

Safe Waters Independent Study Week 1

Assignment:

- Read Chapters in the study guide on Nautical Charts, Magnetic Compass, Aids to Navigation.
- Read handout on Ships Construction and Terminology
- Answer the following Questions
- Complete the Compass problems

1. A mooring buoy, if lighted, shows which color light?
 - a. yellow
 - b. white
 - c. blue
 - d. any color except red or green

2. The light rhythm of Morse (A) is shown on _____
 - a. preferred channel buoys
 - b. starboard or port-side markers
 - c. special marks
 - d. safe water buoys

3. Variation information can be found on the on the chart in the _____
 - a. center of the compass rose(s)
 - b. indicated by isogonic lines
 - c. found in notes on the chart
 - d. all of the above

4. The lubber's line on a magnetic compass indicates _____
 - a. compass north
 - b. the direction of the vessel's heading
 - c. magnetic north
 - d. a relative bearing taken with an azimuth circle

5. The geographic range is the maximum distance a that a light may be seen under ____
 - a. existing visibility conditions, limited only by the curvature of the earth
 - b. perfect visibility conditions, limited only by the curvature of the earth
 - c. existing visibility conditions, limited only by the intensity of the light
 - c. perfect visibility conditions, limited only by the interference from background lighting.

6. What is TRUE concerning new editions of Light Lists?
 - a. supplements to new editions are issued monthly by the U.S. Coast Guard

- b. new editions are published by the National Ocean Survey
 - c. new editions are corrected through the date shown on the title page
 - d. none of the above
7. On navigational aids, what does the light

7. characteristic FL (2+1) mean?

- a. a flashing light combined with a fixed light of greater brightness
- b. light flashes combined in groups, with a different number of flashes in each group
- c. a light showing groups of two or more flashes at regular intervals
- d. a fixed light varied at regular intervals by groups of two or more flashes of greater brightness

8. A special purpose buoy shall be _____

- a. lighted with a white light
- b. striped black and red
- c. lighted with a red light
- d. yellow

9. To predict the actual depth of the water using the Tide Tables, the number obtained from the tables is _____

- a. the actual depth
- b. added to or subtracted from the charted depth
- c. multiplied by the charted depth
- d. divided by the charted depth

10. Information about the currents on the Atlantic Coast of the US. is found in the _____

- a. Nautical Almanac
- b. Tidal Current Tables
- c. Ocean Current Tables
- d. Tide Tables

11. As you enter a channel from seaward in a U.S. port, the numbers on the starboard side buoys _____

- a. decrease and the buoys are black
- b. increase and the buoys are green
- c. decrease and the buoys are red
- d. increase and the buoys are red

12. Stormy weather is usually associated with regions of _____

- a. low barometric pressure
- b. high barometric pressure
- c. steady barometric pressure
- d. changing barometric pressure

13. The cloud formation indicated by #9 in the diagram DO 39 NG is what type of cloud?
- stratocumulus
 - cirrus
 - cumulonimbus
 - cumulous
14. Your vessel has been damaged and is taking on water, but you do not need immediate assistance. You would preface a message advising other vessels of your situation with _____
- mayday, mayday, mayday
 - pan-pan, pan-pan, pan-pan
 - security, security, security
 - SOS, SOS, SOS
15. When communicating on the radiotelephone using plain English, what procedure work indicates the end of my transmission and that a response is not necessary?
- out
 - over
 - roger
 - wilco
16. Buoys are marked with reflective material to assist in their detection by searchlight. Which statement is TRUE?
- all safe-water buoys will display red and white vertical stripes of reflective material
 - all reflective material is white because it is the most visible at night
 - a special purpose mark will display either red or green material to agree with its shape
 - a preferred-channel buoy displays either red or green reflective material to agree with the top band of color
17. Information for updating nautical charts is primarily found in the _____
- Local Notice to Mariners
 - Coast Pilots
 - Nautical Chart Catalogue
 - Sailing Directions
18. The datum used for sounding on charts of the east coast of the United States is _____
- mean low water springs
 - mean low water
 - mean lower low water
 - half tide level

19. Mean high water is the reference plane used for _____

- a. all vertical measurements
- b. height above water of land features such as lights
- c. sounding on the east and west coasts
- d. water depths on the east coast only

20. The chart edition date is printed _____

- a. top center
- b. lower left corner
- c. part of the chart title
- d. any clear area around the neat line

Perform the following TVMDC conversions.

T	025	+W		
V	15W	-E	↓	↑
M				
D	5E		↓	+E
C				-W

T	270	+W		
V	5E	-E	↓	↑
M				
D	2E		↓	+E
C				-W

T	140	+W		
V	12E	-E	↓	↑
M				
D	8W		↓	+E
C				-W

T	090	+W		
V	12W	-E	↓	↑
M				
D	3E		↓	+E
C				-W

T		+W		
V	10E	-E	↓	↑
M				
D	5W		↓	+E
C	200			-W

T		+W		
V	14E	-E	↓	↑
M				
D	4E		↓	+E
C	000			-W

T	180	+W		
V	9E	-E	↓	↑
M				
D	2W		↓	+E
C				-W

T	040	+W		
V	10W	-E	↓	↑
M				
D	5E		↓	+E
C				-W

T		+W		
V	12W	-E	↓	↑
M				
D	5W		↓	+E
C	250			-W

T	270	+W		
V	14W	-E	↓	↑
M				
D	4E		↓	+E
C				-W

T		+W		
V	10W	-E	↓	↑
M				
D	5W		↓	+E
C	325			-W

T	000	+W		
V	6E	-E	↓	↑
M				
D	6W		↓	+E
C				-W