ASSIGNMENT 2

Textbook Assignment: "The Nautical Road," chapter 4, "Basics of Time," chapter 5, and "Introduction to Celestial Navigation," chapter 6, pages 4-1 through 6-14.

2-1. Which of the following lights has a regularly repeated flash not to exceed 30 flashes per minute?

1. Single flashing
2. Interrupted quick flashing
3. Quick flashing
4. Continuous quick flashing

IN ANSWERING QUESTIONS 2-2 THROUGH 2-4, SELECT FROM COLUMN B THE DESCRIPTION THAT MATCHES THE ABBREVIATION IN COLUMN A. NOT ALL RESPONSES WILL BE USED.

A. ABBREVIATIONS	B. DESCRIPTIONS
2-2. Oc	1. Group occulting
2-3. Oc(2)	2. Composite occulting
2-4. Oc(2+1)	3. Single occulting
	4. Continuous occulting

2-5. What color is an odd-numbered daymarker?

1. Yellow only
2. Red only
3. Green
4. Yellow and red

2-6. What shape is an even-numbered daymarker?

1. Round
2. Square
3. Octagonal
4. Triangle

2-7. What color is a spherical buoy?

1. White only
2. Red only
3. Yellow
4. White and red

2-8. When transiting the western rivers of the Intracoastal Waterway, what is indicated by the number on a navigation aid?

1. Buoy number
2. Daymarker number
3. Mileage from a fixed point
4. Mileage since entering the river

2-9. How many rules comprise the main buoy of the rules of the road?

1. 33
2. 38
3. 47
4. 52

2-10. When two ships are experiencing constant bearing decreasing range, what action must be taken?

1. The burdened vessel must turn to port
2. The burdened vessel must turn to starboard
3. Both vessel's must turn to port
4. Both vessel's must turn to starboard

2-11. When does a crossing situation occur?

1. When one ship approaches another from 0° to 90° relative
2. When one ship approaches another from 0° to 112 1/2° relative
3. When one ship approaches another from 0° to 135° relative
4. Any time two ships meet from any direction except dead astern

2-12. How is the term "length and breadth" defined?

1. A vessel's overall length and smallest beam
2. A vessel's overall length and draft
3. A vessel's overall length and greatest beam
4. A vessel's overall length and least draft

2-13. Which publication will indicate the harbor's demarcation lines?

1. 72 COLREGS
2. M 16672-2B
3. ATP 1 VOL
4. CG-69

2-14. When observing the International Rules, what is indicated by two short blasts?

1. I intend to alter course to port
2. I intend to alter course to starboard
3. I am altering course to port
4. I am altering course to starboard

2-15. A vessel agreeing to be overtaken should sound what whistle signal?

1. One prolonged and one short blast
2. One short and one prolonged blast
3. Two prolonged and two short blasts
4. One prolonged, one short, one prolonged, and one short blast

2-16. The International Rules do not specify a distance for sounding signals.

1. True
2. False

2-17. Which of the following is NOT a recognized distress signal?

1. Code November Charlie
2. Parachuted red flare
3. Square flag and ball
4. The national ensign flown upside down

2-18. To which Sun is apparent solar time measured?

1. True
2. Real
3. Fictional
4. Absolute

2-19. To which Sun is mean solar time measured?

1. Absolute
2. Real
3. Tabulated
4. Fictional

2-20. What type of time is kept by the ship's chronometers and clocks?

1. Mean solar
2. Apparent solar
3. Greenwich mean
4. Local mean

2-21. What type of clock keeps the most precise time yet developed?

1. Oscillator
2. Quartz
3. Atomic
4. Cesium

IN ANSWERING QUESTIONS 2-22 AND 2-23, REFER TO FIGURE 5-3 IN YOUR TEXT AS A REFERENCE POINT.

2-22. What time zone would you find 111°30´W?

1. K
2. T
3. U
4. W

2-23. What time zone would you find 147°30'E?

1. J
2. K
3. V
4. W

IN ANSWERING QUESTIONS 2-24 THROUGH 2-27, SELECT FROM COLUMN B THE TIME ZONE DESIGNATION THAT MATCHES THE TIME ZONE LETTER IN COLUMN A. RESPONSES WILL ONLY BE USED ONCE.

A. LETTER	B. DESIGNATION
2-24. M	1. +12
2-25. T	2. -12
2-26. W	3. +10
2-27. Y	4. +7

2-28. What is the arc equivalent to 1 second of time?

1. 1'
2. 4"
3. 15'
4. 15"

2-29. What is the time equivalent to 1' of arc?

1. 1 sec
2. 1 min
3. 4 sec
4. 15 sec

2-30. What is the arc equivalent of 16H 13M 53S?

1. 240° 27' 15"
2. 240° 43' 30"
3. 242° 15' 12"
4. 242° 27' 15"

2-31. What is the time equivalent of 1° 11' ll"?

1. Oh 4m 44s
2. Oh 4m 45s
3. Oh 15m 44s
4. Oh 15m 45s

2-32. When crossing the International Date Line, which time rule is correct?

1. Retard 1 day traveling east
2. Retard 1 day traveling west
3. Advance 12 hours traveling east
4. Advance 12 hours traveling west

2-33. The cesium chronometer is the main source for keeping shipboard time.

1. True
2. False

2-34. When are step adjustments applied to time signals?

1. December 31st only
2. June 30th only
3. September 7th
4. December 31st and June 30th

2-35. What is the maximum error obtained when DUT is applied to GMT?

1. 0.1 sec
2. 0.25 sec
3. 0.50 sec
4. 1.00 sec

2-36. When figuring time, which formula is correct?

1. DUT = GMT + UTC
2. UTC = GMT + DUT
3. GMT = UTC + DUT
4. GMT = UTC - DUT

2-37. During the last 5 minutes of an hourly time tick, which second is NOT transmitted during the 57th minute?

1. 51st
2. 52nd
3. 55th
4. 57th

2-38. During the last 5 minutes of an hourly time tick, the 29th second of each minute is NOT transmitted.

1. True
2. False

2-39. Which of the following is not a time tick?

1. CHU (Ottawa, Can.)
2. NWV (Ft. Collins, Col.)
3. WWVT (Memphis, Tenn.)
4. WWVH (Honolulu, Ha.)

2-40. How many megahertz are used to transmit time ticks?

1. 2.5
2. 12.0
3. 14.0
4. 21.0

2-41. On 01 February 94, your chronometer read -1 min 14 sec, and on 28 February 94, your chronometer read -0 min 43 sec. What was the ADR?

1. -1.1
2. +l.l
3. +1.4
4. -1.5

2-42. Which timepiece(s) is/are used to time celestial observations?

1. Stopwatch only
2. Comparing watch only
3. Stopwatch or comparing watch
4. An accurate wrist watch

2-43. How is the celestial equator also referred?

1. The equinox
2. The celestial meridian
3. The celestial parallel
4. The equinoctial

IN ANSWERING QUESTIONS 2-44 THROUGH 2-47, SELECT FROM COLUMN B THE DESCRIPTION THAT MATCHES THE TERM IN COLUMN A. RESPONSES WILL ONLY BE USED ONCE.

A. TERMS	B. DESCRIPTIONS
2-44. Celestial equator	1. Great circles that encircle the celestial sphere, as do meridians to longitude
2-45. Declination	2. Latitude
2-46. First point of Aries	3. Reference point for measuring declination
2-47. Hour circles	4. Reference point for measuring angles of stars and planets

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IN ANSWERING QUESTIONS 2-48 THROUGH 2-50, SELECT FROM COLUMN B THE DESCRIPTION THAT MATCHES THE TERM IN COLUMN A. NOT ALL RESPONSES ARE USED.

A. TERMS	B. DESCRIPTIONS
2-48. GHA	1. The angular measurement of a celestial body measured eastward from Greenwich
2-49. LHA	2. The angular measurement of a celestial body measured westward from Greenwich
2-50. SHA	3. Hour angle of a star
	4. The observed meridian of the celestial body

2-51. With reference to the Celestial Coordinate System, which of the following facts is true?

1. The first point of Aries is the starting point for all celestial observations
2. Source celestial bodies are motionless
3. LHA associates all hour circles of a celestial body with the Greenwich meridian
4. LHA of Aries will align with the Greenwich meridian

2-52. Which of the following planets is NOT used in navigation?

1. Neptune
2. Jupiter
3. Venus
4. Saturn

2-53. How many navigational stars are listed in the Nautical Almanac?

1. 51
2. 57
3. 63
4. 69

2-54. When figuring morning or evening star time, which formula is correct?

1. Add 30 minutes to sunset
2. Add 45 minutes to sunset
3. Subtract 45 minutes from sunset
4. Subtract 30 minutes from sunset

2-55. What information must be known to enter H.O. 249?

1. Declination and LHA
2. Declination and GHA
3. Latitude and LHA
4. Latitude and GHA

2-56. The Rude Starfinder uses how many transparent templates?

1. 8
2. 10
3. 12
4. 15

2-57. What is the altitude wave range of a Rude Starfinder template?

1. 5 to 70
2. 5 to 80
3. 10 to 65
4. 10 to 80

2-58. The only advantage of the Rude Starfinder is to select several stars for observation.

1. True
2. False

2-59. What data must be known to use the Rude Starfinder?

1. Latitude only
2. LHA only
3. Latitude and declination
4. Latitude and LHA