA, a distance of approximately 26.0 miles. To arrive at Norfolk by 0200 the next day, what is the minimum speed to make good from your 2118 position to arrive at this time? | 5.0 knots | 5.3 knots | 5.8 knots | 5.5 knots |
| 870 | From your 2118 position, you steer a course of $288^{\circ} \mathrm{T}$ at an engine speed of 7.0 knots. Visibility is 2 miles. Height of eye is 12 feet ( 3.7 meters). At what time can you expect Old Point Comfort Light to become visible again? | The light is visible at 2118 | 2139 | 2201 | 2232 |
| 871 | When exiting Thimble Shoal Channel bound for Norfolk, the track line based on the lights of the Norfolk Entrance Reach Range is $\qquad$ . | ${ }^{220}{ }^{\circ} \mathrm{T}$ | $222^{\circ} \mathrm{T}$ | $225^{\circ} \mathrm{T}$ | $228^{\circ} \mathrm{T}$ |


| 872 | The following questions should be answered using chart 1 anchored at LAT $37^{\circ} 22.4^{\prime} \mathrm{N}$, LONG $75^{\circ} 39.9^{\prime} \mathrm{W}$. You get meters). The gyro error is $2^{\circ} \mathrm{W}$. "Per standard magnetic co <br> DEVIATION TABLE | 2221TR, Chesapeake underway at 0240 enro mpass" is abbreviated | Bay Entrance, and the ute to Yorktown, VA. "psc". Use a variation | supporting publication The draft of your vesse of $10^{\circ} \mathrm{W}$ for the entire | s. On 31 July, you are is 9.0 feet ( 2.75 plot. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 873 | What is the course per gyro compass from the anchorage to point A located 0.5 mile east of Cape Charles Lighted Bell Buoy 14? | $180^{\circ}$ | $184^{\circ}$ | $198^{\circ}$ | $199.5^{\circ}$ |
| 874 | If your engines turn for 6.5 knots, and you encounter a 0.5 knot southerly current after weighing anchor. What is your ETA at point A? | 0511 | 0501 | 0450 | 0440 |
| 875 | What is the course to steer per standard magnetic compass from the anchorage to point A, if easterly winds are causing $3^{\circ}$ of leeway? | $187^{\circ}$ | $191^{\circ}$ | $194^{\circ}$ | $197^{\circ}$ |
| 876 | You are on track from the anchorage to point A. At 0250, Great Machipongo Inlet Light " 5 " ( $37^{\circ} 21.8^{\prime} \mathrm{N}, 75^{\circ} 43.7^{\prime} \mathrm{W}$ ) bears $279^{\circ} \mathrm{pgc}$. At 0320 , the light bears $320^{\circ} \mathrm{pgc}$. What is the position of your 0320 running fix if you are making good 6.5 knots? | LAT $37^{\circ} 18.10^{\prime} \mathrm{N}$, LONG $75^{\circ} 39.55^{\prime} \mathrm{W}$ | $\begin{aligned} & \text { LAT } 37^{\circ} 18.10^{\prime} \mathrm{N}, \text { LONG } \\ & 75^{\circ} 39.30^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 37^{\circ} 18.00^{\prime} \mathrm{N}, \text { LONG } \\ & 75^{\circ} 39.75^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 37^{\circ} 17.9^{\prime} \mathrm{N}, \text { LONG } \\ & 75^{\circ} 39.95^{\prime} \mathrm{W} \end{aligned}$ |
| 877 | What is the approximate depth of water under your keel at 0320? | 52 feet (15.8 meters) | 48 feet (14.6 meters) | 44 feet (13.4 meters) | 35 feet (10.6 meters) |


| 878 | At 0400 you take the following bearings: <br> Sand Shoal Inlet South Light bearing $299^{\circ}$ pgc Cape Charles Light bearing $242^{\circ}$ pgc <br> What is your 0400 position? | $\begin{aligned} & \text { LAT } 37^{\circ} 14.2^{\prime} \mathrm{N}, \text { LONG } \\ & 75^{\circ} 39.2^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 37^{\circ} 14.4^{\prime} \mathrm{N}, \text { LONG } \\ & 75^{\circ} 39.3^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 37^{\circ} 14.4^{\prime} \mathrm{N}, \text { LONG } \\ & 75^{\circ} 39.0^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 37^{\circ} 14.6^{\prime} \mathrm{N}, \text { LONG } \\ & 75^{\circ} 39.2^{\prime} \mathrm{W} \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 879 | What was the speed made good from 0240 to 0400? | 5.2 knots | 5.6 knots | 6.0 knots | 6.4 knots |
| 880 | If you increase speed to 8 knots, and the current is $240^{\circ}$ at 0.7 knot. What course should you steer from your 0400 position to arrive at point A? | $178{ }^{\circ} \mathrm{T}$ | $180^{\circ} \mathrm{T}$ | $183^{\circ} \mathrm{T}$ | $186^{\circ} \mathrm{T}$ |
| 881 | Which statement about your 0400 position is true? | You are governed by the Inland Rules of the Road. | Anchoring, trawling and fishing are prohibited. | The ocean floor is composed of shingle. | You are within the Territorial Sea and the contiguous zone. |
| 882 | At 0600, you are on course $241^{\circ} \mathrm{psc}$ at 6.5 knots. Chesapeake Light bears $153^{\circ}$ per standard magnetic compass, and Cape Henry Light bears $261^{\circ}$ per standard magnetic compass. What is the position of your 0600 fix? | $\begin{aligned} & \text { LAT } 36^{\circ} 59.0^{\prime} \mathrm{N}, \text { LONG } \\ & 75^{\circ} 47.4^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 36^{\circ} 59.3^{\prime} \mathrm{N}, \text { LONG } \\ & 75^{\circ} 47.7^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 36^{\circ} 59.5^{\prime} \mathrm{N}, \text { LONG } \\ & 75^{\circ} 47.8^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 36^{\circ} 59.3^{\prime} \mathrm{N}, \text { LONG } \\ & 75^{\circ} 48.0^{\prime} \mathrm{W} \end{aligned}$ |
| 883 | The abandoned lighthouse at Cape Henry is a(n) ___ . | octagonal, black and white tower | radio beacon station | emergency back up to Cape Henry Light | gray, pyramidal tower |
| 884 | When Cape Henry Light is abeam, what is the approximate distance to Yorktown, VA? | 34 miles | 42 miles | 55 miles | 58 miles |
| 885 | As you pass between trestle "B" and trestle "C" of the Chesapeake Bay Bridge - Tunnel, you sight along the trestle " C " when it is in line. The gyro bearing is $048^{\circ}$. What is the gyro error by observation? | $4^{\circ} \mathrm{E}$ | $2^{\circ} \mathrm{E}$ | $0^{\circ}$ | $2^{\circ} \mathrm{W}$ |
| 886 | On either side of York River Entrance Channel, there are areas bounded by short - long magenta lines and marked by yellow buoys. These areas are $\qquad$ | fish trap areas | designated anchorages | spoil areas | naval exercise areas |
| 887 | The wind is northerly and will cause $2^{\circ}$ leeway. The current is $018^{\circ}$ at 0.5 knot. If your engines are turning for 8.0 knots. What should you steer to remain in York River Entrance Channel? | $304{ }^{\circ} \mathrm{T}$ | $306^{\circ} \mathrm{T}$ | $309^{\circ} \mathrm{T}$ | $314^{\circ} \mathrm{T}$ |


| 888 | The following questions should be answered using chart anchored at LAT $37^{\circ} 22.4^{\prime}$ N, LONG $75^{\circ} 39.9^{\prime}$ W. You ge meters). The gyro error is $2^{\circ} \mathrm{W}$. "Per standard magnetic <br> DEVIATION TABLE | 2221TR, Chesapeake underway at 0240 enro mpass" is abbreviated | Bay Entrance, and th ute to Yorktown, VA. "psc". Use a variatio | supporting publicatio The draft of your vess of $10^{\circ} \mathrm{W}$ for the entire | s. On 31 July, you are is 9.0 feet ( 2.75 <br> plot. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 889 | What is the course per standard magnetic compass from the anchorage to point " A " located 0.5 mile east of Cape Charles Lighted Bell Buoy 14? | $185^{\circ}$ | $188^{\circ}$ | $191^{\circ}$ | $194^{\circ}$ |
| 890 | The coast between Great Machipongo Inlet and Cape Charles is $\qquad$ | composed of high rocky bluffs and wooded uplands | marked by prominent isolated barren hills | broken by the mouths of several major rivers | low with sandy beaches bordered by marshes |
| 891 | What is the distance from the anchorage to point "A"? | 13.9 miles | 15.1 miles | 15.9 miles | 17.0 miles |
| 892 | If your engines are turning for 6.5 knots and the estimated current is north at 0.5 knot. What is the ETA at point "A"? | 0511 | 0501 | 0450 | 0440 |
| 893 | What is the course to steer per gyro compass from the anchorage to point " A " if westerly winds are causing $3^{\circ}$ of leeway? | $178^{\circ} \mathrm{pgc}$ | $182^{\circ} \mathrm{pgc}$ | $184^{\circ} \mathrm{pgc}$ | $187^{\circ} \mathrm{pgc}$ |
| 894 | At 0400, you take the following bearings: <br> Sand Shoal Inlet South Light bearing $305^{\circ}$ pgc Cape Charles Light bearing $241^{\circ} \mathrm{pgc}$ <br> What was the course made good since 0240 ? | $181^{\circ} \mathrm{T}$ | $184^{\circ} \mathrm{T}$ | $189^{\circ} \mathrm{T}$ | $192^{\circ} \mathrm{T}$ |


| 895 | The visibility is about 5 miles. Which statement about Cape Charles Light is TRUE? | The light has been visible from the time you departed the anchorage. | You should see Cape Charles Light at about 0400. | The light will become visible when you enter the inbound leg of the traffic separation scheme. | The light will not be visible until you are within 5 miles of the light. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 896 | At 0405, you increase speed and at 0500 your position is LAT $37^{\circ} 06.0^{\prime} \mathrm{N}$, LONG $75^{\circ} 41.1^{\prime} \mathrm{W}$. What is the approximate depth of water? | 46 feet (13.9 meters) | 54 feet (16.4 meters) | 62 feet (18.8 meters) | 66 feet (20.0 meters) |
| 897 | If you proceed from your 0500 position to Chesapeake Bay via the inbound traffic lane. What is the distance to Yorktown, VA? | 34.0 miles | 42.6 miles | 51.7 miles | 62.1 miles |
| 898 | From your 0500 position, you change course to $221^{\circ} \mathrm{T}$ and order turns for 9.8 knots. At 0600 Chesapeake Light bears $143^{\circ} \mathrm{pgc}$ at a radar range of 6.5 miles. Cape Henry Light bears $252^{\circ} \mathrm{pgc}$. What is the position of your 0600 fix? | $\begin{aligned} & \text { LAT } 36^{\circ} 59.1^{\prime} \mathrm{N}, \text { LONG } \\ & 75^{\circ} 48.1^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 36^{\circ} 59.1^{\prime} \mathrm{N}, \text { LONG } \\ & 75^{\circ} 47.6^{\prime} \mathrm{W} \end{aligned}$ | LAT $36^{\circ} 59.2^{\prime} \mathrm{N}$, LONG $75^{\circ} 47.8^{\prime} \mathrm{W}$ | $\begin{aligned} & \text { LAT } 36^{\circ} 58.9^{\prime} \mathrm{N}, \text { LONG } \\ & 75^{\circ} 48.5^{\prime} \mathrm{W} \end{aligned}$ |
| 899 | From your 0600 fix, you change course to $250^{\circ} \mathrm{T}$. At 0605, Cape Henry Light bears $250^{\circ} \mathrm{T}$. At 0615, it bears $251^{\circ} \mathrm{T}$. At 0625, it bears $252^{\circ}$. Based on this you know you are $\qquad$ . | being set to the south | being set to the north | meeting a current from dead ahead | running with a current from dead astern |
| 900 | Weather broadcasts for the Norfolk area are broadcast on what frequency? | 162.25 MHz | 162.30 MHz | 162.55 MHz | 162.65 MHz |
| 901 | Why should mariners use extreme care when navigating within the precautionary area centered on Chesapeake Bay Entrance Junction Lighted Gong Buoy CBJ? | There are numerous underwater obstructions that are a hazard to vessels with drafts exceeding 2 meters (6.5 feet). | Fishing vessels of limited maneuverability routinely operate in this area when hunting oyster and crabs. | Vessels may approach from different directions from the inbound traffic lanes and from Chesapeake and Thimble Shoal Channel. | Large naval vessels having the right of way often enter the area when bound to or from the Norfolk Naval Base. |
| 902 | As you pass between Trestle B and Trestle C of the Chesapeake Bay Bridge - Tunnel, you sight along Trestle C when it is in line. The gyro bearing is $051^{\circ}$. What is the gyro error by observation? | $4^{\circ} \mathrm{E}$ | $2^{\circ} \mathrm{E}$ | $0^{\circ}$ | $2^{\circ} \mathrm{W}$ |
| 903 | The wind is westerly and will cause $2^{\circ}$ of leeway. The current is $180^{\circ}$ at 0.5 knot. If your engines are turning for 8.0 knots, what should you steer to remain in York River Entrance Channel? | $304{ }^{\circ} \mathrm{T}$ | $307^{\circ} \mathrm{T}$ | $311^{\circ} \mathrm{T}$ | $314^{\circ} \mathrm{T}$ |


| 904 | The following questions should be answered using chart anchored at LAT $37^{\circ} 22.4^{\prime} \mathrm{N}$, LONG $75^{\circ} 39.9^{\prime}$ W. You get meters). The gyro error is $2^{\circ} \mathrm{W}$. "Per standard magnetic c <br> DEVIATION TABLE | 2221TR, Chesapeake underway at 0240 enro mpass" is abbreviated | Bay Entrance, and the ute to Yorktown, VA. Th "psc". Use a variation | supporting publication The draft of your vesse of $10^{\circ} \mathrm{W}$ for the entire | s. On 31 July, you are is 9.0 feet ( 2.75 plot. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 905 | What is the course per standard magnetic compass from the anchorage to point A located 0.5 mile east of Cape Charles Lighted Bell Buoy 14? | $194^{\circ} \mathrm{psc}$ | $190^{\circ} \mathrm{psc}$ | $187^{\circ} \mathrm{psc}$ | $180^{\circ} \mathrm{psc}$ |
| 906 | The coast between Great Machipongo Inlet and Cape Charles is $\qquad$ . | broken by the mouths of several major rivers | low, with sandy beaches bordered by marsh and woodlands | marked by prominent, isolated, barren hills | composed of high, rocky bluffs and wooded uplands |
| 907 | If your engines turn for 6.5 knots, and you encounter a 0.5 knot southerly current, what is your ETA at point A? | 0400 | 0450 | 0501 | 0511 |
| 908 | What is the course to steer per gyro compass from the anchorage to point "A" if easterly winds are causing $3^{\circ}$ of leeway? | $178^{\circ} \mathrm{pgc}$ | $181^{\circ} \mathrm{pgc}$ | $185{ }^{\circ} \mathrm{pgc}$ | $189^{\circ} \mathrm{pgc}$ |
| 909 | At 0250, Great Machipongo Inlet Light " $5^{\prime \prime}$ ( $37^{\circ} 21.8^{\prime} \mathrm{N}$, $75^{\circ} 43.7^{\prime} \mathrm{W}$ ) bears $279^{\circ} \mathrm{pgc}$. At 0320, the light bears $320^{\circ} \mathrm{pgc}$. If you are making good 6.5 knots, what is the position of your 0320 running fix? | $\begin{aligned} & \text { LAT } 37^{\circ} 17.5^{\prime} \mathrm{N}, \text { LONG } \\ & 75^{\circ} 39.95^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 37^{\circ} 18.00^{\prime} \mathrm{N}, \text { LONG } \\ & 75^{\circ} 39.75^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 37^{\circ} 18.10^{\prime} \mathrm{N}, \text { LONG } \\ & 75^{\circ} 39.30^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 37^{\circ} 18.10^{\prime} \mathrm{N}, \text { LONG } \\ & 75^{\circ} 39.55^{\prime} \mathrm{W} \end{aligned}$ |


| 910 | At 0400, you obtain the following information: <br> Sand Shoal Inlet South Light bearing $303^{\circ}$ true @ 7.1nm <br> What is your 0400 position? | $\begin{aligned} & \text { LAT } 37^{\circ} 14.2^{\prime} \mathrm{N}, \text { LONG } \\ & 75^{\circ} 40.7^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 37^{\circ} 14.1^{\prime} \mathrm{N}, \text { LONG } \\ & 75^{\circ} 41.3^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 37^{\circ} 14.1^{\prime} \mathrm{N}, \text { LONG } \\ & 77^{\circ} 40.5^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 37^{\circ} 14.0^{\prime} \mathrm{N}, \text { LONG } \\ & 75^{\circ} 40.7^{\prime} \mathrm{W} \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 911 | The visibility is about 5 miles. Which statement about Cape Charles Light is TRUE? | The light has been visible since you departed the anchorage. | You will not see the light until you are within 5 miles of the light. | The light will become visible about 0400. | The light will not be visible until you enter the inbound leg of the traffic separation scheme. |
| 912 | Which statement about your 0400 position is TRUE? | You are within the territorial sea and contiguous zone. | You are governed by the Inland Rules of the Road. | The ocean floor is composed of shale. | Anchoring, trawling and fishing are prohibited. |
| 913 | At 0405, you increase speed. At 0500, your position is LAT $37^{\circ} 06.0^{\prime} \mathrm{N}$, LONG $75^{\circ} 41.1^{\prime} \mathrm{W}$. What is the approximate depth of the water under the keel? | 66 feet (20.0 meters) | 62 feet (18.8 meters) | 54 feet (16.4 meters) | 46 feet (13.9 meters) |
| 914 | At 0600, you are entering the inbound leg of the traffic separation scheme at position LAT $36^{\circ} 59.2^{\prime} \mathrm{N}$, LONG $75^{\circ} 47.6^{\prime} \mathrm{W}$. Course is $250^{\circ} \mathrm{T}$. At 0605, Cape Henry Light bears $249^{\circ} \mathrm{T}$. At 0610, it bears $248^{\circ} \mathrm{T}$. At 0625 , it bears $247^{\circ} \mathrm{T}$. Based on this, you know you are $\qquad$ . | meeting a current from dead ahead | running with a current from dead ahead | being set to the north | being set to the south |
| 915 | The abandoned lighthouse at Cape Henry is a(n) ___ . | gray, pyramidal tower | mound of broken rubble | octagonal, black and white tower | black, skeleton structure |
| 916 | Weather broadcasts for the Norfolk area are broadcast on which frequency? | 162.30 MHz | 162.35 MHz | 162.50 MHz | 162.55 MHz |
| 917 | When Cape Henry Light is abeam, what is the approximate distance to Yorktown? | 58 miles | 55 miles | 42 miles | 34 miles |
| 918 | As you pass between trestle "B" and trestle "C" of the Chesapeake Bay Bridge - Tunnel, you sight along the trestle "C" when it is in line. The trestle bears $057^{\circ}$ per standard magnetic compass while the vessel is heading $320^{\circ} \mathrm{T}$. From this you know the $\qquad$ | vessel should be swung to check the deviation table | compass error is $12^{\circ} \mathrm{W}$ | deviation table is correct for that bearing | deviation is $10^{\circ} \mathrm{W}$ |
| 919 | The wind is easterly and will cause $2^{\circ}$ of leeway. The current is $180^{\circ}$ at 0.5 knot. If your engines are turning for 8.0 knots, what should you steer to remain in York River Entrance Channel? | $304^{\circ} \mathrm{T}$ | $307^{\circ} \mathrm{T}$ | $310^{\circ} \mathrm{T}$ | $315^{\circ} \mathrm{T}$ |


| 920 | The following questions are based on chart 12221TR, Che meters), and your height of eye is 24 feet ( 7.3 meters). Us <br> DEVIATION TABLE | esapeake Bay Entrance e variation $10^{\circ} \mathrm{W}$ whe | , and the supporting necessary. The gyro | ublications. Your vesse error is $2^{\circ} \mathrm{W}$. | draws 11 feet (3.3 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 921 | At 0410, you take the following bearings: New Point Comfort Spit Light " 2 " $244^{\circ}$ pgc Wolf Trap Light $315^{\circ} \mathrm{pgc}$ What is your 0410 position? | $\begin{aligned} & \text { LAT } 37^{\circ} 21.2^{\prime} \mathrm{N}, \text { LONG } \\ & 76^{\circ} 08.3^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 37^{\circ} 21.1^{\prime} \mathrm{N}, \text { LONG } \\ & 76^{\circ} 08.8^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 37^{\circ} 21.1^{\prime} \mathrm{N}, \text { LONG } \\ & 76^{\circ} 07.9^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 37^{\circ} 21.0^{\prime} \mathrm{N}, \text { LONG } \\ & 76^{\circ} 08.1^{\prime} \mathrm{W} \end{aligned}$ |
| 922 | If the visibility is 10 miles and you are in the red sector, at what distance off should you sight Cape Henry Light? | 15 miles | 12 miles | 10 miles | 8 miles |
| 923 | From your 0410 fix, what is the course per standard magnetic compass to enter York Spit Channel with buoy "29" close abeam to starboard? | $172^{\circ} \mathrm{psc}$ | $176^{\circ} \mathrm{psc}$ | $198^{\circ} \mathrm{psc}$ | $202^{\circ} \mathrm{psc}$ |
| 924 | If you are making 8.3 knots over the ground, what is your ETA at the turning point in York Spit Channel at buoy "29"? | 0521 | 0509 | 0459 | 0448 |
| 925 | You are entering the channel at buoy 29 and turning for 9 knots. An easterly wind is causing $3^{\circ}$ of leeway and the current is $320^{\circ} \mathrm{T}$ at 1.2 knots. What true course should you steer to remain in the middle leg of York Spit Channel? | $162^{\circ} \mathrm{T}$ | $165^{\circ} \mathrm{T}$ | $168^{\circ} \mathrm{T}$ | $171^{\circ} \mathrm{T}$ |
| 926 | Which publication contains specific information on the characteristics of Chesapeake Bay entrance? | Sailing Directions | Coast Pilot | Chesapeake Bay <br> Harbor-master's Manual | Navigator's Manual Chesapeake Bay |


| 927 | The Coast Guard announces that Chesapeake Channel is closed indefinitely due to a collision in the channel between Trestle "B" and "C" of the Chesapeake Bay Bridge and Tunnel. You exit York Spit Channel, leaving buoy "22" close abeam to port at 0.1 mile, and alter course to leave Horseshoe Crossing Lighted Bell Buoy "HC" abeam to port at 0.2 mile. What is the course per gyrocompass? | $185{ }^{\circ} \mathrm{pgc}$ | $188^{\circ} \mathrm{pgc}$ | $191^{\circ} \mathrm{pgc}$ | $194^{\circ} \mathrm{pgc}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 928 | After you enter Thimble Shoal Channel, you will alter course to pass between Trestle "A" and "B". Based upon your present position, passing buoy "12" to port, what is TRUE? | You are required to proceed outbound in the North Auxiliary Channel to avoid ferry traffic | You may proceed outbound in Thimble Shoal Channel | You should cross the main channel and proceed outbound in the South Auxiliary Channel | Water depth is 38 feet. |
| 929 | As you pass through the Chesapeake Bay Bridge and Tunnel, you sight Trestle " B " in line bearing $018^{\circ} \mathrm{pgc}$. What is the gyro error by observation? | $2^{\circ} \mathrm{E}$ | $0^{\circ}$ | $2^{\circ} \mathrm{W}$ | $4^{\circ} \mathrm{W}$ |
| 930 | You sighted Trestle "B" in line at 0706 and are steering $108^{\circ}$ T. At 0731, Cape Henry Light bears $136^{\circ}$ T; Cape Charles Light bears $032.5^{\circ} \mathrm{T}$; and Thimble Shoal Tunnel South Light bears $282^{\circ} \mathrm{T}$. What was the speed made good between 0706 and 0731? | 8.3 knots | 8.8 knots | 9.2 knots | 9.4 knots |
| 931 | At 0731, what is the approximate depth of water? | 31 feet (9.4 meters) | 41 feet (12.5 meters) | 52 feet (15.7 meters) | 58 feet (17.6 meters) |
| 932 | What is the coastwise distance from your 0731 fix to Wilmington, DE (LAT $39^{\circ} 43.2^{\prime} \mathrm{N}$, LONG $75^{\circ} 31.5^{\prime} \mathrm{W}$ )? | 339 miles | 309 miles | 245 miles | 221 miles |
| 933 | You will enter waters governed by the International Rules when $\qquad$ . | you cross the territorial sea boundary line | enter the pilotage area | you cross the boundary of the contiguous zone | Cape Henry Light bears $202^{\circ} \mathrm{T}$ |
| 934 | At 0812 you obtain the following information: <br> Chesapeake Light bearing $091^{\circ}$ true @ a range of 10.5 nm <br> What is your 0812 position? | $\begin{aligned} & \text { LAT } 36^{\circ} 53.7^{\prime} \mathrm{N}, \text { LONG } \\ & 75^{\circ} 56.0^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 36^{\circ} 53.8^{\prime} \mathrm{N}, \text { LONG } \\ & 75^{\circ} 56.1^{\prime} \mathrm{W} \end{aligned}$ | LAT $36^{\circ} 54.4^{\prime} \mathrm{N}$, LONG $75^{\circ} 55.9^{\prime} \mathrm{W}$ | LAT $36^{\circ} 54.6^{\prime} \mathrm{N}$, LONG $75^{\circ} 55.8^{\prime} \mathrm{W}$ |
| 935 | At 0812, you are on course $132^{\circ} \mathrm{T}$. The standard magnetic compass reads $135^{\circ}$. What should you conclude? | The deviation table is correct for that heading. | Your compass may be influenced by a local magnetic disturbance. | You should adjust the magnetic compass. | The deviation is increasing as you go south. |


| 936 | The following questions are based on chart 13205TR, Block meters). Your height of eye is 32 ( 9.7 meters). The gyro er <br> DEVIATION TABLE | ck Island Sound, and t rror is $2^{\circ} \mathrm{W}$. Use $15^{\circ} \mathrm{W}$ | e supporting publicati variation where require | ns. Your vessel has a d. | draft of 11 feet (3.4 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 937 | At 0227, you take the following radar ranges and bearings: Bartlett Reef Light $359^{\circ} \mathrm{T}$ at 2.4 miles, Race Rock Light $083^{\circ} \mathrm{T}$ at 4.1 miles. What is your 0227 position? | $\begin{aligned} & \text { LAT } 41^{\circ} 14.5^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 08.0^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 14.1^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 08.2^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 14.0^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 08.5^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 14.3^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 08.5^{\prime} \mathrm{W} \end{aligned}$ |
| 938 | At 0227, you are on course $087^{\circ} \mathrm{T}$ at 10 knots. What course per standard magnetic compass should you steer to make good your true course? | $109^{\circ} \mathrm{psc}$ | $105^{\circ} \mathrm{psc}$ | $102^{\circ} \mathrm{psc}$ | 099 ${ }^{\circ} \mathrm{psc}$ |
| 939 | You estimate that you are making 9.3 knots over the ground. At what time will you enter waters governed by the COLREGS? | 0258 | 0255 | 0251 | 0247 |
| 940 | At 0337, fog closes in and you anchor under the following radar ranges and bearing: <br> South tip of Watch Hill Point 3.0 miles <br> East point of Fishers Island 1.4 miles <br> Latimer Reef Light $331^{\circ} \mathrm{T}$ <br> What is the approximate depth of water at your anchorage? | 135 feet (40.9 meters) | 120 feet (36.4 meters) | 100 feet (30.3 meters) | 83 feet (25.2 meters) |


| 941 | By 1015, visibility has increased to 5.0 miles and you can see Fishers Island. Fishers Island has $\qquad$ | sparsely wooded hills and is fringed with shoals to the south | sheer cliffs rising from the sea to a high, flat plateau | barren, rocky hills with prominent sandy beaches | low and sandy beaches with salt ponds and marsh grass |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 942 | You get underway at 1030. The wind is out of the SSE and you estimate $3^{\circ}$ leeway. What course should you steer per gyrocompass to make good a desired course of $075^{\circ} \mathrm{T}$ ? | 080opgc | 078 ${ }^{\circ} \mathrm{pgc}$ | 076 ${ }^{\circ} \mathrm{pgc}$ | 074º pgc |
| 943 | Shortly after getting underway, you sight Stonington Outer Breakwater Light in line with Stonington Inner Breakwater Light bearing $000^{\circ}$ per gyrocompass. Which statement is TRUE? | The deviation is $2^{\circ} \mathrm{W}$ | The variation is $2^{\circ} \mathrm{E}$ | The compass error is $16^{\circ} \mathrm{W}$ | The gyro error is $2.5^{\circ} \mathrm{W}$ |
| 944 | At 1104, Watch Hill Point Light is in line with Stonington Outer Breakwater Light, the range to the south tip of Watch Hill Point is 2.6 miles and the range to the beach is 1.9 miles. You are steering to make good $075^{\circ} \mathrm{T}$, speed 10.0 knots. At 1110, you change course to head for a position of LAT $41^{\circ} 05.0^{\prime} \mathrm{N}$, LONG $71^{\circ} 50.0^{\prime} \mathrm{W}$. What is the true course? | $193^{\circ}$ | $190^{\circ}$ | $187^{\circ}$ | $185^{\circ}$ |
| 945 | At 1110, you increase speed to 12 knots. What is your ETA at the new position? | 1220 | 1215 | 1208 | 1157 |
| 946 | Upon arrival at your new position you would expect Montauk Point Light to be approximately $\qquad$ mile(s) from your position. | 4.5 | 2.4 | 1.3 | 0.9 |
| 947 | At 1345, you depart from a position 1 mile due east of Montauk Point Light and set course for Block Island Southeast Light at 9 knots. At 1430, your position is: <br> Latitude $41^{\circ} 06.3^{\prime}$ North Longitude $071^{\circ} 41.9^{\prime}$ West <br> What was the current encountered since $1345 ?$ | Set 015 ${ }^{\circ}$, drift 0.5 knot | Set 195 ${ }^{\circ}$, drift 0.7 knot | Set 015 ${ }^{\circ}$, drift 0.7 knot | Set $195^{\circ}$, drift 0.5 knot |
| 948 | You are encountering heavy weather. What action should you take based on your 1430 fix? | Continue on the same course but increase speed | Continue on the same course at the same speed | Slow to 8.3 knots to compensate for the current | Alter course to the right, to pass well clear of Southwest Ledge |
| 949 | At 2100, you set course of $000^{\circ} \mathrm{T}$, speed 10 knots from LAT $41^{\circ} 07.0^{\prime} \mathrm{N}$, LONG $71^{\circ} 30.0^{\prime} \mathrm{W}$. Visibility is $5.5 \mathrm{n} . \mathrm{m}$. What is the earliest time you can expect to sight Point Judith Light? (Use charted range of 20 miles as nominal range.) | The light is visible at 2100. | 2106 | 2111 | 2123 |
| 950 | You estimate the current to be $160^{\circ} \mathrm{T}$ at 1.2 knots. What should your course and speed be in order to make good $000^{\circ} \mathrm{T}$ at 10 knots? | $358^{\circ} \mathrm{T}$ at 09.8 knots | $358^{\circ} \mathrm{T}$ at 11.1 knots | $00{ }^{\circ} \mathrm{T}$ at 11.2 knots | $002^{\circ} \mathrm{T}$ at 09.9 knots |


| 951 | If you want to put into Point Judith Harbor of Refuge, what chart should you use? | 13219 | 13217 | 13209 | 13205 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 952 | The following questions should be answered using chart n steering a westerly course and approaching Block Island Sou <br> DEVIATION TABLE | umber 13205TR, Bloc Sound. The variation | Island and Approach or the area is $15^{\circ} \mathrm{W}$. T | es, and supporting pub he gyro error is $2^{\circ} \mathrm{E}$. | ications. You are |
| 953 | You are underway in the vicinity of Block Island and obtain the following lines of position: <br> What is your position at the time of these sightings? | $\begin{aligned} & \text { LAT } 41^{\circ} 05.0^{\prime} \mathrm{N}, \text { LONG } \\ & 71^{\circ} 36.2^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 05.1^{\prime} \mathrm{N}, \text { LONG } \\ & 71^{\circ} 36.0^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 05.3^{\prime} \mathrm{N}, \text { LONG } \\ & 71^{\circ} 35.8^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 05.4^{\prime} \mathrm{N}, \text { LONG } \\ & 71^{\circ} 35.5^{\prime} \mathrm{W} \end{aligned}$ |
| 954 | What course should you steer by your standard magnetic compass to make good a course of $280^{\circ} \mathrm{T}$ ? | $266^{\circ} \mathrm{psc}$ | $272^{\circ} \mathrm{psc}$ | 290 ${ }^{\circ} \mathrm{psc}$ | $294{ }^{\circ} \mathrm{psc}$ |
| 955 | From your position you observe a rotating white and green light to the north. This light is most likely $\qquad$ | from a submarine on the surface | the light at Southeast Point | at an airport | on a coastal patrol vessel |
| 956 | At 1800 , your position is LAT $41^{\circ} 06.5^{\prime} \mathrm{N}$, LONG $71^{\circ} 43.5^{\prime} \mathrm{W}$. How would the buoy which bears approximately $040^{\circ} \mathrm{T}$ from your position at a range of half a mile be painted? | Horizontally banded, green over red, with a green buoyancy chamber | Horizontally banded, red over green, with a red buoyancy chamber | Vertically striped, red and green | Solid green with red letters "BIS" |


| 957 | From your 1800 position you steer a course of $350^{\circ} \mathrm{psc}$ at a speed of 10.0 knots. At 1830 , your position is LAT $41^{\circ} 11.7^{\prime} \mathrm{N}$, LONG $71^{\circ} 45.8^{\prime} \mathrm{W}$. What are the set and drift of the current? | 029 ${ }^{\circ} \mathrm{T}, 0.7$ knot | 029 ${ }^{\circ} \mathrm{T}$, 1.4 knots | 209${ }^{\circ} \mathrm{T}, 0.7$ knot | $2^{209}{ }^{\circ} \mathrm{T}, 1.4$ knots |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 958 | From your 1830 fix, you come left to a course of $290^{\circ} \mathrm{T}$. Which of the following statements concerning Watch Hill Light is FALSE? | The nominal range of its white light is 15 miles. | It displays both red and white lights. | Its horn blasts every 30 seconds in fog. | Its geographic range is $\mathbf{1 8 . 5}$ miles at a 35 foot ( 10.7 meter) height of eye. |
| 959 | At 1850, you obtain the following bearings and distances: <br> Montauk Point $189^{\circ}$ pgc 8.7 miles <br> Watch Hill Light $340^{\circ}$ pgc 5.7 miles <br> What true course did you make good between 1830 and 1850? | $289^{\circ} \mathrm{T}$ | 294T | $299^{\circ} \mathrm{T}$ | $307{ }^{\circ} \mathrm{T}$ |
| 960 | If your height of eye is 35 feet ( 10.7 meters), what is the approximate geographic range of Block Island North Light? | 7.4 nm | 13.0 nm | 14.3 nm | 15.8 nm |
| 961 | From your 1850 fix, you come left to a course of $280^{\circ} \mathrm{T}$, while maintaining a speed of 10 knots. What can you determine from your 1905 DR position? | you are outside the 120 foot curve | your fathometer reads about 100 feet | you are operating in inland waters | you are 5.0 miles south of Cerberus Shoal |
| 962 | At 1915 your GPS position is Lat $41^{\circ} 13.2^{\prime} \mathrm{N}$ Long $071^{\circ} 53.6^{\prime}$ W. What were your course and speed made good from 1850 to 1915? | $281^{\circ} \mathrm{T}, 10.0 \mathrm{KTS}$ | 279${ }^{\circ} \mathrm{T}, 8.4 \mathrm{KTS}$ | $277^{\circ} \mathrm{T}, 10.0 \mathrm{KTS}$ | 277 ${ }^{\circ} \mathrm{T}, 8.0 \mathrm{KTS}$ |
| 963 | If you were to head into Fishers Island Sound, which of the following charts would you switch to for better detail of Mystic and Mystic Harbor? | 13209 | 13212 | 13213 | 13214 |
| 964 | From your 1915 position, you come left and set a course for Gardiners Point. At 1930, your position is LAT $41^{\circ} 12.7^{\prime} \mathrm{N}$, LONG $71^{\circ} 56.8^{\prime} \mathrm{W}$. What type of bottom is charted at this position? | Blue mud, gritty shells | Buried mussels, gritty shells | Blue mud, gray sand | Bumpy muck with grainy surface |
| 965 | From your 1930 position, you plot a course to pass 0.5 mile due south of Race Rock Light. If your vessel's speed is 10.0 knots, the current's set and drift are $040^{\circ} \mathrm{T}$ at 1.8 knots, and a north wind produces a $3^{\circ}$ leeway, what true course should you steer to make good your desired course? | $275{ }^{\circ} \mathrm{T}$ | $280^{\circ} \mathrm{T}$ | ${ }^{290}{ }^{\circ} \mathrm{T}$ | ${ }^{294}{ }^{\circ} \mathrm{T}$ |


| 966 | As an option to heading into Long Island Sound, you consider anchoring in the vicinity of the Gardiners Point Ruins approximately one mile off the north end of Gardiners Island. What is the minimum recommended distance from the ruins for fishing, trawling, or anchoring? | $\begin{array}{\|l\|} \hline 300 \text { yards (274.4 } \\ \text { meters) } \end{array}$ | 1.0 mile | 0.5 mile | No distance is prescribed since any such activities in the area are prohibited. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 967 | NOAA VHF-FM weather broadcasts from New London, CT are on $\qquad$ . | 162.25 MHz | 162.30 MHz | 162.40 MHz | 162.55 MHz |
| 968 | The following questions are based on chart 13205TR, Blo meters). Your height of eye is 32 feet ( 9.7 meters). The g <br> DEVIATION TABLE | ck Island Sound, and t yro error is $2^{\circ} \mathrm{W}$. Use | e supporting publicati $15^{\circ} \mathrm{W}$ variation where | ns. Your vessel has a equired. | draft of 11 feet (3.4 |
| 969 | At 0227, you take the following radar ranges and bearings: Bartlett Reef Light $359^{\circ} \mathrm{T}$ at 2.4 miles, Race Rock Light $083^{\circ} \mathrm{T}$ at 4.1 miles. What is your 0227 position? | $\begin{aligned} & \text { LAT } 41^{\circ} 14.5^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 08.0^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 14.1^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 08.2^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 14.0^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 08.5^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 14.3^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 08.5^{\prime} \mathrm{W} \end{aligned}$ |
| 970 | At 0227, you are on course $087^{\circ} \mathrm{T}$ at 10 knots. What course per standard magnetic compass should you steer to make good your true course? | $109^{\circ} \mathrm{psc}$ | $105^{\circ} \mathrm{psc}$ | $102^{\circ} \mathrm{psc}$ | 099ºpsc |
| 971 | You estimate that you are making 9.3 knots over the ground. At what time will you enter waters governed by the COLREGS? | 0258 | 0255 | 0251 | 0247 |


| 972 | At 0337, fog closes in and you anchor under the following radar ranges and bearing: <br> South tip of Watch Hill Point 3.0 miles <br> East point of Fishers Island 1.4 miles <br> Latimer Reef Light $331^{\circ} \mathrm{T}$ <br> What is the approximate depth of water at your anchorage? | 135 feet (40.9 meters) | 120 feet (36.4 meters) | 100 feet (30.3 meters) | 83 feet (25.2 meters) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 973 | By 1015, visibility has increased to 5.0 miles and you can see Fishers Island. Fishers Island has $\qquad$ | sparsely wooded hills and is fringed with shoals to the south | sheer cliffs rising from the sea to a high, flat plateau | barren, rocky hills with prominent sandy beaches | low and sandy beaches with salt ponds and marsh grass |
| 974 | You get underway at 1030. The wind is out of the SSE and you estimate $3^{\circ}$ leeway. What course should you steer per gyrocompass to make good a desired course of $075^{\circ} \mathrm{T}$ ? | $080^{\circ} \mathrm{pgc}$ | 078 ${ }^{\circ} \mathrm{pgc}$ | 076ºpgc | 074 ${ }^{\circ} \mathrm{pgc}$ |
| 975 | Shortly after getting underway, you sight Stonington Outer Breakwater Light in line with Stonington Inner Breakwater Light bearing $000^{\circ}$ per gyrocompass. Which statement is TRUE? | The deviation is $2^{\circ} \mathrm{W}$ | The variation is $2^{\circ} \mathrm{E}$ | The compass error is $16^{\circ} \mathrm{W}$ | The gyro error is $2.5^{\circ} \mathrm{W}$ |
| 976 | At 1104, Watch Hill Point Light is in line with Stonington Outer Breakwater Light, the range to the south tip of Watch Hill Point is 2.6 miles and the range to the beach is 1.9 miles. You are steering to make good $075^{\circ} \mathrm{T}$, speed 10.0 knots. At 1110, you change course to head for a position of LAT $41^{\circ} 05.0^{\prime} \mathrm{N}$, LONG $71^{\circ} 50.0^{\prime} \mathrm{W}$. What is the true course? | $193^{\circ}$ | $190^{\circ}$ | $187^{\circ}$ | $185^{\circ}$ |
| 977 | At 1110, you increase speed to 12 knots. What is your ETA at the new position? | 1220 | 1215 | 1208 | 1157 |
| 978 | Upon arrival at your new position you would expect Montauk Point Light to be approximately $\qquad$ mile(s) from your position. | 4.5 | 2.4 | 1.3 | 0.9 |
| 979 | At 1345, you depart from a position 1 mile due east of Montauk Point Light and set course for Block Island Southeast Light at 9 knots. At 1430, your position is: <br> Latitude $41^{\circ} 06.3^{\prime}$ North Longitude $071^{\circ} 41.9^{\prime}$ West <br> What was the current encountered since 1345 ? | Set 015 ${ }^{\circ}$, drift 0.5 knot | Set 195², drift 0.7 knot | Set 015 ${ }^{\circ}$, drift 0.7 knot | Set 195 ${ }^{\circ}$, drift 0.5 knot |


| 980 | You are encountering heavy weather. What action should you take based on your 1430 fix? | Continue on the same course but increase speed. | Continue on the same course at the same speed. | Slow to 8.3 knots to compensate for the current. | Alter course to the right, to pass well clear of Southwest Ledge |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 981 | At 2100, you set course of $000^{\circ} \mathrm{T}$, speed 10 knots from LAT $41^{\circ} 07.0^{\prime} \mathrm{N}$, LONG $71^{\circ} 30.0^{\prime} \mathrm{W}$. Visibility is $5.5 \mathrm{n} . \mathrm{m}$. What is the earliest time you can expect to sight Point Judith Light? (Use charted range of 20 miles as nominal range.) | The light is visible at 2100. | 2106 | 2111 | 2123 |
| 982 | You estimate the current to be $160^{\circ} \mathrm{T}$ at 1.2 knots. What should your course and speed be in order to make good $000^{\circ} \mathrm{T}$ at 10 knots? | $358^{\circ} \mathrm{T}$ at 09.8 knots | $358^{\circ} \mathrm{T}$ at 11.1 knots | $002^{\circ} \mathrm{T}$ at 11.2 knots | $002^{\circ} \mathrm{T}$ at 09.9 knots |
| 983 | If you want to put into Point Judith Harbor of Refuge, what chart should you use? | 13219 | 13217 | 13209 | 13205 |
| 984 | The following questions are based on chart 12221TR, Ch ( 3 meters), and your height of eye is 20 feet ( 6.1 meters). DEVIATION TABLE | sapeake Bay Entranc Use $10^{\circ} \mathrm{W}$ variation w | , and the supporting p here required. The gy | ublications. Your vess orror is $3^{\circ} \mathrm{E}$. | has a draft of 10 feet |
| 985 | You are on course $192^{\circ} \mathrm{pgc}$ at 12 knots. At 1900 you fix your position using the following information: <br> Sand Shoal Inlet South Light bearing $244^{\circ}$ true @ 11 nm <br> What is your latitude and longitude at 1900 ? | $\begin{aligned} & \text { LAT } 37^{\circ} 21.5^{\prime} \mathrm{N}, \text { LONG } \\ & 75^{\circ} 34.8^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 37^{\circ} 22.0^{\prime} \mathrm{N}, \text { LONG } \\ & 75^{\circ} 34.9^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 37^{\circ} 22.2^{\prime} \mathrm{N}, \text { LONG } \\ & 75^{\circ} 35.0^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 37^{\circ} 22.6^{\prime} \mathrm{N}, \text { LONG } \\ & 75^{\circ} 35.7^{\prime} \mathrm{W} \end{aligned}$ |
| 986 | What course should you steer using the standard magnetic compass (psc) to make good the course of $192^{\circ} \mathrm{pgc}$ ? | $188^{\circ} \mathrm{psc}$ | $203^{\circ} \mathrm{psc}$ | $205^{\circ} \mathrm{psc}$ | $208{ }^{\circ} \mathrm{psc}$ |


| 987 | At 1920, the buoy off your starboard bow is ___ | Sand Shoal Inlet Lighted Buoy "A" | $\begin{array}{l}\text { Hog Island Lighted Bell } \\ \text { Buoy }\end{array}$ | South Light Buoy | an interrupted quick flashing buoy |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 988 | At 1930 , your position is LAT $37^{\circ} 16.7^{\prime} \mathrm{N}$, LONG $75^{\circ} 37.7^{\prime} \mathrm{W}$. The depth of water is approximately $\qquad$ | 40 feet (12.2 meters) | 50 feet (15.2 meters) | 60 feet (18.3 meters) | 70 feet (23.2 meters) |
| 989 | At 1950 , your position is LAT $37^{\circ} 12.3^{\prime} \mathrm{N}$, LONG $75^{\circ} 38.6^{\prime} \mathrm{W}$. The set and drift from 1930 to 1950 were $\qquad$ | $150^{\circ} \mathrm{T}$ at 1.6 knot | $150^{\circ} \mathrm{T}$ at 0.6 knots | $330^{\circ} \mathrm{T}$ at 0.6 knot | $330^{\circ} \mathrm{T}$ at 1.6 knots |
| 990 | Assume set and drift have no effect on your vessel. If you change course to $187^{\circ} \mathrm{pgc}$ from your 1950 position, how close will you pass Cape Charles Lighted Bell Buoy "14"? | 0.1 mile | 0.5 mile | 0.8 mile | 1.1 miles |
| 991 | At 2020, you obtain a fix using the following information: <br> Cape Charles Lighted Bell Buoy "14" bears $333^{\circ}$ pgc Cape Charles Light bears $271.5^{\circ}$ pgc <br> Your longitude is $\qquad$ . | 75³8.9'W | 75³9.1'W | 7540.5'W | 75* $41.4{ }^{\text {² }}$ |
| 992 | At 2020, what is the course to steer to enter the inbound lane of North Chesapeake Entrance traffic separation scheme if a northwesterly wind causes $3^{\circ}$ of leeway? | $227^{\circ} \mathrm{pgc}$ | $221^{\circ} \mathrm{pgc}$ | $218^{\circ} \mathrm{pgc}$ | $215^{\circ} \mathrm{pgc}$ |
| 993 | If you make good 12 knots, what is the ETA at North Chesapeake Channel Entrance Buoy "NCA" (LL \#375)? | 2121 | 2116 | 2111 | 2101 |
| 994 | At 2100, Cape Charles Light bears $321^{\circ} \mathrm{pgc}$, and Cape Henry Light bears $247^{\circ} \mathrm{pgc}$. Your latitude is $\qquad$ | $37^{\circ} 00.6$ N | $37^{\circ} 00.0^{\prime} \mathrm{N}$ | $36^{\circ} 59.7^{\prime} \mathrm{N}$ | $36^{\circ} 59.4$ N |
| 995 | If the visibility is 3 miles, at what range will you lose sight of Chesapeake Light? | The light has never been visible. | 4.6 miles | 6.4 miles | 8.3 miles |
| 996 | At 2100, you alter course to $250^{\circ} \mathrm{T}$ and reduce speed to 7 knots. You enter the traffic separation scheme on the inbound side. At 2200, your fix shows you crossing a broken purple line on the chart, and you observe North Chesapeake Entrance Lighted Gong Buoy "NCD" to port. This area is $\qquad$ | an area with local magnetic disturbances | a pilotage area | a precautionary area centered on buoy "CBJ" | in inland waters |
| 997 | What course per standard magnetic compass (psc) is the same as $247^{\circ} \mathrm{pgc}$ ? | $257{ }^{\circ} \mathrm{psc}$ | $260^{\circ} \mathrm{psc}$ | $262^{\circ} \mathrm{psc}$ | $265^{\circ} \mathrm{psc}$ |
| 998 | At 2215, Cape Henry Light bears $242^{\circ} \mathrm{pgc}$, Cape Charles Light bears $010.5^{\circ} \mathrm{pgc}$, and Chesapeake Channel Tunnel North Light bears $319^{\circ} \mathrm{pgc}$. You are heading $271^{\circ} \mathrm{pgc}$. What is the relative bearing of Thimble Shoal Light? | $014^{\circ}$ | 017 ${ }^{\circ}$ | $280^{\circ}$ | $332^{\circ}$ |


| 999 | While navigating inbound in the Thimble Shoal Channel system you must $\qquad$ | navigate in the main channel when between Trestles A \& B | use the north auxiliary channel | remain 1500 yards (1360 meters) from large naval vessels | maintain a speed of six knots |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1000 | The following questions should be answered using Chart 123 your vessel is 8.5 feet ( 2.6 meters) Use a variation of $14^{\circ} \mathrm{W}$ <br> TABLE | 12354TR, Long Island W for the entire plot. | Sound - Eastern Part, | and the supporting | lications. The draft of <br> DEVIATION |
| 1001 | What type of bottom is found at Long Sand Shoal? | Rocky | Muddy | Sandy | Hard |
| 1002 | You are southeast of Saybrook Breakwater Light passing Saybrook Bar Lighted Bell Buoy "8". This buoy marks | shoal water | a tide rips area | the junction with the Connecticut River | a sunken wreck |
| 1003 | At 0005, on 26 January, your position is LAT $41^{\circ} 11.8^{\prime} \mathrm{N}$, LONG $72^{\circ} 20.5^{\prime} \mathrm{W}$. From this position, you plot a course to steer to a point one half mile north of Mattituck Breakwater Light "MI" with an engine speed of 9.0 knots. If there are no set and drift, what course should you steer? | $207^{\circ} \mathrm{psc}$ | $213^{\circ} \mathrm{psc}$ | $220^{\circ} \mathrm{psc}$ | $235{ }^{\circ} \mathrm{psc}$ |
| 1004 | At 0045, you obtain the following bearings: <br> Rocky Point lookout tower $072^{\circ} \mathrm{T}$ <br> Horton Point lighthouse $213^{\circ} \mathrm{T}$ <br> What were the set and drift between 0005 and 0045 ? | $272^{\circ}$ true, 0.9 knot | $272^{\circ}$ true, 1.4 knots | 092${ }^{\circ}$ true, 0.9 knot | 092 ${ }^{\circ} \mathrm{True}$, 1.4 knots |


| 1005 | You alter course from your 0045 position to head for a point 0.5 mile north of Mattituck Breakwater Light "MI". If the visibility is 10 miles and you make good 9 knots, at approximately what time will you lose sight of Saybrook Breakwater Light? | You have already lost sight at 0045 | 0055 | 0120 | The light is visible all the way to Mattituck Inlet |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1006 | At 0100, you obtain the following bearings: <br> Rocky Point Lookout Tower $062^{\circ} \mathrm{T}$ Horton Point Lighthouse $189^{\circ} \mathrm{T}$ <br> What was the speed made good between 0045 and $0100 ?$ | 7.4 knots | 8.0 knots | 8.7 knots | 9.2 knots |
| 1007 | From your 0100 position, you change course to $258^{\circ}$ per standard magnetic compass. Your engine speed is 10.0 knots. A short time later, your fathometer reads 51 feet ( 15.5 meters) under the keel. What is the water depth? | 38.5 feet (11.7 meters) | 43.5 feet (13.2 meters) | 51.0 feet (15.5 meters) | 59.5 feet (18.0 meters) |
| 1008 | According to the DR track line from your 0100 position, how far off Roanoke Point Shoal Buoy "5" should you be when the buoy is abeam? | 0.2 mile | 0.6 mile | 1.3 miles | 1.8 miles |
| 1009 | At 0130, you obtain the following bearings: <br> Horton Point Lighthouse $078^{\circ} \mathrm{T}$ <br> Mattituck Breakwater Light tower $196^{\circ} \mathrm{T}$ <br> What were the course and speed made good between 0100 and 0130? | $246{ }^{\circ} \mathrm{T}$ at 9.8 knots | $253^{\circ} \mathrm{T}$ at 9.4 knots | $259^{\circ} \mathrm{T}$ at 9.8 knots | $267^{\circ} \mathrm{T}$ at 9.4 knots |
| 1010 | From your 0130 position, you change course to adjust for set and drift, and you later obtain the following bearings: <br> Mattituck Inlet Light bearing $104.5^{\circ}$ true <br> Falkner Island Light bearing $001^{\circ}$ true <br> What is the latitude and longitude of your fix? | $\begin{aligned} & \text { LAT } 41^{\circ} 00.8^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 40.8^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 01.2^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 40.4^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 01.6^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 40.0^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 02.0^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 39.5^{\prime} \mathrm{W} \end{aligned}$ |
| 1011 | At 0209, your position is LAT $41^{\circ} 01.8^{\prime} \mathrm{N}$, LONG $72^{\circ} 40.8^{\prime} \mathrm{W}$. What course should you steer per standard magnetic compass to make good $278^{\circ}$ magnetic? (assume no set and drift) | $262.0^{\circ} \mathrm{psc}$ | $265.0^{\circ} \mathrm{psc}$ | $275.5^{\circ} \mathrm{psc}$ | $280.5^{\circ} \mathrm{psc}$ |
| 1012 | The south coast of Long Island Sound between Mattituck Inlet and Port Jefferson is $\qquad$ . | composed of high rocky bluffs | a high, flat plateau with sheer cliffs | fringed by rocky shoals | low and marshy with isolated beaches |


| 1013 | At 0300, your position is LAT $41^{\circ} 01.7^{\prime} \mathrm{N}$, LONG $72^{\circ} 55.1^{\prime} \mathrm{W}$. From this position you steer a course of $289^{\circ}$ per standard magnetic compass at an engine speed of 10.0 knots. At what time can you first expect to see Stratford Shoal Middle Ground Light if the luminous range is 8.0 miles? | 0303 | 0309 | 0312 | 0318 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1014 | You must arrive at your final destination by 0800. The distance from your 0300 position to the final destination is 40.5 miles. What minimum speed must be made good to arrive on time? | 8.1 knots | 8.5 knots | 9.3 knots | 9.6 knots |
| 1015 | You are northwest of Port Jefferson Harbor steering $242^{\circ}$ per standard magnetic compass. As you continue westward, you see that the Port Jefferson Range Front Light and Rear Light come into line. If the deviation table is correct, the bearing of the range should be $\qquad$ | $140^{\circ} \mathrm{psc}$ | $146^{\circ} \mathrm{psc}$ | $157^{\circ} \mathrm{psc}$ | $160^{\circ} \mathrm{psc}$ |
| 1016 | The following questions are to be answered by using char feet ( 4.2 meters). Use $10^{\circ} \mathrm{W}$ for variation where required. <br> DEVIATION TABLE | 12221TR, Chesape The gyro error is $3^{\circ}$ | ke Bay Entrance, and | he supporting publicatic | ns. Your draft is 14 |
| 1017 | Your 1600 position is LAT $37^{\circ} 22.5^{\prime} \mathrm{N}$, LONG $75^{\circ} 32.3^{\prime} \mathrm{W}$. The depth of water under the keel is about $\qquad$ | 59 feet (17.3 meters) | 52 feet (15.8 meters) | 45 feet (13.6 meters) | 38 feet (11.5 meters) |
| 1018 | If there is no current, what is the course per gyro compass from your 1600 position to point A located 0.5 mile due east of Hog Island Lighted Bell Buoy "12"? | $199^{\circ} \mathrm{pgc}$ | $196^{\circ} \mathrm{pgc}$ | $193^{\circ} \mathrm{pgc}$ | $190^{\circ} \mathrm{pgc}$ |


| 1019 | At 1630, you reach point $A$ and come right to $204^{\circ}$ T. Your engine speed is 12 knots. Your 1715, position is LAT $37^{\circ} 09.8^{\prime} \mathrm{N}$, LONG $75^{\circ} 37.4^{\prime} \mathrm{W}$. The current was $\qquad$ | 067${ }^{\circ} \mathrm{T}$ at 1.4 knots | $246^{\circ} \mathrm{T}$ at 1.0 knots | $067^{\circ} \mathrm{T}$ at 1.0 knots | $246^{\circ} \mathrm{T}$ at 1.4 knots |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1020 | From your 1715 fix, you steer $214^{\circ} \mathrm{T}$ at 12 knots. At 1800 , you take the following bearings: <br> Chesapeake Light bearing $175^{\circ} \mathrm{pgc}$ Cape Henry Light bearing $239^{\circ}$ pgc Cape Charles Light bearing $293^{\circ} \mathrm{pgc}$ <br> Your 1800 position is $\qquad$ . | $\begin{aligned} & \text { LAT } 37^{\circ} 02.7^{\prime} \mathrm{N}, \text { LONG } \\ & 75^{\circ} 42.7^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 37^{\circ} 02.9^{\prime} \mathrm{N}, \text { LONG } \\ & 75^{\circ} 43.1^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 37^{\circ} 03.0^{\prime} \mathrm{N}, \text { LONG } \\ & 75^{\circ} 43.3^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 37^{\circ} 03.1^{\prime} \mathrm{N}, \text { LONG } \\ & 75^{\circ} 42.8^{\prime} \mathrm{W} \end{aligned}$ |
| 1021 | At 1815 , your position is LAT $37^{\circ} 01.0^{\prime} \mathrm{N}$, LONG $75^{\circ} 42.7^{\prime} \mathrm{W}$. If there is no current, what is the course per standard magnetic compass to arrive at a point 0.3 mile due north of North Chesapeake Entrance Lighted Whistle Buoy "NCA" (LL\#375)? | $257.0^{\circ}$ | $255.5^{\circ}$ | $251.0^{\circ}$ | $249.0^{\circ}$ |
| 1022 | From your 1815 position, you want to make good a course of $263^{\circ} \mathrm{T}$. Your engines are turning RPM's for 12 knots. The current is $050^{\circ} \mathrm{T}$ at 1.9 knots. Adjusting your course for set and drift, at what time should you expect to enter the red sector of Cape Henry Light? | 1904 | 1859 | 1854 | 1849 |
| 1023 | At 1920, Cape Henry Light bears $225^{\circ} \mathrm{pgc}$, and Chesapeake Channel Tunnel North Light bears $288^{\circ} \mathrm{pgc}$. If your heading is $268^{\circ} \mathrm{T}$, what is the relative bearing of Chesapeake Light? | $206{ }^{\circ}$ | $213^{\circ}$ | $215^{\circ}$ | $220^{\circ}$ |
| 1024 | Which statement concerning your 1920 position is TRUE? | You are governed by the Inland Rules of the Road. | You are entering a restricted area. | You are within the Chesapeake Bay Entrance traffic separation scheme. | You can expect differences of as much as $6^{\circ}$ from the normal magnetic variation of the area. |
| 1025 | From your 1920 position, you change course to enter Chesapeake Channel between buoys 9 and 10. What is the course per standard magnetic compass (psc) ? | $274{ }^{\circ} \mathrm{psc}$ | $280^{\circ} \mathrm{psc}$ | $283{ }^{\circ} \mathrm{psc}$ | 286 ${ }^{\circ} \mathrm{psc}$ |
| 1026 | At 2000, your position is LAT $37^{\circ} 04.1^{\prime} \mathrm{N}$, LONG $76^{\circ} 05.6^{\prime} \mathrm{W}$. You change course for the Eastern Shore. At 2037, Old Plantation Flats Light bears $033^{\circ} \mathrm{pgc}$, and York Spit Light bears $282^{\circ} \mathrm{pgc}$. The course made good from your 2000 position is $\qquad$ | 020T | 014 ${ }^{\circ} \mathrm{T}$ | $0^{0}{ }^{\circ} \mathrm{T}$ | $359{ }^{\circ} \mathrm{T}$ |
| 1027 | At 2037, you change course to make good a course of $016^{\circ} \mathrm{T}$. There is no current, but a westerly wind is causing $3^{\circ}$ leeway. What course per standard magnetic compass (psc) should you steer to make good the course $016^{\circ} \mathrm{T}$ ? | 022 ${ }^{\circ} \mathrm{psc}$ | 025 ${ }^{\circ} \mathrm{psc}$ | 028 ${ }^{\circ} \mathrm{psc}$ | 031 ${ }^{\circ} \mathrm{psc}$ |


| 1028 | Your height of eye is 25 feet ( 7.6 meters). If the visibility is 5.5 nautical miles, what is the luminous range of Wolf Trap Light? | 17.0 miles | 16.0 miles | 12.0 miles | 7.5 miles |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1029 | If you want a more detailed chart of the area at your 2115 DR position, which chart should you use? | 12238 | 12225 | 12224 | 12222 |
| 1030 | At 2123 , your position is LAT $37^{\circ} 20.0^{\prime} \mathrm{N}$, LONG $76^{\circ} 03.0^{\prime} \mathrm{W}$. What is your distance offshore of Savage Neck? | 1.7 miles | 2.6 miles | 3.4 miles | 4.6 miles |
| 1031 | From your 2123 position, you are approximately 42 miles from Crisfield, MD. If you are making good a speed of 13 knots, at what time should you arrive at Crisfield, MD? | 0148 | 0112 | 0037 | 2359 |
| 1032 | The following questions are to be answered by using cha is 11 feet ( 3.3 meters). Use $14^{\circ} \mathrm{W}$ for variation where req <br> DEVIATION TABLE | 12354TR,Long Island uired. The gyro error is | Sound - Eastern Part $3^{\circ} \mathrm{E}$. | and the supporting $p$ | blications. Your draft |
| 1033 | At 0700, Stratford Shoal Middle Ground Light bears $137^{\circ}$ pgc. From your radar, you get a bearing of $007^{\circ} \mathrm{pgc}$ to the south tip of Stratford Point with a range of 4.5 miles. What is your 0700 position? | $\begin{aligned} & \text { LAT } 41^{\circ} 04.6^{\prime} \mathrm{N}, \text { LONG } \\ & 73^{\circ} 07.0^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 04.6^{\prime} \mathrm{N}, \text { LONG } \\ & 73^{\circ} 06.6^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 04.6^{\prime} \mathrm{N}, \text { LONG } \\ & 73^{\circ} 07.4^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 04.6^{\prime} \mathrm{N}, \text { LONG } \\ & 73^{\circ} 07.2^{\prime} \mathrm{W} \end{aligned}$ |
| 1034 | At 0725 , you are heading $054^{\circ} \mathrm{T}$, and Stratford Point Light is abeam to port at 3.1 miles. The current is $135^{\circ} \mathrm{T}$ at 1.8 knots. If you make turns for an engine speed of 8 knots, which course must you steer to make good $048^{\circ}$ T? | 055 ${ }^{\circ} \mathrm{T}$ | $0^{047}{ }^{\circ} \mathrm{T}$ | $042^{\circ} \mathrm{T}$ | 035 ${ }^{\circ} \mathrm{T}$ |
| 1035 | Which structure should you look for while trying to locate Southwest Ledge Light? | White octagonal house on a cylindrical pier | White conical tower with a brown band midway of height | Conical tower, upper half white, lower half brown | Black skeleton tower on a granite dwelling |


| 1036 | At 0830, you obtained the following Radar Ranges: <br> New Haven Light @ 2.2 nm <br> Branford Reef Light @ 4.2 nm <br> What is your vessel's position? | $\begin{aligned} & \text { LAT } 41^{\circ} 12.4^{\prime} \mathrm{N}, \text { LONG } \\ & 73^{\circ} 56.0^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 40^{\circ} 17.4^{\prime} \mathrm{N}, \text { LONG } \\ & 73^{\circ} 54.0^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 12.4^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 53.8^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 13.4^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 53.8^{\prime} \mathrm{W} \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1037 | From your 0830 position, you wish to make good $097^{\circ} \mathrm{T}$. There is no current, but a southerly wind is producing $3^{\circ}$ leeway. What course should you steer per standard magnetic compass in order to make good your true course? | $109^{\circ} \mathrm{psc}$ | $112^{\circ} \mathrm{psc}$ | $115{ }^{\circ} \mathrm{psc}$ | $118^{\circ} \mathrm{psc}$ |
| 1038 | At 0845 , you are on a course of $097^{\circ} \mathrm{T}$, and Townshend Ledge Buoy "10A" is close abeam to port. With a westerly current of 1.2 knots, what speed will you have to turn for from your 0845 position in order to arrive abeam of Six Mile Reef Buoy "8C" at 1030? | 12.1 knots | 10.9 knots | 9.7 knots | 8.5 knots |
| 1039 | At 0910, your DR position is LAT $41^{\circ} 11.9^{\prime} \mathrm{N}$, LONG $72^{\circ} 47.8^{\prime} \mathrm{W}$. Your vessel is on course $097^{\circ} \mathrm{T}$ at 9.5 knots, and the weather is foggy. At 0915, Branford Reef Light is sighted through a break in the fog bearing $318^{\circ} \mathrm{T}$. At 0945, Falkner Island Light is sighted bearing $042^{\circ} \mathrm{T}$. What is your 0945 running fix position? | $\begin{aligned} & \text { LAT } 41^{\circ} 11.1^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 41.2^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 11.3^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 41.3^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 11.5^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 40.7^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 11.8^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 40.2^{\prime} \mathrm{W} \end{aligned}$ |
| 1040 | What do the dotted lines around Goose Island and Kimberly Reef represent? | Depth contours | Breakers | Limiting danger | Tide rips |
| 1041 | At 1100 , your position is LAT $41^{\circ} 11.3^{\prime} \mathrm{N}$, LONG $72^{\circ} 28.0^{\prime} \mathrm{W}$. You are steering a course of $069^{\circ} \mathrm{T}$ to leave Black Point one mile off your port beam. It has been reported that the Long Sand Shoal Buoys and Hatchett Reef Buoys are off station. Which of the following will serve as a line marking the hazards and keep your vessel in safe water? | A bearing to Little Gull Island Light of not less than $090^{\circ}$ | Maintaining a 7nm range off Orient point | Danger bearing to Black Point of not more than $064^{\circ} \mathrm{T}$ | A distance to Saybrook Breakwater Light of not less than 1.3 miles |
| 1042 | Little Gull Island Light is ___ | lighted only during daytime when the sound signal is in operation | lighted throughout 24 hours | maintained only from May 1 to Oct 1 | obscured by trees from $253^{\circ}$ to $352^{\circ}$ |
| 1043 | At 1210, you are in position LAT $41^{\circ} 14.3^{\prime} \mathrm{N}$, LONG $72^{\circ} 16.5^{\prime} \mathrm{W}$. What is the depth of water below your keel? | 92 feet (28.0 meters) | 97 feet (29.4 meters) | 108 feet (32.7 meters) | 115 feet (35.0 meters) |
| 1044 | From your 1210 position, you are making good a course of $083^{\circ} \mathrm{T}$. Your engines are turning RPMs for 10 knots. The set and drift of the current are $310^{\circ}$ at 1.7 knots. At what time should you expect to enter the red sector of New London Harbor Light? | 1243 | 1254 | 1259 | 1305 |


| 1045 | Your vessel is entering New London Harbor Channel. If there is no current, what should you steer per gyro compass to stay on the range? | 006 ${ }^{\circ}$ | $357^{\circ}$ | $354^{\circ}$ | $351^{\circ}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1046 | On chart 12354, the datum from which heights of objects are taken is $\qquad$ . | lowest low water | mean low water | mean high water | mean lower low water |
| 1047 | The red sector of New London Harbor Light covers from | 040 ${ }^{\circ}-310^{\circ}$ | $000^{\circ}-031^{\circ}$ | $208^{\circ}-220^{\circ}$ | 000 ${ }^{\circ}-041^{\circ}$ |
| 1048 | The following questions are based on chart 12354TR, Lon 8.5 feet ( 2.6 meters). Use $14^{\circ} \mathrm{W}$ variation where required <br> DEVIATION TABLE | g Island Sound - | ern Part, and the su | rting publications. | vessel has a draft of |
| 1049 | What type of bottom is found at Long Sand Shoal? | Rocky | Muddy | Hard | Sandy |
| 1050 | You are southeast of Saybrook Breakwater Light passing Saybrook Bar Lighted Bell Buoy "8". This buoy marks | a sunken wreck | a bifurcation | the junction with the Connecticut River | shoal water |
| 1051 | At 0005, on 26 January, your position is LAT $41^{\circ} 11.8^{\prime} \mathrm{N}$, LONG $72^{\circ} 20.5^{\prime} \mathrm{W}$. From this position, you plot a course to steer to Mattituck Breakwater Light "MI" with an engine speed of 9.0 knots. If there are no set and drift, what course should you steer? | $225.0^{\circ} \mathrm{psc}$ | $230.5^{\circ} \mathrm{psc}$ | $233.0^{\circ} \mathrm{psc}$ | $236.0^{\circ} \mathrm{psc}$ |
| 1052 | At 0045, you obtain the following information: <br> Radar range to Inlet Point is 1.4 miles; <br> Radar range to Rocky Point is 2.8 miles. <br> Radar range to Horton Point is 2.8 miles. <br> What were the set and drift between 0005 and 0045? | $275^{\circ}$ true, 0.9 knot | $275^{\circ}$ true, 1.4 knots | 095 ${ }^{\circ}$ true, 1.4 knot | 095 ${ }^{\circ}$ True, 0.9 knots |


| 1053 | You alter course from your 0045 position to head for Mattituck Breakwater Light "MI". If the visibility is 10 miles and you make good 9 knots, at what time will you lose sight of Saybrook Breakwater Light? | 0100 | 0123 | 0131 | The light is visible all the way to Mattituck Inlet |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1054 | At 0100, you obtain the following radar ranges: <br> Inlet Point - 2.7 miles, <br> Rocky Point - 4.5 miles, <br> Horton Point - 1.0 mile. <br> What was the speed made good between 0045 and $0100 ?$ | 6.7 knots | 7.2 knots | 8.0 knots | 8.7 knots |
| 1055 | From your 0100 position, you change course to $258^{\circ}$ per standard magnetic compass. Your engine speed is 10.0 knots. A short time later, your fathometer reads 51 feet ( 15.5 meters) under the keel. What is the water depth? | 42.5 feet (12.9 meters) | 51.0 feet (15.5 meters) | $\begin{aligned} & 59.5 \text { feet (18.0 } \\ & \text { meters) } \end{aligned}$ | 60.4 feet (18.4 meters) |
| 1056 | According to the DR track line from your 0100 position, how far off Roanoke Point Shoal Buoy "5" should you be when the buoy is abeam? | 1.8 miles | 1.3 miles | 0.8 mile | 0.2 mile |
| 1057 | At 0130, you obtain the following radar ranges: <br> What were the course and speed made good between 0100 and 0130? | $236{ }^{\circ} \mathrm{T}$ at 9.4 knots | $246{ }^{\circ} \mathrm{T}$ at 9.8 knots | $259^{\circ} \mathrm{T}$ at 9.8 knots | $267^{\circ} \mathrm{T}$ at 9.4 knots |
| 1058 | From your 0130 position, you change course to adjust for set and drift, and you later obtain the following bearings: <br> Mattituck Inlet Light bearing $104.5^{\circ}$ true <br> Falkner Island Light bearing $001^{\circ}$ true <br> What is the latitude and longitude of the fix? | $\begin{aligned} & \text { LAT } 41^{\circ} 00.8^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 40.8^{\prime} \mathrm{W} \end{aligned}$ | LAT $41^{\circ} 01.2^{\prime} \mathrm{N}$, LONG $72^{\circ} 40.4^{\prime} \mathrm{W}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 02.0^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 39.5^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 02.6^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 39.0^{\prime} \mathrm{W} \end{aligned}$ |
| 1059 | At 0209, your position is LAT $41^{\circ} 01.8^{\prime} \mathrm{N}$, LONG $72^{\circ} 40.8^{\prime} \mathrm{W}$. What course should you steer per standard magnetic compass to make good $278^{\circ}$ magnetic? (assume no set and drift) | $262.0^{\circ} \mathrm{psc}$ | $265.0^{\circ} \mathrm{psc}$ | $270.5^{\circ} \mathrm{psc}$ | $275.5^{\circ} \mathrm{psc}$ |
| 1060 | The south coast of Long Island Sound between Mattituck Inlet and Port Jefferson is $\qquad$ . | composed of high rocky bluffs | a high, flat plateau with sheer cliffs | low and marshy with isolated beaches | fringed by rocky shoals |


| 1061 | At 0300, your position is LAT $41^{\circ} 01.7^{\prime} \mathrm{N}$, LONG $72^{\circ} 55.1^{\prime} \mathrm{W}$. From this position you steer a course of $289^{\circ}$ per standard magnetic compass at an engine speed of 10.0 knots. At what time can you first expect to see Stratford Shoal Middle Ground Light if the luminous range is 8.0 miles? | 0318 | 0312 | 0309 | 0303 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1062 | You must arrive at your final destination by 0800. The distance from your 0300 position to the final destination is 40.5 miles. What minimum speed must be made good to arrive on time? | 9.6 knots | 9.3 knots | 8.5 knots | 8.1 knots |
| 1063 | You are northwest of Port Jefferson Harbor steering $242^{\circ}$ per standard magnetic compass. As you continue westward, you see that the Port Jefferson Range Front Light and Rear Light come into line. If the deviation table is correct, the bearing of the range should be $\qquad$ | $157^{\circ} \mathrm{psc}$ | $160^{\circ} \mathrm{psc}$ | $163^{\circ} \mathrm{psc}$ | $166^{\circ} \mathrm{psc}$ |
| 1064 | The following questions are based on chart 12221TR, Ches meters). Use $10^{\circ} \mathrm{W}$ variation where required. The gyro e <br> DEVIATION TABLE | esapeake Bay E ror is $3^{\circ} \mathrm{E}$. | and the suppo | blications. Your | of eye is 25 feet (7.6 |
| 1065 | The National Weather Service provides 24 hour weather broadcasts to vessels transiting the Chesapeake Bay Bridge Tunnel area on which frequency? | 162.55 MHz | 162.85 MHz | 181.15 MHz | 202.35 MHz |
| 1066 | At 1752 , your position is LAT $37^{\circ} 04.3^{\prime} \mathrm{N}$, LONG $76^{\circ} 06.4^{\prime} \mathrm{W}$. On a flood current you should expect to be set to the $\qquad$ | south southeast | south southwest | east southeast | north northwest |


| 1067 | Your 1752 position places you ___ | less than 0.5 mile eastward of York Spit Channel | less than 0.5 mile westward of York Spit Channel | greater than 0.5 mile westward of York Spit Channel | greater than 0.5 mile eastward of York Spit Channel |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1068 | What is the average velocity of the maximum flood current at the Tail of the Horseshoe? | 1.6 knot | 1.3 knot | 0.9 knots | 0.6 knots |
| 1069 | From your 1752 position, you steer $307^{\circ}$ pgc at 9 knots. At 1805, you obtain the visual bearings. What are the latitude and longitude of your 1805 position? Old Pt. Comfort Light $232^{\circ} \mathrm{pgc}$. Chesapeake Bay Tunnel North Light $130^{\circ} \mathrm{pgc}$. | $\begin{aligned} & \text { LAT } 37^{\circ} 05.9^{\prime} \mathrm{N}, \text { LONG } \\ & 76^{\circ} 08.0^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 37^{\circ} 06.0^{\prime} \mathrm{N}, \text { LONG } \\ & 76^{\circ} 08.4^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 37^{\circ} 05.9^{\prime} \mathrm{N}, \text { LONG } \\ & 76^{\circ} 07.7^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 37^{\circ} 06.1^{\prime} \mathrm{N}, \text { LONG } \\ & 76^{\circ} 07.5^{\prime} \mathrm{W} \end{aligned}$ |
| 1070 | At 1810, you sight a buoy on your starboard side labeled "19". This buoy marks $\qquad$ - | the side of York Spit Channel | the visibility limit of the red sector of Cape Henry Light | the end of York Spit Channel | the junction of the York Spit and York River Entrance Channels |
| 1071 | Based on a DR, at approximately 1817 you would expect to | enter a traffic separation zone | cross a submerged pipeline | depart a regulated area | depart a restricted area |
| 1072 | At 1845, you plot the following bearing lines: <br> Old Plantation Flats Light bearing $071^{\circ}$ true New Point Comfort Spit Light " 2 " bearing $335^{\circ}$ true <br> What is your latitude? | $37^{\circ} 10.7^{\prime} \mathrm{N}$ | $37^{\circ} 10.9^{\prime} \mathrm{N}$ | $37^{\circ} 11.2^{\prime} \mathrm{N}$ | $37^{\circ} 11.6^{\prime} \mathrm{N}$ |
| 1073 | Your 1900 position is LAT $37^{\circ} 12.9^{\prime} \mathrm{N}$, LONG $76^{\circ} 13.5^{\prime} \mathrm{W}$. You change course to $317^{\circ} \mathrm{pgc}$ and slow to 8.0 knots. What is the course per standard magnetic compass? | $329{ }^{\circ} \mathrm{psc}$ | $319^{\circ} \mathrm{psc}$ | $311^{\circ} \mathrm{psc}$ | $309{ }^{\circ} \mathrm{psc}$ |
| 1074 | If the visibility is 11 miles, what is the luminous range of New Point Comfort Spit Light "4"? | 6.5 miles | 5.0 miles | 3.3 miles | 2.0 miles |
| 1075 | According to your track line, how far off New Point Comfort Spit Light " 4 " will you be when abeam of this light? | 0.5 mile | 0.9 miles | 1.5 miles | 1.8 miles |
| 1076 | At 1930, you take a fix using the following radar ranges: York Spit Light - 3.6 miles; <br> New Point Comfort Spit Light "2" - 2.0 miles; York Spit Swash Channel Light "3" - 2.5 miles. <br> Your longitude is $\qquad$ . | 76¹6.2'W | 76¹6.5'W | 76¹6.8'W | 76¹7.2'W |
| 1077 | What was the speed made good from 1845 to 1930? | 6.2 knots | 6.8 knots | 7.5 knots | 8.3 knots |
| 1078 | What is the height above water of Davis Creek Channel Light "1"? | 15 feet (4.6 meters) | 17 feet (5.2 meters) | 19 feet (5.8 meters) | 24 feet (7.3 meters) |
| 1079 | If you have 17.3 miles to reach your destination from your 2000 position and want to be there at 2230, what speed should you make good? | 6.9 knots | 6.5 knots | 6.1 knots | 5.7 knots |


| 1080 | The following questions are based on chart 12221TR, Ch feet ( 2.4 meters). Use $10^{\circ} \mathrm{W}$ variation where required. <br> DEVIATION TABLE | sapeake Bay Entranc gyro error is $2^{\circ} \mathrm{W}$. | , and the supporting | ublications. Your vesse | has a draft of 8.0 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1081 | At 1730 , your position is LAT $37^{\circ} 13.9^{\prime} \mathrm{N}$, LONG $76^{\circ} 26.4^{\prime} \mathrm{W}$. You are steering course $088^{\circ}$ per standard magnetic compass (psc) at an engine speed of 8.0 knots. What is your distance off Tue Marshes Light at 1730? | 3.2 miles | 3.0 miles | 2.8 miles | 2.6 miles |
| 1082 | What is the maximum allowable speed of vessels underway up river from Tue Marshes Light? | 12 knots | 10 knots | 8 knots | 6 knots |
| 1083 | At 1750 , your position is LAT $37^{\circ} 14.5^{\prime} \mathrm{N}$, LONG $76^{\circ} 22.9^{\prime} \mathrm{W}$. What was the course made good between 1730 and 1750? | 081 ${ }^{\circ} \mathrm{T}$ | 078 ${ }^{\circ} \mathrm{T}$ | 075 ${ }^{\circ} \mathrm{T}$ | 072 ${ }^{\circ} \mathrm{T}$ |
| 1084 | At 1800, Tue Marshes Light bears $264.5^{\circ} \mathrm{pgc}$, York Spit Swash Channel Light " 3 " bears $007^{\circ} \mathrm{pgc}$. Your position is | $\begin{aligned} & \text { LAT } 37^{\circ} 15.5^{\prime} \mathrm{N}, \text { LONG } \\ & 76^{\circ} 19.8^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 37^{\circ} 15.2^{\prime} \mathrm{N}, \text { LONG } \\ & 76^{\circ} 20.3^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 37^{\circ} 14.5^{\prime} \mathrm{N}, \text { LONG } \\ & 76^{\circ} 20.1^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 37^{\circ} 15.0^{\prime} \mathrm{N}, \text { LONG } \\ & 76^{\circ} 20.4^{\prime} \mathrm{W} \end{aligned}$ |
| 1085 | What course should you steer per standard magnetic compass in order to navigate down the center of York River Entrance Channel (ignore set and drift)? | $149^{\circ} \mathrm{psc}$ | $145^{\circ} \mathrm{psc}$ | $141^{\circ} \mathrm{psc}$ | $139^{\circ} \mathrm{psc}$ |
| 1086 | You have just passed York River Entrance Channel Lighted Buoys "13" and "14". The chart shows a light approximately 1.0 mile off your port beam with a light characteristic "Fl 6 sec ". What is the name of this light? | York Spit Light | New Point Comfort Shoal Light | Mobjack Bay Entrance Light | York River Entrance Channel Light "1" |


| 1087 | At 1930, your vessel is between York River Entrance Channel Lighted Buoys "1YR" and "2". From this position, you change course to $142^{\circ} \mathrm{pgc}$ at an engine speed of 8.0 knots. At 2001, you obtain the following information: <br> Chesapeake Channel Tunnel North Light $-131^{\circ} \mathrm{pgc}$ Thimble Shoal Light $-248^{\circ}$ pgc <br> What were the set and drift between 1930 and 2001? | $127^{\circ}$ at 0.5 knot | $127^{\circ}$ at 1.1 knot | $307^{\circ}$ at 1.1 knot | $307^{\circ}$ at 0.5 knot |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1088 | At 2015, your vessel is at the Chesapeake Bay Bridge and Tunnel midway between buoys "13" and "14". If the height of tide is -1 foot (- 0.3 meters), what is the approximate depth of water? | 35 feet (10.6 meters) | 43 feet (13.1 meters) | 46 feet (13.9 meters) | 53 feet (15.5 meters) |
| 1089 | If you steer $143^{\circ} \mathrm{pgc}$ from your 2015 position at an engine speed of 8.0 knots, at what time would you reach a point midway between buoys "11" and "12" (ignore set and drift)? | 2029 | 2032 | 2035 | 2037 |
| 1090 | At 2015, you alter course to $154^{\circ} \mathrm{pgc}$. What is the course per standard magnetic compass (psc)? | $142^{\circ} \mathrm{psc}$ | $152^{\circ} \mathrm{psc}$ | $157^{\circ} \mathrm{psc}$ | $162^{\circ} \mathrm{psc}$ |
| 1091 | Which of the following concerning Thimble Shoal Channel is TRUE? | Only deep-draft passenger ships and large naval vessels may use the main channel. | A tow drawing 20 feet is excluded from the main channel. | The channel is 14.5 miles in length. | Thimble Shoal Channel is in international waters. |
| 1092 | At 2118, you obtain the following bearings: <br> Cape Henry Light - $148^{\circ}$ pgc <br> Cape Charles Light - $033^{\circ} \mathrm{pgc}$ <br> Thimble Shoal Light $-291^{\circ}$ pgc <br> From this position, you proceed to Norfolk, VA, a distance of approximately 26.0 miles. To arrive at Norfolk by 0200 the next day, what is the speed to make good from your 2118 position to arrive at this time? | 6.5 knots | 6.0 knots | 5.5 knots | 5.0 knots |
| 1093 | What is your 2118 position? | $\begin{aligned} & \hline \text { LAT } 36^{\circ} 56.6^{\prime} \mathrm{N}, \text { LONG } \\ & 76^{\circ} 01.0^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 36^{\circ} 57.0^{\prime} \mathrm{N}, \text { LONG } \\ & 76^{\circ} 01.5^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 36^{\circ} 57.4^{\prime} \mathrm{N}, \text { LONG } \\ & 76^{\circ} 01.9^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 36^{\circ} 58.0^{\prime} \mathrm{N}, \text { LONG } \\ & 76^{\circ} 02.4^{\prime} \mathrm{W} \end{aligned}$ |
| 1094 | From your 2118 position, you are steering $288^{\circ} \mathrm{T}$ at an engine speed of 7.0 knots. If visibility is suddenly reduced to 2 miles, at what time can you expect Old Point Comfort Light to become visible again? | The light is visible at 2118. | 2155 | 2220 | 2232 |
| 1095 | If the Old Point Comfort main light was inoperative what emergency light would be shown? | Light of reduced intensity | Alternating red and white | Flashing yellow | Strobe light |


| 1096 | The following questions are based on chart 12221TR, Ch feet ( 2.7 meters). Your height of eye is 15 feet ( 4.6 meters) <br> DEVIATION TABLE | sapeake Bay Entra <br> s). Use $10^{\circ} \mathrm{W}$ varia | , and the supp where required | ublications. Your vess yro error is $2^{\circ} \mathrm{W}$. | l has a draft of 9.0 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1097 | At 1400 , your position is LAT $37^{\circ} 14.7^{\prime} \mathrm{N}$, LONG $76^{\circ} 22.3^{\prime} \mathrm{W}$. From this position, you head for the York River Entrance Channel Buoy "17". What should you steer per standard magnetic compass for this heading? | $125^{\circ} \mathrm{psc}$ | $122^{\circ} \mathrm{psc}$ | $119^{\circ} \mathrm{psc}$ | $108^{\circ} \mathrm{psc}$ |
| 1098 | At 1430 , your position is LAT $37^{\circ} 12.8^{\prime} \mathrm{N}$, LONG $76^{\circ} 17.7^{\prime} \mathrm{W}$. At this time, you come left and steer $045^{\circ} \mathrm{T}$. This course will lead you through a channel bordered by yellow buoys. The dashed magenta lines between the buoys mark $\qquad$ | York River Entrance Channel | Fish trap areas | the piloting channel for Mobjack Bay | New Point Comfort shoal area |
| 1099 | From your 1430 fix, you order turns for 8 knots. You steer $045^{\circ} \mathrm{T}$ and experience no set and drift. At what time would you expect to have New Point Comfort Spit Light "4" abeam? | 1510 | 1504 | 1458 | 1452 |
| 1100 | At 1540 , your position is LAT $37^{\circ} 18.4^{\prime} \mathrm{N}$, LONG $76^{\circ} 10.5^{\prime} \mathrm{W}$. Which course should you steer per gyrocompass to head for the entrance to Cape Charles City? | $129^{\circ} \mathrm{pgc}$ | $123^{\circ} \mathrm{pgc}$ | $117^{\circ} \mathrm{pgc}$ | $109^{\circ} \mathrm{pgc}$ |


| 1101 | You arrive at Cape Charles City at 1700 and depart at 1800. You are underway in Chesapeake Bay and encounter heavy fog. At 1830, you obtain the following radar information: <br> Old Plantation Flats Light bearing $041.5^{\circ}$ true @ 1.9 nm <br> What is your 1830 position? | $\begin{aligned} & \text { LAT } 37^{\circ} 10.3^{\prime} \mathrm{N}, \text { LONG } \\ & 76^{\circ} 04.5^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 37^{\circ} 10.3^{\prime} \mathrm{N}, \text { LONG } \\ & 76^{\circ} 06.5^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 37^{\circ} 12.3^{\prime} \mathrm{N}, \text { LONG } \\ & 76^{\circ} 06.5^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 37^{\circ} 12.3^{\prime} \mathrm{N}, \text { LONG } \\ & 76^{\circ} 04.4^{\prime} \mathrm{W} \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1102 | From your 1830 fix, you continue south on a course of $150^{\circ} \mathrm{T}$ turning RPMs for 6 knots. You encounter a flood current in the direction of $330^{\circ} \mathrm{T}$ at 2 knots. Adjusting your course for set and drift, which course would you steer to make good a course of $150^{\circ}$ T while turning RPMs for 6 knots? | $162^{\circ} \mathrm{T}$ | $158^{\circ} \mathrm{T}$ | $150^{\circ} \mathrm{T}$ | $144^{\circ} \mathrm{T}$ |
| 1103 | Determine your 1915 position using the following visual bearings obtained at 1915. <br> Cape Charles Light $107^{\circ}$ pgc <br> Cape Henry Light $172^{\circ} \mathrm{pgc}$ <br> and Radar Bearing and Range to <br> Chesapeake Channel Tunnel South Light $189^{\circ}$ pgc at 7.2 miles | $\begin{aligned} & \text { LAT } 37^{\circ} 03.5^{\prime} \mathrm{N}, \text { LONG } \\ & 76^{\circ} 05.9^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 37^{\circ} 03.5^{\prime} \mathrm{N}, \text { LONG } \\ & 76^{\circ} 09.3^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 37^{\circ} 09.3^{\prime} \mathrm{N}, \text { LONG } \\ & 76^{\circ} 03.1^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 37^{\circ} 09.8^{\prime} \mathrm{N}, \text { LONG } \\ & 76^{\circ} 04.1^{\prime} \mathrm{W} \end{aligned}$ |
| 1104 | From your 1915 fix you come right and steer a course of $200^{\circ} \mathrm{T}$. At 2000, your position is LAT $37^{\circ} 05.5^{\prime} \mathrm{N}$, LONG $76^{\circ} 07.0^{\prime} \mathrm{W}$. Your intention is to pass through Chesapeake Channel. If there are no set and drift, what course would you steer per standard magnetic compass to make good a course of $145^{\circ} \mathrm{T}$ ? | $156^{\circ}$ | $151^{\circ}$ | $139^{\circ}$ | $134^{\circ}$ |
| 1105 | At 2100, you have passed through the Chesapeake Bay Bridge and Tunnel and determine your position to be LAT $37^{\circ} 01.3^{\prime} \mathrm{N}$, LONG $76^{\circ} 03.0^{\prime} \mathrm{W}$. The current is flooding in a direction of $303^{\circ} \mathrm{T}$ at 2.5 knots. Adjusting your course for set and drift, which course would you steer while turning RPMs for 6 knots to make good a course of $175^{\circ}$ ? | $190^{\circ} \mathrm{T}$ | $183^{\circ} \mathrm{T}$ | $164{ }^{\circ} \mathrm{T}$ | $156^{\circ} \mathrm{T}$ |
| 1106 | At 2150, your position is LAT $36^{\circ} 57.2^{\prime} \mathrm{N}$, LONG $76^{\circ} 01.3^{\prime} \mathrm{W}$. In this position on the chart, you note a light magenta line running in a direction of $030^{\circ} \mathrm{T}$. This line indicates the limits of $\qquad$ -. | a pilotage area | a precautionary area | the Cape Henry Light red sector | chart 12222 |
| 1107 | At 2200, you are in position LAT $36^{\circ} 57.5^{\prime} \mathrm{N}$, LONG $76^{\circ} 02.5^{\prime} \mathrm{W}$. You intend to travel up the Thimble Shoals auxiliary Channel to Hampton Roads. According to the Coast Pilot, what is the depth of the auxiliary channel on either side of the main channel? | 45 feet (13.7 meters) | 36 feet (11.0 meters) | 32 feet (9.8 meters) | 28 feet (8.5 meters) |


| 1108 | From your 2200 fix, you steer course $288^{\circ} \mathrm{T}$ to travel up the Thimble Shoal North Auxiliary Channel. If you are making good 6.0 knots, at what time would you expect to pass buoy "18" at the west end of the channel? (There are no set and drift.) | 2355 | 2344 | 2335 | 2324 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1109 | At 2205, you are in Thimble Shoal North Auxiliary Channel abeam of lighted gong buoy "4". At this time the visibility decreases to 5 miles. You continue to turn RPMs for 6 knots and experience no set and drift. What time would you expect Old Point Comfort Light (white sector) to become visible? | 2258 | 2246 | 2240 | 2230 |
| 1110 | The mean high water level at Old Point Comfort is | 3.3 feet (1.1 meters) | 2.6 feet (0.8 meters) | 1.2 feet (0.4 meters) | 0.0 |
| 1111 | You are entering Norfolk Harbor and have just passed Craney Island. Which chart should you use for your final approach into Norfolk Harbor? | 12263 | 12253 | 12248 | 12238 |
| 1112 | The following questions are based on chart 12221TR, Ch ( 8.2 meters). Use $10^{\circ}$ variation where required. There is <br> DEVIATION TABLE | esapeake Bay Entranc no gyro error. | , and the supporting p | ublications. The draft | your tow is 27 feet |
| 1113 | Your 0200 position is LAT $37^{\circ} 23.5^{\prime} \mathrm{N}$, LONG $76^{\circ} 09.2^{\prime} \mathrm{W}$. Your speed is 8 knots, and your course is $095^{\circ} \mathrm{T}$. Which statement is TRUE? | The depth of the water in your vicinity is about 38 to 40 fathoms (69.1 meters to 72.7 meters). | The closest major aid to navigation is New Point Comfort. | You are less than a mile from a sunken wreck which could interfere with your tow. | You will pass through a disposal area on your present course. |


| 1114 | At 0315, you obtain the following bearings: <br> Wolf Trap Light bearing $271^{\circ}$ true Old Plantation Flats Light bearing $179^{\circ}$ true <br> What is the true course from this position to the entrance of York Spit Channel? | $217^{\circ}$ | $211^{\circ}$ | 208 ${ }^{\circ}$ | $203^{\circ}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1115 | From your 0315 position, what time can you expect to reach York Spit Channel Buoys "37" and "38"? | 0423 | 0417 | 0412 | 0405 |
| 1116 | The engineer has advised that it will be necessary to secure the gyrocompass and the electronic equipment. From your 0315 position, what is your course per standard magnetic compass to York Spit Channel Buoy "38", if there is no current? | $218^{\circ} \mathrm{psc}$ | $2^{216} \mathrm{psc}$ | $214^{\circ} \mathrm{psc}$ | $212^{\circ} \mathrm{psc}$ |
| 1117 | Which chart could you use for greater detail of the area at the south end of York Spit Channel? | 12254 | 12226 | 12224 | 12222 |
| 1118 | You leave York Spit Channel at buoy "14" at 0600 with an engine speed of 12 knots. You receive orders to rendezvous with the tug "Quicksilver" and her tow at Hog Island Bell Buoy "12". What is your ETA at the rendezvous point, if you pass through Chesapeake Channel to buoy "CBJ", through the outbound traffic separation lane to buoy "NCA" (LL\#375), and then to the rendezvous point? | 0935 | 0910 | 0850 | 0830 |
| 1119 | You arrive at the rendezvous point, secure the tow, and head back southward. At 1200, you take the following bearings: <br> Sand Shoal Inlet South Light bearing $289^{\circ}$ pgc Cape Charles Light bearing $240^{\circ}$ pgc <br> What is your 1200 position? | $\begin{aligned} & \hline \text { LAT } 37^{\circ} 15.0^{\prime} \mathrm{N}, \text { LONG } \\ & 75^{\circ} 37.5^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 37^{\circ} 16.0^{\prime} \mathrm{N}, \text { LONG } \\ & 75^{\circ} 38.0^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 37^{\circ} 17.0^{\prime} \mathrm{N}, \text { LONG } \\ & 75^{\circ} 39.5^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 37^{\circ} 19.0^{\prime} \mathrm{N}, \text { LONG } \\ & 75^{\circ} 40.5^{\prime} \mathrm{W} \end{aligned}$ |
| 1120 | From your noon position, if there is no set and drift, what is your course per standard magnetic compass to the "NCA" (LL \#375) buoy? | $221^{\circ} \mathrm{psc}$ | $219^{\circ} \mathrm{psc}$ | $2^{217}{ }^{\circ} \mathrm{psc}$ | $215^{\circ} \mathrm{psc}$ |
| 1121 | Your gyro and electronic gear are again operating. At 1710, Chesapeake Light bears $137^{\circ} \mathrm{pgc}$ at 6.6 miles. The current is setting $160^{\circ} \mathrm{T}$ at 2 knots. At your speed of 6 knots, what is your true course to steer to remain in the inbound traffic lane? | $250^{\circ}$ | $261^{\circ}$ | $265^{\circ}$ | $269^{\circ}$ |


| 1122 | At 1810, you obtain the following bearings: <br> Cape Charles Light bearing $005^{\circ}$ pgc Cape Henry Light bearing $251.5^{\circ}$ pgc <br> What is your position? | $\begin{aligned} & \text { LAT } 36^{\circ} 56.0^{\prime} \mathrm{N}, \text { LONG } \\ & 75^{\circ} 58.5^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 36^{\circ} 55.4^{\prime} \mathrm{N}, \text { LONG } \\ & 75^{\circ} 56.0^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 36^{\circ} 56.8^{\prime} \mathrm{N}, \text { LONG } \\ & 75^{\circ} 55.6^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 36^{\circ} 57.4^{\prime} \mathrm{N}, \text { LONG } \\ & 75^{\circ} 54.6^{\prime} \mathrm{W} \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1123 | What speed have you made good from 1710 to 1810? | 6.3 knots | 5.5 knots | 4.9 knots | 4.2 knots |
| 1124 | If you make good a speed of 6.0 knots from your 1810 position, what is your ETA at Chesapeake Channel Lighted Bell Buoy "2C"? | 1900 | 1855 | 1845 | 1833 |
| 1125 | You passed Cape Henry Light at 0730 outbound at maximum flood. What approximate current can you expect on entering Chesapeake Channel? | Slack before ebb | Slack before flood | Flood current | Ebb current |
| 1126 | The coastline by Cape Henry is best described as | rocky with pine scrubs | low wetlands | sandy hills about eighty feet high | low and thinly wooded with many beach houses |
| 1127 | Inbound, the color of Cape Henry Light will ___ | alternate regardless of your position | change after you reach Chesapeake Channel Lighted Bell Buoy "2C" | remain the same | change before you reach Chesapeake Channel Lighted Bell Buoy "2C" |
| 1128 | The following questions are based on chart 12354TR, Lon 12 feet ( 3.6 meters). Your height of eye is 16 feet ( 4.8 me <br> DEVIATION TABLE | Island Sound - East ers). The gyro error | Part, and the suppo $2^{\circ} \mathrm{E}$. Use $14^{\circ} \mathrm{W}$ varia | ing publications. You on where required. | vessel has a draft of |


| 1129 | You are on course $082^{\circ} \mathrm{T}$, and the engines are turning for 8 knots. At 0352, you take the following bearings: Stratford Point Light $016^{\circ}$ pgc Stratford Shoal (Middle Ground) Light $137^{\circ}$ pgc <br> What is your 0352 position? | $\begin{aligned} & \text { LAT } 41^{\circ} 05.2^{\prime} \mathrm{N}, \text { LONG } \\ & 73^{\circ} 07.8^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 05.4^{\prime} \mathrm{N}, \text { LONG } \\ & 73^{\circ} 07.3^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 05.3^{\prime} \mathrm{N}, \text { LONG } \\ & 73^{\circ} 07.5^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 05.4^{\prime} \mathrm{N}, \text { LONG } \\ & 73^{\circ} 07.7^{\circ} \mathrm{W} \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1130 | If the visibility is 11 miles, what is the earliest time you can expect to see New Haven Light? | The light is visible at 0352. | 0443 | 0414 | You will not sight the light. |
| 1131 | While on a heading of $082^{\circ} \mathrm{T}$, you sight Stratford Shoal (Middle Ground) Light in line with Old Field Point Light bearing $206^{\circ}$ per standard magnetic compass. From this you can determine the $\qquad$ . | deviation table is correct for that heading | variation | compass error is $17.5^{\circ} \mathrm{E}$ | deviation is $3.5^{\circ} \mathrm{E}$ for a bearing of $206^{\circ}$ per standard magnetic compass |
| 1132 | The maximum ebb current at a location 4.3 miles south of Stratford Point will occur at 0413. The predicted current will be 1.0 knot at $075^{\circ}$. What will be your course made good if you steer $082^{\circ} \mathrm{T}$ at 8 knots? | 087${ }^{\circ}$ | 085 ${ }^{\circ} \mathrm{T}$ | ${ }^{083}{ }^{\circ} \mathrm{T}$ | 081 ${ }^{\circ} \mathrm{T}$ |
| 1133 | The characteristic of Branford Reef Light is ___ | flashing red every 4 seconds | flashing red every 3 seconds | flashing yellow every 4 seconds | flashing white every 6 seconds |
| 1134 | At 0415, you take the following bearings: <br> Stratford Point Light $329.5^{\circ} \mathrm{pgc}$ <br> Middle Ground Light $223.5^{\circ} \mathrm{pgc}$ <br> Old Field Point Light $\quad 199.5^{\circ} \mathrm{pgc}$ <br> Which statement is TRUE? | The current's drift is greater than predicted. | You are to the right of your intended track line. | The course made good since 0352 is $081^{\circ} \mathrm{T}$. | Your fathometer reads about 76 fathoms. |
| 1135 | If you change course at 0420, what is the course to make good to leave Twenty Eight Foot Shoal Lighted Buoy abeam to port at 1 mile? | $0^{\circ}{ }^{\circ} \mathrm{T}$ | 084 ${ }^{\circ} \mathrm{T}$ | ${ }^{082}{ }^{\circ} \mathrm{T}$ | 079 ${ }^{\circ} \mathrm{T}$ |
| 1136 | At 0430, you take the following radar ranges: <br> Stratford Point Light @ 5.25 nm <br> Middle Ground Light @ 4.55 nm <br> What is your 0430 position? | $\begin{aligned} & \text { LAT } 41^{\circ} 08.9^{\prime} \mathrm{N}, \text { LONG } \\ & 73^{\circ} 00.0^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 05.0^{\prime} \mathrm{N}, \text { LONG } \\ & 73^{\circ} 01.1^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 05.8^{\prime} \mathrm{N}, \text { LONG } \\ & 73^{\circ} 00.8^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 06.5^{\prime} \mathrm{N}, \text { LONG } \\ & 73^{\circ} 01.4^{\prime} \mathrm{W} \end{aligned}$ |
| 1137 | From your 0430 position, what is the course per standard magnetic compass to a position where Twenty-eight foot Shoal lighted buoy "TE" is abeam to port at 1 mile? | $101.5^{\circ}$ | 098.0 ${ }^{\circ}$ | 086.0 ${ }^{\circ}$ | $082.5^{\circ}$ |
| 1138 | By 0430, the wind has increased, and the visibility cleared due to passage of a front. You estimate $3^{\circ}$ leeway due to NW'ly winds. What is the course per gyrocompass to pass 1.2 miles due south of Twenty-eight Foot Shoal Lighted Buoy "TE"? | 090 ${ }^{\circ}$ | 086 ${ }^{\circ}$ | $083^{\circ}$ | 080 ${ }^{\circ}$ |



| 1145 | At 0410, you take the following bearings: <br> What is your 0410 position? | $\begin{aligned} & \text { LAT } 37^{\circ} 20.9^{\prime} \mathrm{N}, \text { LONG } \\ & 76^{\circ} 07.7^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 37^{\circ} 21.0^{\prime} \mathrm{N}, \text { LONG } \\ & 76^{\circ} 08.1^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 37^{\circ} 21.1^{\prime} \mathrm{N}, \text { LONG } \\ & 76^{\circ} 07.9^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 37^{\circ} 21.2^{\prime} \mathrm{N}, \text { LONG } \\ & 76^{\circ} 08.2^{\prime} \mathrm{W} \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1146 | If the visibility is 5 miles and you are in the red sector, at what distance off should you sight Cape Henry Light? | 9 miles | 11 miles | 13 miles | 15 miles |
| 1147 | From your 0410 fix, what is the course per standard magnetic compass to the entrance to York Spit Channel between buoys "37" and "38"? | $152^{\circ}$ | $156^{\circ}$ | $176{ }^{\circ}$ | $178^{\circ}$ |
| 1148 | You are turning for 9 knots, a westerly wind is causing $3^{\circ}$ of leeway, and the current is $320^{\circ} \mathrm{T}$ at 1.2 knots. What true course should you steer to remain in the northern leg of York Spit Channel? | $203^{\circ} \mathrm{T}$ | $197^{\circ} \mathrm{T}$ | 194* ${ }^{\circ}$ | $191^{\circ} \mathrm{T}$ |
| 1149 | If you are making 8.3 knots over the ground, what is your ETA at the first turning point in York Spit Channel between buoys "29" and "30"? | 0522 | 0508 | 0456 | 0448 |
| 1150 | Which publication contains the specific information about navigating in York Spit Channel? | Coast Pilot | Light List | Chesapeake Bay Harbor- master's Regulations Manual | Navigator's Manual Chesapeake Bay |
| 1151 | At 0530, the Coast Guard announces that Chesapeake Channel is closed indefinitely due to a collision occurring in the channel between Trestle "B" and "C" of the Chesapeake Bay Bridge and Tunnel. You exit York Spit Channel, leaving buoy " 20 " abeam to port at 0.1 mile, and alter course to leave Horseshoe Crossing Lighted Bell Buoy abeam to port at 0.2 mile. What is the course per gyrocompass? | $193^{\circ} \mathrm{pgc}$ | $190^{\circ} \mathrm{pgc}$ | $187^{\circ} \mathrm{pgc}$ | $185^{\circ} \mathrm{pgc}$ |
| 1152 | After you enter Thimble Shoal Channel, you will alter course to pass between Trestle "A" and "B". Which channel should you use? | Thimble Shoal Main Channel or the South Auxiliary Channel | Any of the channels but keep to the right hand side | Thimble Shoal Main Channel | The South Auxiliary Channel |
| 1153 | As you pass through the Chesapeake Bay Bridge and Tunnel, you sight Trestle "A" in line bearing $198^{\circ} \mathrm{pgc}$. What is the gyro error? | $2^{\circ} \mathrm{E}$ | $0^{\circ}$ | $1^{\circ} \mathrm{W}$ | $2^{\circ} \mathrm{W}$ |
| 1154 | You sighted Trestle "A" in line at 0707 and are steering $108^{\circ} \mathrm{T}$. At 0731, Cape Henry Light bears $136^{\circ}$ T; Cape Charles Light bears $032.5^{\circ} \mathrm{T}$; and Thimble Shoal Tunnel South Light bears $282^{\circ}$ T. What was the speed made good between 0707 and 0731? | 9.4 knots | 9.2 knots | 8.8 knots | 8.3 knots |


| 1155 | At 0731, approximately how much water is under your keel? | 26 feet (7.9 meters) | 31 feet (9.4 meters) | 48 feet (14.5 meters) | 54 feet (16.4 meters) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1156 | What is the distance from your 0731 fix to Wilmington, N.C. (LAT $34^{\circ} 14.0^{\prime} \mathrm{N}$, LONG $77^{\circ} 57.0^{\prime} \mathrm{W}$ )? | 486 miles | 402 miles | 363 miles | 339 miles |
| 1157 | You will enter waters governed by the International Rules when | you cross the territorial sea boundary line | abeam of buoy "CBJ" | Cape Charles Light bears $022^{\circ} \mathrm{T}$ | you cross the boundary of the contiguous zone |
| 1158 | At 0812, you obtain the following radar information: <br> Cape Henry Light bearing $284^{\circ}$ true @ 3.8 nm <br> What is your 0812 position? | $\begin{aligned} & \text { LAT } 36^{\circ} 53.7^{\prime} \mathrm{N}, \text { LONG } \\ & 75^{\circ} 56.0^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 36^{\circ} 53.8^{\prime} \mathrm{N}, \text { LONG } \\ & 75^{\circ} 56.1^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 36^{\circ} 54.6^{\prime} \mathrm{N}, \text { LONG } \\ & 75^{\circ} 55.8^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 36^{\circ} 55.2^{\prime} \mathrm{N}, \text { LONG } \\ & 75^{\circ} 55.4^{\prime} \mathrm{W} \end{aligned}$ |
| 1159 | At 0812, you are on course $132^{\circ} \mathrm{T}$. The standard magnetic compass reads $135^{\circ}$. What should you conclude? | The deviation table is correct for that heading. | You should adjust the magnetic compass. | The deviation is increasing as you go south. | $\begin{aligned} & \text { Your compass may be } \\ & \text { influenced by a local } \\ & \text { magnetic disturbance. } \end{aligned}$ |
| 1160 | The following questions are based on chart 12354TR, Long 10 feet ( 3.1 meters). Your height of eye is 35 feet ( 10.6 m <br> DEVIATION TABLE | g Island Sound - Easte eters). Use $14^{\circ} \mathrm{W}$ vari | rn Part, and the supp iation where required. | ting publications. You | vessel has a draft of |
| 1161 | At 0345, you set a course to depart New London Harbor. Assuming no set and drift, which standard magnetic compass course must you steer to stay in the middle of the channel? | $192^{\circ} \mathrm{psc}$ | $190^{\circ} \mathrm{psc}$ | $187^{\circ} \mathrm{psc}$ | $175^{\circ} \mathrm{psc}$ |


| 1162 | Which statement regarding the wreck 0.2 mile south of buoys " 1 " and " 2 " at the entrance to New London Harbor is TRUE? | The wreck presents a danger to all vessels with drafts in excess of 30 feet ( 9.1 meters). | The wreck is visible above the sounding datum between the months of March and June. | The wreck was cleared by wire drag in 1982 and will not appear on future charts. | The wreck is shown on the chart, but its actual existence is doubtful. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1163 | At 0530, your position is LAT $41^{\circ} 12.6^{\prime} \mathrm{N}$, LONG $72^{\circ} 08.5^{\prime} \mathrm{W}$. What is the color of New London Harbor Light? | Green | White | Red | Alternating white and green |
| 1164 | From your 0530 position, you set a course of $271^{\circ} \mathrm{psc}$ with an engine speed of 9 knots. At 0645, Cornfield Safe-Water Buoy is abeam to starboard. What speed have you averaged since 0530? | 9.5 knots | 9.0 knots | 8.6 knots | 7.5 knots |
| 1165 | At 0730 , your position is LAT $41^{\circ} 10.5^{\prime} \mathrm{N}$, LONG $72^{\circ} 32.2^{\prime} \mathrm{W}$. From this position you steer course $286^{\circ}$ psc with an engine speed of 9.0 knots. What is the approximate depth of water under your keel? | 67 feet (20.3 meters) | 62 feet (18.8 meters) | 57 feet (17.3 meters) | 52 feet (15.8 meters) |
| 1166 | The broken magenta line which runs parallel to the shore between Roanoke Point and Mattituck Inlet marks a | fish trap area | pipeline | demarcation line | cable area |
| 1167 | Assuming no current, at what time can you expect to be abeam of Townshend Ledge Lighted Buoy? | 0910 | 0905 | 0902 | 0859 |
| 1168 | At 0730, visibility is 5.5 miles. At what time will you lose sight of Horton Point Light? | It is not visible at 0730 | 0733 | 0751 | 0812 |
| 1169 | At 0820, you take the following bearings: <br> Falkner Island Light bearing $052^{\circ}$ true Branford Reef Light bearing $307^{\circ}$ true <br> What are the set and drift since 0730 ? | Set $052^{\circ} \mathrm{T}$, drift 1.1 knots | Set $052^{\circ} \mathrm{T}$, drift 1.3 knots | Set $232^{\circ}$, drift 1.3 knot | Set $232^{\circ} \mathrm{T}$, drift 1.1 knots |
| 1170 | At 0820, you change course to $301^{\circ} \mathrm{psc}$ and reduce speed to 7.5 knots. At 0900, you take the following visual bearings: <br> Your 0900 position is $\qquad$ . | $\begin{aligned} & \text { LAT } 41^{\circ} 11.9^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 50.6^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 12.1^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 48.6^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 12.3^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 47.7^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 12.5^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 44.3^{\prime} \mathrm{W} \end{aligned}$ |
| 1171 | At 0900, the current is flooding in a direction of $350^{\circ} \mathrm{T}$ at 1.2 knots. If your engines are turning RPMs for 9 knots, which course should you steer per standard magnetic compass to make good a course of $297^{\circ}$ true? | $319^{\circ} \mathrm{psc}$ | $317^{\circ} \mathrm{psc}$ | $311^{\circ} \mathrm{psc}$ | $302^{\circ} \mathrm{psc}$ |
| 1172 | Which chart would you use for more detailed information on New Haven Harbor? | 12371 | 12370 | 12372 | 12373 |


| 1173 | What true course and speed did you make good between 0730 and 0900? | $271^{\circ} \mathrm{T}, 8.9$ knots | ${ }^{273}{ }^{\circ} \mathrm{T}, 8.7$ knots | 277${ }^{\circ}$, 8.4 knots | 284${ }^{\circ} \mathrm{T}, 7.5$ knots |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1174 | As you enter the New Haven Outer Channel, you sight the outer range markers in line directly ahead. Your heading at this time is $347^{\circ} \mathrm{psc}$. What is your compass deviation by observation? | $4.5^{\circ} \mathrm{West}$ | $3.5^{\circ} \mathrm{West}$ | $3.0^{\circ}$ East | $0.5^{\circ}$ East |
| 1175 | Which course should you change to per standard magnetic compass as you pass SW Ledge Light to remain in the channel? | 026 ${ }^{\circ} \mathrm{psc}$ | 022 ${ }^{\circ} \mathrm{psc}$ | 014 ${ }^{\circ} \mathrm{psc}$ | 007 ${ }^{\circ} \mathrm{psc}$ |
| 1176 | The following questions are based on chart 12354TR, Long 12 feet ( 3.7 meters). Your height of eye is 24 feet ( 7.3 me <br> DEVIATION TABLE | g Island Sound - East ters). Use $14^{\circ} \mathrm{W}$ varia | Part, and the suppo ion where required. | rting publications. Your | vessel has a draft of |
| 1177 | Your position is LAT $40^{\circ} 59.0^{\prime} \mathrm{N}$, LONG $73^{\circ} 06.2^{\prime} \mathrm{W}$. What is the course per standard magnetic compass to New Haven Harbor Lighted Whistle Buoy "NH"? | 052 ${ }^{\circ}$ | 049 ${ }^{\circ}$ | 046 ${ }^{\circ}$ | 035 ${ }^{\circ}$ |
| 1178 | You depart from the position in the previous question at 2114 and make good 12 knots on a course of $040^{\circ} \mathrm{T}$. At what time will you sight New Haven Light if the visibility is 11 miles? | The light is visible at 2114. | 2152 | 2159 | 2206 |
| 1179 | At 2142, you take the following bearings: <br> What is your 2142 position? | $\begin{aligned} & \text { LAT } 41^{\circ} 02.7^{\prime} \mathrm{N}, \text { LONG } \\ & 73^{\circ} 01.2^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 03.0^{\prime} \mathrm{N}, \text { LONG } \\ & 73^{\circ} 01.7^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 03.1^{\prime} \mathrm{N}, \text { LONG } \\ & 73^{\circ} 01.3^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 03.3^{\prime} \mathrm{N}, \text { LONG } \\ & 73^{\circ} 01.9^{\prime} \mathrm{W} \end{aligned}$ |


| 1180 | What was the speed made good between 2114 and 2142? | 11.4 knots | 11.7 knots | 12.0 knots | 12.3 knots |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1181 | At 2142, you change course to make good $030^{\circ} \mathrm{T}$ and increase speed to 14 knots. You rendezvous with another vessel and receive fresh supplies while off New Haven Harbor lighted whistle buoy " NH ". What is the light characteristic of this buoy? | ( _ . ) | ( _ _ ) | (. . ) | (._) |
| 1182 | At 0109 you get underway, and at 0112 you take the following bearings: <br> Branford Reef Light bearing $051^{\circ}$ true Stratford Point Light bearing $258^{\circ}$ true <br> What is your 0112 position? | $\begin{aligned} & \text { LAT } 41^{\circ} 11.0^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 51.0^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 11.4^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 51.3^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 11.6^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 51.6^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 11.8^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 51.8^{\prime} \mathrm{W} \end{aligned}$ |
| 1183 | At 0112, what is the approximate depth under the keel? | 57 feet (17.3 meters) | 51 feet (15.5 meters) | 47 feet (14.2 meters) | 38 feet (11.5 meters) |
| 1184 | At 0112, you are on course $124^{\circ} \mathrm{T}$ and turning for 12.0 knots. What course will you make good if the current is $255^{\circ} \mathrm{T}$ at 1.2 knots? | $118^{\circ}$ | $120^{\circ}$ | $129^{\circ}$ | $132^{\circ}$ |
| 1185 | Branford Reef is ___ | a hard sand shoal marked with a light | completely submerged at all stages of the tide | surrounded by rocks awash at low water spring tides | a small, low, sandy islet surrounded by shoal water |
| 1186 | At 0112, the radar range to Branford Reef Light is 2.9 miles. At 0125, the range is 3.6 miles. What is the position of your 0125 running fix if you are steering $124^{\circ} \mathrm{T}$ at 12 knots? | $\begin{aligned} & \text { LAT } 41^{\circ} 09.3^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 48.7^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 09.7^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 48.1^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 09.8^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 47.2^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 10.2^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 47.7^{\prime} \mathrm{W} \end{aligned}$ |
| 1187 | At 0130, your position is LAT $41^{\circ} 09.3^{\prime} \mathrm{N}$, LONG $72^{\circ} 46.9^{\prime} \mathrm{W}$ when you change course to $086^{\circ} \mathrm{T}$. If you make good $086^{\circ} \mathrm{T}$, what is the closest point of approach to Twenty-Eight Foot Shoal Lighted Buoy? | 1.2 mile | 1.1 mile | 0.9 miles | 0.7 miles |
| 1188 | At 0200, you take the following bearings: <br> What were the set and drift from 0130? | $260^{\circ}$ at 1.0 knot | $080^{\circ}$ at 0.5 knot | $260^{\circ}$ at 0.5 knot | There is no current. |
| 1189 | What is the distance from your 0200 position to the point where Twenty-Eight Foot Shoal lighted buoy is abeam to starboard? | 7.3 miles | 7.1 miles | 6.9 miles | 6.6 miles |
| 1190 | The shoreline along Rocky Point should give a good radar return because $\qquad$ . | the shore is bluff and rocky | of offshore exposed rocks | submerged reefs cause prominent breakers | the lookout tower is marked with radar reflectors |


| 1191 | You sight Bartlett Reef Light in line with New London Harbor Light bearing $043^{\circ} \mathrm{pgc}$. You are heading $088^{\circ} \mathrm{pgc}$ and $098.5^{\circ}$ per standard magnetic compass at the time of the observation. Which statement is TRUE? | The true heading at the observation was $090^{\circ}$. | The gyro error is $2^{\circ} \mathrm{E}$. | The magnetic compass error is $9.5^{\circ} \mathrm{W}$. | The deviation is $1.5^{\circ} \mathrm{E}$ by observation. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1192 | The following questions are based on chart 13205TR, Blo meters). Your height of eye is 16 feet ( 4.8 meters). The <br> DEVIATION TABLE | ck Island Sound, and gyro error is $2^{\circ} \mathrm{E}$. Use | e supporting publicatio $5^{\circ} \mathrm{W}$ variation where | ns. Your vessel has a required. | draft of 12 feet (3.7 |
| 1193 | At 0520, you take the following observations: <br> Point Judith Light $032^{\circ} \mathrm{pgc}$ Point Judith Harbor of Refuge - Main Breakwater Center Light $308^{\circ} \mathrm{pgc}$ <br> What is the position of your 0520 fix? | LAT 41²0.8'N, Long 71²9.7'W | $\begin{aligned} & \text { LAT } 41^{\circ} 20.6^{\prime} \mathrm{N}, \text { Long } \\ & 71^{\circ} 30.4^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 20.6^{\prime} \mathrm{N}, \text { Long } \\ & 71^{\circ} 30.0^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 20.5^{\prime} \mathrm{N}, \text { Long } \\ & 71^{\circ} 29.4^{\prime} \mathrm{W} \end{aligned}$ |
| 1194 | Point Judith Harbor of Refuge ___ | is used mostly by towing vessels | has a maximum depth of 14 feet at MHW | is entered through the East Gap or the West Gap | is easily accessible in heavy southerly seas |
| 1195 | At 0520 you are on course $243^{\circ} \mathrm{pgc}$ at 12 knots. What is the course per standard magnetic compass? | $2227^{\circ} \mathrm{psc}$ | $233^{\circ} \mathrm{psc}$ | 258ºpsc | $262^{\circ} \mathrm{psc}$ |
| 1196 | The coastline between Point Judith and Watch Hill is | steep with rocky bluffs | sandy and broken by rocky points | low and marshy | heavily forested |
| 1197 | In clear weather, how far away will you sight Point Judith Light? (use charted range of 20 miles as nominal range) | 14.0 nm | 12.3 nm | 10.6 nm | 9.2 nm |
| 1198 | At what time will you cross the 60 foot curve if you make good 12 knots? | 0544 | 0541 | 0534 | 0528 |


| 1199 | The two wavy magenta lines running to Green Hill Point represent $\qquad$ | recommended approaches to Green Hill Point | a restricted anchorage area | submarine cables | prohibited fishing areas |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1200 | At 0600 you take the following bearings: <br> Point Judith Light bearing $063^{\circ}$ pgc Block Island North Reef Light bearing $144^{\circ}$ pgc <br> What is your 0600 position? | LAT $41^{\circ} 18.3^{\prime} \mathrm{N}$, LONG $71^{\circ} 38.7^{\prime} \mathrm{W}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 18.4^{\prime} \mathrm{N}, \text { LONG } \\ & 71^{\circ} 38.0^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 18.5^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 38.1^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 18.7^{\prime} \mathrm{N}, \text { LONG } \\ & 71^{\circ} 38.9^{\prime} \mathrm{W} \end{aligned}$ |
| 1201 | What was the current between 0520 and 0600? | $201^{\circ}$ at 1.0 knot | $201{ }^{\circ}$ at 1.5 knot | $021{ }^{\circ}$ at 1.5 knot | $021^{\circ}$ at 1.0 knots |
| 1202 | From your 0600 position, what is the course per gyrocompass to leave Watch Hill Light abeam to starboard at 2.0 miles if a southerly wind is producing $3^{\circ}$ of leeway? | $262^{\circ} \mathrm{pgc}$ | 258 ${ }^{\circ} \mathrm{pgc}$ | 256 ${ }^{\circ} \mathrm{pgc}$ | $252^{\circ} \mathrm{pgc}$ |
| 1203 | At 0645, Watch Hill Point (left tangent) bears $314.5^{\circ} \mathrm{T}$ at 2.75 miles. What was the speed made good between 0600 and 0645? | 11.4 knots | 10.7 knots | 9.8 knots | 8.1 knots |
| 1204 | At 0705, you take the following bearings: <br> Watch Hill Light $030.5^{\circ} \mathrm{pgc}$ <br> Latimer Reef Light $329.0^{\circ} \mathrm{pgc}$ <br> Race Rock Light $262.0^{\circ}$ pgc <br> What was the true course made good between 0645 and 0705? | $266^{\circ} \mathrm{T}$ | ${ }^{263}{ }^{\circ} \mathrm{T}$ | $256^{\circ} \mathrm{T}$ | $252^{\circ} \mathrm{T}$ |
| 1205 | At 0705, you change course to head for The Race. You wish to leave Race Rock Light bearing due north at 0.4 mile. If the current is $100^{\circ} \mathrm{T}$, at 2.8 knots, and you are turning for 12.0 knots, what course (pgc) should you steer? | $267^{\circ} \mathrm{pgc}$ | 263 ${ }^{\circ} \mathrm{pgc}$ | $255^{\circ} \mathrm{pgc}$ | 250 ${ }^{\circ} \mathrm{pgc}$ |
| 1206 | You are bound for New London. Where will you cross the demarcation line and be governed by the Inland Rules of the Road? | You are already governed by the Inland Rules. | Above the Thames River Bridge | In the Race | You will not be governed by the Rules. |
| 1207 | In order to check your compasses, you sight North Dumpling Island Light in line with Latimer Reef Light bearing $074^{\circ}$ pgc. The helmsman was steering $303^{\circ} \mathrm{pgc}$ and $315^{\circ}$ per standard magnetic compass at the time. <br> Which of the following is TRUE? | The true line of the range is $072^{\circ}$. | The deviation based on the observation is $15^{\circ} \mathrm{W}$. | The magnetic compass error is $12^{\circ} \mathrm{W}$. | The gyro error is exactly $1.5^{\circ} \mathrm{E}$. |


| 1208 | The following questions should be answered using chart your vessel is 12 feet ( 3.6 meters) and your height of eye abbreviated "psc". Use a variation of $14^{\circ} \mathrm{W}$ for the entire <br> DEVIATION TABLE | 2354TR, Long Island is 16 feet ( 4.8 meters) ot. | Sound - Eastern Part, Gyro error is $2^{\circ} \mathrm{W}$. "P | nd the supporting public r standard magnetic c | cations. The draft of mpass" is |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1209 | You are on course $092^{\circ} \mathrm{T}$, and the engines are turning for 8 knots. At 0452, you take the following bearings: <br> Stratford Point Light $020^{\circ}$ pgc Stratford Shoal (Middle Ground) Light $141^{\circ} \mathrm{pgc}$ <br> What is your 0452 position? | LAT $41^{\circ} 05.2^{\prime} \mathrm{N}$, LONG $73^{\circ} 07.8^{\prime} \mathrm{W}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 05.0^{\prime} \mathrm{N}, \text { LONG } \\ & 73^{\circ} 07.5^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 05.0^{\prime} \mathrm{N}, \text { LONG } \\ & 73^{\circ} 07.3^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 04.8^{\prime} \mathrm{N}, \text { LONG } \\ & 73^{\circ} 07.3^{\prime} \mathrm{W} \end{aligned}$ |
| 1210 | If the visibility is 10 miles, what is the earliest time you can expect to see New Haven Light? | 0500 | 0508 | 0514 | You will not sight the light. |
| 1211 | At 0507, Stratford Shoal Middle Ground Light bears $208^{\circ}$ pgc. What is the position of your 0507 running fix? | $\begin{aligned} & \text { LAT } 41^{\circ} 04.6^{\prime} \mathrm{N}, \text { LONG } \\ & 73^{\circ} 04.7^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 04.8^{\prime} \mathrm{N}, \text { LONG } \\ & 73^{\circ} 04.8^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 04.8^{\prime} \mathrm{N}, \text { LONG } \\ & 73^{\circ} 04.9^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 05.1^{\prime} \mathrm{N}, \text { LONG } \\ & 73^{\circ} 05.1^{\prime} \mathrm{W} \end{aligned}$ |
| 1212 | Based on your running fix, you ___. | have a following current | have a head current | are being set to the north | are not affected by a current |
| 1213 | Your 0507 position is about 7 miles from Bridgeport, CT. What is the distance from this position to Newport, RI? | 114 miles | 101 miles | 95 miles | 88 miles |
| 1214 | Your 0530 position is LAT $41^{\circ} 04.9^{\prime} \mathrm{N}$, LONG $73^{\circ} 01.1^{\prime} \mathrm{W}$. What is the course per standard magnetic compass to a position 1.0 mile south of Twenty Eight Foot Shoal "TE" buoy? | 099.5 ${ }^{\circ} \mathrm{psc}$ | 096.0 ${ }^{\circ} \mathrm{psc}$ | 092.5 ${ }^{\circ} \mathrm{psc}$ | 082.0 ${ }^{\circ} \mathrm{psc}$ |
| 1215 | The south shore of Long Island Sound near your position is | high with numerous cliffs | fringed with rock shoals | backed by marshes and wooded uplands | low and marshy |


| 1216 | At 0530, you change course to $090^{\circ} \mathrm{T}$ and increase speed to 8.5 knots. What is the course to steer per gyro compass if northerly winds are causing $2^{\circ}$ of leeway? | 094 ${ }^{\circ} \mathrm{pgc}$ | 092 ${ }^{\circ} \mathrm{pgc}$ | 090 ${ }^{\circ} \mathrm{pgc}$ | 088ºpgc |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1217 | At 0615, Stratford Point Light bears $292^{\circ} \mathrm{pgc}$, Falkner Island Light bears $052^{\circ} \mathrm{pgc}$, and Branford Reef Light bears $018^{\circ} \mathrm{pgc}$. What was the current since 0530? | $083^{\circ}$ at 0.9 knots | $083{ }^{\circ}$ at 1.2 knots | $263^{\circ}$ at 1.2 knots | $263^{\circ}$ at 0.9 knots |
| 1218 | What is the approximate depth of the water under the keel at 0615? | 85 feet (25.9 meters) | 89 feet (27.1 meters) | 95 feet (29 meters) | 106 feet (32.3 meters) |
| 1219 | At 0615 you change course to $078^{\circ} \mathrm{T}$. If there is no current, when will Falkner Island Light be abeam? | 0730 | 0735 | 0743 | 0750 |
| 1220 | At 0700, Falkner Island Light bears $023^{\circ} \mathrm{pgc}$, and the range to the south tip of Falkner Island is 7.1 miles. What was the course made good since 0615? | ${ }^{087}{ }^{\circ} \mathrm{T}$ | 084 ${ }^{\circ} \mathrm{T}$ | ${ }^{081}{ }^{\circ} \mathrm{T}$ | 078 ${ }^{\circ}$ T |
| 1221 | At 0705, the gyro loses power. At 0715, you are on course $092^{\circ}$ per standard magnetic compass (psc) when you take the following bearings: Falkner Light bears $356^{\circ}$ psc, Horton Point Light bears $123^{\circ}$ psc, and Kelsey Point Breakwater Light bears $048^{\circ} \mathrm{psc}$. What is the position of your 0715 fix? | $\begin{aligned} & \text { LAT } 41^{\circ} 06.7^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 36.0^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 07.0^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 36.2^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 07.2^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 36.4^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 07.4^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 36.4^{\prime} \mathrm{W} \end{aligned}$ |
| 1222 | Horton Point Light ___ | is 14 feet above sea level | has a fixed green light | is shown from a white square tower | is synchronized with a radio beacon |
| 1223 | If visibility permits, Little Gull Island Light will break the horizon at a range of approximately $\qquad$ . | 18.0 miles | 15.6 miles | 12.8 miles | 11.1 miles |
| 1224 | 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 $206^{\circ} \mathrm{T}$ and your speed is 18 knots. |  |  |  |  |
| 1225 | At 0705 your position is Latitude $37^{\circ} 20.8^{\prime} \mathrm{N}$ Longitude $75^{\circ}$ 29.9' W . If a northwesterly breeze is causing $3^{\circ}$ leeway what is the true course to steer in order to pass Hog Island Lighted Bell Buoy "12" abeam at a distance of two miles? | $212^{\circ} \mathrm{T}$ | $209^{\circ} \mathrm{T}$ | $206^{\circ} \mathrm{T}$ | $203{ }^{\circ} \mathrm{T}$ |
| 1226 | At 0725 you determined your vessel's position to be $37^{\circ} 15.5^{\prime} \mathrm{N}$, $75^{\circ} 33.2^{\prime} \mathrm{W}$. Assuming that you make good your course of $206^{\circ}$ true and a speed of 18 knots, at what time would you expect to be abeam of Cape Charles Lighted Bell Buoy "14"? | 0750 | 0754 | 0758 | 0802 |
| 1227 | At about what time will you see Chesapeake Light if visibility is exceptionally clear? | 0729 | 0733 | 0738 | 0742 |
| 1228 | At 0741 you are still steering a course of $206^{\circ}$ true, with a speed of 18 knots. At this time you observe Cape Charles Lighted Bell Buoy "14" bearing $222^{\circ}$ true and Hog Island Lighted Bell Buoy "12" bearing $015^{\circ}$ true. What were the set and drift experienced since 0725 ? | $259{ }^{\circ}$ true at 3.2 knots | $049^{\circ}$ true at 2.5 knots | $240^{\circ}$ true at 1.9 knots | $042^{\circ}$ true at 3.3 knots |


| 1229 | From your 0741 position, you wish to change course in order to pass 2.2 miles easterly of Cape Charles Lighted Bell Buoy "14". Your engine speed is now 14.0 knots. You estimate the current to be $240^{\circ}$ true at 1.8 knots. What is the true course to steer to make good the desired course? | $179^{\circ}$ true | $185^{\circ}$ true | $190^{\circ}$ true | $197^{\circ}$ true |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1230 | At 0811 your vessel's position is $37^{\circ} 04.9^{\prime} \mathrm{N}, 75^{\circ} 39.7^{\prime} \mathrm{W}$. You are steering a course of $220^{\circ}$ true at a speed of 14.0 knots. At what time would you expect the buoys in the northeasterly traffic scheme to line up, if you do not correct for a southwesterly current of 1.8 knots? | 0826 | 0831 | 0837 | 0846 |
| 1231 | At 0841 Chesapeake Light bears $164^{\circ}$ true, Cape Charles Light bears $312^{\circ}$ true, and Cape Henry Light bears $247^{\circ}$ true. What was your course made good since 0811? | $226{ }^{\circ}$ true | $230^{\circ}$ true | $233^{\circ}$ true | $237^{\circ}$ true |
| 1232 | From your 0841 position, you are steering a course of $241^{\circ}$ true to the northeasterly inbound channel entrance, your speed is now 15 knots. What is your ETA abeam of buoy "NCA" (LL\#375)? | 0850 | 0855 | 0901 | 0911 |
| 1233 | As you pass through the Chesapeake Bay Bridge and Tunnel, you take a bearing of $047^{\circ} \mathrm{pgc}$ along trestle C when it is in line. The helmsman reports the vessel's heading as $316^{\circ} \mathrm{pgc}$ and $329^{\circ} \mathrm{psc}$. What is the deviation on that heading? | $3^{\circ} \mathrm{E}$ | $1^{\circ} \mathrm{E}$ | $1^{\circ} \mathrm{W}$ | $9^{\circ} \mathrm{W}$ |
| 1234 | The following questions are to be answered using chart 132 approaching Block Island Sound from sea. Your vessel has compass, depth finder, and radar. | 3205 TR, Block Island as a draft of 20 feet. | ound, and supporting uipment on board your | publications. On 7 Sep vessel includes gyroc | ember, you are ompass, magnetic |
| 1235 | At 1830 your position is LAT $40^{\circ} 42.5^{\prime} \mathrm{N}$, LONG $72^{\circ} 07.1^{\prime} \mathrm{W}$. You are on course $046^{\circ} \mathrm{T}$ and is making turns for 9 knots. At what time will your vessel be abeam of Buoy "MP"? | 2110 | 2214 | 2118 | 2222 |
| 1236 | Your 1900 position is LAT $40^{\circ} 45.5^{\prime} \mathrm{N}$, LONG $72^{\circ} 03.0^{\prime} \mathrm{W}$. At your 1939 DR position, what is the expected relative bearing of Montauk Point Light on the port bow? | $024^{\circ}$ relative | $028^{\circ}$ relative | $032^{\circ}$ relative | $036{ }^{\circ}$ relative |
| 1237 | At 2000 Montauk Point Light bears $010^{\circ}$ T. At 2030 Montauk Point Light bears $348^{\circ}$ T. Assuming that you are making good your course of $046^{\circ} \mathrm{T}$ and a speed of 9 knots, what is your 2030 running fix position? | $\begin{aligned} & \text { LAT } 40^{\circ} 53.9^{\prime} \mathrm{N}, \text { LONG } \\ & 71^{\circ} 51.3^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 40^{\circ} 57.2^{\prime} \mathrm{N}, \text { LONG } \\ & 71^{\circ} 49.4^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 40^{\circ} 55.9^{\prime} \mathrm{N}, \text { LONG } \\ & 71^{\circ} 49.0^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 40^{\circ} 56.7^{\prime} \mathrm{N}, \text { LONG } \\ & 71^{\circ} 48.1^{\prime} \mathrm{W} \end{aligned}$ |
| 1238 | At 2050 Montauk Point Light is bearing $337^{\circ}$ true at a range of 8 nm , From this position, you change course in order to pass 1 mile due east of Montauk Point Lighted Whistle Buoy "MP". If there are no set and drift, what course must you steer? | 024 ${ }^{\circ} \mathrm{T}$ | 028 ${ }^{\circ} \mathrm{T}$ | $032^{\circ} \mathrm{T}$ | 036T |


| 1239 | At 2100 your position is LAT $40^{\circ} 58.5^{\prime} \mathrm{N}$, LONG $71^{\circ} 46.0^{\prime} \mathrm{W}$. You are proceeding north. At 2131 Montauk Point Light has a radar range of 5.1 miles and bears $284^{\circ} \mathrm{T}$. Block Island Southeast Light has a radar range of 10.8 miles. What was the course made good from your 2100 position? | $005^{\circ} \mathrm{T}$ | 011 ${ }^{\circ} \mathrm{T}$ | $017^{\circ} \mathrm{T}$ | $0^{\circ}{ }^{\circ} \mathrm{T}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1240 | At 2155 Montauk Point Light bears $249^{\circ}$ T, Watch Hill Point Light bears $335^{\circ} \mathrm{T}$, and Block Island North Light bears $045^{\circ}$ T. At this time, you wish to change course to $288^{\circ}$ T. The current has a set of $355^{\circ} \mathrm{T}$ and a drift of 2.0 knots. If your vessel is turning RPM's for 9 knots, what course must you steer in order to make your desired course good? | $276{ }^{\circ} \mathrm{T}$ | $280^{\circ} \mathrm{T}$ | $2^{184}{ }^{\circ} \mathrm{T}$ | ${ }^{288}{ }^{\circ} \mathrm{T}$ |
| 1241 | Montauk Point Light has a radar range of 3.9 miles and bears $170^{\circ} \mathrm{T}$ at 2232 . What is the depth of water below your keel? | 40 feet | 60 feet | 70 feet | 80 feet |
| 1242 | Your 2239 position is LAT $41^{\circ} 08.5^{\prime} \mathrm{N}$, LONG $71^{\circ} 53.3^{\prime} \mathrm{W}$. You change course to $315^{\circ} \mathrm{T}$, and you maintain RPM's for 9 knots. At 2329 Little Gull Island Light bears $253^{\circ}$ T, Race Rock Light bears $309^{\circ} \mathrm{T}$, and Watch Hill Point Light bears $058^{\circ} \mathrm{T}$. What were the set and drift of the current you experienced from your 2239 position? | $076{ }^{\circ} \mathrm{T}$ at 0.75 knot | $076{ }^{\circ} \mathrm{T}$ at 0.90 knot | $256^{\circ} \mathrm{T}$ at 0.75 knot | $256{ }^{\circ} \mathrm{T}$ at 0.90 knot |
| 1243 | Which nautical chart would you use to navigate into New London, CT? | 13209 | 13211 | 13212 | 13214 |
| 1244 | The following questions are to be answered using chart 13205 TR, Block Island Sound, and 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 22 feet. Use $15^{\circ} \mathrm{W}$ variation where required. |  |  |  |  |
| 1245 | At 1910 you obtain the following bearings: <br> Bartlett Reef Light $\quad 268^{\circ} \top$ <br> Race Rock Light $\quad 147^{\circ} \mathrm{T}$ <br> Little Gull Island Light $198^{\circ}{ }^{\circ}$ <br> Which of the following is your position at 1910? | $\begin{aligned} & \text { LAT } 41^{\circ} 17.4^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 05.6^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 17.0^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 07.1^{\prime} \mathrm{W} \end{aligned}$ | LAT $41^{\circ} 16.6^{\prime} \mathrm{N}$, LONG $72^{\circ} 04.6^{\prime} \mathrm{W}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 16.2^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 06.4^{\prime} \mathrm{W} \end{aligned}$ |
| 1246 | From your 1910 position, you set a course of $162^{\circ} \mathrm{T}$ at a speed of 14 knots. What is the distance off Race Rock Light when abeam of it? | . 3 mile | . 6 mile | . 9 mile | 1.2 miles |
| 1247 | At 1934 Little Gull Island Light bears $277^{\circ}$ T and Race Rock Light bears $000^{\circ} \mathrm{T}$. Which were the set and drift between 1910 and 1934? | $321^{\circ} \mathrm{T}, 2.2$ knots | $321^{\circ} \mathrm{T}, 0.9$ knots | $331^{\circ} \mathrm{T}, 2.2$ knots | $331{ }^{\circ} \mathrm{T}, 0.9$ knots |



| 1255 | At 2209 your position is latitude $40^{\circ} 47.7^{\prime} \mathrm{N}$, longitude $71^{\circ}$ $35.5^{\prime} \mathrm{W}$. There is a strong WSW'ly wind causing an estimated $3^{\circ}$ leeway. What course will you steer by standard magnetic compass to make good $340^{\circ}$ ? | $322^{\circ}$ | $348^{\circ}$ | $356^{\circ}$ | 002 ${ }^{\circ}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1256 | From your 2209 fix you are steering course $340^{\circ} \mathrm{T}$, what is the distance off Block Island Sound South Entrance Obstruction Lighted "BIS" Buoy when you are abeam of it? | 1.1 miles | 1.4 miles | 1.7 miles | 2.4 miles |
| 1257 | If you make good your intended course and speed, at what time will you cross the 150 -foot curve? | 2237 | 2249 | 2256 | 2301 |
| 1258 | At 2230 you take the following visual bearings: <br> Montauk Point Light, Long Island $317^{\circ} \mathrm{pgc}$ Southeast Point Light, Block Island $009^{\circ} \mathrm{pgc}$ <br> What is your position? | $\begin{aligned} & \text { LAT } 40^{\circ} 51.2^{\prime} \mathrm{N}, \text { LONG } \\ & 71^{\circ} 35.9^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 40^{\circ} 51.5^{\prime} \mathrm{N}, \text { LONG } \\ & 71^{\circ} 36.4^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 40^{\circ} 52.2^{\prime} \mathrm{N}, \text { LONG } \\ & 71^{\circ} 36.6^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 40^{\circ} 52.0^{\prime} \mathrm{N}, \text { LONG } \\ & 71^{\circ} 37.4^{\prime} \mathrm{W} \end{aligned}$ |
| 1259 | At 2302 you fix your position at LAT $40^{\circ} 57.8^{\prime} \mathrm{N}$, LONG $71^{\circ} 39.3^{\prime} \mathrm{W}$. What current have you experienced since your 2209 fix? | $105^{\circ} \mathrm{T}$ at 1.0 knot | $105^{\circ} \mathrm{T}$ at 0.9 knot | $285^{\circ} \mathrm{T}$ at 1.0 knot | $285^{\circ} \mathrm{T}$ at 0.9 knot |
| 1260 | At 2302 you change course to compensate for an estimated current of $090^{\circ} \mathrm{T}$, at 1.0 knot. What course per gyrocompass will you steer to leave Endeavor Shoals Lighted Gong Buoy "3" abeam to port at 1 mile? | $324^{\circ} \mathrm{pgc}$ | $327^{\circ} \mathrm{pgc}$ | $330^{\circ} \mathrm{pgc}$ | $333^{\circ} \mathrm{pgc}$ |
| 1261 | After changing course to allow for a current of $090^{\circ} \mathrm{T}$ at 1.0 knot, what time will Endeavor Shoals Lighted Gong Buoy "3" be abeam to port? | 2340 | 2345 | 2350 | 2355 |
| 1262 | Where will you cross the demarcation line between the International and Inland Rules of the Road? | Between Montauk Point and Block Island | In the Race | At the mouth of Bridgeport Harbor | Between Plum Gut and Niantic Bay |
| 1263 | After passing through the Race, enroute to Bridgeport, CT, and Race Rock Light is 2 miles astern you notice an equal interval flashing red light on the starboard side. This light is $\qquad$ _. | New London Airport Aerobeacon | New London Harbor Light | New London Ledge Light | Bartlett Reef Light |
| 1264 | The following questions are to be answered using chart 12221 TR, Chesapeake Bay Entrance, and supporting publications. Your present course is $202^{\circ} \mathrm{T}$ 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 $10^{\circ} \mathrm{W}$ variation where required. |  |  |  |  |
| 1265 | At 0800 your position is LAT $37^{\circ} 21.0^{\prime} \mathrm{N}$, LONG $75^{\circ} 32.0^{\prime} \mathrm{W}$. Assuming that there is no set and drift, what time would your vessel cross the 60-foot curve? | 0809 | 0813 | 0816 | 0822 |


| 1266 | At 0800 you reduce speed from sea speed. Speed was reduced by the time you passed abeam of Hog Island Lighted Bell Buoy "12" at 0814. At this time Buoy "12" was abeam on your starboard side at a distance of 0.65 mile. Assuming you continue to make good your course of $202^{\circ} \mathrm{T}$, what is your new speed if you pass abeam of Cape Charles Lighted Bell Buoy " 14 " at a distance of 1.5 miles at 0907? | 13.6 knots | 12.9 knots | 12.3 knots | 12.0 knots |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1267 | Visibility is exceptionally clear. At approximately what distance did Chesapeake Light become visible? | 19.2 miles | 21.0 miles | 22.7 miles | 24.0 miles |
| 1268 | At 0907 you change course to $224^{\circ} \mathrm{T}$, and your speed is now 13.0 knots. At 0939 Chesapeake Light is bearing $168^{\circ} \mathrm{T}$ at a distance of 7.1 miles, and Cape Henry Light is bearing $246^{\circ} \mathrm{T}$. What were the set and drift since 0907? | $326^{\circ} \mathrm{T}$ at 0.7 knot | $326^{\circ} \mathrm{T}$ at 1.4 knots | $146^{\circ} \mathrm{T}$ at 1.4 knots | $146^{\circ} \mathrm{T}$ at 0.7 knots |
| 1269 | From your 0939 position, you wish to change course in order to pass 0.3 mile north of Buoy "NCA" (LL\#375) in the inbound traffic lane. You estimate the current to be $150^{\circ}$ T at 2.0 knots. What course should you steer to make good the desired course? Your speed is still 13.0 knots. | $232^{\circ} \mathrm{T}$ | $235{ }^{\circ} \mathrm{T}$ | $245{ }^{\circ} \mathrm{T}$ | $249^{\circ} \mathrm{T}$ |
| 1270 | At what time will you enter the inbound traffic lane with Buoy "NCA" (LL \#375) bearing $180^{\circ} \mathrm{T}$ at 0.3 mile? | 1003 | 0957 | 0951 | 0948 |
| 1271 | At 1010 your vessel passes close abeam to Buoy "NCB" in the inbound traffic lane. At this time the Chesapeake Bay Pilot informs you that he will not board your vessel until 1100. The pilot boat is located 1.5 miles northeast of Cape Henry Light. What should you reduce your speed to in order to arrive at the pilot boat at this time? | 5.9 knots | 7.5 knots | 8.2 knots | 9.8 knots |
| 1272 | After the pilot boards, he tells you the gyro has a $2^{\circ} \mathrm{E}$ error. If this is true, what should the bearing be along Trestle C of the Chesapeake Bay Bridge-Tunnel as your vessel passes abeam of it? | 052 ${ }^{\circ} \mathrm{pgc}$ | 049 ${ }^{\circ} \mathrm{pgc}$ | 047 ${ }^{\circ} \mathrm{pgc}$ | 045 ${ }^{\circ} \mathrm{pgc}$ |
| 1273 | Your vessel's heading is $330^{\circ} \mathrm{pgc}$ and $345^{\circ} \mathrm{psc}$ with a $2^{\circ} \mathrm{E}$ gyro error. What is the deviation on this heading? | $0^{\circ}$ | $3^{\circ} \mathrm{W}$ | $4^{\circ} \mathrm{E}$ | $7^{\circ} \mathrm{W}$ |


| 1274 | The following questions are based on chart 13205TR, Block and the height of eye is 24 feet ( 7.3 meters). Use $15^{\circ} \mathrm{W}$ varia <br> DEVIATION TABLE | ck Island Sound, and ariation where require | he supporting publication . The gyro error is $2^{\circ} \mathrm{W}$ | ns. Your vessel draw | $8 \text { feet (2.4 meters), }$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1275 | You are steering $087^{\circ} \mathrm{pgc}$ and turning for 6.8 knots. At 0600, you take the following bearings: <br> Little Gull Island Light bearing $089.5^{\circ} \mathrm{pgc}$ <br> Bartlett Reef Light bearing $047^{\circ}$ pgc <br> What is your 0600 position? | $\begin{aligned} & \text { LAT } 41^{\circ} 11.2^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 14.6^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 12.1^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 13.8^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 12.3^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 14.7^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 12.5^{\prime} \mathrm{N}, \text { LONG } \\ & 71^{\circ} 14.9^{\prime} \mathrm{W} \end{aligned}$ |
| 1276 | If you change course at 0610, what is the course to steer to a point where Little Gull Island Light bears $180^{\circ} \mathrm{T}$ at 0.7 mile (Point " A ")? | 072 ${ }^{\circ} \mathrm{pgc}$ | 076 ${ }^{\circ} \mathrm{pgc}$ | 080 ${ }^{\circ} \mathrm{pgc}$ | 084 ${ }^{\circ} \mathrm{pgc}$ |
| 1277 | What is your ETA at point "A"? | 0640 | 0651 | 0655 | 0702 |
| 1278 | You calculate that the current will be ebbing at the Race at 0700. You should expect to be set in which general direction at the Race? | West | North | Northeast | East |
| 1279 | From your 0610 DR, assuming no set and drift, at what time will you enter waters governed by the COLREGS? | 0701 | 0705 | 0711 | 0714 |
| 1280 | From point "A", you lay out an intended track line to a point where Block Island North Light bears $180^{\circ} \mathrm{T}$ at 2.9 miles (Point " B "). What is the length of this leg of the voyage? | 20.4 miles | 23.7 miles | 23.9 miles | 24.4 miles |
| 1281 | What is the course per standard magnetic compass between points "A" and "B"? | 094.5 ${ }^{\circ}$ | 095.5 ${ }^{\circ}$ | 098.5 ${ }^{\circ}$ | 099.5 ${ }^{\circ}$ |


| 1282 | At 0715 you take the following bearings: <br> Race Rock Light $328^{\circ} \mathrm{pgc}$ <br> Little Gull Island Light $249^{\circ} \mathrm{pgc}$ <br> Mt. Prospect Antenna $036^{\circ} \mathrm{pgc}$ <br> Based on your 0715 fix, which statement is TRUE? | You are to the left of your track line. | Your fathometer reads about 265 fathoms. | You are in a cable area. | You are governed by the Inland Rules. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1283 | From your 0715 position, you set a course of $085^{\circ} \mathrm{T}$. At 0745 you take the following bearings: <br> What was the current encountered between 0715 and 0745 ? | Set $030^{\circ} \mathrm{T}$, drift 0.4 knot | Set $216^{\circ} \mathrm{T}$, drift 0.3 knot | Set $070^{\circ} \mathrm{T}$, drift 0.6 knot | Set $238^{\circ} \mathrm{T}$, drift 1.0 knot |
| 1284 | The wind is southerly, and you estimate $3^{\circ}$ leeway. Allowing for leeway, what is the course to steer from your 0745 position to pass 1 mile south of Watch Hill Buoy "WH"? | 079 ${ }^{\circ} \mathrm{pgc}$ | 081 ${ }^{\circ} \mathrm{pgc}$ | 085 ${ }^{\circ} \mathrm{pgc}$ | 087 ${ }^{\circ} \mathrm{pgc}$ |
| 1285 | From your 0745 fix, you change course to pass 1.0 mile south of buoy "WH" and estimate your speed at 7 knots. If the visibility clears, what is the earliest time you can expect to see Block Island North Light tower? | 0750 | 0807 | 0838 | 0845 |
| 1286 | Which statement describes the shore between Watch Hill Point and Point Judith? | Low, rocky cliffs with heavily wooded hills inland | Sandy beaches broken by rocky points | Sand dunes and beaches with a mud and sand bottom | Wooded, barren hills with isolated prominent buildings |
| 1287 | At 0830, Watch Hill Point bears $343^{\circ} \mathrm{T}$ at 3.5 miles by radar. What was the speed made good since 0745 ? | 5.4 knots | 5.8 knots | 6.7 knots | 7.1 knots |
| 1288 | At 0900, you take the following radar ranges: <br> Which statement is TRUE? | You are within 3 nautical miles of the coast. | The bottom in the area is sand and gravel. | The fix is indeterminate. | You are governed by the Inland Rules. |
| 1289 | At 0930, your position is LAT $41^{\circ} 16.5^{\prime} \mathrm{N}$, LONG $71^{\circ} 41.4^{\prime} \mathrm{W}$, and you are turning for 7 knots. Allowing $3^{\circ}$ leeway for southerly winds and estimating the current as $035^{\circ}$ at 0.3 knot, what is the course to steer (pgc) to point "B"? | 089 ${ }^{\circ} \mathrm{pgc}$ | 091 ${ }^{\circ} \mathrm{pgc}$ | 093 ${ }^{\circ} \mathrm{pgc}$ | 096ºpgc |


| 1290 | The following questions should be answered using chart 12 draft is 11 feet ( 3.4 meters). The gyro error is $2^{\circ} \mathrm{W}$. "Per plot. <br> DEVIATION TABLE | 2221TR, and the supp tandard magnetic com | orting publications. T pass" is abbreviated | height of eye is 29 f sc". Use a variation o | ( 8.8 meters). Your $10^{\circ} \mathrm{W}$ for the entire |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1291 | On 25 February, your vessel is berthed near Lamberts Point in Norfolk. You are preparing to sail for Baltimore and wish to be transiting York Spit Channel while the morning flood current is at its maximum speed. At what time should you be between buoys "33" and "34"? And, what will be the speed of the flood at this time? | 0513, 0.8 k | 0810, 1.2 k | 0810, 1.5 k | 1124, 1.2 k |
| 1292 | What is the distance from Lamberts Point to Thimble Shoal Lt.? | 9.0 miles | 9.8 miles | 10.6 miles | 11.2 miles |
| 1293 | You are delayed in sailing due to engineering problems. You get underway at 0630. A Coast Guard radio broadcast advises that an aircraft carrier will transit the Elizabeth River enroute Norfolk Naval Shipyard and a safety zone is in effect. Further information on how far you must remain from the carrier found is in $\qquad$ | PUB 117 | Light List | Coast Pilot | Chart Number 1 |
| 1294 | At 0823, Old Point Comfort Light bears $000^{\circ} \mathrm{T}$ at 0.6 mile. What is your 0823 position? | $\begin{aligned} & \hline \text { LAT } 36^{\circ} 59.5^{\prime} \mathrm{N}, \text { LONG } \\ & 76^{\circ} 18.4^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 36^{\circ} 59.0^{\prime} \mathrm{N}, \text { LONG } \\ & 77^{\circ} 21.6^{\prime} \mathrm{W} \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { LAT } 36^{\circ} 59.0^{\prime} \mathrm{N}, \text { LONG } \\ & 76^{\circ} 19.6^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 36^{\circ} 55.5^{\prime} \mathrm{N}, \text { LONG } \\ & 76^{\circ} 18.6^{\prime} \mathrm{W} \end{aligned}$ |


| 1295 | At 0845, you are approaching the entrances to Thimble Shoal Channel. What channel must you use? | The South Auxiliary Channel since your draft is less than 25 feet ( 7.6 meters), and you are not a passenger vessel. | The South Auxiliary Channel or Thimble Shoal Channel, but you must remain on the right hand side of the main channel. | The North Auxiliary Channel since you are going to turn to a northerly heading near buoy "12". | You are not permitted to use any of the channels, but must remain outside the buoyed channel line. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1296 | At 0908, you change course to $010^{\circ} \mathrm{T}$. What course should you steer per standard magnetic compass? | $003^{\circ}$ | 017 ${ }^{\circ}$ | 021 ${ }^{\circ}$ | $359^{\circ}$ |
| 1297 | Visibility has decreased to 1 mile in haze. At 0948, you take the following radar ranges. What course should you steer per gyrocompass from this fix to enter the channel between buoys "19" and "20"? <br> Thimble Shoal Light - 5.9 miles <br> South end of trestle C of the Chesapeake Bay Bridge and Tunnel - 3.8 miles <br> South end of trestle B of the Chesapeake Bay Bridge and Tunnel- 5.4 miles | 001 ${ }^{\circ} \mathrm{pgc}$ | 004 ${ }^{\circ} \mathrm{pgc}$ | 007 ${ }^{\circ} \mathrm{pgc}$ | 010 ${ }^{\circ} \mathrm{pgc}$ |
| 1298 | If you are making 10 knots, what is your ETA at York Spit Channel Buoys "19" and "20"? | 0959 | 1002 | 1006 | 1011 |
| 1299 | What is the course per standard magnetic compass on the southern leg of York Spit Channel between buoys "15" and "23"? | $319^{\circ}$ | $322^{\circ}$ | $339^{\circ}$ | $341^{\circ}$ |
| 1300 | What is indicated by the dashed magenta line crossing York Spit Channel between buoys "20" and "22"? | You are crossing the demarcation line between the COLREGS and the Inland Rules. | The line marks the limits of a regulated area. | The line indicates a submarine cable, and you should not anchor in the area. | It marks the range between Hampton Roads and Cherrystone Channel. |
| 1301 | At 1015, you estimate you have 139 miles to complete the voyage. If you average 9.5 knots, you will complete the voyage in $\qquad$ . | 14 hours 22 minutes | 14 hours 30 minutes | 14 hours 38 minutes | 14 hours 44 minutes |
| 1302 | At 1018, you are entering York Spit Channel and buoy "19" is abeam to starboard. At 1031, buoy "23" is abeam. What speed are you making good? | 8.4 knots | 8.8 knots | 9.7 knots | 9.9 knots |
| 1303 | The York Spit Channel width is maintained at ___ | 200 feet | 400 feet | 600 feet | 800 feet |


| 1304 | At 1037, you are on course $010^{\circ} \mathrm{T}$ at 10 knots, when you take the following bearings: <br> Old Plantation Flats Light bearing $125^{\circ} \mathrm{pgc}$ <br> Wolf Trap Light bearing $338^{\circ} \mathrm{pgc}$ <br> New Point Comfort Spit Light "2" bearing $286^{\circ}$ pgc <br> What is your 1037 position? | $\begin{aligned} & \text { LAT } 37^{\circ} 15.9^{\prime} \mathrm{N}, \text { LONG } \\ & 76^{\circ} 07.1^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 37^{\circ} 16.1^{\prime} \mathrm{N}, \text { LONG } \\ & 76^{\circ} 07.4^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 37^{\circ} 16.2^{\prime} \mathrm{N}, \text { LONG } \\ & 76^{\circ} 07.8^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 37^{\circ} 16.3^{\prime} \mathrm{N}, \text { LONG } \\ & 76^{\circ} 07.2^{\prime} \mathrm{W} \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1305 | At 1119, Wolf Trap Light bears $268^{\circ} \mathrm{T}$ at 4.4 miles by radar. What were the set and drift since your 1037 fix? | $178^{\circ}, 0.5$ knot | $358^{\circ}, 0.5 \mathrm{knot}$ | $178^{\circ}, 0.7$ knot | $358^{\circ}, 0.7$ knot |
| 1306 | The following questions are based on chart 13205TR, Bl meters). Your height of eye is 32 feet ( 9.7 meters). The <br> DEVIATION TABLE | Island Sound, and th ro error is $2^{\circ} \mathrm{W}$. Use | supporting publicatio $5^{\circ} \mathrm{W}$ variation where | s. Your vessel has quired. | raft of 11 feet (3.4 |
| 1307 | At 0227, you take the following radar ranges and bearings: <br> Bartlett Reef Light $359^{\circ} \mathrm{T}$ at 2.4 miles <br> Race Rock Light $083^{\circ} \mathrm{T}$ at 4.1 miles <br> What is your 0227 position? | LAT 41¹4.1'N, LONG $72^{\circ} 08.2^{\prime} \mathrm{W}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 14.2^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 08.4^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 14.0^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 08.5^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 14.3^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 08.5^{\prime} \mathrm{W} \end{aligned}$ |
| 1308 | At 0227, you are on course $087^{\circ} \mathrm{T}$ at 10 knots. What course per standard magnetic compass should you steer to make good your true course? | 099 ${ }^{\circ} \mathrm{psc}$ | $102^{\circ} \mathrm{psc}$ | $105^{\circ} \mathrm{psc}$ | $109^{\circ} \mathrm{psc}$ |


| 1309 | You estimate that you are making 9.3 knots over the ground. At what time will you enter waters governed by the COLREGS? | 0247 | 0251 | 0255 | 0258 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1310 | At 0337, fog closes in and you anchor under the following radar ranges and bearing. <br> South tip of Watch Hill Point 3.0 miles <br> East point of Fishers Island 1.4 miles <br> Latimer Reef Light $331^{\circ}$ T <br> What is the approximate depth of water at your anchorage? | 83 feet (25.2 meters) | 100 feet (30.3 meters) | 120 feet (36.4 meters) | 135 feet (40.9 meters) |
| 1311 | By 1015, visibility has increased to 5.0 miles and you can see Fishers Island. Fishers Island has $\qquad$ | low and sandy beaches with salt ponds and marsh grass | sheer cliffs rising from the sea to a high, flat plateau | barren, rocky hills with prominent sandy beaches | sparsely wooded hills and is fringed with shoals to the south |
| 1312 | You get underway at 1030. The wind is out of the SSE and you estimate $3^{\circ}$ leeway. What course should you steer per gyrocompass to make good a desired course of $075^{\circ} \mathrm{T}$ ? | 074 ${ }^{\circ} \mathrm{pgc}$ | 076 ${ }^{\circ} \mathrm{pgc}$ | 078 ${ }^{\circ} \mathrm{pgc}$ | 080 ${ }^{\circ} \mathrm{pgc}$ |
| 1313 | Shortly after getting underway, your heading is $097^{\circ}$ per standard magnetic compass, and you sight Stonington Outer Breakwater Light in line with Stonington Inner Breakwater Light bearing $000^{\circ}$ per gyrocompass. Which statement is TRUE? | The gyro error is $2.5^{\circ} \mathrm{W}$. | The variation is $2^{\circ} \mathrm{E}$. | The compass error is $16^{\circ} \mathrm{W}$. | The deviation is $2^{\circ} \mathrm{W}$. |
| 1314 | At 1104, Watch Hill Point Light is in line with Stonington Outer Breakwater Light, the range to the south tip of Watch Hill Point is 2.6 miles and the range to the beach is 1.9 miles. You are steering to make good $075^{\circ} \mathrm{T}$, speed 10.0 knots. At 1110, you change course to head for a position of LAT $41^{\circ} 05.0^{\prime} \mathrm{N}$, LONG $71^{\circ} 50.0^{\prime} \mathrm{W}$. What is the true course? | $185^{\circ}$ | $187^{\circ}$ | $190^{\circ}$ | $193^{\circ}$ |
| 1315 | At 1110, you increase speed to 12 knots. What is your ETA at the new position? | 1157 | 1208 | 1215 | 1219 |
| 1316 | At what time can you expect to cross the 120 -foot curve, on your present course and speed? | 1125 | 1122 | 1117 | 1114 |
| 1317 | At 1345, you depart from a position 1 mile due east of Montauk Point Light and set course for Block Island Southeast Light at 9 knots. At 1430 your position is Latitude $41^{\circ} 06.3^{\prime}$ North Longitude $071^{\circ} 41.9^{\prime}$ West <br> What was the current encountered since 1345 ? | Set 015 ${ }^{\circ}$, drift 0.5 knot | Set 195², drift 0.5 knot | Set 015 ${ }^{\circ}$, drift 0.7 knot | Set 195², drift 0.7 knot |



| 1325 | At 0507, Stratford Shoal Middle Ground Light bears $208^{\circ}$ pgc. What is the position of your 0507 running fix? | $\begin{aligned} & \text { LAT } 41^{\circ} 04.8^{\prime} \mathrm{N}, \text { LONG } \\ & 73^{\circ} 05.0^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 04.9^{\prime} \mathrm{N}, \text { LONG } \\ & 73^{\circ} 04.8^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \hline \text { LAT } 41^{\circ} 05.1^{\prime} \mathrm{N}, \text { LONG } \\ & 73^{\circ} 05.1^{\prime} \mathrm{W} \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 05.3^{\prime} \mathrm{N}, \text { LONG } \\ & 73^{\circ} 04.8^{\prime} \mathrm{W} \\ & \hline \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1326 | Based on your running fix, you ___ | have a head current | have a following current | are being set to the north | are not affected by a current |
| 1327 | Your 0507 position is about 7 miles from Bridgeport, CT. What is the distance from this position to Newport, RI? | 88 miles | 95 miles | 101 miles | 114 miles |
| 1328 | Your 0530 position is LAT $41^{\circ} 04.9^{\prime} \mathrm{N}$, LONG $73^{\circ} 01.1^{\prime} \mathrm{W}$. What is the course per standard magnetic compass to a position 1.0 mile south of Twenty Eight Foot Shoal "TE" buoy? | 082.0 ${ }^{\circ} \mathrm{psc}$ | 092.5 ${ }^{\circ} \mathrm{psc}$ | 096.0º psc | 099.5 ${ }^{\circ} \mathrm{psc}$ |
| 1329 | The south shore of Long Island Sound near your position is | marked by gradual shoaling | low and marshy | backed by marshes and wooded uplands | bluff and rocky |
| 1330 | At 0530, you change course to $090^{\circ} \mathrm{T}$ and increase speed to 8.5 knots. What is the course to steer per gyro compass if northerly winds are causing $2^{\circ}$ of leeway? | 088 ${ }^{\circ} \mathrm{pgc}$ | 090 ${ }^{\circ} \mathrm{pgc}$ | 092 ${ }^{\circ} \mathrm{pgc}$ | 094 ${ }^{\circ} \mathrm{pgc}$ |
| 1331 | At 0615, Stratford Point Light bears $292^{\circ} \mathrm{pgc}$, Falkner Island Light bears $052^{\circ} \mathrm{pgc}$, and Branford Reef Light bears $018^{\circ} \mathrm{pgc}$. What was the current since 0530? | $083{ }^{\circ}$ at 1.2 knots | $083^{\circ}$ at 0.9 knots | $263^{\circ}$ at 1.2 knots | $263^{\circ}$ at 0.9 knots |
| 1332 | What should your fathometer read at 0615? | 97 feet | 93 feet | 89 feet | 85 feet |
| 1333 | At 0615 you change course to $078^{\circ} \mathrm{T}$. If there is no current, when will Falkner Island Light be abeam? | 0750 | 0743 | 0735 | 0730 |
| 1334 | At 0700, Falkner Island Light bears $023^{\circ} \mathrm{pgc}$, and the range to the south tip of Falkner Island is 7.1 miles. What was the course made good since 0615? | 078 ${ }^{\circ} \mathrm{T}$ | 081 ${ }^{\circ} \mathrm{T}$ | 084 ${ }^{\circ} \mathrm{T}$ | $0^{\circ}{ }^{\circ} \mathrm{T}$ |
| 1335 | At 0705, the gyro loses power. At 0730, you are on course $092^{\circ}$ per standard magnetic compass (psc). Falkner Light bears $356^{\circ}$ psc, Horton Point Light bears $123^{\circ}$ psc, and Kelsey Point Breakwater Light bears $048^{\circ}$ psc. What is the position of your 0730 fix? | $\begin{aligned} & \text { LAT } 41^{\circ} 06.7^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 36.1^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 06.8^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 36.0^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 07.0^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 36.2^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 07.2^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 36.1^{\prime} \mathrm{W} \end{aligned}$ |
| 1336 | Horton Point Light ___ . | is shown from a white square tower | has a fixed green light | is 14 feet above sea level | is synchronized with a radio beacon |
| 1337 | If visibility permits, Little Gull Island Light will break the horizon at a range of approximately $\qquad$ | 11.1 miles | 12.8 miles | 15.6 miles | 18.0 miles |


| 1338 | The following questions are based on chart 13205TR, Blo and the height of eye is 20 feet ( 6.1 meters). Use $15^{\circ} \mathrm{W}$ v <br> DEVIATION TABLE | I Island Sound, and ariation where require | he supporting publication . The gyro error is $3^{\circ} E$ | ns. Your vessel draw | 8 feet (2.4 meters), |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1339 | At 0630, you pass Buoy "PI" close abeam on the starboard side. You are steering $078^{\circ}$ T and are headed directly toward Race Rock Light. At 0654, Little Gull Island Light is bearing $207^{\circ} \mathrm{T}$ and Race Rock Light is bearing $072^{\circ} \mathrm{T}$. What is your 0654 position? | LAT $41^{\circ} 14.0^{\prime} \mathrm{N}$, LONG 72º5.3'W | $\begin{aligned} & \text { LAT } 41^{\circ} 14.2^{\prime} \mathrm{N}, \text { LONG } \\ & 71^{\circ} 54.6^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 14.4^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 06.8^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 19.0^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 05.2^{\prime} \mathrm{W} \end{aligned}$ |
| 1340 | What is your speed from your 0630 position, with Buoy "PI" close abeam, to your 0654 position? | 8.2 knots | 9.3 knots | 10.5 knots | 11.4 knots |
| 1341 | At 0700, your gyro alarm sounds. What course should you steer by the standard magnetic compass in order to maintain your original heading of $078^{\circ}$ T? | $062^{\circ} \mathrm{psc}$ | 080 ${ }^{\circ} \mathrm{psc}$ | 090 ${ }^{\circ} \mathrm{psc}$ | 095 ${ }^{\circ} \mathrm{psc}$ |
| 1342 | At 0705, with your gyro again functioning properly, you change course to $096^{\circ} \mathrm{T}$. At this time Race Rock Light is bearing $000^{\circ} \mathrm{T}$ at 0.35 mile. You are now governed by which Navigation Rules? | Inland Rules | Local Pilot Rules | International Rules | Coastal Fishery Rules |
| 1343 | At 0728, Race Rock Light is bearing $282^{\circ} \mathrm{T}$ at 3.8 miles, and the closest point on Fishers Island is at a radar range of 2.0 miles. What speed have you been making since you changed course at 0705? | 9.2 knots | 9.8 knots | 10.6 knots | 11.4 knots |
| 1344 | At 0728 , you change course to $080^{\circ} \mathrm{T}$. When steady on course, the standard magnetic compass reads $097^{\circ}$. Which statement is TRUE? | The gyro course is $083^{\circ} \mathrm{pgc}$. | The magnetic heading is $090^{\circ}$. | The deviation is $1.0^{\circ} \mathrm{E}$. | The magnetic compass error is $17^{\circ} \mathrm{W}$. |


| 1345 | At 0748, you take the following bearings: <br> Watch Hill Point Light bearing $020.5^{\circ} \mathrm{pgc}$ Race Rock Light bearing $269.5^{\circ} \mathrm{pgc}$ <br> What is the approximate depth of water at this position? | 325 feet | 175 feet | 130 feet | 104 feet |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1346 | At 0748 , you change course to $160^{\circ} \mathrm{T}$, speed 10 knots. At what time will you cross the 120 -foot curve the first time? | 0754 | 0800 | 0804 | 0808 |
| 1347 | At 0815, Montauk Pt. Light House is bearing $167^{\circ}$ T, Shagwong Pt. has a radar range of 4.5 miles, and Cerberus Shoal " 9 " Buoy is bearing $284^{\circ} \mathrm{T}$. If the engine is making turns for 10 knots, what was the set and drift of the current since 0748 ? | Set $065^{\circ} \mathrm{T}$, drift 1.1 knots | Set $065^{\circ} \mathrm{T}$, drift 2.4 knots | Set $245^{\circ} \mathrm{T}$, drift 1.1 knots | Set $245^{\circ} \mathrm{T}$, drift 2.4 knots |
| 1348 | What action should you take to compensate for the above current? | Continue on the same course and speed. | Alter your course to the left. | Slow to 8.5 knots. | Alter your course to the right. |
| 1349 | At 0815, visibility is excellent and you can see Montauk Point. Montauk Point is $\qquad$ | low and rocky with scattered small pine trees | a low lying wetland | a flat wooded plain | a high sandy bluff |
| 1350 | At 0815, you change course to $079^{\circ} \mathrm{T}$ and head for the entrance of Great Salt Pond on Block Island. To compensate for a northerly wind, you estimate a $5^{\circ}$ leeway is necessary. What course should you steer per gyrocompass to make good 079́ㅜ? | 079 ${ }^{\circ} \mathrm{pgc}$ | 076 ${ }^{\circ} \mathrm{pgc}$ | 074 ${ }^{\circ} \mathrm{pgc}$ | 071 ${ }^{\circ} \mathrm{pgc}$ |
| 1351 | At 0845, Montauk Pt. Light is bearing $205^{\circ} \mathrm{T}$ at a radar distance of 6.6 miles. What is your speed made good from your 0815 position? | 8.2knots | 9.2 knots | 10.0 knots | 10.5 knots |
| 1352 | As you head toward Great Salt Pond, visibility is unlimited. At what time will you lose sight of Montauk Pt. Light? | 0905 | 0928 | 0950 | It will remain visible to Great Salt Pond. |
| 1353 | Which chart should you use to enter Great Salt Pond? | 13214 | 13205 | 13217 | 13207 |


| 1354 | The following questions are based on chart 13205TR, Blo and the height of eye is 20 feet ( 6.1 meters). Use $15^{\circ} \mathrm{W}$ v <br> DEVIATION TABLE | ck Island Sound, and ariation where require | e supporting publicatio The gyro error is $3^{\circ} \mathrm{E}$ | ons. Your vessel draw | 8 feet (2.4 meters), |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1355 | At 0630, you pass Buoy "PI" close abeam on the starboard side. You are steering $078^{\circ} \mathrm{T}$ and are headed directly toward Race Rock Light. At 0654, Little Gull Island Light is bearing $207^{\circ} \mathrm{T}$ and Race Rock Light is bearing $072^{\circ} \mathrm{T}$. What is your 0654 position? | $\begin{aligned} & \text { LAT } 41^{\circ} 13.6^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 03.3^{\prime} \mathrm{W} \end{aligned}$ | LAT $41^{\circ} 14.0^{\prime} \mathrm{N}$, LONG $72^{\circ} 05.3^{\prime} \mathrm{W}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 14.7^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 06.8^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 19.0^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 05.2^{\prime} \mathrm{W} \end{aligned}$ |
| 1356 | What is your speed from your 0630 position, with Buoy "PI" close abeam, to your 0654 position? | 11.4 knots | 10.5 knots | 9.3 knots | 8.2 knots |
| 1357 | At 0700, your gyro alarm sounds. What course should you steer by the standard magnetic compass in order to maintain your original heading of $078^{\circ}$ ? | 095ºpsc | 090 ${ }^{\circ} \mathrm{psc}$ | 080 ${ }^{\circ} \mathrm{psc}$ | $062^{\circ} \mathrm{psc}$ |
| 1358 | At 0705, with your gyro again functioning properly, you change course to $096^{\circ} \mathrm{T}$. At this time Race Rock Light is bearing $000^{\circ} \mathrm{T}$ at 0.35 mile. You are now governed by which Navigation Rules? | International Rules | Local Pilot Rules | Inland Rules | Coastal Fishery Rules |
| 1359 | At 0728, Race Rock Light is bearing $282^{\circ} \mathrm{T}$ at 3.8 miles, and the closest point on Fishers Island is at a radar range of 2.1 miles. What speed have you been making since you changed course at 0705? | 11.4 knots | 10.6 knots | 9.9 knots | 9.2 knots |
| 1360 | At 0728 , you change course to $080^{\circ} \mathrm{T}$. When steady on course, the standard magnetic compass reads $097^{\circ}$. Which statement is TRUE? | The magnetic compass error is $17^{\circ} \mathrm{W}$ | The magnetic heading is $090^{\circ}$ | The deviation is $1.0^{\circ} \mathrm{E}$ | The gyro course is $083^{\circ} \mathrm{pgc}$ |


| 1361 | At 0748, you take the following bearings: <br> Watch Hill Point Light bearing $020.5^{\circ}$ pgc Race Rock Light bearing $269.5^{\circ}$ pgc <br> What is the approximate depth of water at this position? | 104 feet | 130 feet | 175 feet | 325 feet |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1362 | At 0748 , you change course to $160^{\circ} \mathrm{T}$, speed 10 knots. At what time will you cross the 120 -foot curve the first time? | 0750 | 0754 | 0759 | 0808 |
| 1363 | At 0815, Montauk Pt. Light House is bearing $167^{\circ} \mathrm{T}$, Shagwong Pt. has a radar range of 4.5 miles, and Cerberus Shoal " 9 " Buoy is bearing $284^{\circ} \mathrm{T}$. If the engine is making turns for 10 knots, what was the set and drift of the current since 0748 ? | Set $065^{\circ}$, drift 1.1 knots | Set $065^{\circ} \mathrm{T}$, drift 2.4 knots | Set $245^{\circ} \mathrm{T}$, drift 2.4 knots | Set $245^{\circ} \mathrm{T}$, drift 1.1 knots |
| 1364 | What action should you take to compensate for the above current? | Continue on the same course and speed. | Alter your course to the right. | Slow to 8.5 knots. | Alter your course to the left. |
| 1365 | At 0815, visibility is excellent and you can see Montauk Point. Montauk Point is $\qquad$ | low and rocky with scattered small pine trees | a low lying wetland | a high sandy bluff | a flat wooded plain |
| 1366 | At 0815, you change course to $079^{\circ}$ T and head for the entrance of Great Salt Pond on Block Island. To compensate for a northerly wind, you estimate a $5^{\circ}$ leeway is necessary. What course should you steer per gyrocompass to make good 079́ㅜ? | 071 ${ }^{\circ} \mathrm{pgc}$ | 074 ${ }^{\circ} \mathrm{pgc}$ | 076 ${ }^{\circ} \mathrm{pgc}$ | 079 ${ }^{\circ} \mathrm{pgc}$ |
| 1367 | At 0845, Montauk Pt. Light is bearing $205^{\circ} \mathrm{T}$ at a radar distance of 6.6 miles. What is your speed made good from your 0815 position? | 10.5 knots | 10.0 knots | 9.2 knots | 8.4 knots |
| 1368 | As you head toward Great Salt Pond, visibility is unlimited. At what time will you lose sight of Montauk Pt. Light? | 0905 | 0928 | 0950 | It will remain visible to Great Salt Pond. |
| 1369 | Which chart should you use to enter Great Salt Pond? | 13205 | 13207 | 13214 | 13217 |


| 1370 | The following questions should be answered using chart 132 is 18 feet ( 5.4 meters) and the height of eye is 20 feet ( 6.1 a variation of $15^{\circ} \mathrm{W}$ for the entire plot. <br> DEVIATION TABLE | 3205TR, Block Island meters). Gyro error | Sound and approache $3^{\circ} \mathrm{W}$. "Per standard | , and the supporting pur agnetic compass" is | blications. Your draft breviated "psc". Use |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1371 | At 0630, Buoy "PI" is close abeam on the starboard side. You are steering $078^{\circ} \mathrm{T}$ and are headed directly toward Race Rock Light. At 0654, Little Gull Island Light is bearing $210^{\circ} \mathrm{pgc}$ and Race Rock Light is bearing $075^{\circ}$ pgc. What is your 0654 position? | $\begin{aligned} & \text { LAT } 41^{\circ} 19.0^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 05.2^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 14.4^{\prime} \mathrm{N}, \text { LONG } \\ & 71^{\circ} 54.6^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 14.2^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 06.8^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 14.0^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 05.3^{\prime} \mathrm{W} \end{aligned}$ |
| 1372 | What was the course made good from 0630 to 0654 ? | 078 ${ }^{\circ} \mathrm{T}$ | $082^{\circ} \mathrm{T}$ | $086{ }^{\circ} \mathrm{T}$ | 090T |
| 1373 | What course should you steer by the standard magnetic compass in order to maintain a heading of $081^{\circ} \mathrm{pgc}$ ? | $062^{\circ} \mathrm{psc}$ | 080psc | 090 ${ }^{\circ} \mathrm{psc}$ | 095 ${ }^{\circ} \mathrm{psc}$ |
| 1374 | At 0705, you change course to $096^{\circ} \mathrm{T}$. At this time, Race Rock Light is bearing $000^{\circ} \mathrm{T}$ at 0.35 mile. You are now governed by which Navigation Rules? | COLREGS | Local Pilot Rules | Inland Rules | Coastal Fishery Rules |
| 1375 | At 0728 , Race Rock Light is bearing $282^{\circ} \mathrm{T}$ at 3.8 miles, and the closest point on Fishers Island has a radar range of 2.1 miles. What speed have you been making since you changed course at 0705? | 11.2 knots | 10.8 knots | 9.6 knots | 9.1 knots |
| 1376 | At 0727, the cupola on Fishers Island is in line with Latimer Reef Light bearing $024^{\circ}$ pgc. Based on this, the gyro error is $\qquad$ | $2^{\circ} \mathrm{E}$ | $1^{\circ} \mathrm{E}$ | $0^{\circ}$ | $3^{\circ} \mathrm{W}$ |


| 1377 | At 0748, you take the following bearings: <br> Watch Hill Point Light bearing $026.5^{\circ}$ pgc Race Rock Light bearing $275.5^{\circ} \mathrm{pgc}$ <br> What is the approximate depth of water under the keel at this position? | 325 feet (98.5 meters) | 175 feet (53.0 meters) | 130 feet (39.4 meters) | 112 feet (33.9 meters) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1378 | At 0748 , you change course to $160^{\circ} \mathrm{T}$, speed 10 knots. At what time will you cross the 120 -foot curve the first time? | 0754 | 0800 | 0804 | 0808 |
| 1379 | At 0815, Montauk Pt. Light House is bearing $172^{\circ}$ T, Shagwong Pt. has a radar range of 4.5 miles. If the engine was making turns for 10 knots, what was the current since 0748? | Set $040^{\circ} \mathrm{T}$, drift 0.7 knots knots | Set $040^{\circ} \mathrm{T}$, drift 1.6 knots | Set $220^{\circ} \mathrm{T}$, drift 1.6 knots | Set $220^{\circ} \mathrm{T}$, drift 0.7 knots |
| 1380 | Which action should you take to compensate for the above current? | Continue on the same course and speed. | Alter your course to the left. | Slow to 8.5 knots. | Alter your course to the right. |
| 1381 | At 0815, visibility is excellent and you can see Montauk Point. Montauk Point Light is $\qquad$ . | shown from a brown tower | equipped with a fog diaphone | lighted 24 hours | $\begin{aligned} & \text { is } 79 \text { feet ( } 24 \text { meters) } \\ & \text { high } \end{aligned}$ |
| 1382 | At 0815 , you change course to $079^{\circ} \mathrm{T}$. To compensate for a southerly wind, you estimate a $3^{\circ}$ leeway is necessary. Which course should you steer per standard magnetic compass to make good $079^{\circ} \mathrm{T}$ ? | 090ºpsc | 093 ${ }^{\circ} \mathrm{psc}$ | 095 ${ }^{\circ} \mathrm{psc}$ | 099 ${ }^{\circ} \mathrm{psc}$ |
| 1383 | At 0839, Montauk Pt. Light is bearing $205^{\circ} \mathrm{T}$ at a radar distance of 6.6 miles. What is your speed made good from your 0815 position? | 8.2 knots | 9.2 knots | 10.0 knots | 10.5 knots |
| 1384 | The area between Block Island and Montauk Point that is bounded by dashed magenta lines is a $\qquad$ . | naval exercise area | fish trap area | submerged cable area | restricted navigation area |
| 1385 | Which chart should you use to enter Great Salt Pond? | 13204 | 13205 | 13207 | 13217 |


| 1386 | The following questions are based on chart 13205TR, Blo and the height of eye is 24 feet ( 7.3 meters). Use $15^{\circ} \mathrm{W}$ v <br> DEVIATION TABLE | ck Island Sound, and ariation where requir | he supporting publica . The gyro error is $2^{\circ}$ | ns. Your vessel draw | $8 \text { feet (2.4 meters), }$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1387 | You are steering $087^{\circ} \mathrm{pgc}$ and turning for 6.8 knots. At 0600, you take the following bearings: <br> Little Gull Island Light bearing 089.5º pgc <br> Bartlett Reef Light bearing $047^{\circ}$ pgc <br> What is your 0600 position? | $\begin{aligned} & \text { LAT } 41^{\circ} 11.2^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 14.6^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 11.7^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 14.4^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 12.1^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 13.8^{\prime} \mathrm{W} \end{aligned}$ | $\text { LAT } 41^{\circ} 12.5^{\prime} \mathrm{N}, \text { LONG }$ $71^{\circ} 14.9^{\prime} \mathrm{W}$ |
| 1388 | If you change course at 0610, what is the course to steer to a point where Little Gull Island Light bears $180^{\circ} \mathrm{T}$ at 0.7 mile (Point "A")? | 084 ${ }^{\circ} \mathrm{pgc}$ | 080 ${ }^{\circ} \mathrm{pgc}$ | 076 ${ }^{\circ} \mathrm{pgc}$ | 072 ${ }^{\circ} \mathrm{pgc}$ |
| 1389 | What is your ETA at point "A"? | 0702 | 0655 | 0651 | 0640 |
| 1390 | You calculate that the current will be ebbing at the Race at 0700. You should expect to be set in which general direction at the Race? | West | East | Northeast | North |
| 1391 | If your fathometer is set to fathoms, it should read approximately $\qquad$ at point "A"? | 38 fathoms | 35 fathoms | 28 fathoms | 24 fathoms |
| 1392 | From point "A", you lay out an intended track line to a point where Block Island North Light bears $180^{\circ} \mathrm{T}$ at 2.9 miles (Point " B "). What is the length of this leg of the voyage? | 24.4 miles | 23.9 miles | 23.7 miles | 20.4 miles |
| 1393 | What is the course per standard magnetic compass between points "A" and "B"? | $099.5^{\circ}$ | 098.5 ${ }^{\circ}$ | 095.5 ${ }^{\circ}$ | 094.5 ${ }^{\circ}$ |


| 1394 | At 0715 you take the following bearings: <br> Race Rock Light $\quad 328^{\circ} \mathrm{pgc}$ <br> Little Gull Island Light $249^{\circ} \mathrm{pgc}$ <br> Mt. Prospect Antenna $036^{\circ} \mathrm{pgc}$ <br> Based on your 0715 fix, which statement is TRUE? | You are governed by the Inland Rules. | Your fathometer reads about 265 fathoms. | You are in a cable area. | You are to the left of your track line. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1395 | From your 0715 position, you set a course of $085^{\circ}$ T. At 0745 you take the following bearings: <br> What was the current encountered between 0715 and $0745 ?$ | Set 030 ${ }^{\circ} \mathrm{T}$, drift 0.4 knot | Set $216^{\circ} \mathrm{T}$, drift 0.3 knot | Set $238^{\circ} \mathrm{T}$, drift 0.9 knot | Set $070^{\circ} \mathrm{T}$, drift 0.6 knot |
| 1396 | The wind is southerly, and you estimate $3^{\circ}$ leeway. Allowing for leeway, what is the course to steer from your 0745 position to pass 1 mile south of Watch Hill Buoy "WH"? | 087 ${ }^{\circ} \mathrm{pgc}$ | 085 ${ }^{\circ} \mathrm{pgc}$ | 081 ${ }^{\circ} \mathrm{pgc}$ | 079 ${ }^{\circ} \mathrm{pgc}$ |
| 1397 | From your 0745 fix, you change course to pass 1.0 mile south of buoy "WH" and estimate your speed at 7 knots. If the visibility clears, what is the earliest time you can expect to see Block Island North Light tower? | 0845 | 0838 | 0807 | 0750 |
| 1398 | Which statement describes the shore between Watch Hill Point and Point Judith? | Low, rocky cliffs | Heavily wooded hills | Sandy beaches broken by rocky points | Barren hills with prominent buildings |
| 1399 | At 0830, Watch Hill Point bears $343^{\circ} \mathrm{T}$ at 3.5 miles by radar. What was the speed made good since 0745 ? | 7.1 knots | 6.7 knots | 5.8 knots | 5.4 knots |
| 1400 | At 0900, you take the following radar ranges: <br> Which statement about this fix is TRUE? | You are to the left of the track line. | The bottom in the area is sand and gravel. | You are governed by the Inland Rules. | The fix is indeterminate. |
| 1401 | At 0930, your position is LAT $41^{\circ} 16.5^{\prime} \mathrm{N}$, LONG $71^{\circ} 41.4^{\prime} \mathrm{W}$, and you are turning for 7 knots. Allowing $3^{\circ}$ leeway for southerly winds and estimating the current as $035^{\circ}$ at 0.3 knot, what is the course to steer (pgc) to point "B"? | 096 ${ }^{\circ} \mathrm{pgc}$ | 094 ${ }^{\circ} \mathrm{pgc}$ | 091 ${ }^{\circ} \mathrm{pgc}$ | 089 ${ }^{\circ} \mathrm{pgc}$ |


| 1402 | The following questions should be answered using chart 1 vessel draws 8 feet ( 2.4 meters) and the height of eye is 2 "psc". Use a variation of $15^{\circ} \mathrm{W}$ for the entire plot. <br> DEVIATION TABLE | 3205TR, Block Island 4 feet ( 7.3 meters). | Sound and approache yro error is $2^{\circ} E$."Per $s$ | , and the supporting andard magnetic com | ublications. Your ass" is abbreviated |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1403 | You are steering $087^{\circ}$ pgc and turning for 6.8 knots. At 0600, you take the following bearings: <br> Little Gull Island Light bearing $085.5^{\circ} \mathrm{pgc}$ <br> Bartlett Reef Light bearing $043^{\circ} \mathrm{pgc}$ <br> What is your 0600 position? | $\begin{aligned} & \text { LAT } 41^{\circ} 12.1^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 13.8^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 12.1^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 14.6^{\prime} \mathrm{W} \end{aligned}$ | LAT $41^{\circ} 12.3^{\prime} \mathrm{N}$, LONG $72^{\circ} 14.7^{\prime} \mathrm{W}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 12.5^{\prime} \mathrm{N}, \text { LONG } \\ & 71^{\circ} 14.9^{\prime} \mathrm{W} \end{aligned}$ |
| 1404 | If you change course at 0610, what is the course to steer per gyro compass to a point where Little Gull Island Light bears $180^{\circ} \mathrm{T}$ at 0.7 mile (Point " $\mathrm{A}^{\prime \prime}$ )? | 072 ${ }^{\circ} \mathrm{pgc}$ | 076 ${ }^{\circ} \mathrm{pgc}$ | 080 ${ }^{\circ} \mathrm{pgc}$ | 084 ${ }^{\circ} \mathrm{pgc}$ |
| 1405 | What is your ETA at point "A"? | 0637 | 0643 | 0649 | 0700 |
| 1406 | You calculate that the current will be flooding at the Race at 0700. You should expect to be set in which general direction at the Race? | West | East | Northeast | Southwest |
| 1407 | If your fathometer is set to fathoms, it should read $\qquad$ at point "A". | 42 fathoms | 38 fathoms | 35 fathoms | 28 fathoms |
| 1408 | From point "A", you lay out an intended track line to a point where Block Island North Light bears $180^{\circ} \mathrm{T}$ at 2.9 miles (Point " B "). What is the length of this leg of the voyage? | 20.4 miles | 23.7 miles | 24.4 miles | 25.3 miles |
| 1409 | What is the course per standard magnetic compass between points "A" and "B"? | 090.5 ${ }^{\circ}$ | 093.0 ${ }^{\circ}$ | 095.5 ${ }^{\circ}$ | 098.5 ${ }^{\circ}$ |


| 1410 | At 0715, you take the following bearings: <br> Based on your 0715 fix, which statement is TRUE? | You are to the right of your track line. | The charted depth is about 265 feet (80.3 meters). | You are in a cable area. | You are governed by the Inland Rules. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1411 | From your 0715 position, you set a course of $085^{\circ} \mathrm{T}$. At 0745 , you take the following bearings: <br> What was the current encountered between 0715 and 0745 ? | Set $030^{\circ} \mathrm{T}$, drift 0.4 knot | Set $070^{\circ} \mathrm{T}$, drift 0.7 knot | Set $210^{\circ} \mathrm{T}$, drift 0.8 knot | Set $238^{\circ} \mathrm{T}$, drift 1.0 knot |
| 1412 | The wind is northerly, and you estimate $3^{\circ}$ leeway. Allowing for leeway what is the course to steer per gyro compass from your 0745 position to pass 1 mile south of Watch Hill Buoy "WH"? | 077 ${ }^{\circ} \mathrm{pgc}$ | 082 ${ }^{\circ} \mathrm{pgc}$ | 085 ${ }^{\circ} \mathrm{pgc}$ | 087 ${ }^{\circ} \mathrm{pgc}$ |
| 1413 | From your 0745 fix, you change course to pass 1.0 mile south of buoy "WH" and estimate your speed at 7 knots. If the visibility clears, what is the earliest time you can expect to see Block Island North Light tower? | The tower is in sight at 0745. | 0750 | 0806 | 0838 |
| 1414 | Which statement describes the shore between Watch Hill Point and Point Judith? | Low, rocky cliffs with heavily wooded hills inland | Sandy beaches broken by rocky points | Sand dunes and beaches with a mud and sand bottom | Wooded, barren hills with isolated prominent buildings |
| 1415 | At 0830, Watch Hill Point bears $343^{\circ} \mathrm{T}$ at 3.5 miles by radar. What was the speed made good since 0745 ? | 7.1 knots | 6.7 knots | 5.8 knots | 5.4 knots |
| 1416 | At 0900, you take the following radar ranges: <br> Which statement is TRUE? | You are to the right of the track line. | The bottom in the area is sand and gravel. | You are inside of the Territorial Sea. | The fix is indeterminate. |
| 1417 | At 0930, your position is LAT $41^{\circ} 16.5^{\prime} \mathrm{N}$, LONG $71^{\circ} 41.4^{\prime} \mathrm{W}$, and you are turning for 7 knots. Allowing $3^{\circ}$ leeway for northerly winds and estimating the current as $035^{\circ}$ at 0.3 knot, what is the course to steer (pgc) to point "B"? | 084 ${ }^{\circ} \mathrm{pgc}$ | 086 ${ }^{\circ} \mathrm{pgc}$ | 091 ${ }^{\circ} \mathrm{pgc}$ | 094 ${ }^{\circ} \mathrm{pgc}$ |


| 1418 | The following questions should be answered using chart 1 steering a westerly course and approaching Block Island Sou a variation of $15^{\circ} \mathrm{W}$ for the entire plot. <br> DEVIATION TABLE | 3205TR, Block Island Sound. The gyro error | Sound and approaches, is $2^{\circ} \mathrm{W}$. "Per standard | , and the supporting p magnetic compass" is | ublications. You are bbreviated "psc". Use |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1419 | You are underway in the vicinity of Block Island and obtain the following lines of position: <br> What is your position at the time of these sightings? | $\begin{aligned} & \text { LAT } 41^{\circ} 05.2^{\prime} \mathrm{N}, \text { LONG } \\ & 71^{\circ} 36.2^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 05.3^{\prime} \mathrm{N}, \text { LONG } \\ & 71^{\circ} 35.8^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 05.4^{\prime} \mathrm{N}, \text { LONG } \\ & 71^{\circ} 36.0^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 05.4^{\prime} \mathrm{N}, \text { LONG } \\ & 71^{\circ} 35.9^{\prime} \mathrm{W} \end{aligned}$ |
| 1420 | Which course would you steer by your standard magnetic compass to make good a course of $275^{\circ} \mathrm{T}$ ? | $266^{\circ} \mathrm{psc}$ | $272^{\circ} \mathrm{psc}$ | $289{ }^{\circ} \mathrm{psc}$ | 294 ${ }^{\circ} \mathrm{psc}$ |
| 1421 | From your position you observe a rotating white and green light to the north. This light is most likely $\qquad$ -. | at an airport | on a naval minecountermeasures vessel | "Block Island North Light" | on a vessel engaged in public safety activity |
| 1422 | At 1800 , your position is LAT $41^{\circ} 06.5^{\prime} \mathrm{N}$, LONG $71^{\circ} 43.5^{\prime} \mathrm{W}$. How should the buoy which bears $030^{\circ} \mathrm{T}$ from your position at a range of approximately 0.5 mile be painted? | Horizontally banded, red over green, with a red buoyancy chamber | Horizontally banded, green over red, with a green buoyancy chamber | Vertically striped, red and green | Solid red with green letters "BIS" |


| 1423 | From your 1800 position, you steer a course of $355^{\circ} \mathrm{psc}$ at a speed of 10.0 knots. At 1830 , your position is LAT $41^{\circ} 11.7^{\prime} \mathrm{N}$, LONG $71^{\circ} 45.8^{\prime} \mathrm{W}$. What are the set and drift of the current? | 005 ${ }^{\circ} \mathrm{T}, 1.0$ knot | 005 ${ }^{\circ}$, 0.5 knots | $180^{\circ} \mathrm{T}, 0.5$ knot | $208^{\circ} \mathrm{T}, 1.0$ knots |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1424 | From your 1830 fix, you come left to a course of $290^{\circ} \mathrm{T}$. Which statement concerning Watch Hill Light is TRUE? | The nominal range of its white light is 16 miles. | It displays both red and white lights. | Its horn blasts every 15 seconds in fog. | Its geographic range is 18.5 miles at a 35 -foot (10.7 meters) height of eye. |
| 1425 | At 1850, you obtain the following bearings and distance: <br> What true speed did you make good between 1830 and 1850? | 2.9 knots | 5.7 knots | 8.0 knots | 8.7 knots |
| 1426 | If your height of eye is 45 feet ( 13.7 meters), what is the approximate geographic range of Block Island North Light? | 7.8 nm | 8.9 nm | 13.0 nm | 16.7 nm |
| 1427 | What is the depth of water at your 1850 position? | 120 feet | 135 feet | 140 feet | 156 feet |
| 1428 | At 1915, you obtain the following bearings and distances: <br> Watch Hill Light $018{ }^{\circ} \mathrm{T}$, 5.3 miles <br> Montauk Point Light $169^{\circ} \mathrm{T}$, 9.1 miles <br> What is your 1915 position? | LAT $41^{\circ} 13.6^{\prime} \mathrm{N}$, LONG $71^{\circ} 540^{\prime} \mathrm{W}$ 7154.0'W | $\begin{aligned} & \text { LAT } 41^{\circ} 13.2^{\prime} \mathrm{N}, \text { LONG } \\ & 71^{\circ} 53.7^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 13.4^{\prime} \mathrm{N}, \text { LONG } \\ & 71^{\circ} 53.1^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 14.4^{\prime} \mathrm{N}, \text { LONG } \\ & 71^{\circ} 53.7^{\prime} \mathrm{W} \end{aligned}$ |
| 1429 | If you were to head into New London Harbor, which chart should you switch to for the best detail? | 13209 | 13212 | 13213 | 13214 |
| 1430 | From your 1915 position, you come left and set a course for Gardiners Point. At 1930 , your position is LAT $41^{\circ} 12.7^{\prime} \mathrm{N}$, LONG $71^{\circ} 56.8^{\prime} \mathrm{W}$. What type of bottom is charted at this position? | Blue mud, gritty shells | Buried mussels, gritty shells | Blue mud, gray sand | Bumpy mud with gravel surface |
| 1431 | From your 1930 position, you plot a course to pass 0.5 mile due south of Race Rock Light. If your vessel's speed is 8.0 knots, the current's set and drift are $040^{\circ} \mathrm{T}$ at 1.4 knots, and a south wind produces a $3^{\circ}$ leeway, what true course should you steer to make good your desired course? | $275{ }^{\circ} \mathrm{T}$ | $280^{\circ} \mathrm{T}$ | $290^{\circ} \mathrm{T}$ | $294{ }^{\circ} \mathrm{T}$ |
| 1432 | The short-long dashed magenta line around Gardiners Island marks $\qquad$ | a regulated anchorage | fish trap areas | an area closed to the public | underwater cables |


| 1433 | NOAA VHF-FM weather broadcasts from Providence, RI are on | 162.25 MHz | 162.30 MHz | 162.40 MHz | 162.55 MHz |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1434 | The following questions should be answered using chart n steering a westerly course and approaching Block Island Sou <br> DEVIATION TABLE | number 13205TR, Blo <br> Sound. The variation | Island and Approach the area is $15^{\circ} \mathrm{W}$. Th | s, and supporting pub gyro error is $2^{\circ} \mathrm{E}$. | lications. You are |
| 1435 | You are underway in the vicinity of Block Island and obtain the following lines of position: <br> What is your position at the time of these sightings? | $\begin{aligned} & \text { LAT } 41^{\circ} 05.0^{\prime} \mathrm{N}, \text { LONG } \\ & 71^{\circ} 36.2^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 05.3^{\prime} \mathrm{N}, \text { LONG } \\ & 71^{\circ} 35.8^{\prime} \mathrm{W} \end{aligned}$ | LAT $41^{\circ} 05.3^{\prime} \mathrm{N}$, LONG $71^{\circ} 35.1^{\prime} \mathrm{W}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 05.4^{\prime} \mathrm{N}, \text { LONG } \\ & 71^{\circ} 35.0^{\prime} \mathrm{W} \end{aligned}$ |
| 1436 | What course should you steer by your standard magnetic compass to make good a course of $280^{\circ} \mathrm{T}$ ? | $294{ }^{\circ} \mathrm{psc}$ | $290^{\circ} \mathrm{psc}$ | $272^{\circ} \mathrm{psc}$ | 266ºpsc |
| 1437 | Which statement concerning Montauk Point Light is TRUE? | The light comes on at sunset. | There is an emergency light if the main light is extinguished. | The height of the light is 24 feet. | The tower is painted with black and white stripes. |
| 1438 | At 1800 , your position is LAT $41^{\circ} 06.5^{\prime} \mathrm{N}$, LONG $71^{\circ} 43.5^{\prime} \mathrm{W}$. How would the buoy which bears $030^{\circ} \mathrm{T}$ from your position at a range of approximately 0.5 mile be painted? | Horizontally banded, red over green | Horizontally banded, green over red | Vertically striped, red and green | Solid green with red letters "BIS" |


| 1439 | From your 1800 position you steer a course of $350^{\circ}$ psc at a speed of 10.0 knots. At 1830 , your position is LAT $41^{\circ} 11.7^{\prime} \mathrm{N}$, LONG $71^{\circ} 45.8^{\prime} \mathrm{W}$. What are the set and drift of the current? | 029 ${ }^{\circ} \mathrm{T}, 1.4$ knot | 029 ${ }^{\circ} \mathrm{T}, 0.7$ knots | $209^{\circ} \mathrm{T}, 0.7$ knot | 209º${ }^{\circ}$, 1.4 knots |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1440 | From your 1830 fix, you come left to a course of $290^{\circ} \mathrm{T}$. Which of the following statements concerning Watch Hill Light is FALSE? | The nominal range of its white light is 15 miles. | It displays both red and white lights. | Its geographic range is $\mathbf{1 8 . 5}$ miles at a 35 foot ( 10.7 meter) height of eye. | Its horn blasts every 30 seconds in fog. |
| 1441 | At 1850, you obtain the following bearings and distances: <br> Montauk Point $\quad 189^{\circ} \mathrm{pgc} 8.7$ miles <br> Watch Hill Light $340^{\circ}$ pgc 5.7 miles <br> What true course did you make good between 1830 and $1850 ?$ | $293{ }^{\circ} \mathrm{T}$ | $297^{\circ} \mathrm{T}$ | $299^{\circ} \mathrm{T}$ | $305^{\circ} \mathrm{T}$ |
| 1442 | If your height of eye is 35 feet (10.7 meters), what is the approximate geographic range of Block Island North Light? | 7.4 nm | 13.0 nm | 15.8 nm | 17.5 nm |
| 1443 | What is the water depth at your 1850 position? | 105 feet | 120 feet | 135 feet | 142 feet |
| 1444 | At 1915, you obtain the following bearings and distances: <br> Watch Hill Light $018^{\circ} \mathrm{T} @ 5.3$ miles Montauk Point Light $169^{\circ} \mathrm{T}$ @ 9.1 miles <br> What is your 1915 position? | $\begin{aligned} & \text { LAT } 41^{\circ} 13.0^{\prime} \mathrm{N}, \text { LONG } \\ & 71^{\circ} 54.1^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 13.0^{\prime} \mathrm{N}, \text { LONG } \\ & 71^{\circ} 53.9^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 13.2^{\prime} \mathrm{N}, \text { LONG } \\ & 71^{\circ} 53.7^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 13.4^{\prime} \mathrm{N}, \text { LONG } \\ & 71^{\circ} 53.4^{\prime} \mathrm{W} \end{aligned}$ |
| 1445 | If you were to head into Fishers Island Sound, which of the following charts would you switch to for better detail of Mystic and Mystic Harbor? | 13209 | 13212 | 13214 | 13215 |
| 1446 | From your 1915 position, you come left and set a course for Gardiners Point. At 1930, your position is LAT $41^{\circ} 12.7^{\prime} \mathrm{N}$, LONG $71^{\circ} 56.8^{\prime} \mathrm{W}$. What type of bottom is charted at this position? | Blue mud, gritty shells | Buried mussels, gritty shells | Bumpy muck with grainy surface | Blue mud, gray sand |
| 1447 | From your 1930 position, you plot a course to pass 0.5 mile due south of Race Rock Light. If your vessel's speed is 10.0 knots, the current's set and drift are $040^{\circ} \mathrm{T}$ at 1.8 knots, and a north wind produces a $3^{\circ}$ leeway, what true course should you steer to make good your desired course? | $300^{\circ} \mathrm{T}$ | ${ }^{295}{ }^{\circ} \mathrm{T}$ | $290^{\circ} \mathrm{T}$ | $280^{\circ} \mathrm{T}$ |


| 1448 | As an option to heading into Long Island Sound, you consider anchoring in the vicinity of the Gardiners Point Ruins at the north end of Gardiners Island. What is the minimum recommended distance from the ruins for fishing, trawling, or anchoring? | 1.0 mile | 0.8 mile | 0.5 mile | 300 yards (91 meters) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1449 | NOAA VHF-FM weather broadcasts from New London, CT are on $\qquad$ . | 162.55 MHz | 162.40 MHz | 162.30 MHz | 162.25 MHz |
| 1450 | The following questions should be answered using chart n vessel has a draft of 9 feet ( 2.7 meters). You are turning for <br> DEVIATION TABLE | number 12354TR, Long for 7.5 knots. Your heig | Island Sound - Easter ht of eye is 25 feet (7. | Part, and the suppo meters). The variation | ing publications. Your for the area is $14^{\circ} \mathrm{W}$. |
| 1451 | As you enter the New Haven Outer Channel, you sight the range markers in line directly over the stern. Your heading at the time is $155.5^{\circ}$ per gyrocompass. What is the gyro error? | $1.0^{\circ} \mathrm{E}$ | $1.0^{\circ} \mathrm{W}$ | $2.0^{\circ} \mathrm{E}$ | $2.0^{\circ} \mathrm{W}$ |
| 1452 | At 0720, you are in the outer channel between buoy "1" and buoy "2" and change course to pass Townshend Ledge Lighted Bell Buoy "10A" abeam to port at 200 yards. What is your ETA off the buoy? | 0745 | 0741 | 0738 | 0734 |
| 1453 | At 0740, you take the following Radar Ranges: <br> Branford Reef Light @ 2.5 nm <br> New Haven Light @ 3.9 nm <br> What is your position? | $\begin{aligned} & \text { LAT } 41^{\circ} 12.4^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 51.5^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 12.6^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 51.8^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 12.7^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 51.9^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 12.2^{\prime} \mathrm{N}, \text { LONG } \\ & 72^{\circ} 52.0^{\prime} \mathrm{W} \end{aligned}$ |


| 1454 | From your 0740 position, you change course to pass 1.1 miles north of Falkner Island Light. A northerly wind is causing a $2^{\circ}$ leeway. What gyro course should you steer in order to ensure that you will remain clear of the 18' shoal located 1 mile NW of Falkner Island Light? | 081 ${ }^{\circ} \mathrm{pgc}$ | $085{ }^{\circ} \mathrm{pgc}$ | $079{ }^{\circ} \mathrm{pgc}$ | $077{ }^{\circ} \mathrm{pgc}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1455 | At 0802, Branford Reef Light bears $348^{\circ} \mathrm{T}$ at 0.75 mile, and the north point of Falkner Island bears $088^{\circ} \mathrm{T}$ at 6.7 miles. What were the set and drift since 0740? | Set 040${ }^{\circ}$, drift . 2 knot | Set $220^{\circ} \mathrm{T}$, drift . 2 knot | Set $220^{\circ} \mathrm{T}$, drift . 6 knot | You are making good your intended course and speed. |
| 1456 | What publication contains information on the navigational hazards in the vicinity of Falkner Island? | The navigational regulations in Title 46, Code of Federal Regulations | U.S. Coast Pilot | U.S. Coast Guard Light List | Inland Navigation Rules |
| 1457 | If there is no current, what is the course per standard magnetic compass from your 0802 fix to the position 1.1 miles north of Falkner Island Light? | 099 ${ }^{\circ}$ | 095 ${ }^{\circ}$ | 068 ${ }^{\circ}$ | $064{ }^{\circ}$ |
| 1458 | At 0830, you wish to get the latest weather forecasts for the Falkner Island area. On what frequency would you set your FM radio for this information? | 2181 kHz | 162.40 Mhz | 156.80 Mhz | 156.65 Mhz |
| 1459 | At 0844, the range to the north end of Falkner Island is 2.0 miles and the left tangent bearing is $102^{\circ} \mathrm{T}$. What is the approximate charted depth of the water? | 29 ft (8.8 meters) | 22 ft (6.7 meters) | 19 ft (5.8 meters) | 14 ft (4.2 meters) |
| 1460 | At 0925, you plot the following bearings and range: <br> Falkner Island Light bearing $251^{\circ}$ true @ 1.7nm Kelsey Point BW Light bearing $075^{\circ}$ true <br> If you correct for a current setting $215^{\circ} \mathrm{T}$ at 0.5 knot , what course will you steer from the 0925 position to arrive at a position 0.5 mile south of Long Sand Shoal West End Horn Buoy "W"? | $10{ }^{\circ} \mathrm{T}$ | ${ }^{096}{ }^{\circ} \mathrm{T}$ | ${ }^{093}{ }^{\circ} \mathrm{T}$ | 088 ${ }^{\circ} \mathrm{T}$ |
| 1461 | If you correct for the current in the previous question $\left(215^{\circ} \mathrm{T}\right.$ at 0.5 knot) and maintain an engine speed of 7.5 knots, what is your ETA 0.5 mile south of buoy "W"? | 1014 | 1018 | 1021 | 1026 |
| 1462 | At what approximate distance would you expect Bartlett Reef Light to break the horizon, if the visibility is 27 nautical miles? | 12.8 nm | 12.0 nm | 6.9 nm | 5.9 nm |
| 1463 | At 1038, you are 0.4 mile south of Long Sand Shoal Buoy " 8 A " on course $090^{\circ} \mathrm{T}$ If you continue on your present course to the approaches of New London which of the following is true? | You are governed by the inland rules of the road. | You are entering a restricted area | You will clear Plum Island Whistle buoy at a range of 0.4 nm . | You switch to chart 13214. |
| 1464 | At 1200, your position is 2.0 miles southwest of Bartlett Reef Light. Your heading is $075^{\circ} \mathrm{T}$. Visibility is less than 0.2 mile in fog and rain. Which of the following signals is most likely to be from another vessel? | Whistle from $125^{\circ}$ relative | Bell from $350^{\circ}$ relative | Whistle from $075^{\circ}$ relative | Horn from $330^{\circ}$ relative |


| 1465 | What chart should you use after you enter New London Harbor? | 13211 | 13214 | 13213 | 13272 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1466 | The following questions should be answered using chart 12 your vessel is 10 feet and your height of eye is 25 feet. G $14^{\circ} \mathrm{W}$ for the entire plot. <br> DEVIATION TABLE <br> On 04 December 1983, you are departing New London H knots. | 2354TR, Long Island yro error is $2^{\circ} \mathrm{W}$. "Per <br> arbor. At 1712, you ar | Sound - Eastern Part, a standard magnetic com <br> between buoys "1" and | nd the supporting pub pass" is abbreviated " <br> d "2" on a course of 2 | ications. The draft of ssc". Use a variation of <br> $0^{\circ} \mathrm{psc}$ turning for 8.4 |
| 1467 | At 1732, Bartlett Reef Lt bears $016^{\circ}$ psc. Race Rock Lt bears $125.5^{\circ} \mathrm{psc}$ with a radar range of 4.4 miles. What is the set and drift? | $116^{\circ}, 0.4$ knot | $116^{\circ}, 1.0$ knot | 296 , 0.4 knot | 296, 1.0 knot |
| 1468 | From your 1750 GPS position at LAT $41^{\circ} 15.6^{\prime} \mathrm{N}$, LONG $072^{\circ} 11.5^{\prime} \mathrm{W}$, you plot a course of $255^{\circ} \mathrm{T}$ at 8.5 kts . At what time would you see Falkner Island Light, if visibility is 10 miles? | 1819 | 1850 | 1910 | 1917 |
| 1469 | You are on course $255^{\circ} \mathrm{T}$. Which of the following is true? | You are governed by the International Rules of the Road. | You will pass through an area of the 30 fathom curve. | At times of extreme Iow tide Six Mile Reef may be a danger to your vessel. | You will leave Six Mile Reef buoy "8C" abeam to port at 1.1 mile. |
| 1470 | At 1930 you obtain two radar ranges: Hammonasset Point at 4.1 miles and the East side of Falkner Island at 7.6 miles. What is your position? | $\begin{aligned} & \text { LAT } 41^{\circ} 11.2^{\prime} \mathrm{N}, \text { LONG } \\ & 072^{\circ} 30.6^{\prime} \mathrm{W} \end{aligned}$ | $\begin{aligned} & \text { LAT } 41^{\circ} 11.7^{\prime} \mathrm{N}, \text { LONG } \\ & 072^{\circ} 29.2^{\prime} \mathrm{W} \end{aligned}$ | LAT $41^{\circ} 11.8^{\prime} \mathrm{N}$, LONG 072²9.6'W | $\begin{aligned} & \text { LAT } 41^{\circ} 11.9^{\prime} \mathrm{N}, \text { LONG } \\ & 072^{\circ} 29.2^{\prime} \mathrm{W} \end{aligned}$ |


| 1471 | At 2000 you plot your position as: LAT $41^{\circ} 11^{\prime} \mathrm{N}$, LONG $072^{\circ} 35^{\prime} \mathrm{W}$. The set and drift is $095^{\circ} \mathrm{T}$ at 0.8 knot. What course must you steer, and what engine speed must you turn, in order to make good $255^{\circ} \mathrm{T}$ at 8.5 knots? | $257^{\circ} \mathrm{T}, 9.3$ knots | 253${ }^{\circ}$, 9.3 knots | 257${ }^{\circ} \mathrm{T}, 7.7$ knots | 253${ }^{\circ} \mathrm{T}, 7.7$ knots |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1472 | At 2100 Branford Reef Light bears $349^{\circ}$ psc and Falkner Island Light bears $064^{\circ} \mathrm{psc}$. Your heading is $255^{\circ} \mathrm{T}$. What is the relative bearing of Joshua Point Light? | $030^{\circ}$ | $105^{\circ}$ | $135^{\circ}$ | $225^{\circ}$ |
| 1473 | What VHF frequency would you use to listen to a weather forecast for the eastern part of Long Island Sound? | 156.65 MHz | 156.85 MHz | 162.475 MHz | 162.775 MHz |
| 1474 | At 2130 New Haven buoy "NH" bears $337^{\circ}$ per gyro compass and Middle Ground Lt bears $254^{\circ}$ per gyro compass. You must arrive 0.3 miles off Port Jefferson buoy "PJ" at 2300. What speed will you have to make good, for arrival at 2300? | 9.0 knots | 9.3 knots | 9.6 knots | 10.7 knots |
| 1475 | From the 2130 position, you steer $236^{\circ} \mathrm{T}$ at 10 knots. A strong northerly wind is causing $4^{\circ}$ of leeway. What course must you steer per standard compass, to make good $236^{\circ} \mathrm{T}$ ? | $232^{\circ} \mathrm{psc}$ | $240^{\circ} \mathrm{psc}$ | $244^{\circ} \mathrm{psc}$ | $252^{\circ} \mathrm{psc}$ |
| 1476 | You have maneuvered for traffic and at 2215 you obtain the following radar information: <br> Middle Ground Light bearing $287^{\circ}$ pgc @ 6.65 nm <br> What course must you steer to arrive at buoy "PJ", passing 0.5 nm off "Mt Misery Shoal"? | $237^{\circ} \mathrm{psc}$ | $257^{\circ} \mathrm{psc}$ | $261^{\circ} \mathrm{psc}$ | $265^{\circ} \mathrm{psc}$ |
| 1477 | Which statement best describes the shoreline at Mount Misery? | Wooded, barren hills with a rocky beach | Low, rocky cliffs with heavily wooded hills inland | Sand dunes and beaches with a mud and sand bottom | Sand bluffs 60 feet high and banks dug out by sand and gravel companies |
| 1478 | What chart would you need to enter Port Jefferson Harbor? | 12362 | 12364 | 12369 | 12370 |
| 1479 | At 2315, you are notified that the Port Jefferson pilot will be delayed. Old Field Point Light bears $257^{\circ}$ T, Stratford Shoal Middle Ground Light bears $355^{\circ} \mathrm{T}$ and Port Jefferson East Breakwater Light bears $171^{\circ} \mathrm{T}$. What is the depth under the keel at this time on December 4, 1983? | 41 feet | 47 feet | 51 feet | 57 feet |
| 1480 | What will be the current at Port Jefferson entrance at 0130 on December 5, 1983? | 1.4 knots, flood | 1.4 knots, ebb | 0.8 knot, flood | 0.8 knot, ebb |
| 1481 | At 0145 you take on the pilot and are inbound Port Jefferson. The ship's heading is $147^{\circ} \mathrm{pgc}$ when lined up on the Port Jefferson range. What is your gyro error? | $1^{\circ} \mathrm{W}$ | $1^{\circ} \mathrm{E}$ | $2^{\circ} \mathrm{E}$ | $0^{\circ}$ |


| 1482 | The following questions (1-10) are based on the Army Corps of Engineers Mississippi River Maps (Cairo to the Gulf) and the Light List. AHP = Above Head of Passes, LMR = Lower Mississippi River, UMR = Upper Mississippi River, OHR = Ohio River, ACOE = Army Corps of Engineers At 0630, on 15 March, you are upbound on the Lower Mississippi River passing Kaiser Aluminum \& Chemical Corp. (mile 234.0 AHP). |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1483 | The horizontal clearance of the center span on the Baton Rouge RR and Highway Bridge (mile 233.9 AHP) is | 443 | 500 | 623 | 748 |
| 1484 | You are upbound approaching Springfield Bend Lt. (mile 244.8 AHP) downriver from Profit Island. Which of the following statements is TRUE? | Profit Island Chute is open to navigation and is a shortcut for singlebarge tows. | Tow length must not exceed 600 feet to use Profit Island Chute. | Profit Island Chute is closed to navigation. | Tows must navigate towards right descending bank when passing Profit Island Chute. |
| 1485 | At 1042, on 16 March, you are passing the Vicksburg Gage (mile 437.0 AHP). What has been the average current since 0630, 15 March, if you have been making turns for 8.0 mph ? | 0.2 mph | 0.5 mph | 0.8 mph | 1.2 mph |
| 1486 | Which of the following statements regarding buoys on the Mississippi River is TRUE? | The positions of river buoys can be found in the latest edition of Light List-Vol. V. | Buoy positions on the chart are approximate. | The buoys are maintained on station year round. | The buoys do not shift positions due to permanent moorings. |
| 1487 | What is the mile point of the Arkansas City Gage? | 554.1 AHP | 556.8 AHP | 560.0 AHP | 562.8 AHP |
| 1488 | The highest point on your towboat is 53 feet above the water, and the Helena Gage (mile 663 AHP) reads 6.7 feet. What is the vertical clearance when you pass under the Helena Highway Bridge in Helena? | 59.9 feet | 62.5 feet | 64.1 feet | 65.5 feet |
| 1489 | You are passing the Memphis Gage at 0405, 18 March. If you are turning for 8 mph and estimate the current at 0.9 mph , what is your ETA at Cairo Point, IL (mile 954.5 AHP)? | 0447, 19 Mar | 1052, 19 Mar | 1518, 19 Mar | 1808, 19 Mar |
| 1490 | At what time would you listen to VHF Channel 22 ( 157.1 MHz ) for information concerning the stage of the river between Memphis and Cairo? | 1115 | 1235 | 1300 | 1815 |
| 1491 | What type of daymark will you see as you approach Gold Dust Bar Light (mile 793.3 AHP)? | Red diamond | Red triangle | Green square | Green diamond |
| 1492 | What is the distance from Cairo Point, IL, to Arkansas City? | 28 miles | 110 miles | 292 miles | 400 miles |


| 1493 | The following questions (1-10) are based on the Army Corps of Engineers Mississippi River Maps (Cairo to the Gulf) and the Light List. AHP = Above Head of Passes, LMR = Lower Mississippi River, UMR = Upper Mississippi River, OHR = Ohio River, ACOE = Army Corps of Engineers <br> On 3 January you get underway from Cambalick Dock, Morganza, LA, (mile 278.3 AHP) enroute to the Socony - Mobil Oil Docks (east side), LDB, in St. Louis. |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1494 | What is the length of the trip? | 899.6 miles | 878.9 miles | 851.9 miles | 726.0 miles |
| 1495 | What are the dimensions of the Old River Lock on the Lower Old River (304 AHP)? | $1190 \times 75$ feet | $1195 \times 75$ feet | $1195 \times 84$ feet | $1202 \times 84$ feet |
| 1496 | At 2126, you pass Morganza Bend Light (mile 278.4 AHP). At 0122, 4 January, you pass Red River Landing Gage (302.4 AHP). You have been turning for 7.5 mph . What is the current? | 1.4 MPH | 1.8 MPH | 2.7 MPH | 6.2 MPH |
| 1497 | The Gage at Red River Landing reads 22.2 feet. The low water reference plane for Red River is 10.6 feet. How many feet is this above the low water reference plane? | 10.6 ft | 11.6 ft | 22.2 ft | 32.8 ft |
| 1498 | The river will be temporarily closed to navigation at mile 531.3 AHP due to repairs to the bridge. This will occur at 1300, 5 January, and last for six hours. What minimum speed over the ground must you make from Red River Landing Gage in order not to be delayed? | 6.0 mph | 6.4 mph | 6.8 mph | 7.3 mph |
| 1499 | What type of daymark will you see as you approach Joe Pierce Light (mile 335.4 AHP)? | Private aid - no daymark | Red square | Red triangle | Red diamond |
| 1500 | What is the vertical clearance of the Natchez Highway Bridge (westbound) when the river level is the same as the Low Water Reference Plane ( 6.1 ft )? | 102.2 ft | 108.3 ft | 119.4 ft | 125.6 ft |
| 1501 | The Natchez Gage reads 20.6 feet. The high point on your towboat is 47 feet above the water. What is the vertical clearance as you pass under the Natchez Highway Bridge? | 58.0 feet | 64.1 feet | 72.5 feet | 78.6 feet |
| 1502 | In order to determine what buoys, if any, are in place at Concordia Bar crossing (mile 596.0 AHP), what should you check? | Bulletin board at the Rosedale Gage | Waterways Journal | Notice to Mariners | Light List |
| 1503 | The area between Island 67 Upper Light (mile 623.1 AHP) and Sunflower Cut-off Foot Light (mile 624.8 AHP) is known as a | transit | chute | crossing | slough |


| 1504 | The following questions (1-10) are based on the Army Corps of Engineers Mississippi River Maps (Cairo to the Gulf) and the Light List. AHP = Above Head of Passes, LMR = Lower Mississippi River, UMR = Upper Mississippi River, OHR = Ohio River, ACOE = Army Corps of Engineers <br> On 21 September, you are making up your tow at the fleeting area in Cairo, IL (mile 980.6 Ohio River). You get underway at 0952 enroute to New Orleans with a mixed tow. |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1505 | You are turning for 7.8 mph and estimate the current at 1.0 mph . What is your speed over the ground? | 8.8 mph | 7.9 mph | 7.8 mph | 6.8 mph |
| 1506 | What is your ETA at the Memphis Highway Bridge? | 0828, 22 Sept | 1052, 22 Sept | 1405, 22 Sept | 1813, 22 Sept |
| 1507 | What daymark should you see as you approach Parker Landing Light (mile 924.6 AHP)? | Green square | Green triangle | Red and green rectangle | Green diamond |
| 1508 | You pass Morrison Towhead Light (mile 890.5 AHP) at 1723. What was your average speed since leaving Cairo? | 7.5 mph | 7.8 mph | 8.5 mph | 8.8 mph |
| 1509 | At 1723 you increase speed to make good 9.2 mph . At 1937 you have a daymark on your port beam. What daymark is this? | Tiptonville Ferry Landing Daymark | Tiptonville Light | Merriwether Bend Light and Daymark | Alaska Light and Daymark |
| 1510 | The charts show a circle with two black quadrants located at mile 846.0 AHP. What does this indicate? | Hazardous chemical dock | Bulletin Board | Betz-Tipton Veneers Terminal | River Gage |
| 1511 | The Helena Gage reads 9.4 feet. The high point on your towboat is 46 feet above water. What is the vertical clearance when you pass under the Helena Highway Bridge? | 56.0 feet | 64.2 feet | 79.5 feet | 106.1 feet |
| 1512 | What company does NOT have a marine facility along the river bank in Helena (mile 658 to 665 AHP)? | Helena Grain Co. | Helena Port Terminal, Inc. | Arkansas Power \& Light Co. | Texas Eastern Pipeline Co. |
| 1513 | If the Rosedale Gage reads -0.5 feet, what is the water level if the low water reference plane for Rosedale is 3.0 feet? | 0.5 foot below the plane | 0.5 foot above the plane | 2.5 feet above the plane | 3.5 feet below the plane |
| 1514 | Which of the following describes the river at Cypress Bend, mile 569.0 AHP? | There are revetments on both banks. | The river is three tenths of a mile wide. | There is dredge spoil on both banks. | There is a turning basin located on the LDB. |
| 1515 | The following questions (1-10) are based on the Army Corps of Engineers Mississippi River Maps (Cairo to the Gulf) and the Light List. AHP = Above Head of Passes, LMR = Lower Mississippi River, UMR = Upper Mississippi River, OHR = Ohio River, ACOE = Army Corps of Engineers <br> At 1015 on 16 April, you are at the Amoco Pipeline Co. Docks (253.6 AHP), when you get underway, enroute Institute, WV, with a tow of eight barges carrying molten sulphur. |  |  |  |  |
| 1516 | What is the distance from the Amoco Pipeline Co. Docks at Baton Rouge, LA, to the mouth of the Ohio River? | 700.2 miles | 727.9 miles | 953.5 miles | 981.5 miles |


| 1517 | As you approach Shreves cut-off you see Red River Landing Gage (302.4 AHP) which reads 6.2 feet. The Low Water Reference Plane (LWRP) for Red River is 10.6. Which of the following statements is TRUE? | This reading is at 4.4 ft. below the Low Water Reference Plane. | This reading is 6.2 ft . above the Low Water Reference Plane. | The depth of water at Red River Landing is 6.2 ft . | A vessel drawing 7 ft . would be able to pass through the locks at Lower Old River. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1518 | You pass Red River Gage at 2015 on 16 April and estimate the current will average 3.5 mph for the remainder of the time on the Mississippi River. What is your ETA at the mouth of the Ohio River if you continue to turn for 10 mph ? | 1445, 20 April | 1830, 20 April | 0028, 21 April | 0821, 21 April |
| 1519 | What is the vertical clearance between the highest point of your towboat, if it is 58 feet above the water, and if the Natchez Gage reads 28.13 feet when passing under the Natchez Upper Highway Bridge? | 15.9 feet | 33.2 feet | 39.9 feet | 45.4 feet |
| 1520 | In high water conditions, which publication would you consult for the latest information on buoys between Baton Rouge and Cairo? | U.S.C.G. Local Notice to Mariners | U.S.C.G. Light List | Army Corps. of Engineers Navigation Chart | List of Buoys and Daymarks |
| 1521 | As you approach Giles Bend Cutoff Light (mile 367.7 AHP), what type of daymark would you see on the light structure? | Green diamond | Green triangle | Red triangle | Red diamond |
| 1522 | At 0305 on 18 April, you pass under the Greenville Bridge (mile 531.3 AHP). What was your average speed since departing Amoco Pipeline Co. Docks (mile 253.6 AHP)? | 6.2 mph | 6.5 mph | 6.8 mph | 7.2 mph |
| 1523 | A stretch where the channel changes from one side of the river to the other is called a $\qquad$ . | passing | transit | transfer | crossing |
| 1524 | The black broken-line marking, across the river, that appears at mile 952.1 AHP represents a $\qquad$ | utility crossing | railroad | submarine crossing | revetment |
| 1525 | The following questions (1-10) are based on the Army Corps of Engineers Mississippi River Maps (Cairo to the Gulf) and the Light List. AHP = Above Head of Passes, LMR = Lower Mississippi River, UMR = Upper Mississippi River, OHR = Ohio River, ACOE = Army Corps of Engineers <br> On 16 October, you depart the Formosa Plastics mooring facility at mile 233.5 AHP with six loaded tank barges enroute to the Agrico Chemical dock, Herculaneum, MO (mile 153.4 UMR). Your engines are making turns for 6.5 mph in still water. |  |  |  |  |
| 1526 | What is the total length of the trip? | 873.7 miles | 900.7 miles | 901.4 miles | 910.6 miles |
| 1527 | You estimate the current at 3.0 mph . What is the speed over the ground? | 9.5 mph | 7.5 mph | 4.5 mph | 3.5 mph |
| 1528 | What are the dimensions of the channel maintained at Baton Rouge, LA? | 30 feet x 300 feet | 45 feet $\times 500$ feet | 30 feet $\times 500$ feet | 40 feet $\times 300$ feet |


| 1529 | You pass Springfield Bend Lt. (mile 244.8 AHP) at 1242, on 17 October, and estimate the current will average 2.5 mph for the remainder of your trip. What is your ETA at the mouth of the Ohio River if you are making turns for 10.5 mph ? | 1905, 19 October | 2122, 19 October | 0232, 21 October | 0519, 21 October |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1530 | As you pass under the Natchez-Vidalia Dual Bridge, the gage on the bridge reads -3.6 feet. If the highest point on your vessel is 62 ft . above the water, what is your vertical clearance? | 122.0 feet | 67.6 feet | 63.6 feet | 60.0 feet |
| 1531 | What are the color and shape of Anconia Pt. Light at mile 528.6 AHP? | Green - Diamond | Green - Square | Red - Triangle | Red - Square |
| 1532 | At 1227, on 19 October, you pass under the Greenville Highway Bridge (mile 531.3 AHP). What speed must you average to arrive at Jimmy Hawken Light (mile 663.5 AHP) at 0930 the following day? | 6.3 mph | 5.9 mph | 5.6 mph | 5.2 mph |
| 1533 | Which of the following statements regarding aids to navigation shown in the Army Corps. of Engineers map book is TRUE? | The U.S. Army Corps.. of Engineers is responsible for placing and maintaining all aids to navigation. | Buoy positions as shown on the chart are exact. | Buoys should always be given as wide a berth as possible. | Lights and daymarks are always shown in their exact location. |
| 1534 | The Delta-Friar Point revetment on the LMR extends from mile | 648.5-645.5 LDB | 652.8-649.6 RDB | 657.3-652.2 LDB | 645.6-641.4 RDB |
| 1535 | What is the distance from Greenville, MS, to St. Louis, MO, on the Mississippi River System? | 832 miles | 733 miles | 597 miles | 566 miles |
| 1536 | The following questions (1-10) are based on the Army Corps of Engineers Mississippi River Maps (Cairo to the Gulf) and the Light List. AHP = Above Head of Passes, LMR = Lower Mississippi River, UMR = Upper Mississippi River, OHR = Ohio River, ACOE = Army Corps of Engineers <br> At 1745, on 25 August, you depart Memphis Harbor, McKellar Lake (mile 726.0 AHP - LMR) enroute to Baton Rouge, LA, with a tow of twelve empty gasoline barges. |  |  |  |  |
| 1537 | You have received orders to proceed to the Amoco Pipeline Co. (mile 253.6 AHP) above Baton Rouge. If your vessel is making turns for 9 mph with an estimated average current of 1.5 mph , what is your ETA at the Amoco docks? | 0844, 28 Aug | 1454, 28 Aug | 1444, 27 Aug | 2214, 27 Aug |
| 1538 | The highest point on your towboat is 52 feet above the water, and the Helena Gage reads +9.6 feet. What is the vertical clearance when you pass under the A-span of the Helena Highway Bridge? | 73.1 feet | 58.0 feet | 53.9 feet | 49.8 feet |


| 1539 | You are in charge of a vessel that damages an aid to navigation established and maintained by the United States. Which statement is TRUE? | You must take the aid in tow and deliver it to the nearest Coast Guard, Marine Safety Office. | You must report the accident to the nearest Officer in Charge, Marine Inspection. | You may wait until you reach your destination before reporting the allision to the U.S. Coast Guard. | You must report the allision to the nearest Corps. of Engineers office. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1540 | At 2342, on 25 August, you pass under the Helena Highway Bridge (mile 661.7 AHP). What has been the average speed of the current since departing Memphis Harbor, McKellar Lake, if you have been making turns for 9 mph ? | 5.6 mph | 4.4 mph | 2.1 mph | 1.8 mph |
| 1541 | What is the distance in river miles, from the new mouth of the White River to the RR and Hwy bridge at Baton Rouge, LA? | 384 miles | 370 miles | 365 miles | 358 miles |
| 1542 | The Clinch River empties into which river? | Arkansas | Mississippi | Tennessee | Ohio |
| 1543 | As you pass under the Greenville Highway Bridge, you estimate the current as 4.5 mph . What is the speed over the ground, if your vessel is making turns for 9 mph ? | 13.5 mph | 14.5 mph | 15.5 mph | 16.5 mph |
| 1544 | As you approach Anconia Pt. Light (mile 528.6 AHP), which type of dayboard would you see on the light structure? | Green diamond | Green square | Red square | Red diamond |
| 1545 | You are downbound when you observe on your Mississippi River map a white square with a number inside located on either bank. This indicates $\qquad$ | a facilities display number | a river mile marker | a daybeacon | a river gage |
| 1546 | What are the dimensions of Old River Lock, on the Lower Mississippi River? | 1190 feet $\times 75$ feet | 1045 feet $\times 75$ feet | 760 feet $\times 75$ feet | 425 feet $\times 75$ feet |
| 1547 | The following questions (1-10) are based on the Army Corps of Engineers Mississippi River Maps (Cairo to the Gulf) and the Light List. AHP = Above Head of Passes, LMR = Lower Mississippi River, UMR = Upper Mississippi River, OHR = Ohio River, ACOE = Army Corps of Engineers <br> At 1707, on 23 May, you get underway from mile 234.2 AHP enroute to Louisville, KY (mile 612.6 OR). |  |  |  |  |
| 1548 | What is the length of the trip? | 1566.4 miles | 1334.6 miles | 1332.2 miles | 1088.0 miles |
| 1549 | After you get underway, what is the first river gage you will pass? | Bayou Sara | Baton Rouge | Head of Passes | Red River Landing |
| 1550 | The Red River Landing Gage reads 5.2 feet. The Low Water Reference Plane for the Red River is 10.6 ft . Which of the following statements is TRUE? | The depth over revetment at Old River is 25.2 feet. | River level is below the Low Water Reference Plane. | The depth over Old River Lock sill is greater than 11 ft . | This gage reading is at a higher elevation than the same reading on the Gage at Head of Passes. |
| 1551 | At 0922, on 24 May, you are abreast the St. Catherine Bar Lt. (mile 348.6 AHP). If you are turning for 8.0 mph , what is the current? | 7.0 mph | 2.0 mph | 1.4 mph | 1.0 mph |


| 1552 | What daymark will you see as you approach Warnicott Bar Lt. (mile 351.3 AHP)? | Red diamond | Red triangle | White square | Green square |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1553 | You pass Warnicott Bar Lt. at 1146, 24 May. What is your ETA off the Mhoon Landing Gage if you average 6.5 mph ? | 0909, 27 May | 1528, 26 May | 0426, 26 May | 0152, 26 May |
| 1554 | What town is located at mile 389.8 AHP? | Whitehall | Belmont | Rodney | St. James |
| 1555 | What is the width of the navigable channel at Grand Gulf Island Light (mile 404.9 AHP) ? | 0.455 mile | 0.62 miles | 0.71 mile | 0.8 miles |
| 1556 | The Greenville Gage reads 10.6 feet. The high point of your towboat is 54 feet above water. What is the vertical clearance as you pass under the Greenville Highway Bridge? | 75.4 feet | 65.4 feet | 54.2 feet | 44.4 feet |
| 1557 | In addition to the Army Corps. of Engineers maps, data on bridge clearances may be found in the $\qquad$ | Light List | Waterways Journal | Army Corps. of Engineers Regulations | Channel Report |
| 1558 | The following questions (1-10) are based on the Army Corps of Engineers Mississippi River Maps (Cairo to the Gulf) and the Light List. AHP = Above Head of Passes, LMR = Lower Mississippi River, UMR = Upper Mississippi River, OHR = Ohio River, ACOE = Army Corps of Engineers <br> On 3 January, you get underway from Morganza, LA, (mile 278.3 AHP) enroute to the Eagle Marine Docks, LDB, in St. Louis. |  |  |  |  |
| 1559 | What is the length of the trip? | 726.0 miles | 851.9 miles | 878.9 miles | 879.6 miles |
| 1560 | What are the dimensions of the Old River Lock on the Lower Old River (mile 304 AHP)? | $1202 \times 84$ feet | $1200 \times 75$ feet | $1195 \times 75$ feet | $1190 \times 75$ feet |
| 1561 | At 2126, you pass Morganza Bend Light (mile 278.4 AHP). At 0122, 4 January, you pass Red River Landing Gage (302.4 AHP). You have been turning for 7.5 mph . What is the current? | 6.2 mph | 2.7 mph | 1.8 mph | 1.4 mph |
| 1562 | The Gage at Red River Landing reads 22.2 feet. The LWRP for Red River is 10.6 feet. What is the water level in relation to the low water reference plane? | 32.8 ft below | 32.8 ft above | 11.6 ft below | 11.6 ft above |
| 1563 | The river will be temporarily closed to navigation at mile 531.3 AHP due to repairs to the bridge. This will occur at 1300, 5 January, and last for six hours. What minimum speed over the ground must you make from Red River Landing Gage in order not to be delayed? | 7.3 mph | 6.8 mph | 6.4 mph | 6.0 mph |
| 1564 | Which type of daymark will you see as you approach Joe Pierce Light (mile 335.4 AHP)? | Red Triangle | Red square | Red diamond | Private aid - no daymark |
| 1565 | What is the vertical clearance of the Natchez-Vidalia Highway Bridge (westbound) when the river level is the same as the Low Water Reference Plane ( 6.5 feet)? | 125.6 ft | 119.5 ft | 108.3 ft | 102.2 ft |


| 1566 | The Natchez Gage reads 20.6 feet. The high point on your towboat is 47 feet above the water. What is the vertical clearance as you pass under the Natchez Highway Bridge? | 78.6 feet | 72.5 feet | 64.1 feet | 58.4 feet |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1567 | In order to determine what buoys, if any, are in place at Concordia Bar crossing (mile 596.0 AHP), what should you check? | Local Notice to Mariners | Waterways Journal | Bulletin Board at the Rosedale Gage | Light List |
| 1568 | The area between Island 67 Upper Light (mile 623.1 AHP) and Sunflower Cut-off Foot Light (mile 624.8 AHP) is known as a | crossing | chute | transit | slough |
| 1569 | The following questions (1-10) are based on the Army Corps of Engineers Mississippi River Maps (Cairo to the Gulf) and the Light List. AHP = Above Head of Passes, LMR = Lower Mississippi River, UMR = Upper Mississippi River, OHR = Ohio River, ACOE = Army Corps of Engineers <br> On 21 September, you are making up your tow at the fleeting area in Cairo, IL (mile 980.6 Ohio River). You get underway at 0952 enroute to New Orleans with a mixed tow. |  |  |  |  |
| 1570 | You are turning for 7.8 mph and estimate the current at 1.0 mph. What is your speed over the ground? | 6.8 mph | 7.8 mph | 7.9 mph | 8.8 mph |
| 1571 | What is your ETA at the Memphis Highway Bridge? | 1813, 22 Sept | 1405, 22 Sept | 1052, 22 Sept | 0828, 22 Sept |
| 1572 | What daymark should you see as you approach Parker Landing Light (mile 924.6 AHP)? | Green square | Green diamond | Red and green rectangle | Green triangle |
| 1573 | You pass Morrison Towhead Light (mile 890.5 AHP) at 1723. What was your average speed since leaving Cairo? | 8.8 mph | 8.5 mph | 7.8 mph | 7.5 mph |
| 1574 | At 1723 you increase speed to make good 9.2 mph. At 1937 you have a daymark on your port beam. What daymark is this? | Tiptonville Ferry Landing Daymark | Tiptonville Light | Alaska Light and Daymark | Merriwether Bend Light and Daymark |
| 1575 | The map shows a circle with two black quadrants located at mile 846.4 AHP. What does this indicate? | A river gage | A bulletin Board | The grain elevator at Bunge Grain | A culvert with a sluice gate |
| 1576 | The Helena Gage reads 9.4 feet. The high point on your towboat is 46 feet above water. What is the vertical clearance when you pass under the Helena Highway Bridge? | 106.1 feet | 79.5 feet | 64.2 feet | 56.0 feet |
| 1577 | Which company does NOT have a marine facility along the river bank in Helena (mile 658 to 665 AHP)? | Riceland Food Corps.. | Helena Marine Services, Inc. | Helena Grain Co. | Texas Eastern Pipeline Co. |
| 1578 | If the Rosedale Gage reads -0.5 feet, what is the water level in relation to the low water reference plane? The low water reference plane (LWRP) for Rosedale, MS. is 3.0 feet. | 3.5 foot below the plane | 2.5 foot above the plane | 0.5 feet above the plane | 0.5 feet below the plane |
| 1579 | Which light characteristics does Catfish Point Lower Light (mile 572.2 AHP) have? | 2 red flashes every 5 seconds | 5 red flashes every 2 seconds | 2 white flashes every 5 seconds | 3 red flashes every 5 seconds |


| 1580 | The following questions (1-10) are based on the Army Corps of Engineers Mississippi River Maps (Cairo to the Gulf) and the Light List. AHP = Above Head of Passes, LMR = Lower Mississippi River, UMR = Upper Mississippi River, OHR = Ohio River, ACOE = Army Corps of Engineers <br> At 1015, on 16 April, you are at the Amoco Pipeline Co. Docks (253.6 AHP), when you get underway, enroute Institute, WV with a tow of eight barges carrying molten sulphur. |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1581 | What is the distance from the Amoco Docks at Baton Rouge, LA, to the mouth of the Ohio River? | 981.5 miles | 953.5 miles | 727.9 miles | 700.2 miles |
| 1582 | You are turning for 10 mph , approaching Angola, LA. Angola reports that the current at Red River Landing is estimated at 4.5 mph . Which of the following statements is TRUE? | You should expect to encounter vessels crossing the river at mile 300.5 AHP | You are making 14.5 mph over the ground. | You would expect to find a more favorable current near the broken red line in the river. | Hog Pt. Light and Hog Pt. Lower Light may be used as range lights when entering Shreves cut-off. |
| 1583 | As you approach Shreves cut-off you see Red River Landing Gage (mile 302.4 AHP) which reads 6.2 feet. Which of the following statements is TRUE? | This reading is 6.2 feet above the Low Water Reference Plane. | This reading is at the same elevation as the 6.2 ft . mark on the Gage at Head of Passes. | The depth of water at Red River Landing is 6.2 ft . | A vessel drawing 7 ft . would be able to pass through the locks at Lower Old River. |
| 1584 | You pass Red River Gage at 2015 on 16 April and estimate the current will average 3.5 mph for the remainder of the time on the Mississippi River. What is your ETA at the mouth of the Ohio River if you continue to turn for 10 mph ? | 0821, 21 April | 0028, 21 April | 1830, 20 April | 1445, 20 April |
| 1585 | What is the vertical clearance between the highest point of your towboat, if it is 58 feet above the water, and if the Natchez Gage reads 28.13 feet when passing under the Natchez Upper Highway Bridge? | 45.4 feet | 39.3 feet | 33.2 feet | 15.9 feet |
| 1586 | In high water conditions, which publication would you consult for the latest information on buoys between Baton Rouge and Cairo? | Army Corps. of Engineers Navigation Chart | U.S.C.G. Light List | U.S.C.G. Local Notice to Mariners | List of Buoys and Daymarks |
| 1587 | As you approach Giles Bend Cutoff Light (mile 367.7 AHP), what type of daymark would you see on the light structure? | None | Red diamond | Red square | Red triangle |
| 1588 | At 0305 on 18 April, you pass under the Greenville Bridge (mile 531.3 AHP). What was your average speed since departing Amoco Pipeline Co. Docks (mile 253.6 AHP)? | 7.2 mph | 6.8 mph | 6.5 mph | 6.2 mph |
| 1589 | A stretch where the channel changes from one side of the river to the other is called a $\qquad$ . | crossing | transit | transfer | passing |
| 1590 | Which light characteristics does Quaker Oats Light (mile 952.6) have? | 1 red flash every four seconds | 2 green flashes every 5 seconds | 2 red flashes every 4 seconds | 2 red flashes every 5 seconds |


| 1591 | The following questions (1-10) are based on the Army Corps of Engineers Mississippi River Maps (Cairo to the Gulf) and the Light List. AHP = Above Head of Passes, LMR = Lower Mississippi River, UMR = Upper Mississippi River, OHR = Ohio River, ACOE = Army Corps of Engineers <br> At 0630, on 15 March, you are upbound on the Lower Mississippi River passing Kaiser Aluminum \& Chemical Corp. (mile 234.0 AHP). |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1592 | The latest available information on the channel conditions above Baton Rouge that includes the latest buoy information, as well as recommended courses, is found in the $\qquad$ | Corps. of Engineers maps | Waterways Journal | Local Notice to Mariners | Sailing Directions |
| 1593 | You are upbound approaching Springfield Bend Lt. (mile 244.8 AHP) downriver from Profit Island. Which of the following statements is TRUE? | Profit Island Chute is closed to navigation. | Tow length must not exceed 600 feet to use Profit Island Chute. | Tows must navigate toward left ascending bank when passing Profit Island Chute. | Profit Island Chute is open to navigation and is a shortcut for single barge tows. |
| 1594 | At 1218, on 16 March, you are passing the Vicksburg Gage (mile 437.0 AHP). What has been the average current since 0630, 15 March, if you have been making turns for 8.0 mph ? | 0.2 mph | 0.5 mph | 0.8 mph | 1.2 mph |
| 1595 | Which of the following statements regarding buoys on the Mississippi River is TRUE? | The positions of river buoys can be found in the latest edition of Light List-Vol. V. | The buoys are maintained on station year round. | Buoy positions on the chart are approximate. | The buoys do not shift positions due to permanent moorings. |
| 1596 | What is the mile point of the Rosedale, MS Gage? | 554.2 AHP | 592.2 AHP | 632.5 AHP | 663.0 AHP |
| 1597 | The highest point on your towboat is 53 feet above the water, and the Helena Gage (mile 663 AHP) reads 3.9 feet. What is the vertical clearance when you pass under the B-span of the Helena Highway Bridge in Helena? | 59.9 feet | 62.5 feet | 64.1 feet | 65.5 feet |
| 1598 | You are passing the Memphis Gage at 0405, 18 March. If you are turning for 8 mph and estimate the current at 2.3 mph , what is your ETA at Cairo Point, IL (mile 954.5 AHP)? | 0447, 19 Mar | 1052, 19 Mar | 1518, 19 Mar | 1839, 19 Mar |
| 1599 | At what time would you listen to VHF Channel 22 ( 157.1 MHz ) for information concerning the stage of the river between Memphis and Cairo? | 1300 | 1435 | 1620 | 1815 |
| 1600 | As you approach French Point Light (mile 915.4 AHP), you see 2 daymarks on the structure. What significance do the daymarks have? | They indicate the starboard side of the channel from seaward and mid-channel fairway. | They indicate the starboard side of the channel from seaward and a channel crossing. | They indicate the port side of the channel from seaward and a range marking. | They indicate the port side of the channel and a channel crossing. |
| 1601 | What is the distance from Cairo Point, IL, to Arkansas City? | 28 miles | 110 miles | 218 miles | 400 miles |


| 1602 | The following questions (1-10) are based on the Army Corps of Engineers Mississippi River Maps (Cairo to the Gulf) and the Light List. AHP = Above Head of Passes, LMR = Lower Mississippi River, UMR = Upper Mississippi River, OHR = Ohio River, ACOE = Army Corps of Engineers <br> AT 1835, on 10 August, you are downbound on the Upper Mississsippi River at St. Louis, MO (mile 184.0 UMR), with a mixed tow of 6 loaded, covered hopper barges, 2 loaded tank barges, and 2 empty hopper barges. |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1603 | You have orders to drop off the empties at the fleeting area in Cairo and add five loaded barges to your tow. If you are turning for 8 mph and estimate the current at 0.5 mph , what is your ETA at Cairo? | 1928, 11 Aug | 1614, 11 Aug | 1327, 11 Aug | 2352, 10 Aug |
| 1604 | You complete changing out your tow and get underway enroute Memphis, Tennessee to deliver 2 tank barges. What is the distance you must travel from Cairo Point Light to the Lion Oil Refining Co. Docks in Memphis? | 180.3 miles | 220.2 miles | 246.5 miles | 734.3 miles |
| 1605 | As you approach Kate Aubrey Towhead Light (mile 789.5 AHP), your searchlight will show what type of marking at the light? | Green diamond | Red and green banded square | Green triangle | Green square |
| 1606 | The highest point on your towboat is 57 feet above the water, and the Memphis Gage reads +1.3 feet. What is the vertical clearance when you pass under the Memphis Highway Bridge in Memphis? | 112.7 feet | 55.7 feet | 54.6 feet | 51.8 feet |
| 1607 | At 0230 on 13 August, you are at mile 610.5 AHP when you see about a mile ahead lights on the water near the left bank. What might you see when you come abreast of these lights? | Privately maintained buoys at a yacht club | Government buoys marking the Hurricane Point dikes | Barges moored at the Dennis Landing Terminal | A pipeline discharging dredge spoil |
| 1608 | What is the mile point of the Rosedale Gage? | 598 AHP | 592 AHP | 587 AHP | 554 AHP |
| 1609 | Which of the following statements concerning the buoys on the Mississippi River is TRUE? | Buoy locations may be changed to indicate the channel for the existing river stage. | The buoys are maintained on station year round. | Buoys have permanent moorings on the river bottom and will not shift position. | The position of river buoys can be determined by consulting the latest Light List - Vol. V. |
| 1610 | At 1430 on 13 August, you pass Carolina Landing Light (mile 508.8 AHP). What has been the average current since 0230, 13 August if you have been making turns for 8.0 mph ? | 8.5 mph | 5.7 mph | 1.5 mph | 0.5 mph |
| 1611 | You are approaching the Old River Control Structure (mile 314.5 AHP). The structure is in operation. Which of the following statements is TRUE? | The maximum speeds permitted when passing the channel are 10 mph downbound and 7.5 mph upbound. | Tows must be no more than 110 feet wide when passing the inflow channel. | You should navigate as close to the left descending bank of the Mississippi River as safety permits. | Tow length should not exceed 850 feet when passing the inflow channel. |


| 1612 | The latest available information on the channel conditions above Baton Rouge that includes recommended course and the latest buoy information is found in the $\qquad$ . | Local Notice to Mariners | Waterways Journal | Sailing Directions | Corps. of Engineers maps |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1613 | The following questions (1-10) are based on the Army Corps of Engineers Mississippi River Maps (Cairo to the Gulf) and the Light List. AHP = Above Head of Passes, LMR = Lower Mississippi River, UMR = Upper Mississippi River, OHR = Ohio River, ACOE = Army Corps of Engineers <br> On 25 March, you depart the Morganza, LA, Docks at mile 278.2 AHP with 12 barges enroute to St. Louis, MO (mile 175 UMR). Your engines are turning for 7.5 mph in still water. |  |  |  |  |
| 1614 | What is the total length of the trip? | 850.6 miles | 894.8miles | 922.5 miles | 946.5 miles |
| 1615 | You estimate the current as 2.0 mph . What is the speed over the ground? | 4.5 mph | 5.5 mph | 7.5 mph | 9.5 mph |
| 1616 | You will pass the first gage at ___ . | Profit Island | Bayou Sara | Baton Rouge | Red River Landing |
| 1617 | What is the mile point of the Natchez, MS Gage? | 228.4 AHP | 265.4 AHP | 302.4 AHP | 363.3 AHP |
| 1618 | As you pass Fort Adams (311.4 AHP) you observe a flashing amber light on the right descending bank ahead. This indicates that you should $\qquad$ —. | proceed with caution as there is construction work being done on the revetment | keep as close to the right descending bank as safety permits | keep as close to the left descending bank as safety permits | proceed with caution as the river is congested around the bend |
| 1619 | The highest point on your towboat is 57 feet above water. The Natchez Gage (mile 363.3 AHP) reads 16.7 feet. What is the vertical clearance when you pass under the Natchez - Vidalia (westbound) Hwy. Bridge? | 52.3 feet | 59.9 feet | 61.0 feet | 68.6 feet |
| 1620 | You pass under the Natchez bridge (mile 363.3 AHP) at 1300, on 27 March, and estimate the current to be 3.3 mph . What is your ETA at St. Louis if you continue to turn for 7.5 mph ? | 0617, 4 April | 0316, 4 April | 1153, 30 March | 1253, 31 April |
| 1621 | As you approach Canon Point Light (mile 418.3 AHP), what daymark will you see on the light structure? | Green square | Green diamond | Red diamond | Red triangle |
| 1622 | Which light characteristics does Coggins Lt. (mile 429.5) have? | 1 red flash every 4 seconds | 1 white flash every 4 seconds | 1white flash every 5 seconds | 2 white flashes every 4 seconds |
| 1623 | As you approach mile 427.6 AHP, you see on the right side a white buoy with orange bands and open face diamond. This buoy shows . $\qquad$ | safe water | preferred channel | danger | special marks |
| 1624 | The following questions (1-10) are based on the Army Corps of Engineers Mississippi River Maps (Cairo to the Gulf) and the Light List. AHP = Above Head of Passes, LMR = Lower Mississippi River, UMR = Upper Mississippi River, OHR = Ohio River, ACOE = Army Corps of Engineers <br> On 16 October, you depart the Formosa Plastics mooring facility at mile 233.5 AHP with six loaded tankbarges enroute to the Apex Oil dock, St. Louis, MO (mile 180.9 UMR). Your engines are making turns for 6.5 mph in still water. |  |  |  |  |


| 1625 | What is the total length of the trip? | 910.6 miles | 901.2 miles | 900.3 miles | 873.7 miles |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1626 | You estimate the current at 2.0 mph . What is the speed over the ground? | 3.5 mph | 4.5 mph | 7.5 mph | 9.5 mph |
| 1627 | What are the dimensions of the channel maintained at Baton Rouge, LA? | 30 feet $\times 300$ feet | 40 feet $\times 300$ feet | 45 feet x 500 feet | 30 feet $\times 500$ feet |
| 1628 | You pass Springfield Bend Lt. (mile 244.8 AHP) at 1242, on 17 October, and estimate the current will average 2.5 mph for the remainder of your trip. What is your ETA at the mouth of the Ohio River if you are making turns for 10.5 mph ? | 1905, 19 October | 0207, 21 October | 0519, 21 October | 0847, 21 October |
| 1629 | As you pass under the Natchez-Vidalia Dual Bridge, the gage on the bridge reads 3.6 feet. If the highest point on your vessel is 62 ft . above the water, what is your vertical clearance? | 60.4 feet | 63.6 feet | 67.2 feet | 122.0 feet |
| 1630 | What are the color and shape of Joseph Henry Daymark at mile 445.2 AHP? | Red - Triangle | Green - Square | Green - Triangle | Red - Diamond |
| 1631 | At 1227, on 19 October, you pass under the Greenville Highway Bridge (mile 531.3 AHP). What speed must you average to arrive at Jimmy Hawken Light (mile 663.5 AHP) at 1045 the following day? | 5.2 mph | 5.6 mph | 5.9 mph | 6.3 mph |
| 1632 | Which of the following statements regarding aids to navigation shown in the Corps. of Engineers map book is TRUE? | Buoys should always be given as wide a berth in passing as possible. | The U.S. Army Corps.. of Engineers is responsible for placing and maintaining all aids to navigation. | Buoy positions as shown on the chart are exact. | Lights and daymarks are always shown in their exact location. |
| 1633 | The Delta-Friar Point revetment on the LMR extends from mile | 645.6-641.4 RDB | 652.8-649.6 RDB | 648.5-645.5 LDB | 657.3-652.2 LDB |
| 1634 | What is the distance from Arkansas City, AR, to St. Louis, MO, on the Mississippi River System? | 584 miles | 617 miles | 733 miles | 832 miles |
| 1635 | The following questions (1-10) are based on the Army Corps of Engineers Mississippi River Maps ( Cairo to the Gulf) and the Light List. AHP = Above Head of Passes, LMR = Lower Mississippi River, UMR = Upper Mississippi River, OHR = Ohio River, ACOE = Army Corps of Engineers <br> At 1145, on 24 August, you depart Memphis Harbor, McKellar Lake (mile 726.0 AHP) enroute to Baton Rouge, LA, with a tow of twelve empty gasoline barges. |  |  |  |  |
| 1636 | You have received orders to proceed to the Amoco Pipeline Co. (mile 253.6 AHP) above Baton Rouge. If your vessel is making turns for 9 mph with an estimated average current of 1.5 mph , what is your ETA at the Amoco docks? | 2044, 25 Aug | 0214, 26 Aug | 0745, 26 Aug | 0845, 26 Aug |


| 1637 | The highest point on your towboat is 32 feet above the water, and the Helena Gage reads +6.6 feet. What is the vertical clearance when you pass under the A-span of the Helena Highway Bridge? | 80.8 feet | 73.1 feet | 68.0 feet | 56.1 feet |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1638 | You are in charge of a vessel that damages an aid to navigation established and maintained by the United States. Which statement is TRUE? | You must take the aid in tow and deliver it to the nearest Coast Guard, Marine Safety Office. | You must report the allision to the nearest Corps.. of Engineers Office. | You must report the accident to the nearest Officer in Charge, Marine Inspection. | You may wait until you reach your destination before reporting the allision to the U.S. Coast Guard. |
| 1639 | At 1727, on 24 August, you pass under the Helena Highway Bridge (mile 661.7 AHP). What has been the average speed of the current since departing Memphis Harbor, McKellar Lake, if you have been making turns for 9 mph ? | 1.8 mph | 2.3 mph | 2.8 mph | 3.6 mph |
| 1640 | What is the distance in river miles, from the mouth of the Yazoo Diversion Canal to the RR and Hwy bridge at Baton Rouge, LA? | 365 miles | 310 miles | 265 miles | 203 miles |
| 1641 | The Crooked River empties into which river? | Missouri | Mississippi | Tennessee | Ohio |
| 1642 | As you pass under the Greenville Highway Bridge, you estimate the current as 3.5 mph . What is the speed over the ground, if your vessel is making turns for 9 mph ? | 14.5 mph | 13.5 mph | 12.5 mph | 11.5 mph |
| 1643 | As you approach Walnut Point Light (mile 522.5 AHP), which type of daymark would you see on the light structure? | Red triangle | Green diamond | Green square | Red diamond |
| 1644 | Which light characteristics does Black Hawk Light (mile 318.3 AHP) have? | 1 red flash every 4 seconds | 1 green flash every 4 seconds | 1 white flash every 4 seconds | 2 white flashes every 5 seconds |
| 1645 | On what river is Ghent, Kentucky located? | Tennessee | Mississippi | Missouri | Ohio |
| 1646 | The following questions (1-10) are based on the Army Corps of Engineers Mississippi River Maps (Cairo to the Gulf) and the Light List. AHP = Above Head of Passes, LMR = Lower Mississippi River, UMR = Upper Mississippi River, OHR = Ohio River, ACOE = Army Corps of Engineers <br> At 0519 on 23 May, you get underway from Baton Rouge, LA, (mile 231.8 AHP) bound for Louisville, KY, (mile 610.1 OR). |  |  |  |  |
| 1647 | What is the length of the trip? | 722.0 miles | 953.8 miles | 1097.9 miles | 1332.1 miles |
| 1648 | After you get underway, what is the fourth river gage you will pass? | Head of Passes | Natchez | Bayou Sara | Red River Landing |
| 1649 | The Bayou Sara Gage reads 5.25 feet. The low water reference plane (LWRP) for Bayou Sara is 5.25 feet. Which statement is TRUE? | This gage reading is at a higher elevation than the same reading on the Gage at Head of Passes. | The depth over revetment at Old River is 25.2 ft . | The depth over Old River Lock sill is greater than 11 ft . | River level is at the Low Water Reference plane |


| 1650 | At 0715, on 24 May, you are abreast the St. Catherine Bar Lt. (mile 348.6 AHP). If you are turning for 8.0 mph , what has been the average current since you left Baton Rouge? | 1.0 mph | 1.4 mph | 3.8 mph | 4.4 mph |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1651 | The U. S. Coast Guard facility at mile 361 AHP is represented by which numbered white square on your map? | 8 | 11 | 12 | 13 |
| 1652 | You pass Hole in Wall Light at 1200, 24 May. What is your ETA off the Mhoon Landing Gage if you average 6.5 mph ? | 0152, 26 May | 0426, 26 May | 1128, 26 May | 1221, 26 May |
| 1653 | What town is located at mile 395 AHP? | St. Joseph | Belmont | St. James | Rodney |
| 1654 | As you approach mile 425 AHP, you see a brown shaded area along the left descending bank. This represents $\qquad$ | weirs | a revetment | dikes | a fleeting area |
| 1655 | The Greenville Gage reads 1.6 feet. The high point of your towboat is 54 feet above water. What is the vertical clearance as you pass under the Greenville Highway Bridge? | 74.5 feet | 64.2 feet | 55.5 feet | 44.4 feet |
| 1656 | In addition to the Army Corps. of Engineers maps, data on bridge clearances may be found in the $\qquad$ -. | Army Corps. of Engineers Regulations | Light List | Waterways Journal | Channel Report |
| 1657 | The following questions (1-10) are based on the Army Corps of Engineers Mississippi River Maps (Cairo to the Gulf) and the Light List. AHP = Above Head of Passes, LMR = Lower Mississippi River, UMR = Upper Mississippi River, OHR = Ohio River, ACOE = Army Corps of Engineers On 3 January you get underway from Cambalick Dock, Morganza, LA, (mile 278.3 AHP) enroute to Portage, MO (UMR). |  |  |  |  |
| 1658 | What is the length of the trip? | 887.9 miles | 878.9 miles | 851.9 miles | 726.0 miles |
| 1659 | What are the dimensions of the Old River Lock on the Lower Old River (mile 304 AHP)? | $1175 \times 75$ feet | $1190 \times 75$ feet | $1195 \times 84$ feet | $1202 \times 84$ feet |
| 1660 | At 2126, you pass Morganza Bend Light (mile 278.4 AHP).At 0226, 4 January, you pass Red River Landing Gage (mile 302.4 AHP). You have been turning for 7.5 mph . What is the current? | 1.4 mph | 1.8 mph | 2.7 mph | 6.2 mph |
| 1661 | The Gage at Red River Landing reads 43.4 feet. The low water reference plane (LWRP) for Red River Landing, LA. Is 10.6 ft . How many feet is this above the low water reference plane? | 10.6 ft | 11.6 ft | 22.2 ft | 32.8 ft |
| 1662 | The river will be temporarily closed to navigation at mile 531.3 AHP due to repairs to the bridge. This will occur at 1530, 5 January, and last for six hours. What minimum speed over the ground must you make from Red River Landing Gage in order not to be delayed? | 6.2 mph | 6.4 mph | 6.8 mph | 7.3 mph |


| 1663 | What type of daymark will you see as you approach Black Hills Light (mile 337.7 AHP)? | Private aid - no daymark | Red square | Red diamond | Red triangle |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1664 | What is the vertical clearance of the Natchez-Vidalia Highway Bridge when the Natchez-Vidalia Highway Bridge Gage reads 23.4 feet? | 102.6 ft | 108.3 ft | 119.5 ft | 125.6 ft |
| 1665 | The Natchez Gage reads 14.5 feet. The high point on your towboat is 47 feet above the water. What is the vertical clearance as you pass under the Natchez - Vidalia Highway Bridge? | 58.0 feet | 64.5 feet | 72.5 feet | 78.6 feet |
| 1666 | In order to determine what buoys, if any, are in place at Concordia Bar crossing (mile 596.0 AHP), what should you check? | Bulletin board at the Rosedale Gage | Waterways Journal | Light List | Notice to Mariners |
| 1667 | The area between Island 67 Upper Light (mile 623.1 AHP) and Sunflower Cut-off Foot Light (mile 624.8 AHP) is known as a $\qquad$ | transit | crossing | chute | slough |
| 1668 | The following questions (1-10) are based on the Army Corps of Engineers Mississippi River Maps (Cairo to the Gulf) and the Light List. AHP = Above Head of Passes, LMR = Lower Mississippi River, UMR = Upper Mississippi River, OHR = Ohio River, ACOE = Army Corps of Engineers <br> On 11 September, you are making up your tow at the fleeting area in Cairo, IL (mile 980.6 Ohio River). You get underway at 0600 enroute to New Orleans with a mixed tow. |  |  |  |  |
| 1669 | You are turning for 7.8 mph and estimate the current at 1.0 mph. What is your speed over the ground? | 6.8 mph | 7.8 mph | 8.8 mph | 9.8 mph |
| 1670 | What is your ETA at the Fulton Gage? | 1405, 12 Sept | 1052, 12 Sept | 0828, 12 Sept | 0204, 12 Sept |
| 1671 | What daymark should you see as you approach French Point Light (mile 915.4 AHP)? | Red triangle | Green triangle | Red diamond | Green diamond |
| 1672 | You pass New Madrid, MO (mile 889.0 AHP) at 1412. What was your average speed since leaving Cairo? | 8.0 mph | 7.8 mph | 7.6 mph | 7.3 mph |
| 1673 | At 1412 you increase speed to make good 10.2 mph . At 1506 you have a daymark on your port beam. Which daymark is this? | Bessie Daymark | Nolan Light | Everetts Light | Marr Towhead Light |
| 1674 | The charts show a circle with two black quadrants located at mile 846.0 AHP. What does this indicate? | Hazardous chemical dock | River Gage | Betz-Tipton Veneers Terminal | Bulletin Board |
| 1675 | The Helena Gage reads 2.3 feet. The high point on your towboat is 26 feet above water. What is the vertical clearance when you pass under the Helena Highway Bridge? | 76.0 feet | 84.2 feet | 89.5 feet | 90.7 feet |
| 1676 | What company does NOT have a marine facility along the river bank in Helena (mile 658 to 665 AHP)? | Texas Eastern Pipeline Co. | Helena Port Terminal, Inc. | Arkansas Power \& Light Co. | Helena Grain Co. |
| 1677 | If the Fair Landing, AR. Gage reads -1.2 feet, what is the water level in relation to the low water reference plane? The low water reference plane (LWRP) for Fair Landing, AR. is -0.9 feet. | 2.1 foot above the plane | 0.3 foot above the plane | 0.3 feet below the plane | 1.2 feet below the plane |


| 1678 | What are the light characteristics of the Bunge Corporation Terminal Lights (2) at mile 570.6 AHP? | a group flashing white light every five seconds | a flashing green light every 4 seconds | a flashing green light every 6 seconds | a flashing red light every 4 seconds |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1679 | The following questions (1-10) are based on the Army Corps of Engineers Mississippi River Maps (Cairo to the Gulf) and the Light List. AHP = Above Head of Passes, LMR = Lower Mississippi River, UMR = Upper Mississippi River, OHR = Ohio River, ACOE = Army Corps of Engineers <br> On 22 September, you are making up your tow at the Fleeting area in Baton Rouge, LA near Gartness Light (mile 227.8 AHP). You get underway at 0842 enroute to Cairo, IL, with a mixed tow. |  |  |  |  |
| 1680 | Your engine speed is 9.8 mph and you estimate the current at 1.6 mph . What is your speed over the ground? | 11.0 mph | 9.8 mph | 8.6 mph | 8.2 mph |
| 1681 | What is your ETA at the Helena Highway Bridge? | 1335, 24 Sept | 1109, 24 Sept | 0926, 24 Sept | 0458, 24 Sept |
| 1682 | Which daymark would you see as you approach Red Store Light (mile 269.5 AHP)? | Green square | Green triangle | Green diamond | Red square |
| 1683 | You pass Ratcliff Light (mile 289.8) at 1650. What was your average speed since leaving Baton Rouge? | 7.3 mph | 7.6 mph | 8.0 mph | 8.3 mph |
| 1684 | At 1650 you decrease speed to make good 7.1 mph . At 2020 you are $\qquad$ | abeam of Old River Control Structure Light | entering the Vicksburg District of the U.S. Army Corps. of Engineers | at Palmetto Point | at Latitude $31^{\circ} 10^{\prime} \mathrm{N}$ |
| 1685 | The charts show two dashed lines crossing the river just south of St. Catherine Bar Light. What does this indicate? | Overhead power lines | Louisiana-Mississippi ferry crossings | Two railroad trestles | Two submerged oil pipelines |
| 1686 | The Natchez Gage reads 16.3 feet. The high point on your towboat is 38 feet above water. What is the vertical clearance when you pass under the Natchez Highway Bridge? | 79.0 feet | 71.7 feet | 65.2 feet | 59.1 feet |
| 1687 | What organization has an installation at the uppermost end of Carthage Revetment? | City of Natchez (waterfront) | River Cement Co. | J.M. Jones Lumber | International Paper Co. |
| 1688 | If the Gage at the Greenville Highway Bridge reads 22.0 feet, and the low water reference plane (LWRP) for Greenville (Bridge). MS is 11.3 feet. What is the water level in relation to the low water reference plane? | 22.1 feet below the LWRP | 10.7 feet below the LWRP | 10.7 feet above the LWRP | 0.5 feet below the LWRP |
| 1689 | What does the circle with black and white quadrants across from Morgan Point Landing ( 769.0 miles AHP) represent? | Gage reading | Day Beacon | Light Tower | Speed zone |


| 1690 | The following questions (1-10) are based on the Army Corps of Engineers Mississippi River Maps (Cairo to the Gulf) and the Light List. AHP = Above Head of Passes, LMR = Lower Mississippi River, UMR = Upper Mississippi River, OHR = Ohio River, ACOE = Army Corps of Engineers <br> At 1015, on 16 April, you are at the Amoco Pipeline Co. docks (253.6 AHP), when you get underway enroute to Institute, WV, with a tow of eight barges carrying molten sulphur. |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1691 | What is the distance from the Amoco Docks at Baton Rouge, LA, to the new mouth of the White River? | 981.5 miles | 953.5 miles | 345.3 miles | 700.2 miles |
| 1692 | You are turning for 10 mph and passing Hog Point ,LA. Angola reports that the current at Red River Landing is 4.5 mph . Which statement is TRUE? | The main channel lies on the north side of the island you see ahead. | You are making 14.5 mph over the ground. | You would expect to find the more favorable current near the broken red line in the river. | You should expect to encounter vessels crossing the river at mile 300.5 AHP. |
| 1693 | As you approach Shreves cut-off you see Red River Landing Gage (mile 302.4 AHP) which reads 4.2 feet. The Low Water Reference Plane (LWRP) is 10.6 feet. Which of the following statements is TRUE? | This reading is 6.4 feet above the Low Water Reference Plane. | A vessel drawing 8 ft would be able to pass over the sill at Old River Lock | This reading is 6.4 feet below the Low Water Reference Plane. | A vessel drawing 7 ft . would be able to pass through the locks at Lower Old River. |
| 1694 | You pass Red River Gage at 2015 on 16 April and estimate the current will average 3.0 mph for the remainder of the time on the Mississippi River. What is your ETA at the mouth of the Ohio River if you continue to turn for 10 mph ? | 1718, 20 April | 1830, 20 April | 0028, 21 April | 0821, 21 April |
| 1695 | What is the vertical clearance between the highest point of your towboat, if it is 48 feet above the water, and if the Natchez Gage reads 20.1 feet when passing under the Natchez Upper Highway Bridge? | 35.9 feet | 43.2 feet | 49.3 feet | 57.9 feet |
| 1696 | In high water conditions, which publication would you consult for the latest information on buoys between Baton Rouge and Cairo? | U.S.C.G. Light List | U.S.C.G. Local Notice to Mariners | Army Corps. of Engineers Navigation Chart | List of Buoys and Daymarks |
| 1697 | As you approach Hole in the Wall Light (mile 373.4 AHP), what type of daymark would you see on the light structure? | Green square | Green diamond | Red diamond | Red square |
| 1698 | At 0300 on 19 April, you pass under the Greenville Bridge (mile 531.3 AHP). What was your average speed since departing Amoco Pipeline Co. Docks (mile 253.6 AHP)? | 6.2 mph | 5.2 mph | 4.8 mph | 4.3 mph |
| 1699 | A stretch where the channel changes from one side of the river to the other is called a $\qquad$ . | bifurcation | transit | crossing | changeover |
| 1700 | What is the width of the navigable channel at Columbus Pt. Light (mile 936.0 AHP)? | 200 ft . | 300 ft . | 450 ft . | 750 ft . |


| 1701 | The following questions (1-10) are based on the Army Corps of Engineers Mississippi River Maps (Cairo, ILssouri to the Gulf of Mexico) and the Light List. AHP = Above Head of Passes, LMR = Lower Mississippi River, UMR = Upper Mississippi River, OHR = Ohio River, ACOE = Army Corps of Engineers <br> At 0815, on the 16 of April, you depart the Exxon Refinery Docks(mile 232 AHP) bound for the fleeting area at Sycamore Chute Light(740.3 AHP). |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1702 | The horizontal clearance of the center span on the Baton Rouge RR and Highway 190 Bridge is $\qquad$ | 443 | 500 | 623 | 748 |
| 1703 | As you pass under the Baton Rouge RR and Highway 190 bridge you receive a call from another tow upriver. What channel on the VHF should you be monitoring? | 1 | 13 | 16 | 67 |
| 1704 | As you pass Solitude Lt. (mile 249.0 AHP) which dayboard would you see? | Green square | Green diamond | Red triangle | Red diamond |
| 1705 | Which of the following statements regarding buoys on the Mississippi River is TRUE? | Buoys should be given as wide a berth as possible in passing. | Buoy positions on the chart are exact. | The buoys are maintained on station year round. | The buoys do not shift positions due to permanent moorings. |
| 1706 | What is indicated by the two light gray shaded areas that cross the river above False River Lt. (mile 251.0 AHP)? | Ferry crossings | Utility crossings | Aerial cable crossings | Bridge construction |
| 1707 | What are the light characteristics of Greenwood Light (mile 288.6 AHP)? | Fixed red light | 1 red flash every 4 seconds | 2 red flashes every 5 seconds | 2 white flashes every 4 seconds |
| 1708 | After passing Wilkinson Lt. (mile 310.0 AHP) you see a flashing amber light on the right descending bank ahead. The flashing light indicates that you should $\qquad$ . | stay in the deepest water | slow down due to dredging operations | keep as close to the right descending bank as safety permits | keep as close to the left descending bank as safety permits |
| 1709 | At which of the following times would you be able to listen to lower Mississippi River conditions on VHF Channel 22? | 0900 hours | 1100 hours | 1300 hours | 1700 hours |
| 1710 | At 0645, on the 17th of April, you pass Hole in the Wall Lt. (mile 373.4 AHP). What has been your average speed since departing the Exxon Refinery? | 5.8 mph | 6.3 mph | 6.7 mph | 7.1 mph |
| 1711 | Your company wants to know at what time you will be arriving at the fleeting area at Sycamore Chute Light (mile 740.3 AHP) in Memphis, TN. You are making turns for 9.0 mph and you estimate the average current at 2.2 mph . Figuring the distance and time from Hole in the Wall Lt. (mile 373.4 AHP), what is your ETA at Sycamore Chute Lt.? | 0557, April 19th | 1045, April 19th | 1242, April 19th | 1733, April 19th |


| 1712 | The following questions (1-10) are based on the Army Corps of Engineers Mississippi River Maps (Cairo, ILssouri to the Gulf of Mexico) and the Light List. AHP = Above Head of Passes, LMR = Lower Mississippi River, UMR = Upper Mississippi River, OHR = Ohio River, ACOE = Army Corps of Engineers <br> On the 10th of May at 1130 , you leave the fleeting area at Gartness Lt.(mile 227.8 AHP) bound for the Monsanto Terminal in St. Louis (mile 178.0 UMR). Your engines turn for 8.5 mph in still water. |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1713 | What is the length of the trip? | 405.8 miles | 553.0 miles | 904.0 miles | 1136.8 miles |
| 1714 | You estimate the current as 2.5 mph . What is the speed over the ground? | 5.5 mph | 6.0 mph | 8.0 mph | 11.0 mph |
| 1715 | As you approach Casting Yard Dock Lt. (mile 265.4 AHP) you notice on the map a circle with 2 black sectors. This symbol indicates a $\qquad$ . | lock | warning sign | mooring buoy | river gage |
| 1716 | From Baton Rouge to Cairo, what is the maintained minimum channel depth during low water? | 6 feet | 9 feet | 12 feet | 30 feet |
| 1717 | On which map would you find Redman Point, Arkansas? | 20 | 23 | 29 | 37 |
| 1718 | At 1000, on May 11th, you are passing George Prince Lt. (mile 364.1 AHP) in Natchez, Mississippi and must send an ETA to the Monsanto Terminal in St. Louis (mile 178.0 UMR). Your engines are still turning for 8.5 mph and you estimate the current at 2.5 mph . What will be your arrival time in St. Louis? | 1919 on 15 May | 2344 on 15 May | 1757 on 16 May | 2236 on 16 May |
| 1719 | As you approach Ashland Light (mile 378.1 AHP) which daymark would you see? | Red triangle | Red diamond | Green square | Green diamond |
| 1720 | What is your clearance as you pass under the Vicksburg Highway 80 Bridge (mile 437.8 AHP). if the Vicksburg Gage reads 14.8 feet and the highest point on your tow boat is 44.5 feet? | 36 feet | 42 feet | 57 feet | 66 feet |
| 1721 | After entering Milliken Bend (mile 455 AHP) you wish to locate the river service in Madison Parish, Louisiana. The river service is indicated by the square containing which number? | 7 | 6 | 5 | 4 |
| 1722 | At Filter Point Light (mile 475 AHP) there are 2 close straight dashed lines on the map. What do these lines represent? | Submerged oil pipelines | Submerged telephone cables | Submerged gas pipelines | Aerial power cables |
| 1723 | The following questions (1-10) are based on the Army Corps of Engineers Mississippi River Maps (Cairo, IL to the Gulf of Mexico) and the Light List AHP = Above Head of Passes, LMR = Lower Mississippi River, UMR = Upper Mississippi River, OHR = Ohio River, ACOE = Army Corps of Engineers <br> At 1315, on the 5 of October, you depart the Sycamore Chute fleeting area(mile 740.5 AHP) at Memphis, TN bound for Donaldsonville, LA.(mile 175.0 AHP) |  |  |  |  |


| 1724 | You are turning for 8.2 mph and estimate the current at 1.5 mph . What is you speed over the ground? | 9.7 | 8.2 | 7.8 | 6.7 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1725 | If the highest point on your towboat is 52 feet and the West Memphis Gage reads 26 feet what is the vertical clearance when you pass under the Hernando Desoto Bridge (mile 736.6 AHP)? | 25.8 feet | 30.7 feet | 42.6 feet | 56.7 feet |
| 1726 | Your vessel is making turns for 9.5 mph and you estimate the average current for the trip will be 2.5 mph . What will be your ETA Donaldsonville, LA? | 1222 on 7 October | 1823 on 7 October | 0443 on 8 October | 1033 on 8 October |
| 1727 | As you approach West Memphis Lt. (mile 727.4 AHP) you notice on the map a dashed line crossing the river. This line indicates a $\qquad$ . | submerged oil pipeline | submerged gas pipeline | aerial tramway | aerial power line |
| 1728 | At 1609, on October 5, you are abeam of Star Landing Lt. (mile 707.2 AHP). You calculate your speed since you departed Sycamore Chute fleeting area. If you are turning for 9.5 mph what was the current? | 1.0 mph | 1.5 mph | 2.0 mph | 2.5 mph |
| 1729 | What is the distance from the Arkansas River mouth to the Ohio River mouth in river miles? | 594 miles | 546 miles | 422 miles | 372 miles |
| 1730 | As you approach Joseph Henry Light (mile 445.2 AHP) which daymark would you see? | Red triangle | Red diamond | Green diamond | Green square |
| 1731 | On which river is Dover, KY located? | Mississippi | Tennessee | Ohio | Missouri |
| 1732 | After passing Oak Bend Lt. (mile 425.6 AHP) you see a light gray shaded area extending into the river shown on the map. This indicates a $\qquad$ . | fleeting area | weir | dike | revetment |
| 1733 | Which numbered box indicates the ExxonMobil Refining \& Supply Co. in Baton Rouge? | 1 | 2 | 3 | 4 |
| 1734 | The following questions (1-10) are based on the Army Corps of Engineers Mississippi River Maps (Cairo, IL to the Gulf of Mexico) and the Light List. AHP = Above Head of Passes, LMR = Lower Mississippi River, UMR = Upper Mississippi River, OHR = Ohio River, ACOE = Army Corps of Engineers <br> At 0620 on 25 November, you depart Cape Girardeau fleeting area (mile 53.0 UMR) bound for the Gold Bond Building Products Wharf in New Orleans, LA, (mile 102.0 AHP. |  |  |  |  |
| 1735 | Your engines are turning for 8.2 mph . You estimate the current at 1.5 mph . What is your speed over the ground? | 9.7 mph | 8.8 mph | 8.2 mph | 6.7 mph |
| 1736 | What is the distance to Caruthersville Gage from Cape Girardeau? | 54.4 miles | 160.4 miles | 793.4 miles | 899.4 miles |
| 1737 | Which dayboard would you see on Puntney Light (mile 943.6 AHP)? | Green square | Green triangle | Red diamond | Red triangle |
| 1738 | What is the distance from the Memphis Gage to the Redneb Services Dock in New Orleans, LA. | 460 miles | 503 miles | 588 miles | 633 miles |


| 1739 | How long will it take you to go from the Memphis Gage to your destination in New Orleans, LA, if you estimate the average current on this segment of the route to be 2.0 mph and you increase the engine turns to 8.5 mph . | $\begin{aligned} & 1 \text { day } 20 \text { hours } 33 \\ & \text { minutes } \end{aligned}$ | $\begin{aligned} & 2 \text { days } 6 \text { hours } 24 \\ & \text { minutes } \end{aligned}$ | 2 days 12 hours 15 minutes | $\begin{aligned} & 3 \text { days } 4 \text { hours } 11 \\ & \text { minutes } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1740 | What is the minimum maintained depth of the channel from Cairo to Baton Rouge during low water? | 9 feet | 12 feet | 15 feet | 18 feet |
| 1741 | You see a buoy with red and green bands. This buoy marks | the center of the channel | the preferred channel | a channel crossing | an isolated danger |
| 1742 | As you approach Old River Control Structure Light you see a flashing amber light. You should $\qquad$ | navigate as close to the left descending bank as safety permits | navigate as close to the right descending bank as safety permits | turn into the inflow channel as the bypass is now open | slow your engine speed to not more than 5 mph |
| 1743 | What are the dimensions of the Old River Lock? | $110 \mathrm{ft} \times 1190 \mathrm{ft}$ | $100 \mathrm{ft} \times 990 \mathrm{ft}$ | $75 \mathrm{ft} \times 1000 \mathrm{ft}$ | $75 \mathrm{ft} \times 1190 \mathrm{ft}$ |
| 1744 | At 1710 on 27 November, you are abeam of Kings Point Lt. (mile 439.8 AHP). At this time you receive a message that there will no be space for you at the Redneb Services Dock until after 1200 on the 29 November. What speed over the ground will you have to slow to so as not to arrive before this time? | 5.4 mph | 6.1 mph | 6.9 mph | 7.9 mph |
| 1745 | The following questions (1-10) are based on the C of E Mississippi River Maps (Cairo, IL, to the Gulf of Mexico) and the Light List. AHP = Above Head of Passes, LMR = Lower Mississippi River, UMR = Upper Mississippi River, OHR = Ohio River, ACOE = Army Corps of Engineers <br> You are making up your tow at the fleeting area at Cairo Point, II(mile 980.8 Ohio River). At 0952, on 21 September, you get underway enroute to New Orleans with a mixed tow. |  |  |  |  |
| 1746 | You are turning for 6.8 mph and estimate the current at 1.0 mph . What is your speed over the ground? | 8.8 mph | 8.2 mph | 7.8 mph | 6.8 mph |
| 1747 | How far is it to the Hernando Desoto Bridge in Memphis, TN? | 980.8 miles | 736.6 miles | 218.1 miles | 202.4 miles |
| 1748 | Which daymark should you see as you approach French Point Light (mile 915.4 AHP)? | Red triangle | Green square | Red diamond | Green diamond |
| 1749 | At 1923, on September 21, you pass Bixby Towhead Light (mile 873.7 AHP). What was your average speed since leaving Cairo? | 12.1 mph | 11.3 mph | 10.5 mph | 9.2 mph |
| 1750 | At 1923, you decrease speed to make good 9.2 mph . What is the first Gage you will pass after your speed change? | Cottonwood Point | New Madrid | Fulton | Tiptonville |
| 1751 | Which light will you be passing at 0059, on 22 September, if you make good 9.2 mph ? | Kate Aubrey Lt. | Obion Bar Lt. | Trotter Lt. | Quaker Oats Lt. |
| 1752 | The Helena Gage reads 9.4 feet. The high point on your towboat is 42 feet above water. What is the vertical clearance when you pass under the Helena Highway Bridge? | 53.0 feet | 64.2 feet | 68.0 feet | 110.0 feet |


| 1753 | Which company does NOT have a marine facility along the river bank in Helena (mile 661 to 665 AHP)? | Helena Grain, Inc. | Helena Bridge Terminal, Inc. | Quincy Soybean Co. | Texas Eastern Pipeline Co. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1754 | If the Bayou Sara Gage reads -0.5 feet, the Low Water Reference Plane is 5.25 . What is the water level in relation to the low water reference plane? | 0.5 foot below the plane | 0.5 foot above the plane | 5.25 feet above the plane | 5.75 feet below the plane |
| 1755 | The Arkansas City Yellow Bend revetment on the LMR extends from mile $\qquad$ . | 555.5-549.7 RDB | 549.0-548.5 RDB | 556.9-554.9 LDB | 548.5-546.5 LDB |
| 1756 | The following questions (1-10) are based on the Army Corps of Engineers Mississippi River Maps (Cairo, IL to the Gulf of Mexico) and the Light List. AHP = Above Head of Passes, LMR = Lower Mississippi River, UMR = Upper Mississippi River, OHR = Ohio River, ACOE = Army Corps of Engineers <br> At 1215, on July 23, you get underway from The First Nitrogen Barge dock at mile 173.6 AHP enroute to Racine, OH(mile 241.6 OR). |  |  |  |  |
| 1757 | What is the length of the trip? | 1195.4 miles | 1223.1 miles | 1520.1 miles | 1657.8 miles |
| 1758 | After you get underway, what is the first river gage you will pass? | Head of Passes | Donaldsonville | Baton Rouge | Red River Landing |
| 1759 | You are passing the Bayou Sara Gage which reads 3.9 feet. The low water reference plane (LWRP) at Bayou Sara is 5.25 feet. Which of the following statements is TRUE? | The river level is above the Low Water Reference Plane. | Red Store Landing Revetment is ahead on your starboard side | This gage reading is at a lower elevation than the same reading on the Gage at Head of Passes. | None of the above. |
| 1760 | At 0921, on 24 July, you are abreast the St. Catherine Bar Lt. (mile 348.6 AHP). If you are turning for 10.0 mph , what was the current since departure? | 1.4 mph | 1.7 mph | 2.0 mph | 7.0 mph |
| 1761 | Which daymark will you see as you approach Natchez Beam Lt. (mile 364.8 AHP)? | Red diamond | White square | Green square | Red triangle |
| 1762 | At 1132, 24 July, you pass Natchez Beam Lt. (mile 364.8 AHP). What is your ETA off the Memphis Gage if you average 8.0 mph? | 2345, 25 July | 0525, 26 July | 0947, 26 July | 2215, 26 July |
| 1763 | Which town is located at mile 663.5 AHP? | Helena | Friers Point | St. Francis | Rodney |
| 1764 | What is the brown colored tint shown at Bordeaux Point Dykes (mile 681.0 AHP)? | river gage | fish hatchery | levee | dredge material |
| 1765 | The Memphis Gage reads 18.4 feet. The high point of your towboat is 48 feet above water. What is the vertical clearance as you pass under the Memphis Highway Bridge? | 46.4 feet | 53.8 feet | 66.4 feet | 75.4 feet |
| 1766 | The Linwood Bend revetment on the LMR extends from mile | 828.1-823.1 RDB | 831.7-829.4 RDB | 841.3-838.7 LDB | 845.4-842.5 LDB |


| 1767 | The following questions (1-10) are based on the Army Corps of Engineers Mississippi River Maps (Cairo, IL to the Gulf of Mexico) and the Light List. AHP = Above Head of Passes, LMR = Lower Mississippi River, UMR = Upper Mississippi River, OHR = Ohio River, ACOE = Army Corps of Engineers <br> At 1914, on 21 June, you depart the Alton Barge Docks at Alton, II (Mile 202.0 UMR), with a mixed tow of 6 loaded covered hopper barges, 2 loaded tank barges, and 2 empty hopper barges. |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1768 | You have orders to drop off the empties at the fleeting area at Cairo Point and add five loaded tank barges to your tow. If you are turning for 9 mph and estimate the current at 1.5 mph , what is your ETA at Cairo? | 1031, 22 June | 1423, 22 June | 1741, 22 June | 2210, 22 June |
| 1769 | You complete changing out your tow and get underway enroute Ark City Tank Storage (mile 554.0 AHP) to deliver the tank barges. What is the distance you must travel from Cairo Point Light? | 606.8 miles | 554.0 miles | 399.8 miles | 202.1 miles |
| 1770 | As you approach Dean Island Light (mile 754.8 AHP), which type of daymark will be observed at the light? | Green triangle | Red and green banded square | Green square daymark | Diamond-shaped green daymark |
| 1771 | The highest point on your towboat is 48 feet above the water, and the Memphis Gage reads +7.5 feet. What is the vertical clearance when you pass under the Hernando Desoto Bridge in Memphis? | 48.0 feet | 53.2 feet | 68.2 feet | 116.0 feet |
| 1772 | What is the mile point of the Fulton Gage? | 778 AHP | 687 AHP | 632 AHP | 598 AHP |
| 1773 | At 2350 hours on 23 June, you are at mile 610.5 AHP when you see about a mile ahead white lights on the water near the left bank. What might you see when you come abreast of these lights? | Privately maintained buoys at a yacht club | Government buoys marking the Hurricane Point dikes | Barges moored at the Dennis Landing Terminal | A pipeline discharging dredge spoil |
| 1774 | Which of the following statements concerning the buoys on the Mississippi River is TRUE? | The position of river buoys can be determined by consulting the latest Light List - Vol. V. | A preferred channel mark is a lateral mark indicating a channel junction which must always be passed to starboard. | Setting a buoy is the act of placing a buoy on assigned position in the water. | None of the above. |
| 1775 | At 1032 on 24 June, you pass Carolina Landing Light(508.8 AHP). What has been the average current since 2350, 23 June, if you have been making turns for 9.0 mph ? | 0.5 mph | 1.5 mph | 5.7 mph | 8.5 mph |
| 1776 | Where can scheduled broadcast times of river stages be found? | Sailing Directions | Light List | List of Lights | Coast Pilot |
| 1777 | Which company does NOT have a marine facility in Rosedale harbor (mile 585 AHP)? | Sanders Elevator Corp | Rosedale-Boliver County Port Commission | T.L. James | Cives Steel Company |


| 1778 | The following questions (1-10) are based on the Army Corps of Engineers Mississippi River Maps (Cairo, IL to the Gulf of Mexico) and the Light List. AHP = Above Head of Passes, LMR = Lower Mississippi River, UMR = Upper Mississippi River, OHR = Ohio River, ACOE = Army Corps of Engineers <br> September, you depart the Formosa Plastics mooring facility at mile 233.5 AHP with six loaded tank barges enroute to the Alton Barge Terminal, Alton, IL (mile 202.0 UMR). Your engines are making turns for 7.5 mph in still water. |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1779 | What is the total length of the trip? | 922.3 miles | 985.3 miles | 1155.8 miles | 1187.3 miles |
| 1780 | You estimate the current at 2.0 mph . What is the speed over the ground? | 3.5 mph | 4.5 mph | 5.5 mph | 9.5 mph |
| 1781 | What are the dimensions of the Port Allen Lock at Baton Rouge, LA? | 75 feet $\times 1188$ feet | 84 feet $\times 1188$ feet | 84 feet $\times 1180$ feet | 75 feet $\times 1180$ feet |
| 1782 | At 0119, on 10 September, you pass Springfield Bend Lt. (mile 244.8 AHP) and estimate the current will average 2.5 mph for the remainder of your trip. What is your ETA at the mouth of the Ohio River if you are making turns for 8.5 mph ? | 1746, 12 September | 1244, 13 September | 1244, 14 September | 2329, 14 September |
| 1783 | As you pass under the Natchez-Vidalia Dual Bridge, the gage on the bridge reads 8.9 ft . If the highest point on your vessel is 54 ft . above the water, what is your vertical clearance? | 60.0 feet | 63.1 feet | 67.2 feet | 122.0 feet |
| 1784 | Which type of daymark would you see on the Belle Island Corner Lt. at mile 458.6 AHP? | Green - Diamond | Green - Square | Red - Triangle | Red - Diamond |
| 1785 | At 1814, on 11 September, you pass under the Greenville Highway Bridge (mile 531.3 AHP). What speed must you average to arrive at Jimmy Hawken Light (mile 663.5 AHP) at 0930 the following day? | 9.7 mph | 8.7 mph | 6.3 mph | 5.6 mph |
| 1786 | What company does NOT have a marine facility along the river bank in Madison Parish (mile 457.0 AHP)? | Complex Chemical Co. | Delta Southern Railroads | Baxter Wilson Steam | Farm Chemical |
| 1787 | The Vaucluse Trench fill revetment on the LMR extends from mile $\qquad$ . | 535.6-532.9 RDB | 535.9-534.3 RDB | 535.9-534.3 LDB | 534.3-532.6 LDB |
| 1788 | What is the distance from Cairo, IL, to Parkersburg, WV? | 795 miles | 733 miles | 597 miles | 537 miles |
| 1789 | The following questions (1-10) are based on the Army Corps of Engineers Mississippi River Maps (Cairo, IL,MO, to the Gulf of Mexico) and the Light List. AHP = Above Head of Passes, LMR = Lower Mississippi River, UMR = Upper Mississippi River, OHR = Ohio River, ACOE = Army Corps of Engineers <br> At 1515, on 23 May, you get underway from the Amoco Pipeline Co. docks(253.6 AHP), enroute to Pittsburgh, PA, with a tow of six barges carrying asphalt. |  |  |  |  |
| 1790 | What is the distance from the Amoco Docks at Baton Rouge, LA, to Pittsburgh, PA? | 727.9 miles | 981.5 miles | 1575.3 miles | 1681.7 miles |


| 1791 | You are turning for 10 mph and passing Hog Point, LA. (mile 297.5 AHP). Angola reports that the current at Red River Landing is 4.5 mph . Which statement is TRUE? | The main channel lies on the south side of the island you see ahead. | You are making 14.5 mph over the ground. | An underwater stone dike has been constructed 0.5 miles upstream of Miles Bar Towhead. | You would expect to find the more favorable current near the broken red line in the river. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1792 | Which facility is located on the right descending bank at mile 363.6 AHP? | River Cement Corps.. | Vidalia Dock and Storage Co. | T.L. James | Bunge Corps.. |
| 1793 | At 1118, on 24 May, you pass Natchez Gage and estimate the current will average 3.0 mph for the remainder of the time on the Mississippi River. What is your ETA at Cairo, IL if you continue to turn for 10 mph ? | 0840, 26 May | 2218, 26 May | 2218, 27 May | 2339, 27 May |
| 1794 | If the highest point of your towboat is 54 feet above the water and the Natchez Gage reads 24.8 feet, what will be your vertical clearance when passing under the Natchez-Vidalia westbound Highway Bridge? | 35.9 feet | 43.2 feet | 47.2 feet | 57.5 feet |
| 1795 | In high water conditions, which publication would you consult for the latest information on buoys between Baton Rouge and Cairo? | List of Buoys and Daymarks | U.S.C.G. Light List | Army Corps. of Engineers Navigation Map | None of the above |
| 1796 | As you approach Giles Bend Cut-off Light (mile 367.7 AHP), what type of daymark would you see on the light structure? | Green square | Green diamond | Red triangle | Red diamond |
| 1797 | At 1554, on 25 May, you pass Huntington Point Light (mile 555.2 AHP). What was your average speed since departing Amoco Pipeline Co. Docks (mile 253.6 AHP)? | 6.2 mph | 5.2 mph | 4.8 mph | 4.3 mph |
| 1798 | The solid lines extending into the channel at mile 948 AHP are | revetments | dikes | spoil areas | Westvaco Service Facilities |
| 1799 | What is the width of the widest span of the Cairo Highway Bridge (Upper Mississippi River mile 1.3)? | 503 feet | 625 feet | 675 feet | 800 feet |
| 1800 | The following questions (1-10) are based on the Army Corps of Engineers Mississippi River Maps (Cairo, IL, to the Gulf of Mexico) and the Light List. AHP = Above Head of Passes, LMR = Lower Mississippi River, UMR = Upper Mississippi River, OHR = Ohio River, ACOE = Army Corps of Engineers <br> On 3 January you get underway from Hall-Buck Coke Terminal Dock, Baton Rouge, LA, (mile 233.0 AHP) enroute to the Mobile Oil Docks (east side),(mile 176.4 UMR), in St. Louis. |  |  |  |  |
| 1801 | What is the length of the trip? | 720.8 miles | 777.4 miles | 897.2 miles | 906.3 miles |
| 1802 | What are the dimensions of the Old River Lock on the Lower Old River (mile 304 AHP)? | $1190 \times 75$ feet | $1185 \times 84$ feet | $1190 \times 84$ feet | $1185 \times 75$ feet |
| 1803 | At 2142, on January 3, you pass Sebastapol Light (mile 283.3 AHP). At 0137, January 4, you pass Fort Adams Light(311.4 AHP). You have been turning for 9.0 mph . What was the current? | 4.2 mph | 3.3 mph | 2.7 mph | 1.8 mph |


| 1804 | At 0850, 4 January, you pass the Gage at Natchez, MS which reads 26.8 feet. The low water reference plane (LWRP) for Natchez is 6.1 feet. What is the water level in relation to the low water reference plane? | 20.7 ft above | 20.7 ft below | 32.9 ft above | 32.9 ft below |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1805 | At 1300, 5 January, the river will be temporarily closed to navigation for six hours at mile 531.3 AHP due to repairs to a bridge. What minimum speed over the ground must you make from Natchez Gage in order not to be delayed? | 5.7 mph | 6.0 mph | 6.8 mph | 7.3 mph |
| 1806 | Which type of daymark will you see as you approach Old Levee Light (mile 385.2 AHP)? | Green diamond | Red square | Green square | Private aid - no daymark |
| 1807 | What is the vertical clearance of the Vicksburg Highway 80 Bridge when the river level is the same as the Low Water Reference Plane? | 128.3 ft | 125.6 ft | 119.5 ft | 116.3 ft |
| 1808 | The Vicksburg Gage reads 31.9 feet. The high point on your towboat is 43 feet above the water. What is the vertical clearance as you pass under the Vicksburg Highway 80 Bridge? | 36.2 feet | 41.4 feet | 58.0 feet | 84.3 feet |
| 1809 | Where would you find out which buoys, if any, are in place at Concordia Bar crossing (mile 596.0 AHP)? | Local Notice to Mariners | Bulletin board at the Rosedale Gage | Waterways Journal | None of the above |
| 1810 | What are the dotted lines crossing at mile 529.7 AHP? | submarine cables | power cables | gated dams | workboat crossings |
| 1811 | The following questions (1-10) are based on the C of E Mississippi River Maps (Cairo, IL, to the Gulf of Mexico) and the Light List. AHP = Above Head of Passes, LMR = Lower Mississippi River, UMR = Upper Mississippi River, OHR = Ohio River, ACOE = Army Corps of Engineers <br> You are making up your tow at the fleeting area at Cairo Point, Il(mile 980.8 Ohio River). At 0952, on 21 September, you get underway enroute to New Orleans with a mixed tow. |  |  |  |  |
| 1812 | You are turning for 6.8 mph and estimate the current at 1.0 mph. What is your speed over the ground? | 6.8 mph | 7.8 mph | 8.8 mph | 9.4 mph |
| 1813 | How far is it to the Hernando Desoto Bridge in Memphis, TN? | 980.8 miles | 736.6 miles | 312.3 miles | 218.1 miles |
| 1814 | Which daymark should you see as you approach French Point Light (mile 915.4 AHP)? | Red diamond | Green square | Red triangle | Green diamond |
| 1815 | At 1923, on September 21, you pass Bixby Towhead Light (mile 873.7 AHP). What was your average speed since leaving Cairo? | 9.2 mph | 8.8 mph | 8.5 mph | 7.2 mph |
| 1816 | At 1923, you increase speed to make good 9.2 mph . What is the first Gage you will pass after your speed change? | Cottonwood Point | Caruthersville | Fulton | New Madrid |
| 1817 | Which light will you be passing at 0059, on 22 September, if you make good 9.2 knots? | Obion Bar Lt. | Kate Aubrey Lt. | Trotter Lt. | Quaker Oats Lt. |


| 1818 | The Helena Gage reads 9.4 feet. The high point on your towboat is 42 feet above water. What is the vertical clearance when you pass under the Helena Highway Bridge? | 53.0 feet | 62.6 feet | 64.2 feet | 68.0 feet |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1819 | What company does NOT have a marine facility along the river bank in Helena (mile 661 to 665 AHP)? | Helena Port Terminal, Inc. | Riceland Food Corps.. | Quincy Soybean Co. | Texas Eastern Pipeline Co. |
| 1820 | The low water reference plane (LWRP) for Bayou Sara is 5.25 feet. If the Bayou Sara Gage reads -0.5 feet, what is the water level in relation to the low water reference plane? | 4.75 feet above the plane | 5.75 feet above the plane | 5.75 feet below the plane | 4.75 feet below the plane |
| 1821 | The Arkansas City Yellow Bend revetment on the LMR extends from mile . $\qquad$ | 555.0-549.7 RDB | 549.0-548.5 RDB | 556.9-554.9 LDB | 548.5-546.5 LDB |
| 1822 | The following questions (1-10) are based on the Army Corps of Engineers Mississippi River Maps (Cairo, IL to the Gulf of Mexico) and the Light List. AHP = Above Head of Passes, LMR = Lower Mississippi River, UMR = Upper Mississippi River, OHR = Ohio River, ACOE = Army Corps of Engineers <br> At 1215, on May 23, you get underway from The First Nitrogen Barge dock at mile 173.6 AHP enroute to Racine, OH(mile 241.6 OR). |  |  |  |  |
| 1823 | What is the length of the trip? | 1195.4 miles | 1223.1 miles | 1464.8 miles | 1520.1 miles |
| 1824 | After you get underway, what is the first river gage you will pass? | Donaldsonville | Head of Passes | Baton Rouge | Red River Landing |
| 1825 | You are passing the Bayou Sara Gage which reads 3.9 feet. The low water reference plane for Bayo Sara is 5.25 feet. Which of the following statements is TRUE? | The river level is above the Low Water Reference Plane. | Red Store Landing Revetment is ahead on your starboard side | This gage reading is at a lower elevation than the same reading on the Gage at Head of Passes. | None of the above. |
| 1826 | At 0921, on 24 May, you are abreast the St. Catherine Bar Lt. (mile 348.6 AHP). If you are turning for 10.0 mph , what was the current since departure? | 3.4 mph | 2.0 mph | 1.7 mph | 1.4 mph |
| 1827 | Which daymark will you see as you approach Natchez Beam Lt. (mile 364.8 AHP)? | Red triangle | White square | Green square | Red diamond |
| 1828 | At 1132, 24 May, you pass Natchez Beam Lt. (mile 364.8 AHP). What is your ETA off the Memphis Gage if you average 8.0 mph ? | 2345, 25 May | 0947, 26 May | 1525, 26 May | 2215, 26 May |
| 1829 | Which town is located at mile 663.5 AHP? | Friers Point | Helena | St. Francis | Rodney |
| 1830 | What is the brown colored tint shown at Bordeaux Point Dykes (mile 681.0 AHP)? | river gage | fish hatchery | dredge material | levee |
| 1831 | The Memphis Gage reads 18.4 feet. The high point of your towboat is 48 feet above water. What is the vertical clearance as you pass under the Memphis Highway Bridge? | 75.4 feet | 66.4 feet | 53.8 feet | 46.4 feet |
| 1832 | The Linwood Bend revetment on the LMR extends from mile | 828.1-823.1 RDB | 831.7-829.4 RDB | 845.4-842.5 LDB | 841.3-838.7 LDB |


| 1833 | The following questions (1-10) are based on the Army Corps of Engineers Mississippi River Maps (Cairo, IL to the Gulf of Mexico) and the Light List. AHP = Above Head of Passes, LMR = Lower Mississippi River, UMR = Upper Mississippi River, OHR = Ohio River, ACOE = Army Corps of Engineers <br> At 1914, on 21 June, you depart the Alton Barge Docks at Alton, II (Mile 202.0 UMR), with a mixed tow of 6 loaded covered hopper barges, 2 loaded tank barges, and 2 empty hopper barges. |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1834 | You have orders to drop off the empties at the fleeting area at Cairo Point and add five loaded tank barges to your tow. If you are turning for 9 mph and estimate the current at 1.5 mph , what is your ETA at Cairo? | 2210, 22 June | 1741, 22 June | 1423, 22 June | 1031, 22 June |
| 1835 | You complete changing out your tow and get underway enroute Ark City Tank Storage (mile 554.0 AHP) to deliver the tank barges. What is the distance you must travel from Cairo Point Light? | 202.1 miles | 400.7 miles | 554.2 miles | 605.8 miles |
| 1836 | As you approach Dean Island Light (mile 754.8 AHP), which type of daymark will be observed at the light? | Green triangle | Green diamond | Green square | Red-and-green banded square |
| 1837 | The highest point on your towboat is 48 feet above the water, and the Memphis Gage reads +7.5 feet. What is the vertical clearance when you pass under the Hernando Desoto Bridge in Memphis? | 53.2 feet | 58.1 feet | 68.2 feet | 96.3 feet |
| 1838 | What is the mile point of the Fulton Gage? | 598 AHP | 632 AHP | 687 AHP | 778 AHP |
| 1839 | At 2350 on 23 June, you are at mile 610.5 AHP when you see about a mile ahead lights on the water near the left bank. What might you see when you come abreast of these lights? | Privately maintained buoys at a yacht club | Government buoys marking the Hurricane Point dikes | Barges moored at the Dennis Landing Terminal | A pipeline discharging dredge spoil |
| 1840 | Which of the following statements concerning the buoys on the Mississippi River is TRUE? | The position of river buoys can be determined by consulting the latest Light List - Vol. V. | A preferred channel mark is a lateral mark indicating a channel junction which must always be passed to starboard. | Buoys should be passed as close as possible. | Setting a buoy is the act of placing a buoy on assigned position in the water. |
| 1841 | At 1032 on 24 June, you pass Carolina Landing Light (mile 508.8 AHP). What has been the average current since 2350, 23 June, if you have been making turns for 9.0 mph ? | 8.5 mph | 5.7 mph | 1.5 mph | 0.5 mph |
| 1842 | Where can scheduled broadcast times of river stages be found? | Sailing Directions | List of Lights | Light List | Coast Pilot |
| 1843 | Which company does NOT have a marine facility in Rosedale harbor (mile 585 AHP)? | T.L. James | Rosedale-Boliver County Port Commission | Cives Steel Company | Sanders Elevator Corp |


| 1844 | The following questions (1-10) are based on the Army Corps of Engineers Mississippi River Maps (Cairo, IL to the Gulf of Mexico) and the Light List. AHP = Above Head of Passes, LMR = Lower Mississippi River, UMR = Upper Mississippi River, OHR = Ohio River, ACOE = Army Corps of Engineers <br> On 9 September, you depart the Formosa Plastics mooring facility at mile 233.5 AHP with six loaded tank barges enroute to the Alton Barge Terminal, Alton, IL (mile 202.0 UMR). Your engines are making turns for 7.5 mph in still water. |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1845 | What is the total length of the trip? | 906.3 miles | 922.3 miles | 1155.8 miles | 1187.3 miles |
| 1846 | You estimate the current at 2.0 mph . What is the speed over the ground? | 9.5 mph | 5.5 mph | 5.0 mph | 4.5 mph |
| 1847 | What are the dimensions of the Port Allen Lock at Baton Rouge, LA? | 75 feet $\times 1188$ feet | 84 feet $\times 1180$ feet | 84 feet $\times 1188$ feet | 75 feet $\times 1180$ feet |
| 1848 | At 0119, on 10 September, you pass Springfield Bend Lt. (mile 244.8 AHP) and estimate the current will average 2.5 mph for the remainder of your trip. What is your ETA at the mouth of the Ohio River if you are making turns for 8.5 mph ? | 1746, 12 September | 1244, 13 September | 2329, 14 September | 0210, 15 September |
| 1849 | As you pass under the Natchez-Vidalia Dual Bridge, the gage on the bridge reads 8.9 ft . If the highest point on your vessel is 54 ft . above the water, what is your vertical clearance? | 63.1 feet | 65.3 feet | 67.2 feet | 122.0 feet |
| 1850 | Which type of daymark would you see on the Belle Island Corner Lt. at mile 458.6 AHP? | Green - Diamond | Green - Square | Red - Diamond | Red - Triangle |
| 1851 | At 1814, on 11 September, you pass under the Greenville Highway Bridge (mile 531.3 AHP). What speed must you average to arrive at Jimmy Hawken Light (mile 663.5 AHP) at 0930 the following day? | 8.7 mph | 7.7 mph | 6.3 mph | 5.6 mph |
| 1852 | Which company does NOT have a marine facility along the river bank in Madison Parish (mile 457.0 AHP)? | Complex Chemical Co. | Delta Southern Railroads | Farm Chemical | Baxter Wilson |
| 1853 | The Vaucluse Trench fill revetment on the LMR extends from mile $\qquad$ . | 524.3-522.6 RDB | 535.6-532.9 RDB | 535.9-534.3 LDB | 534.3-532.6 LDB |
| 1854 | What is the distance from Greenville, MS, to Tiptonville, TN on the Mississippi River System? | 95 miles | 136 miles | 341 miles | 520 miles |
| 1855 | The following questions (1-10) are based on the Army Corps of Engineers Mississippi River Maps (Cairo, IL,MO, to the Gulf of Mexico) and the Light List. AHP = Above Head of Passes, LMR = Lower Mississippi River, UMR = Upper Mississippi River, OHR = Ohio River, ACOE = Army Corps of Engineers <br> At 1515, on 23 May, you get underway from the Amoco Pipeline Co. docks (253.6 AHP), enroute to Pittsburgh, PA, with a tow of six barges carrying asphalt. |  |  |  |  |
| 1856 | What is the distance from the Amoco Docks at Baton Rouge, LA, to Pittsburgh, PA? | 1681.7 miles | 1575.3 miles | 981.7 miles | 727.9 miles |


| 1857 | You are turning for 10 mph and passing Hog Point, LA. (mile 297.5 AHP). Angola reports that the current at Red River Landing is 4.5 mph . Which statement is TRUE? | The main channel lies on the south side of the island you see ahead. | You are making 14.5 mph over the ground. | An underwater stone dike has been constructed 0.5 miles upstream of Miles Bar Towhead. | You would expect to find the more favorable current near the broken red line in the river. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1858 | Which facility is located on the right descending bank at mile 363.6 AHP? | River Cement Corps.. | Bunge Corps.. | T.L. James | Vidalia Dock and Storage Co. |
| 1859 | At 1118, on 24 May, you pass Natchez Gage and estimate the current will average 3.0 mph for the remainder of the time on the Mississippi River. What is your ETA at Cairo, IL if you continue to turn for 10 mph ? | 0840, 26 May | 2218, 26 May | 2339, 27 May | 0339, 28 May |
| 1860 | If the highest point of your towboat is 54 feet above the water and the Natchez Gage reads 24.8 feet, what will be your vertical clearance when passing under the Natchez-Vidalia westbound Highway Bridge? | 35.9 feet | 47.2 feet | 49.6 feet | 57.5 feet |
| 1861 | In high water conditions, which publication would you consult for the latest information on buoys between Baton Rouge and Cairo? | List of Buoys and Daymarks | U.S.C.G. Light List | Army Corps. of Engineers Navigation Chart | None of the above |
| 1862 | As you approach Ashland Light (mile 378.1 AHP), which type of daymark would you see on the light structure? | Green square | Green diamond | Red diamond | Red triangle |
| 1863 | At 1554, on 25 May, you pass Huntington Point Light (mile 555.2 AHP). What was your average speed since departing Amoco Pipeline Co. Docks (253.6 AHP)? | 6.9 mph | 6.2 mph | 4.8 mph | 4.3 mph |
| 1864 | The solid lines extending into the channel at mile 948 AHP are | dikes | revetments | spoil areas | Westvaco Service Facilities |
| 1865 | What is the width of the widest span of the Cairo Highway Bridge (Upper Mississippi River mile 1.3)? | 800 feet | 675 feet | 625 feet | 503 feet |
| 1866 | The following questions (1-10) are based on the Army Corps of Engineers Mississippi River Maps (Cairo, IL,MO, to the Gulf of Mexico) and the Light List. AHP = Above Head of Passes, LMR = Lower Mississippi River, UMR = Upper Mississippi River, OHR = Ohio River, ACOE = Army Corps of Engineers <br> At 2345, on 25 December, you depart Vulcan Chemicals, Memphis Harbor, McKellar Lake (mile 726.0 AHP - LMR) enroute to the Petroleum Fuel \& Terminal Co. (144.6 AHP) in Angelina, LA, with a tow of eight full gasoline barges. |  |  |  |  |
| 1867 | If your vessel is making turns for 7.5 mph with an estimated average current of 1.5 mph , what is your ETA at the dock in Angelina, LA? | 1621, 28 Dec | 2203, 28 Dec | 0516, 29 Dec | 1621, 29 Dec |
| 1868 | The highest point on your towboat is 67 feet above the water, and the Helena Gage reads +22.3 feet. What is the vertical clearance when you pass under the A-span of the Helena Highway Bridge? | 74.7 feet | 52.4 feet | 49.8 feet | 30.1 feet |


| 1869 | Which of the following statements are TRUE? | Oil well structures are listed in the Light List. | All aids to navigation with lights have lateral significance. | On the Western Rivers, crossing marks may exhibit white lights. | None of the above. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1870 | At 0509, on 26 December, you pass under the Helena Highway Bridge (mile 661.7 AHP). What has been the average speed of the current since departing Memphis Harbor, McKellar Lake, if you have been making turns for 7.5 mph ? | 5.6 mph | 4.4 mph | 2.1 mph | 1.8 mph |
| 1871 | What is the distance in river miles, from the new mouth of the White River to the Petroleum Fuel \& Terminal Co. (mile 144.6 AHP)? | 454 miles | 427 miles | 384 miles | 370 miles |
| 1872 | What is the white/black within a circle symbol found at mile 592.1 AHP? | Terrence Landing Light | Daymark | River Gage | Information Board |
| 1873 | What facility is not found near La Grange Towhead Light (538.2 AHP) on Greenville Harbour? | Mississippi Limestone | Ergon, Inc. | American Commercial Barge Lines | Greenville Casino Wharf |
| 1874 | As you pass under the Vicksburg Bridges, you estimate the current as 3.0 mph . What is the speed over the ground, if your vessel is making turns for 10.5 mph ? | 16.5 mph | 13.5 mph | 10.5 mph | 7.5 mph |
| 1875 | As you approach Buckridge Light (mile 412.5 AHP), which type of daymark would you see on the light structure? | Red diamond | Red triangle | Green square | Green diamond |
| 1876 | What is NOT true about the yellow square at mile 227.3 AHP? | Yellow in color | Square in shape | Lighted | Part of Intracoastal Waterway System |
| 1877 | The following questions (1-10) are based on the Army Corps of Engineers Mississippi River Maps (Cairo, ILssouri to the Gulf of Mexico) and the Light List. AHP = Above Head of Passes, LMR = Lower Mississippi River, UMR = Upper Mississippi River, OHR = Ohio River, ACOE = Army Corps of Engineers <br> At 0815, on the 16 of April, you depart the Exxon Refinery Docks(mile 232 AHP) bound for the fleeting area at Sycamore Chute Light(740.3 AHP). |  |  |  |  |
| 1878 | The horizontal clearance of the center span on the Baton Rouge RR and Highway 190 Bridge is $\qquad$ | 443 | 500 | 575 | 623 |
| 1879 | You are at mile 230.0 AHP and see on the map a large rectangle outlined with a broken line. This indicates a | revetment | dredge material | fleeting area | dike |
| 1880 | As you pass Solitude Lt. (mile 249.0 AHP) which dayboard would you see? | Green diamond | Green square | Red triangle | Red diamond |
| 1881 | Which of the following statements regarding buoys on the Mississippi River is TRUE? | Buoy positions on the chart are exact. | Buoys should be given as wide a berth as possible in passing. | The buoys are maintained on station year round. | The buoys do not shift positions due to permanent moorings. |


| 1882 | What is indicated by the two light gray shaded areas that cross the river above False River Lt. (mile 251.0 AHP)? | Utility crossings | Ferry crossings | Aerial cable crossings | Bridge construction |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1883 | What are the light characteristics of Greenwood Light (mile 288.6 AHP)? | Fixed red light | $\begin{aligned} & 2 \text { red flashes every } 5 \\ & \text { seconds } \end{aligned}$ | 1 red flash every 4 seconds | 2 white flashes every 4 seconds |
| 1884 | After passing Wilkinson Lt. you see a flashing amber light on the right descending bank ahead. The flashing light indicates that you should $\qquad$ —. | stay in the deepest water | slow down due to dredging operations | keep as close to the left descending bank as safety permits | keep as close to the right descending bank as safety permits |
| 1885 | At which of the following times would you be able to listen to lower Mississippi River conditions on VHF Channel 22? | 0900 hours | 1100 hours | 1200 hours | 1300 hours |
| 1886 | At 0645, on the 17th of April, you pass Hole in the Wall Lt. (mile 373.4 AHP). What has been your average speed since departing the Exxon Refinery? | 8.8 mph | 7.3 mph | 6.8 mph | 6.3 mph |
| 1887 | Your company wants to know at what time you will be arriving at the fleeting area at Sycamore Chute Light (mile 740.3 AHP) in Memphis, TN You are making turns for 9.0 mph and you estimate the average current at 2.2 mph . Figuring the distance and time from Hole in the Wall Lt. (mile 373.4 AHP), what is your ETA at Sycamore Chute Lt.? | 1242, April 19th | 1645, April 19th | 2242, April 19th | 2333, April 19th |
| 1888 | The following questions (1-10) are based on the Army Corps of Engineers Mississippi River Maps (Cairo, ILssouri to the Gulf of Mexico) and the Light List. AHP = Above Head of Passes, LMR = Lower Mississippi River, UMR = Upper Mississippi River, OHR = Ohio River, ACOE = Army Corps of Engineers <br> On the 10th of May at 1130 , you leave the fleeting area at Gartness Lt.(mile 227.8 AHP) bound for the Monsanto Terminal in St. Louis (mile 178.0 UMR). Your engines turn for 8.5 mph in still water. |  |  |  |  |
| 1889 | What is the length of the trip? | 405.8 miles | 904.0 miles | 1002.0 miles | 1136.8 miles |
| 1890 | You estimate the current as 2.5 mph . What is the speed over the ground? | 11.0 mph | 8.0 mph | 6.0 mph | 5.5 mph |
| 1891 | As you approach Casting Yard Dock Lt. (mile 265.4 AHP) you notice on the map a circle with 2 black sectors. This symbol indicates a . $\qquad$ | lock | warning sign | river gage | mooring buoy |
| 1892 | From Baton Rouge to Cairo, the channel project depth is twelve (12) feet. What is the maintained depth of the channel? | 9 feet | 6 feet | 15 feet | 40 feet |
| 1893 | On which map would you find Redman Point, Arkansas? | 20 | 38 | 45 | 60 |


| 1894 | At 1000, on May 11th, you are passing George Prince Lt. (mile 364.1 AHP) in Natchez, Mississippi and must send an ETA to the Monsanto Terminal in St. Louis (mile 178.0 UMR). Your engines are still turning for 8.5 mph and you estimate the current at 2.5 mph . What will be your arrival time in St. Louis? | 1919 on 15 May | 2344 on 15 May | 1113 on 16 May | 1757 on 16 May |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1895 | As you approach Ashland Light (mile 378.1 AHP) which daymark would you see? | Red triangle | Red diamond | Green square | Green diamond |
| 1896 | What is your clearance as you pass under the Vicksburg Highway 80 Bridge (mile 437.8 AHP). if the Vicksburg Gage reads 14.8 feet and the highest point on your tow boat is 44.5 feet? | 36 feet | 42 feet | 48 feet | 57 feet |
| 1897 | After entering Milliken Bend (mile 455 AHP) you wish to locate the river service in Madison Parish, Louisiana. The river service is indicated by the square containing which number? | 4 | 5 | 3 | 2 |
| 1898 | At Filter Point Light (mile 475 AHP) there are 2 close straight dashed lines on the map passing through the black dots. What do these lines represent? | Submerged oil pipelines | Submerged gas pipelines | Submerged telephone cables | Aerial power cables |
| 1899 | The following questions (1-10) are based on the Army Corps of Engineers Mississippi River Maps (Cairo, IL, to the Gulf of Mexico) and the Light List. AHP = Above Head of Passes, LMR = Lower Mississippi River, UMR = Upper Mississippi River, OHR = Ohio River, ACOE = Army Corps of Engineers <br> On 3 January you get underway from Hall-Buck Coke Terminal Dock, Baton Rouge, LA, (mile 233.0 AHP) enroute to the Mobile Oil Docks (east side),(mile 176.4 UMR), in St. Louis. |  |  |  |  |
| 1900 | What is the length of the trip? | 720.8 miles | 777.4 miles | 897.2 miles | 906.3 miles |
| 1901 | What are the dimensions of the Old River Lock on the Lower Old River (mile 304 AHP)? | $1190 \times 75$ feet | $1185 \times 84$ feet | $1190 \times 84$ feet | $1185 \times 75$ feet |
| 1902 | At 2142, on January 3, you pass Sebastapol Light (mile 283.3 AHP). At 0137, January 4, you pass Fort Adams Light (mile 311.4 AHP). You have been turning for 9.0 mph . What was the current? | 4.2 mph | 3.3 mph | 2.7 mph | 1.8 mph |
| 1903 | At 0850, 4 January, you pass the Gage at Natchez, MS which reads 26.8 feet. The low water reference plane (LWRP) for Natchez is 6.1 feet. What is the water level in relation to the low water reference plane? | 20.7 ft below | 20.7 ft above | 32.9 ft below | 32.9 ft above |
| 1904 | At 1300, 5 January, the river will be temporarily closed to navigation for six hours at mile 531.3 AHP due to repairs to a bridge. What minimum speed over the ground must you make from Natchez Gage in order not to be delayed? | 5.7 mph | 6.0 mph | 6.8 mph | 7.3 mph |
| 1905 | Which type of daymark will you see as you approach Old Levee Light (mile 385.2 AHP)? | Green diamond | Red square | Green square | Private aid - no daymark |


| 1906 | What is the vertical clearance of the Vicksburg Highway 80 Bridge when the river level is the same as the Low Water Reference Plane? The low water reference plane (LWRP) for Vicksburg, MS. is 0.1. | 128.3 ft | 125.6 ft | 119.5 ft | 116.1 ft |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1907 | The Vicksburg Gage reads 31.9 feet. The high point on your towboat is 43 feet above the water. What is the vertical clearance as you pass under the Vicksburg Highway 80 Bridge? | 36.2 feet | 41.4 feet | 58.0 feet | 84.3 feet |
| 1908 | Where would you find out which buoys, if any, are in place at Concordia Bar crossing (mile 596.0 AHP)? | Notice to Mariners | Bulletin board at the Rosedale Gage | Waterways Journal | None of the above |
| 1909 | Which company utility crossing is at mile 529.7 AHP? | Texas Gas <br> Transmission Corp. <br> submerged gas <br> pipeline | Tennessee Gas Co. submerged gas pipeline | ANR Pipeline Co. submerged gas pipeline | Trunkline Gas Co. submerged gas pipeline |
| 1910 | The following questions (1-10) are based on the Army Corps of Engineers Mississippi River Maps (Cairo, ILssouri to the Gulf of Mexico) and the Light List. AHP = Above Head of Passes, LMR = Lower Mississippi River, UMR = Upper Mississippi River, OHR = Ohio River, ACOE = Army Co of Engineers <br> At 1400, 12 January, you are down bound on the Upper Mississippi River at St. Louis, MO(mile 181.0 UMR) bound for the River Cement Co. in Natchez, MS. |  |  |  |  |
| 1911 | When you pass under the Jefferson Barracks Highway Bridge (mile 168.6 UMR) what will be your vertical clearance if the highest point on your towboat is 55 feet and the St Louis Gage reads 21 feet? | 11.8 feet | 14.6 feet | 19.7 feet | 25.8 feet |
| 1912 | You are on map \#4. What is the mile point of the facility known as Gulf Coast Grain Co.? | mile 920 AHP | mile 921 AHP | mile 922 AHP | mile 923 AHP |
| 1913 | Which light characteristics does Foster Light have? | 1 green flash every 4 seconds | 1 red flash every 4 seconds | 2 white flashes every 5 seconds | 2 red flashes every 5 seconds |
| 1914 | At 2100, January 12, you are passing Cherokee Landing Lt. (mile 112.5 UMR). What has been your speed over the ground since leaving St. Louis, MO (mile 181 UMR). | 10.4 mph | 9.8 mph | 9.2 mph | 8.8 mph |
| 1915 | You are turning for 7.5 mph and estimate the current at 3.0 mph . What is your ETA at the River Cement Co. in Natchez considering that you passed Cherokee Landing Lt. at 2100 ? | 1605 on 15 January | 0355 on 16 January | 1244 on 16 January | 1922 on 16 January |
| 1916 | You are passing Putney Lt. (mile 943.6 AHP). The gray shaded areas alongside the river represent $\qquad$ | levees | weirs | dikes | revetments |
| 1917 | At 1030, 13 January, you are passing Columbus Point Lt. (mile 936.1 AHP). What has been your average speed since leaving St. Louis (mile 181 UMR) on the 12th of January at 1400 hours? | 10.4 mph | 9.7 mph | 9.4 mph | 9.1 mph |


| 1918 | What is the mile point of Hickman, KY Gage? | 846.4 AHP | 889.0 AHP | 922.0 AHP | 937.2 AHP |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1919 | Which daymark would you see at Shields Bar Lt. (mile 882.2 AHP)? | Red triangle | Green triangle | Red diamond | Green square |
| 1920 | You are passing Eastwood Lt. (mile 849.3 AHP) and the map indicates that Bunge Grain facility would be located at the square with number $\qquad$ | 4 | 6 | 8 | 10 |
| 1921 | The following questions (1-10) are based on the Army Corps of Engineers Mississippi River Maps (Cairo, IL,MO, to the Gulf of Mexico) and the Light List. AHP = Above Head of Passes, LMR = Lower Mississippi River, UMR = Upper Mississippi River, OHR = Ohio River, ACOE = Army Corps of Engineers <br> At 0825 on 08 March, you get underway from the River Cement Co. (173.0 AHP), enroute The Slay Warehousing docks(179.0 UMR) in St. Louis, MO, with a tow of eight barges carrying cement. |  |  |  |  |
| 1922 | What is the distance from the River Cement Co. Dock to the mouth of the Ohio River? | 718.8 miles | 780.8 miles | 953.5 miles | 981.5 miles |
| 1923 | As you pass under the Baton Rouge R.R. and Hwy 190 Bridge C233.9 AHP), you find that the Kinder Morgan Bulk Terminals are indicated by which numbered box? | 10 | 9 | 8 | 7 |
| 1924 | You are turning for 9 mph , approaching Fort Adams Lt. (mile 311.4 AHP) and it is reported that the current at Knox Landing is estimated at 4.5 MPH . Which of the following statements is TRUE? | Tows and other vessels should navigate as close to the left descending bank as safety will permit. | The inflow channel is a navigable channel for any vessel. | You are making 13.5 mph over the ground. | Old River Control Structure Light and Fort Adams Light may be used as range lights when entering the outflow channel. |
| 1925 | At 0715, on March 9, you pass Knox Landing Gage C313.8 AHP) and estimate the current will average 3.5 mph for the remainder of the time on the Mississippi River. What is your ETA at the mouth of the Ohio River if you increase speed to turn for 10 mph ? | 0640, 11 March | 0554, 12 March | 0943, 13 March | 1242, 13 March |
| 1926 | What is the vertical clearance between the highest point of your towboat, if it is 45 feet above the water, and if the Natchez Gage reads 23.4 feet when passing under the Natchez-Vidalia Westbound Highway Bridge? | 67.5 feet | 57.1 feet | 52.2 feet | 45.2 feet |
| 1927 | In high water conditions, which publication would you consult for the latest information on buoys between Baton Rouge and Cairo? | List of Buoys and Daymarks | Coast Pilot | Army Corps. of Engineers Navigation Chart | U.S.C.G. Local Notice to Mariners |
| 1928 | As you approach Buckridge Light (mile 412.5 AHP), which type of daymark would you see on the light structure? | Red square | Green square | Red diamond | Green diamond |
| 1929 | At 1019, on 10 March, you pass under the Greenville Bridge (mile 531.3 AHP). What was your average speed since departing River Cement Co. Dock? | 7.2 mph | 6.8 mph | 6.5 mph | 6.2 mph |


| 1930 | As you approach mile 659 AHP, you notice on the map a dashed line crossing the river at mile 659.9 AHP. This line indicates $\qquad$ | ferry crossing | submarine crossing | power lines | gas pipelines |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1931 | On which river is New Providence, TN located? | Allegheny | Upper Mississippi | Ohio | Cumberland |
| 1932 | The following questions (1-10) are based on the Army Corps of Engineers Mississippi River Maps (Cairo, ILssouri to the Gulf of Mexico) and the Light List. AHP = Above Head of Passes, LMR = Lower Mississippi River, UMR = Upper Mississippi River, OHR = Ohio River, ACOE = Army Corps of Engineers <br> At 0815, on the 16 of April, you depart the Exxon Refinery Docks(mile 232 AHP) bound for the fleeting area at Sycamore Chute Light(740.3 AHP). |  |  |  |  |
| 1933 | The horizontal clearance of the center span on the Baton Rouge RR and Highway 190 Bridge is $\qquad$ | 443 | 500 | 623 | 748 |
| 1934 | Which light characteristics does Ben Burman Lt. (mile 235.0 AHP) have? | $\begin{aligned} & 1 \text { red flash every } 5 \\ & \text { seconds } \end{aligned}$ | 2 white flashes every 5 seconds | 2 green flashes every 5 seconds | 2 red flashes every 5 seconds |
| 1935 | As you pass Solitude Lt. (mile 249.0 AHP) which dayboard would you see? | Green square | Green diamond | Red triangle | Red diamond |
| 1936 | Which of the following statements regarding buoys on the Mississippi River is TRUE? | Buoys should be given as wide a berth as possible in passing. | Buoy positions on the chart are exact. | The buoys are maintained on station year round. | The buoys do not shift positions due to permanent moorings. |
| 1937 | What is indicated by the two light gray shaded areas that cross the river above False River Lt. (mile 251.0 AHP)? | Ferry crossings | Utility crossings | Aerial cable crossings | Bridge construction |
| 1938 | What are the light characteristics of Greenwood Light (mile 288.6 AHP). | Fixed red light | 1 red flash every 4 seconds | 2 red flashes every 5 seconds | 2 white flashes every 4 seconds |
| 1939 | After passing Wilkinson Lt. (mile 310.0 AHP) you see a flashing amber light on the right descending bank ahead. The flashing light indicates that you should $\qquad$ . | stay in the deepest water | slow down due to dredging operations | keep as close to the right descending bank as safety permits | keep as close to the left descending bank as safety permits |
| 1940 | At which of the following times would you be able to listen to lower Mississippi River conditions on VHF Channel 22? | 0900 hours | 1100 hours | 1300 hours | 1600 hours |
| 1941 | At 0645, on the 17th of April, you pass Hole in the Wall Lt. (mile 373.4 AHP). What has been your average speed since departing the Exxon Refinery? | 5.8 mph | 6.3 mph | 6.7 mph | 7.1 mph |


| 1942 | Your company wants to know at what time you will be arriving at the fleeting area at Sycamore Chute Light (mile 740.3 AHP) in Memphis, TN You are making turns for 9.0 mph and you estimate the average current at 2.2 mph . Figuring the distance and time from Hole in the Wall Lt. (mile 373.4 AHP), what is your ETA at Sycamore Chute Lt.? | 0557, April 19th | 1045, April 19th | 1242, April 19th | 1733, April 19th |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1943 | The following questions (1-10) are based on the Army Corps of Engineers Mississippi River Maps (Cairo, IL,MO, to the Gulf of Mexico) and the Light List. AHP = Above Head of Passes, LMR = Lower Mississippi River, UMR = Upper Mississippi River, OHR = Ohio River, ACOE = Army Corps of Engineers <br> At 1515, on 23 May, you get underway fromt the Amoco Pipeline Co. docks(253.6 AHP), enroute to Pittsburgh, PA, with a tow of six barges carrying asphalt. |  |  |  |  |
| 1944 | What is the distance from the Amoco Docks at Baton Rouge, LA, to Pittsburgh, PA? | 1681 miles | 1575 miles | 981 miles | 727 miles |
| 1945 | You are turning for 10 mph and passing Hog Point, LA. (mile 297.5 AHP). Angola reports that the current at Red River Landing is 4.5 mph . Which statement is TRUE? | The main channel lies on the south side of the island you see ahead. | You are making 14.5 mph over the ground. | An underwater stone dike has been constructed 0.5 miles upstream of Miles Bar Towhead. | You would expect to find the more favorable current near the broken red line in the river. |
| 1946 | Which facility is located on the right descending bank at mile 363.6 AHP? | River Cement Corps.. | Bunge Corps.. | T.L. James | Vidalia Dock and Storage Co. |
| 1947 | At 1118, on 24 May, you pass Natchez Gage and estimate the current will average 3.0 mph for the remainder of the time on the Mississippi River. What is your ETA at Cairo, IL if you continue to turn for 10 mph ? | 0840, 26 May | 2218, 26 May | 2339, 27 May | 0339, 28 May |
| 1948 | If the highest point of your towboat is 54 feet above the water and the Natchez Gage reads 24.8 feet, what will be your vertical clearance when passing under the Natchez-Vidalia westbound Highway Bridge? | 35.9 feet | 47.2 feet | 49.6 feet | 57.5 feet |
| 1949 | In high water conditions, which publication would you consult for the latest information on buoys between Baton Rouge and Cairo? | List of Buoys and Daymarks | U.S.C.G. Light List | Army Corps. of Engineers Navigation Chart | None of the above |
| 1950 | As you approach Ashland Light (mile 378.1 AHP), which type of daymark would you see on the light structure? | Green square | Green triangle | Red diamond | Red triangle |
| 1951 | At 1554, on 25 May, you pass Huntington Point Light (mile 555.2 AHP). What was your average speed since departing Amoco Pipeline Co. Docks (253.6 AHP)? | 6.9 mph | 6.2 mph | 4.8 mph | 4.3 mph |
| 1952 | The solid lines extending into the channel at mile 948 AHP are | dikes | revetments | spoil areas | Meadwestvaco pipeline |
| 1953 | What is the width of the widest span of the Cairo Highway Bridge (Upper Mississippi River mile 1.3)? | 800 feet | 675 feet | 625 feet | 503 feet |


| 1954 | The following questions (1-10) are based on the Army Corps of Engineers Mississippi River Maps (Cairo to the Gulf) and the Light List. AHP = Above Head of Passes, LMR = Lower Mississippi River, UMR = Upper Mississippi River, OHR = Ohio River, ACOE = Army Corps of Engineers At 1707, on 23 May, you get underway from mile 234.2 AHP enroute to Louisville, KY (mile 612.6 OR). |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1955 | What is the length of the trip? | 1088.5 miles | 1332.2 miles | 1334.6 miles | 1566.4 miles |
| 1956 | After you get underway, what is the first river gage you will pass? | Head of Passes | Baton Rouge | Bayou Sara | Red River Landing |
| 1957 | The Red River Landing Gage reads 5.2 feet. The low water reference plane (LWRP) for Red River is 10.6 feet. Which of the following statements is TRUE? | River level is below the Low Water Reference Plane. | The depth over revetment at Old River is 25.2 ft . | The depth over Old River Lock sill is greater than 11 ft . | This gage reading is at a higher elevation than the same reading on the Gage at Head of Passes. |
| 1958 | At 0922, on 24 May, you are abreast the St. Catherine Bar Lt. (mile 348.6 AHP). If you are turning for 8.0 mph , what is the current? | 1.0 mph | 1.4 mph | 2.0 mph | 7.0 mph |
| 1959 | What daymark will you see as you approach Warnicott Bar Lt. (mile 351.3 AHP)? | Red diamond | Red triangle | Green square | White square |
| 1960 | You pass Warnicott Bar Lt. at 1146, 24 May. What is your ETA off the Mhoon Landing Gage if you average 6.5 mph ? | 0152, 26 May | 0426, 26 May | 1528, 26 May | 0909, 27 May |
| 1961 | What town is located at mile 389.8 AHP? | Whitehall | Belmont | St. James | Rodney |
| 1962 | The circle with black and white quadrants located at mile 435.6 AHP is a $\qquad$ . | Daymark | Electrical Tower | River Gage | Information Board |
| 1963 | The Greenville Gage reads 10.6 feet. The high point of your towboat is 54 feet above water. What is the vertical clearance as you pass under the Greenville Highway Bridge? | 44.4 feet | 54.2 feet | 65.4 feet | 75.4 feet |
| 1964 | The locations of locks and dams can be found in the | Army Corps. of Engineers maps | Light List | Local Notice to Mariners | Channel Report |
| 1965 | The following questions (1-10) are based on the Army Corps of Engineers Mississippi River Maps (Cairo, ILssouri to the Gulf of Mexico) and the Light List. AHP = Above Head of Passes, LMR = Lower Mississippi River, UMR = Upper Mississippi River, OHR = Ohio River, ACOE = Army Corps of Engineers <br> On the 10th of May at 1130 , you leave the fleeting area at Gartness Lt. (mile 227.8 AHP ) bound for the Monsanto Terminal in St. Louis (mile 178.0 UMR). Your engines turn for 8.5 mph in still water. |  |  |  |  |
| 1966 | What is the length of the trip? | 405.8 miles | 904.0 miles | 1002.0 miles | 1136.8 miles |
| 1967 | You estimate the current as 2.5 mph . What is the speed over the ground? | 11.0 mph | 8.0 mph | 6.0 mph | 5.5 mph |


| 1968 | As you approach Casting Yard Dock Lt. (mile 265.4 AHP) you notice on the map a circle with 2 black sectors. This symbol indicates a $\qquad$ . | lock | warning sign | river gage | mooring buoy |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1969 | From Baton Rouge to Cairo, what is the maintained minimum channel depth during low water? | 9 feet | 12 feet | 15 feet | 30 feet |
| 1970 | On which map would you find Redman Point, Arkansas? | 23 | 20 | 17 | 5 |
| 1971 | At 1000, on May 11th, you are passing George Prince Lt. (mile 364.1 AHP) in Natchez, Mississippi and must send an ETA to the Monsanto Terminal in St. Louis (mile 178.0 UMR). Your engines are still turning for 8.5 mph and you estimate the current at 2.5 mph . What will be your arrival time in St. Louis? | 1919 on 15 May | 2344 on 15 May | 1113 on 16 May | 1757 on 16 May |
| 1972 | As you approach Ashland Light (mile 378.1 AHP) which daymark would you see? | Red triangle | Red diamond | Green square | Green diamond |
| 1973 | What is your clearance as you pass under the Vicksburg Highway 80 Bridge (mile 437.8 AHP). if the Vicksburg Gage reads 14.8 feet and the highest point on your tow boat is 44.5 feet? | 36 feet | 42 feet | 48 feet | 57 feet |
| 1974 | After entering Milliken Bend (mile 455 AHP) you wish to locate the river service in Madison Parish, Louisiana. The river service is indicated by the square containing which number? | 5 | 4 | 3 | 2 |
| 1975 | At Filter Point Light (mile 475 AHP) there are 3 close straight dashed lines on the map passing through the black dot below the number 475 . What do these lines represent? | Oil pipelines | Submerged gas pipelines | Power Cables | Submerged fiber optic cable |
| 1976 | The following questions (1-10) are based on the Army Corps of Engineers Mississippi River Maps (Cairo, IL to the Gulf of Mexico) and the Light List. AHP = Above Head of Passes, LMR = Lower Mississippi River, UMR = Upper Mississippi River, OHR = Ohio River, ACOE = Army Corps of Engineers <br> At 1914, on 21 June, you depart the Alton Barge Docks at Alton, II (Mile 202.0 UMR), with a mixed tow of 6 loaded covered hopper barges, 2 loaded tank barges, and 2 empty hopper barges. |  |  |  |  |
| 1977 | You have orders to drop off the empties at the fleeting area at Cairo Point and add five loaded tank barges to your tow. If you are turning for 9 mph and estimate the current at 1.5 mph , what is your ETA at Cairo? | 2210, 22 June | 1741, 22 June | 1423, 22 June | 1031, 22 June |
| 1978 | You complete changing out your tow and get underway enroute Ark City Tank Storage (mile 554.0 AHP) to deliver the tank barges. What is the distance you must travel from Cairo Point Light? | 202.1 miles | 400.7 miles | 554.2 miles | 605.8 miles |
| 1979 | As you approach Dean Island Light (mile 754.8 AHP), which type of daymark will be observed at the light? | Green triangle | Green diamond | Green square | Red-and-green banded square |


| 1980 | The highest point on your towboat is 48 feet above the water, and the Memphis Gage reads +7.5 feet. What is the vertical clearance when you pass under the Hernando Desoto Bridge in Memphis? | 53.2 feet | 58.1 feet | 68.2 feet | 96.3 feet |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1981 | What is the mile point of the Fulton Gage? | 598 AHP | 632 AHP | 687 AHP | 778 AHP |
| 1982 | At 2350 on 23 June, you are at mile 610.5 AHP when you see about a mile ahead lights on the water near the left bank. What might you see when you come abreast of these lights? | Privately maintained buoys at a yacht club | Government buoys marking the Hurricane Point dikes | Barges moored at the Dennis Landing Terminal | A pipeline discharging dredge spoil |
| 1983 | Which of the following statements concerning the buoys on the Mississippi River is TRUE? | The position of river buoys can be determined by consulting the latest Light List - Vol. V. | A preferred channel mark is a lateral mark indicating a channel junction which must always be passed to starboard. | Buoys should be passed as close as possible. | Setting a buoy is the act of placing a buoy on assigned position in the water. |
| 1984 | At 1032 on 24 June, you pass Carolina Landing Light(508.8 AHP). What has been the average current since 2350, 23 June, if you have been making turns for 9.0 mph ? | 8.5 mph | 5.7 mph | 1.5 mph | 0.5 mph |
| 1985 | Where can scheduled broadcast times of river stages be found? | Sailing Directions | List of Lights | Light List | Coast Pilot |
| 1986 | Which company does NOT have a marine facility in Rosedale Harbor (mile 585 AHP)? | T.L. James | Rosedale-Boliver County Port Commission | Cives Steel Company | Sanders Elevator Corp |
| 1987 | The following questions (1-10) are based on the Army Corps of Engineers Mississippi River Maps (Cairo to the Gulf) and the Light List. AHP = Above Head of Passes, LMR = Lower Mississippi River, UMR = Upper Mississippi River, OHR = Ohio River, ACOE = Army Corps of Engineers <br> At 1745, on 25 August, you depart Memphis Harbor, McKellar Lake (mile 726.0 AHP - LMR) enroute to Baton Rouge, LA, with a tow of twelve empty gasoline barges. |  |  |  |  |
| 1988 | You have received orders to proceed to the Amoco Pipeline Co. (mile 253.6 AHP) above Baton Rouge. If your vessel is making turns for 9 mph with an estimated average current of 1.5 mph , what is your ETA at the Amoco docks? | 1444, 27 Aug | 2214, 27 Aug | 0844, 28 Aug | 1454, 28 Aug |
| 1989 | The highest point on your towboat is 52 feet above the water, and the Helena Gage reads +9.6 feet. What will be the vertical clearance when you pass under the A-span of the Helena Highway Bridge? | 49.8 feet | 53.9 feet | 57.8 feet | 73.1 feet |


| 1990 | You are in charge of a vessel that damages an aid to navigation established and maintained by the United States. Which statement is TRUE? | You must take the aid in tow and deliver it to the nearest Coast Guard, Marine Safety Office. | You must report the allision to the nearest Army Corps.. of Engineers Office. | You may wait until you reach your destination before reporting the allision to the U.S. Coast Guard. | You must report the accident to the nearest Officer in Charge, Marine Inspection. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1991 | At 2342, on 25 August, you pass under the Helena Highway Bridge (mile 661.7 AHP). What has been the average speed of the current since departing Memphis Harbor, McKellar Lake, if you have been making turns for 9 mph ? | 1.8 mph | 2.1 mph | 4.4 mph | 5.6 mph |
| 1992 | What is the distance in river miles, from the new mouth of the White River to the RR and Hwy bridge at Baton Rouge, LA? | 338 miles | 365 miles | 400 miles | 454 miles |
| 1993 | The Clinch River empties into which river? | Arkansas | Mississippi | Ohio | Tennessee |
| 1994 | As you pass under the Greenville Highway Bridge, you estimate the current as 4.5 mph . What is the speed over the ground, if your vessel is making turns for 9 mph ? | 9.5 mph | 13.5 mph | 14.5 mph | 16.5 mph |
| 1995 | As you approach Vaucluse Bend Light (mile 533.8 AHP), which type of daymark would you see on the light structure? | Red diamond | Red triangle | Green square | Green diamond |
| 1996 | You are downbound when you observe on your Mississippi River map a circle with black and white quadrants on the left bank. This indicates a $\qquad$ . | river gage | daymark | control tower | information board |
| 1997 | What are the dimensions of Old River Lock, on the Lower Mississippi River? | 1202 feet $\times 84$ feet | 1190 feet $\times 75$ feet | 760 feet $\times 75$ feet | 425 feet $\times 75$ feet |
| 1998 | The following questions (1-10) are based on the Army Corps of Engineers Mississippi River Maps (Cairo, IL to the Gulf of Mexico) and the Light List. AHP = Above Head of Passes, LMR = Lower Mississippi River, UMR = Upper Mississippi River, OHR = Ohio River, ACOE = Army Corps of Engineers <br> On 9 September, you depart the Formosa Plastics mooring facility at mile 233.5 AHP with six loaded tank barges enroute to the Alton Barge Terminal, Alton, IL (mile 202.0 UMR). Your engines are making turns for 7.5 mph in still water. |  |  |  |  |
| 1999 | What is the total length of the trip? | 906.3 miles | 922.3 miles | 1155.8 miles | 1187.3 miles |
| 2000 | You estimate the current at 2.0 mph . What is the speed over the ground? | 9.5 mph | 5.5 mph | 5.0 mph | 4.5 mph |
| 2001 | What are the dimensions of the Port Allen Lock at Baton Rouge, LA? | 75 feet $\times 1188$ feet | 84 feet $\times 1180 f$ eet | 84 feet $\times 1188$ feet | 75 feet x 1180 feet |


| 2002 | At 0119, on 10 September, you pass Springfield Bend Lt. (mile 244.8 AHP) and estimate the current will average 2.5 mph for the remainder of your trip. What is your ETA at the mouth of the Ohio River if you are making turns for 8.5 mph ? | 1746, 12 September | 1244, 13 September | 2329, 14 September | 0210, 15 September |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2003 | As you pass under the Natchez-Vidalia Dual Bridge, the gage on the bridge reads 8.9 ft . If the highest point on your vessel is 54 ft . above the water, what is your vertical clearance? | 63.1 feet | 65.3 feet | 67.2 feet | 122.0 feet |
| 2004 | Which type of daymark would you see on the Belle Island Corner Lt. at mile 458.6 AHP? | Green diamond | Green square | Red diamond | Red triangle |
| 2005 | At 1814, on 11 September, you pass under the Greenville Highway Bridge (mile 531.3 AHP). What speed must you average to arrive at Jimmy Hawken Light (mile 663.5 AHP) at 0930 the following day? | 8.7 mph | 7.7 mph | 6.3 mph | 5.6 mph |
| 2006 | Which company does NOT have a marine facility along the river bank in Madison Parish (mile 457.0 AHP)? | Complex Chemical Co. | Delta Southern Railroads | Mid-Delta Helena, LLC | Baxter Wilson |
| 2007 | The Vaucluse Trench fill revetment on the LMR extends from mile $\qquad$ . | 524.3-522.6 RDB | 535.6-532.9 RDB | 535.9-534.3 LDB | 534.3-532.6 LDB |
| 2008 | What is the distance from Baton Rouge, LA, to Hickman, KY, on the Mississippi River System? | 117 miles | 433 miles | 656 miles | 692 miles |
| 2009 | The following questions (1-10) are based on the C of E Mississippi River Maps (Cairo, IL, to the Gulf of Mexico) and the Light List. AHP = Above Head of Passes, LMR = Lower Mississippi River, UMR = Upper Mississippi River, OHR = Ohio River, ACOE = Army Corps of Engineers. <br> You are making up <br> your tow at the fleeting area at Cairo Point, II(mile 980.8 Ohio River). <br> At 0952, on 21 September, you get underway enroute to New Orleans with a mixed tow. |  |  |  |  |
| 2010 | You are turning for 6.8 mph and estimate the current at 1.0 mph . What is your speed over the ground? | 6.8 mph | 7.8 mph | 8.8 mph | 9.4 mph |
| 2011 | How far is it to the Hernando Desoto Bridge in Memphis, TN? | 980.8 miles | 736.6 miles | 312.3 miles | 218.1 miles |
| 2012 | Which daymark should you see as you approach French Point Light (mile 915.4 AHP)? | Green diamond | Green square | Red triangle | Red diamond |
| 2013 | At 1923, on September 21, you pass Bixby Towhead Light (mile 873.7 AHP). What was your average speed since leaving Cairo? | 9.2 mph | 8.8 mph | 8.5 mph | 7.2 mph |
| 2014 | At 1923, you increase speed to make good 9.2 mph . What is the first gage you will pass after your speed change? | Cottonwood Point | Caruthersville | Fulton | New Madrid |
| 2015 | Which light will you be passing at 0059, on 22 September, if you make good 9.2 knots? | Obion Bar Lt. | Kate Aubrey Lt. | Trotter Lt. | Quaker Oats Lt. |


| 2016 | The Helena Gage reads 9.4 feet. The high point on your towboat is 42 feet above water. What is the vertical clearance when you pass under the Helena Highway Bridge? | 53.0 feet | 62.6 feet | 64.2 feet | 68.0 feet |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2017 | What company does NOT have a marine facility along the river bank in Helena (mile 661 to 665 AHP)? | Helena Port Terminal, Inc. | Riceland Food Corps.. | Quincy Soybean Co. | Texas Eastern Pipeline Co. |
| 2018 | The low water reference plane (LWRP) for Bayou Sara is 5.25 feet. If the Bayou Sara Gage reads -0.5 feet, what is the water level in relation to the low water reference plane? | 4.75 feet above the plane | 5.75 feet above the plane | 5.75 feet below the plane | 4.75 feet below the plane |
| 2019 | The Arkansas City Yellow Bend revetment on the LMR extends from mile $\qquad$ . | 555.0-549.7 RDB | 549.0-548.5 RDB | 556.9-554.9 LDB | 548.5-546.5 LDB |
| 2020 | The following questions (1-10) are based on the Army Corps of Engineers Mississippi River Maps (Cairo to the Gulf) and the Light List. AHP = Above Head of Passes, LMR = Lower Mississippi River, UMR = Upper Mississippi River, OHR = Ohio River, ACOE = Army Corps of Engineers <br> On 22 September, you are making up your tow at the Fleeting area in Baton Rouge, LA near Gartness Light (mile 227.8 AHP). You get underway at 0842 enroute to Cairo, IL, with a mixed tow. |  |  |  |  |
| 2021 | Your engine speed is 9.8 mph and you estimate the current at 1.6 mph . What is your speed over the ground? | 11.0 mph | 9.8 mph | 8.6 mph | 8.2 mph |
| 2022 | What is your ETA at the Helena Highway Bridge? | 1335, 24 Sept | 1109, 24 Sept | 0926, 24 Sept | 0458, 24 Sept |
| 2023 | Which daymark would you see as you approach Red Store Light (mile 269.5 AHP)? | Green square | Green triangle | Green diamond | Red square |
| 2024 | You pass Ratcliff Light (mile 289.8) at 1650. What was your average speed since leaving Baton Rouge? | 7.3 mph | 7.6 mph | 8.0 mph | 8.3 mph |
| 2025 | At 1650 you decrease speed to make good 7.1 mph . At 2020 you are $\qquad$ | abeam of Old River Control Structure Light | entering the Vicksburg District of the U.S. Army Corps. of Engineers | at Palmetto Point | at Latitude $31^{\circ} 10^{\prime} \mathrm{N}$ |
| 2026 | The charts show two dashed lines crossing the river just south of St. Catherine Bar Light. What does this indicate? | Overhead power lines | Louisiana-Mississippi ferry crossings | Two railroad trestles | Two submerged oil pipelines |
| 2027 | The Natchez Gage reads 16.3 feet. The high point on your towboat is 38 feet above water. What is the vertical clearance when you pass under the Natchez Highway Bridge? | 79.0 feet | 71.7 feet | 65.2 feet | 59.1 feet |
| 2028 | What organization has an installation at the uppermost end of Carthage Revetment? | U.S. Coast Guard | River Cement Co. | U.S. Army Corps. of Engineers | International Paper Co. |
| 2029 | The low water reference plane for Greenville Highway Bridge is 11.3 feet. If the Gage at the Greenville Highway Bridge reads 22.0 feet, what is the water level in relation to the low water reference plane (LWRP)? | 22.1 feet below the LWRP | 10.7 feet below the LWRP | 10.7 feet above the LWRP | 0.5 feet below the LWRP |


| 2030 | Controlling depth of a channel ___ | is the least depth within the limits of the channel | is the greatest depth within the limits of the channel | permits the safe use of the channel to drafts of more than that depth | is the designed dredging depth of a channel constructed by the U.S. Army Corps. of Engineers |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2031 | The following questions (1-10) are based on the Army Corps of Engineers Mississippi River Maps (Cairo to the Gulf) and the Light List. AHP = Above Head of Passes, LMR = Lower Mississippi River, UMR = Upper Mississippi River, OHR = Ohio River, ACOE = Army Corps of Engineers <br> On 16 October, you depart the Formosa Plastics mooring facility at mile 233.5 AHP with six loaded tank barges enroute to the Agrico Chemical dock, Herculaneum, MO (mile 153.4 UMR). Your engines are making turns for 6.5 mph in still water. |  |  |  |  |
| 2032 | What is the total length of the trip? | 910.6 miles | 901.4 miles | 900.7 miles | 873.7 miles |
| 2033 | You estimate the current at 3.0 mph . What is the speed over the ground? | 3.5 mph | 4.5 mph | 7.5 mph | 9.5 mph |
| 2034 | What are the dimensions of the channel maintained from Baton Rouge to New Orleans, LA? | 30 feet $\times 300$ feet | 40 feet $\times 300$ feet | 30 feet $\times 500$ feet | 45 feet $\times 500$ feet |
| 2035 | You pass Springfield Bend Lt. (mile 244.8 AHP) at 1242, on 17 October, and estimate the current will average 2.5 mph for the remainder of your trip. What is your ETA at the mouth of the Ohio River if you are making turns for 10.5 mph ? | 1905, 19 October | 2122, 19 October | 0519, 21 October | 0847, 21 October |
| 2036 | As you pass under the Natchez-Vidalia Dual Bridge, the gage on the bridge reads -3.6 feet. If the highest point on your vessel is 62 ft . above the water, what is your vertical clearance? | 60.0 feet | 63.6 feet | 67.6 feet | 122.0 feet |
| 2037 | What are the color and shape of Togo Island daymark at mile 415.0 AHP? | Green - Square | Green - Diamond | Red - Triangle | Red - Square |
| 2038 | At 1227, on 19 October, you pass under the Greenville Highway Bridge (mile 531.3 AHP). What speed must you average to arrive at Jimmy Hawken Light (mile 663.5 AHP) at 0930 the following day? | 5.2 mph | 5.6 mph | 5.9 mph | 6.3 mph |
| 2039 | Which of the following statements regarding aids to navigation shown in the Corps. of Engineers map book is TRUE? | The U.S. Army Corps.. of Engineers is responsible for placing and maintaining all aids to navigation. | Buoys should always be given as wide a berth in passing as possible. | Buoy positions as shown on the chart are exact. | Lights and daymarks are always shown in their exact location. |
| 2040 | The Delta-Friar Point revetment on the LMR extends from mile | 657.3-652.2 LDB | 652.8-649.6 RDB | 648.5-645.5 LDB | 645.6-641.4 RDB |
| 2041 | What is the distance from Baton Rouge, LA, to St. Louis, MO, on the Mississippi River System? | 1038 miles | 916 miles | 690 miles | 352 miles |


| 2042 | The following questions (1-10) are based on the Army Corps of Engineers Mississippi River Maps (Cairo, IL,MO, to the Gulf of Mexico) and the Light List. AHP = Above Head of Passes, LMR = Lower Mississippi River, UMR = Upper Mississippi River, OHR = Ohio River, ACOE = Army Corps of Engineers <br> At 2345, on 25 December, you depart Vulcan Chemicals, Memphis Harbor, McKellar Lake (mile 726.0 AHP - LMR) enroute to the Petroleum Fuel \& Terminal Co. (144.6 AHP) in Angelina, LA, with a tow of eight full gasoline barges. |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2043 | If your vessel is making turns for 7.5 mph with an estimated average current of 1.5 mph , what is your ETA at the dock in Angelina, LA? | 0516, 28 Dec | 1621, 28 Dec | 0516, 29 Dec | 1621, 29 Dec |
| 2044 | The highest point on your towboat is 67 feet above the water, and the Helena Gage reads +22.3 feet. What is the vertical clearance when you pass under the A-span of the Helena Highway Bridge? | 30.1 feet | 49.8 feet | 52.4 feet | 74.7 feet |
| 2045 | Which of the following statements are TRUE? | Oil well structures are listed in the Light List. | All aids to navigation with lights have lateral significance. | On the Western Rivers, crossing marks may exhibit white lights. | All of the above. |
| 2046 | At 0509, on 26 December, you pass under the Helena Highway Bridge (mile 661.7 AHP). What has been the average speed of the current since departing Memphis Harbor, McKellar Lake, if you have been making turns for 7.5 mph ? | 1.8 mph | 2.1 mph | 4.4 mph | 5.6 mph |
| 2047 | What is the distance in river miles, from the new mouth of the White River to the Petroleum Fuel \& Terminal Co.(144.6 AHP)? | 370 miles | 384 miles | 437 miles | 454 miles |
| 2048 | The Platte River empties into which river? | Mississippi | Missouri | Ohio | Tennessee |
| 2049 | You are downbound, passing by Warfield Point Lt. (mile 537 AHP), when you observe on your Mississippi River map several black lines extending into the river from the bank. These indicate $\qquad$ . | revetments | weirs | fleeting areas | dikes |
| 2050 | As you pass under the Vicksburg Bridges, you estimate the current as 3.0 mph . What is the speed over the ground, if your vessel is making turns for 10.5 mph ? | 7.5 mph | 10.5 mph | 13.5 mph | 16.5 mph |
| 2051 | As you approach Buckridge Light (mile 412.5 AHP), which type of daymark would you see on the light structure? | Red diamond | Red triangle | Green diamond | Green square |
| 2052 | As you approach mile 225 AHP, you notice on the map a black broken line crossing the river at mile 224.2 AHP. This line indicates $\qquad$ | ferry crossing | submarine crossing | gas pipelines | power lines |


| 2053 | The following questions (1-10) are based on the Army Corps of Engineers Mississippi River Maps (Cairo, IL,MO, to the Gulf of Mexico) and the Light List. AHP = Above Head of Passes, LMR = Lower Mississippi River, UMR = Upper Mississippi River, OHR = Ohio River, ACOE = Army Corps of Engineers <br> At 2345, on 25 December, you depart Vulcan Chemicals, Memphis Harbor, McKellar Lake (mile 726.0 AHP - LMR) enroute to the Petroleum Fuel \& Terminal Co. (144.6 AHP) in Angelina, LA, with a tow of eight full gasoline barges. |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2054 | If your vessel is making turns for 7.5 mph with an estimated average current of 1.5 mph , what is your ETA at the dock in Angelina, LA? | 1621, 28 Dec | 2203, 28 Dec | 0516, 29 Dec | 1621, 29 Dec |
| 2055 | The highest point on your towboat is 67 feet above the water, and the Helena Gage reads +22.3 feet. What is the vertical clearance when you pass under the A-span of the Helena Highway Bridge? | 74.7 feet | 52.4 feet | 49.8 feet | 30.1 feet |
| 2056 | Which of the following statements are TRUE? | Oil well structures are listed in the Light List. | All aids to navigation with lights have lateral significance. | On the Western Rivers, crossing marks may exhibit white lights. | None of the above. |
| 2057 | At 0509, on 26 December, you pass under the Helena Highway Bridge (mile 661.7 AHP). What has been the average speed of the current since departing Memphis Harbor, McKellar Lake, if you have been making turns for 7.5 mph ? | 5.6 mph | 4.4 mph | 2.1 mph | 1.8 mph |
| 2058 | What is the distance in river miles, from the new mouth of the White River to the Petroleum Fuel \& Terminal Co. (mile 144.6 AHP)? | 454 miles | 427 miles | 384 miles | 370 miles |
| 2059 | The Platte River empties into which river? | Mississippi | Ohio | Missouri | Tennessee |
| 2060 | You are downbound, passing by Spanish Moss Lt. (mile 534.2 AHP), when you observe on your Mississippi River map several black broken lines extending into the river from the bank. These indicate $\qquad$ . | fleeting areas | revetments | dikes | weirs |
| 2061 | As you pass under the Vicksburg Bridges, you estimate the current as 3.0 mph . What is the speed over the ground, if your vessel is making turns for 10.5 mph ? | 16.5 mph | 13.5 mph | 10.5 mph | 7.5 mph |
| 2062 | As you approach Buckridge Light (mile 412.5 AHP), which type of daymark would you see on the light structure? | Red diamond | Red triangle | Green diamond | Green square |
| 2063 | As you approach mile 225 AHP, you notice on the map a brown broken-lined rectangular shaped area along the bank. This indicates . $\qquad$ | weirs | a revetment | a fleeting area | utility crossing |


| 2064 | The following questions (1-10) are based on the Army Corps of Engineers Mississippi River Maps (Cairo, IL to the Gulf of Mexico) and the Light List. AHP = Above Head of Passes, LMR = Lower Mississippi River, UMR = Upper Mississippi River, OHR = Ohio River, ACOE = Army Corps of Engineers <br> At 1914, on 21 June, you depart the Alton Barge Docks at Alton, II (Mile 202.0 UMR), with a mixed tow of 6 loaded covered hopper barges, 2 loaded tank barges, and 2 empty hopper barges. |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2065 | You have orders to drop off the empties at the fleeting area at Cairo Point and add five loaded tank barges to your tow. If you are turning for 9 mph and estimate the current at 1.5 mph , what is your ETA at Cairo? | 1031, 22 June | 1423, 22 June | 1741, 22 June | 2210, 22 June |
| 2066 | You complete changing out your tow and get underway enroute Ark City Tank Storage (mile 554.0 AHP) to deliver the tank barges. What is the distance you must travel from Cairo Point Light? | 606.8 miles | 554.0 miles | 399.8 miles | 202.1 miles |
| 2067 | As you approach Dean Island Light (mile 754.8 AHP), which type of daymark will be observed at the light? | Green triangle | Red and green banded square | Green square daymark | $\begin{aligned} & \text { Diamond-shaped } \\ & \text { green daymark } \end{aligned}$ |
| 2068 | The highest point on your towboat is 48 feet above the water, and the Memphis Gage reads +7.5 feet. What is the vertical clearance when you pass under the Hernando Desoto Bridge in Memphis? | 48.0 feet | 53.2 feet | 68.2 feet | 116.0 feet |
| 2069 | What is the mile point of the Fulton Gage? | 778 AHP | 687 AHP | 632 AHP | 598 AHP |
| 2070 | At 2350 on 23 June, you are at mile 610.5 AHP when you see about a mile ahead lights on the water near the left bank. What might you see when you come abreast of these lights? | Privately maintained buoys at a yacht club | Government buoys marking the Hurricane Point dikes | Barges moored at the Dennis Landing Terminal | A pipeline discharging dredge spoil |
| 2071 | Which of the following statements concerning the buoys on the Mississippi River is TRUE? | The position of river buoys can be determined by consulting the latest Light List - Vol. V. | A preferred channel mark is a lateral mark indicating a channel junction which must always be passed to starboard. | Setting a buoy is the act of placing a buoy on assigned position in the water. | None of the above. |
| 2072 | At 1032 on 24 June, you pass Carolina Landing Light (mile 508.8 AHP). What has been the average current since 2350, 23 June, if you have been making turns for 9.0 mph ? | 0.5 mph | 1.5 mph | 5.7 mph | 8.5 mph |
| 2073 | Where can scheduled broadcast times of river stages be found? | Sailing Directions | Light List | List of Lights | Coast Pilot |
| 2074 | Which company does NOT have a marine facility in Rosedale harbor (mile 585 AHP)? | Sanders Elevator Corp | Rosedale-Boliver County Port Commission | T.L. James | Cives Steel Company |

