ASSIGNMENT 2

Textbook Assignment: "Introduction to Navigation (continued)," and "Compasses", chapters 1 and 2, pages 1-31 through 2-23.

2-1. NAVTEX is scheduled to replace the Hydros and Navarea warnings.

1. True
2. False

2-2. The Summary of Corrections is composed of a total of how many volumes?

1. Five
2. Six
3. Seven
4. Eight

2-3 What Volume of the Summary of Corrections is classified?

1. V
2. VI
3. VII
4. VIII

2-4 How often is Volume VI of the Summary of Corrections published?

1. Monthly
2. Quarterly
3. Semiannually
4. Annually

2-5 What volume in the Summary of Corrections covers the west coast of North and South America and Antarctica?

1. I
2. II
3. III
4. IV

2-6 When your ship receives a new edition of a chart, what should be done to the old chart?

1. Destroyed
2. Corrected
3. Saved
4. Returned to the DMA

2-7. When your ship receives a new edition of an existing chart, what should be done to the chart correction card?

1. Cross out all corrections on the card that do not apply
2. Initial all corrections on the card that do not apply
3. Change the edition date and number on the card
4. Make a new chart correction card

2-8. Of the following instruments, which ones should you use to correct a chart?

1. High quality colored pencils, pencil type erasers, and an erasing shield
2. Ball point pens and an erasing shield
3. Colored pencils, pencil type erasers, and correction fluid
4. High quality ball point pens, pencil type erasers, and correction fluid

2-9. When chart corrections are made, what color of ink should NOT be used?

1. Red
2. Magenta
3. Purple
4. Yellow

2-10. When you make corrections to a chart-that has numerous corrections, in what manner should the corrections be made?

1. Make the latest correction first and work backward
2. Make the earliest correction first and work forward
3. Make all temporary corrections first
4. Make all temporary corrections last

2-11 Chartlet corrections appear in what section of the Notice to Mariners?

1. I
2. II
3. III
4. IV

2-12 What command issues all maps, charts, and publications?

1. CINCLANTFLT
2. CINCPACFLT
3. DMAODS
4. DDCP

2-13 The DMA offices and branch offices stock limited quantities of products to meet immediate operational needs.

1. True
2. False

2-14. What document or instruction contains your ship's nautical chart and publication allowance?

1. Instructions of the fleet commander
2. DMA monthly bulletin
3. DMA quarterly bulletin
4. DMA annual bulletin

2-15. Your ship's permanent chart allowance needs to be supplemented by another allowance to cover a specific area of deployment. How many months prior to deployment should this deployment allowance be requested?

1. 1
2. 2
3. 3
4. 6

2-16. What method is used to keep your ship's allowances of charts and publications current with no action required on your part?

1. Routine circulation
2. Routine distribution
3. Automatic distribution control
4. Automatic initial distribution

2-17. In what order should charts be stowed aboard ship?

1. Numerically by region
2. Alphabetically by subregion
3. Numerically by portfolio
4. Alphabetically by chart type

2-18 The gyrocompass is the compass that is used most aboard ship.

1. True
2. False

2-19 Which of the following are characteristics of a magnet?

1. A metallic element that attracts iron
2. A metallic element that produces a magnetic field around itself
3. The magnetic field is pictured as lines of force
4. Each of the above

2-20. What are the two types of magnetism?

1. Permanent and reduced
2. Permanent and induced
3. Inducted and magnetic
4. Magnetic and permanent

2-21. According to the laws of magnetic attraction and repulsion, how will the south pole of one magnet react to another magnet?

1. It will be repelled only by the north pole of the second magnet
2. It will be attracted only to the north pole of the second magnet
3. It will be repelled by either the north pole or south pole of the second magnet
4. It will be attracted by either the north pole or south pole of the second magnet

2-22. What causes the magnetic compass error called variation?

1. The Earth is not a perfect sphere
2. Metals in ships have magnetic qualities
3. Compasses cannot be constructed without mechanical defects
4. Positions of the Earth's magnetic and geographic poles do not coincide

2-23. What part of a chart shows the magnetic variation for a specific area?

1. Legend
2. Chart data
3. Compass rose
4. Publication note

2-24. If the variation was 2°W in 1984, and the annual increase was 3°, what was the variation in a certain area in 1994?

1. 1°30'W
2. 1°48'W
3. 2°12'w
4. 2°30'W

2-25. Of the following vessels, which ones do NOT require a magnetic steering compass at the primary steering station?

1. Submarines
2. Hover craft
3. Tug boats
4. Landing craft

2-26. If a ship has two magnetic compasses, what is the primary compass called?

1. Reference compass
2. Standard compass
3. Steering compass
4. Support compass

2-27. If a ship has two magnetic compasses, what is the second compass called?

1. Back-up compass
2. Standard compass
3. Checking compass
4. Auxiliary compass

2-28. The notation "PSC" after courses and bearings indicates the readings were obtained using which of the following compasses?

1. Steering
2. Standard
3. Selsyn
4. Synchronized

2-29. Which of the following precautions must be observed in the vicinity of a magnetic compass?

1. A compass should not be placed near iron or steel equipment that will be frequently moved
2. The immediate vicinity should be kept free of sources of magnetism, particularly those of a changing nature
3. No source of magnetism should be permitted within a radius of several feet
4. All of the above

IN ANSWERING QUESTIONS 2-30 THROUGH 2-33, SELECT FROM COLUMN B THE DEFINITION THAT MATCHES THE COMPASS BINNACLE COMPONENT IN COLUMN A. RESPONSES ARE USED ONLY ONCE.

	A. COMPONENT	B. DEFINITION
2-30.	Card	1. Serves to house the compass
2-31.	Magnets	2. Several bars are used to correct and align the compass
2-32.	Gimbals	3. Has a jeweled bearing that rides on a pivot point
2-33.	Binnacle	4. Permits the compass to remain level

2-34. What are the two influences that must be taken into account when compass error is determined?

1. Variation and deviation
2. Gyro error and variation
3. Annual change and variation
4. Gyro error and deviation

2-35. The amount a compass is deflected from the magnetic meridian because of the effects of the ship's iron defines which of the following terms?

1. Deviation
2. Degradation
3. Declination
4. Depreciation

2-36. The amount of deviation varies as the ship changes course.

1. True
2. False

2-37. What is the process of correcting for deviation called?

1. Adjusting the compass
2. Swinging ship
3. Swinging the compass
4. Compensating the compass

2-38. Refer to figure 2-8 in the text. The magnetic compass deviation table shows the "ships head magnetic" in increments of how many degrees?

1. 5°
2. 10°
3. 15°
4. 20°

2-39. What does the bottom of the magnetic compass table indicate?

1. The date and ship's position
2. Magnet placements only
3. Flinders bar placements only
4. Magnet and flinders bar placements

2-40. Refer to figure 2-8 in your text. If the magnetic course is 150° (DG OFF), what is the approximate compass course?

1. 146°
2. 147°
3. 148°
4. 152°

2-41. Refer to figure 2-8 in your text. If the magnetic course is 030° (DG ON), what is the approximate compass course?

1. 028°
2. 029°
3. 030°
4. 031°

2-42. What is the compass deviation for a magnetic course of 195° (DG ON)?

1. 0.0°
2. .5°W
3. .5°E
4. 1.5°E

2-43. The bearing of a range is 081° magnetic, and your ship's magnetic compass reads 079.5°. What is the compass deviation?

1. 1.5°E
2. 1.5°W
3. 2.0°E
4. 2.0°W

2-44. Your ship is in the northern hemisphere. What is the rule for applying deviation to the magnetic compass course to achieve compass course?

1. Add east deviation, and add west deviation
2. Add east deviation, and subtract west deviation
3. Add west deviation, and add east deviation
4. Subtract west deviation, and subtract east deviation

2-45. What is the purpose of degaussing?

1. To detect magnetic compass error
2. To counteract a ship's magnetic field
3. To correct magnetic compass error
4. To fix the location of the ship

IN ANSWERING QUESTIONS 2-46 THROUGH 2-49, SELECT FROM COLUMN B THE DEGAUSSING COMPONENT THAT MATCHES THE DEFINITION IN COLUMN A. RESPONSES ARE USED ONLY ONCE.

A. DEFINITION	B. COMPONENT
2-46. Produces a magnetic field that will counteract the ship's longitudinal permanent and induced magnetism	1. F coil
2-47. Produces a magnetic field that will counteract the ship's athwartship permanent and induced magnetism	2. L coil
2-48. Produces a magnetic field that will counteract the ship's vertical permanent and induced magnetism	3. M coil
2-49. Made up of loops in vertical planes, produces a magnetic field that will counteract the ship's longitudinal permanent and induced magnetism	4. A coil

2-50 Which of the following is NOT a proper name for a heading?

1. True
2. Magnetic
3. Relative
4. Compass

2-51 Which of the following terms defines converting a compass course to a true course?

1. Correcting
2. Uncorrecting
3. Compensating
4. Adjusting

2-52 Which of the following factors must be applied to a true heading to obtain a magnetic heading?

1. Variation and deviation
2. Gyro error and variation
3. Gyro error and deviation
4. Compass error and deviation

2-53. Which of the following methods should you use to convert compass courses to true courses?

1. Add deviations and variations, regardless of their direction, to the compass course
2. Subtract deviations and variations, regardless of their direction, to the compass course
3. Add easterly deviation and variation to the compass course and subtract westerly variation and deviation from the compass course
4. Subtract easterly deviation and variation from the compass course and add westerly deviation and variation to the compass course

2-54. If the magnetic heading is 255° and the variation is 5°W, what is the approximate true course?

1. 250°
2. 251°
3. 259°
4. 260°

2-55. If the compass course is 170°, the variation is 15°E, and the deviation is 5°W, what is the true course?

1. 150°
2. 160°
3. 180°
4. 190°

2-56. If the variation is 5°W and the deviation is 10°E, what compass course must be steered to make good a course of 090°T?

1. 075°
2. 085°
3. 095°
4. 105°

2-57. If the compass course is 270°, the variation is 10°E, and the deviation is 5°E, what is the magnetic course of the ship?

1. 255°
2. 265°
3. 275°
4. 290°

2-50. A ship is steering a compass course of 180° making good a true course of 176°. If the deviation is 2°E, what is the variation?

1. 2°E
2. 6°E
3. 2°W
4. 6°W

IN ANSWERING QUESTIONS 2-59 THROUGH 2-62 REFER TO FIGURE 2-8 IN THE TEXT, MAGNETIC COMPASS DEVIATION TABLE.

2-59. If the true course is 195° and the variation is 5°W (DG OFF), what is the approximate compass course?

1. 199.5°
2. 200.5°
3. 204.5°
4. 205.5°

2-60 When variation is 10°W (DG OFF) what is the deviation for a true heading of 275°?

1. 0.0
2. .2W
3. .5W
4. 1.0W

2-61, When variation is 5°E (DG OFF), what is the compass course for a true course of 135°?

1. 127.5°
2. 132.5°
3. 137.5°
4. 142.5°

2-62. What is the true heading if the magnetic heading is 240° with a variation 7°E (DG ON)?

1. 231°
2. 235°
3. 245°
4. 247°

2-63. When a ship is under way, the ship's compasses should be compared at least how often?

1. Once a watch
2. Every 4 hours
3. Every course change only
4. Every 1/2 hour and at each course change

2-64. At least how often must the magnetic compass be adjusted?

1. Every time the ship gets under way
2. Once a year
3. Once a quarter
4. Only when the ship leaves the shipyard

2-65. What publication number must be used when performing actual compass adjustments?

1. 226
2. 229
3. 249
4. 251

2-66. The master gyrocompass should be energized a minimum of how many hours before being used?

1. 1
2. 2
3. 3
4. 4

2-67. When a ship is under way, the gyrocompass must be checked for error a minimum of how many times each day?

1. Once
2. Twice
3. Three times
4. Four times

2-68. In what area(s) aboard ship are gyro repeaters normally found?

1. The pilothouse and bridgewings
2. Aftersteering
3. Secondary conn
4. At all ship's control stations

2-69. The magnetic compass requires electricity to operate.

1. True
2. False

2-70. Which of the following methods should NOT be used to check the accuracy of a gyrocompass?

1. Terrestrial range
2. Azimuth of the Moon
3. Azimuth of the Sun
4. Amplitude of the Sun