

U.S.C.G. Merchant Marine Exam

Master Less than 100 Gross Registered Tons Rivers

Q401 Deck General – Safety

(Sample Examination)

Choose the best answer to the following Multiple-Choice Questions.

1. Which splice should you use in order to make a permanent loop in a line?

- A. Eye splice
- B. Back splice
- C. Short splice
- D. Long splice

Correct answer: A

2. What is the name of the metal, teardrop-shaped object sometimes used within an eyesplice?

- A. Grommet
- B. Splice form
- C. Reinforcement
- D. Thimble

Correct answer: D

3. What type of knot in illustration D030DG below is indicated by the Letter "N"?

- A. Rolling bowline
- B. Stopper hitch
- C. Timber hitch
- D. Heaving line hitch

Correct answer: B

4. What type of knot in illustration D030DG below is indicated by the Letter "R"?

- A. Round turn and two half hitches
- B. Fisherman's bend
- C. Double becket bend
- D. Bowline

Correct answer: C

5. Which factor is most likely to impair the strength and durability of synthetic line?

- A. Washing with mild soap
- B. Sunlight
- C. Mildew
- D. Dry rot

Correct answer: B

6. Which type of line floats?

- A. Polypropylene
- B. Old manila
- C. Nylon
- D. Dacron

Correct answer: A

7. In illustration D044DG below, what is the mooring line labeled "A" called?

- A. After spring line
- B. Onshore stern line
- C. Offshore stern line
- D. After breast line

Correct answer: C

8. In illustration D044DG below, what is the mooring line labeled "E" called?

- A. After spring line
- B. Bow line
- C. Bow spring line
- D. Forward breast line

Correct answer: C

9. An aircraft has indicated that he wants you to change course and follow him. You cannot comply because of an emergency on board. Which signal should you make?

- A. Fire a red flare at night or a red smoke signal by day
- B. Make an "S" turn (hard right then hard left) and resume course
- C. Send the Morse signal "N" by flashing light
- D. Make a round turn (360°) and resume course

Correct answer: C

10. Which of the following when removed will extinguish a fire?

- A. Oxygen
- B. Nitrogen
- C. Sodium
- D. Carbon dioxide

Correct answer: A

11. What is the normal percentage of oxygen in air?

- A. 16%
- B. 18%
- C. 21%
- D. 25%

Correct answer: C

12. Why should storage batteries be charged in a well-ventilated area?

- A. They generate heat
- B. They recharge faster in a well-ventilated space
- C. They emit hydrogen
- D. Because of the toxic fumes they emit

Correct answer: C

13. What is the purpose of chafing gear?

- A. It is used to anchor the boat
- B. It can pick up heavy loads
- C. It strengthens mooring lines
- D. It protects fiber rope from abrasion

Correct answer: D

14. Which method of adjusting mooring lines is MOST useful for leaving a boat free to rise and fall with the tide?

- A. Crossing the spring lines
- B. Slacking all forward running lines while keeping all after running lines taut
- C. Slacking bow and stern lines
- D. Doubling up on spring or breast lines

Correct answer: A

15. What is the purpose of lubricating wire rope?

- A. To prevent internal and external rust and corrosion
- B. To reduce the internal friction of the wire
- C. To reduce chafing and increases its useful service life
- D. All of the above

Correct answer: D

16. Which is the correct way to make an eye in a wire rope with clips?

- A. Place the first and third U-bolts on the standing part and the second U-bolt on the bitter end
- B. Place the U-bolts of all clips on the bitter end
- C. Place the first and third U-bolts on the bitter end and the second U-bolt on the standing part
- D. Place the U-bolts of all clips on the standing part

Correct answer: B

17. Which term is used to describe the distance a vessel moves at right angles to the original course, when a turn of 180° has been completed?

- A. Advance
- B. Pivoting point
- C. Kick
- D. Tactical diameter

Correct answer: D

18. Which term describes the distance that a vessel travels from the time that the order to put engines full astern until the vessel is dead in the water?

- A. Transfer
- B. Advance
- C. Head reach
- D. Surge

Correct answer: C

19. In relation to the turning circle of a ship, which defines the term "transfer"?

- A. The distance gained at right angles to the original course
- B. The distance the ship moves sidewise from the original course away from the direction of the turn after the rudder is first put over
- C. The distance gained in the direction of the original course
- D. The distance around the circumference of the turning circle

Correct answer: A

20. When piloting a vessel, how are visual references used to establish a constant rate of turn?

- A. Visual references cannot be used to maintain a constant rate of turn.
- B. Begin the turn when the fixed object is on the beam.
- C. Fixed objects that stay on the same relative bearing when the ship is turning indicate a constant rate of turn.
- D. Keep the fixed object's relative bearing opening, for a constant rate of turn.

Correct answer: C

21. You are making a sharp turn in a channel and using a buoy four points on the bow to gauge your rate of turn. If you observe the buoy moving aft relative to you, what should you do?

- A. Increase the rate of turn
- B. Maintain a constant rate of turn
- C. Decrease the rate of turn
- D. Decrease speed

Correct answer: A

22. Which is described as a wedge of water building up between the bow and the nearer bank which forces the bow out and away?

- A. Bank cushion
- B. Bank suction
- C. Bend effect
- D. Combined effect

Correct answer: A

23. When passing a moored vessel in a narrow channel which actions will help minimize wake damage?

- A. Reduce speed and make a notation in the bell book
- B. Go half astern when abeam of the moored vessel
- C. Check the rudder several times while passing the vessel
- D. Stay on outside of channel and make a notation in the logbook

Correct answer: A

24. Who is responsible for any wake damage caused by a passing vessel?

- A. The owner of the damaged vessel
- B. The person deemed competent to steer the vessel
- C. The person in charge of the passing vessel
- D. No one is responsible for wake damage

Correct answer: C

25. Fire may be spread by which means?

- A. Direct radiation
- B. Conduction of heat to adjacent surfaces
- C. Convection
- D. All of the above

Correct answer: D

26. How can the spread of fire be prevented?

- A. Cooling surfaces adjacent to the fire
- B. Shutting off the oxygen supply
- C. Removing combustibles from the endangered area
- D. All of the above

Correct answer: D

27. Why is it necessary to secure the forced ventilation to a compartment where there is a fire?

- A. To allow the exhaust fans to remove smoke
- B. To protect firefighting personnel from smoke
- C. To prevent additional oxygen from reaching the fire
- D. To extinguish the fire by carbon monoxide smothering

Correct answer: C

28. What is the primary reason for placing covers over the top of storage batteries?

- A. To protect against accidental shorting across terminals
- B. To prevent the accumulation of explosive gases
- C. To prevent movement of the battery in rough waters
- D. To protect the hull from leaking electrolyte

Correct answer: A

29. Which is the best method of extinguishing a class A fire?

- A. Remove oxygen from the area
- B. Smother with CO₂
- C. Cool fuel below ignition temperature
- D. Smother fire with foam

Correct answer: C

30. A burning pile of dunnage would be which classification of fire?

- A. Class A
- B. Class B
- C. Class C
- D. Class D

Correct answer: A

31. Which extinguishing agent is/are suitable to combat a class B fire in an engine compartment?

- A. Carbon dioxide
- B. Foam
- C. Dry chemical
- D. All of the above

Correct answer: D

32. If ignited, which material would be a class B fire?

- A. Magnesium
- B. Diesel Oil
- C. Paper
- D. Wood

Correct answer: B

33. Which extinguishing agent is the best for use on electrical fires?

- A. Water fog
- B. Foam
- C. Dry chemical
- D. CO2

Correct answer: D

34. What is the primary hazard, other than fire damage, associated with a class C fire?

- A. Possibility of reflash
- B. Explosion
- C. Flashover
- D. Electrocution or shock

Correct answer: D

35. Fires which occur in energized electrical equipment, such as switchboard insulation, are which classification?

- A. Class A
- B. Class B
- C. Class C
- D. Class D

Correct answer: C

36. While you are working in a space, the fixed CO2 system is accidentally activated. Which action should you take?

- A. Retreat to fresh air and ventilate the compartment before returning
- B. Make sure all doors and vents are secured
- C. Continue with your work as there is nothing you can do to stop the flow of CO2
- D. Secure the applicators to preserve the charge in the cylinders

Correct answer: A

37. Fixed CO2 systems would not be used on crew's quarters or at which other location?

- A. The engine room
- B. Spaces open to the atmosphere
- C. Cargo holds
- D. The paint locker

Correct answer: B

38. When fighting a fire using a portable carbon dioxide extinguisher, where should the stream be directed to extinguish the fire?

- A. At the bottom of the flaming area, moving the horn vertically to the top following the flames upward as they diminish
- B. At the base of the flames, moving the horn from side to side
- C. At the center of the flaming area, moving the horn vertically from top to bottom
- D. At the top of the flaming area, moving the horn from side to side,

Correct answer: B

39. When discharging a portable CO2 fire extinguisher, why must you grasp the hose handle and NOT the discharge horn?

- A. The horn is placed directly in the flames
- B. The discharge horn becomes extremely cold
- C. The discharge horn becomes extremely hot
- D. The horn could come off in your hands

Correct answer: B

40. If you must jump from a vessel, what does the correct posture include?

- A. Body straight and arms held tightly at the sides for feet first entry into the water
- B. Knees bent and held close to the body with both arms around legs
- C. Both hands holding the life preserver below the chin with knees bent and legs crossed
- D. Holding down the life preserver against the chest with one arm crossing the other, covering the mouth and nose with a hand, and feet together

Correct answer: D

41. If you must swim through an oil fire, which action should be avoided?

- A. Wear as much clothing as possible
- B. Cover eyes with one hand when entering the water
- C. Swim with the wind
- D. Enter the water feet first

Correct answer: C

42. If heavy smoke is coming from the paint locker, what should be the FIRST firefighting response?

- A. Secure the ventilation
- B. Open the door to evaluate the extent of the fire
- C. Release the CO2 flooding system
- D. Enter and use a portable extinguisher

Correct answer: A

43. What is the MOST important consideration when determining how to fight an electrical fire?

- A. Whether the fire is in machinery or passenger spaces
- B. Maintaining electrical power
- C. Danger of shock to personnel
- D. The amount of toxic fumes created by the extinguisher

Correct answer: C

44. There is a fire in the crew's quarters of your vessel. Which action should you take FIRST?

- A. Close all ventilation to the quarters if possible
- B. Prepare to abandon ship
- C. Attempt to put the fire out yourself before sounding the alarm
- D. Ventilate the quarters as much as possible

Correct answer: A

45. You are trying to rescue survivors from a wrecked vessel on fire. How should you make your approach?

- A. To windward of the wrecked vessel
- B. At a speed of at least that of the wrecked vessel
- C. To leeward of the wrecked vessel
- D. At a speed of at most one-half that of the wrecked vessel

Correct answer: A

46. You are picking up a conscious person that has fallen overboard in one of the vessels motor boats. Recovery is easier in a light breeze if you approach from which direction?

- A. Windward with the victim to leeward
- B. Approach with the wind on your port side
- C. Leeward with the victim to windward
- D. Approach with the wind on your starboard side

Correct answer: A

47. One of your crew members falls overboard from the starboard side. You should IMMEDIATELY take which action?

- A. Position your vessel to windward and begin recovery
- B. Apply left rudder
- C. Begin backing your engines
- D. Throw the crew member a life preserver

Correct answer: D

48. Which is a major advantage of the round turn maneuver in a man overboard situation?

- A. It is easy for a single-screw vessel to perform
- B. It can be used in reduced visibility
- C. It requires the least shiphandling skills to perform
- D. It is the fastest method

Correct answer: D

49. The vessel shown in illustration D025DG has broken down and you are going to take her in tow. The wind is coming from her starboard beam. You are making more leeway than she. Where should you position your vessel when you start running lines?

- A. A
- B. B
- C. C
- D. D

Correct answer: A

50. The vessel shown in illustration D025DG has broken down and you are going to take her in tow. The wind is on her starboard beam. Both vessels are making the same amount of leeway. Where should you position your vessel when you start running lines?

- A. A
- B. B
- C. C
- D. D

Correct answer: C

51. Regardless of local requirements, when in a U.S. port, all oil spills must be reported to which of the following agencies?

- A. Environmental Protection Agency
- B. Minerals Management Service
- C. National Response Center (USCG)
- D. All of the Above

Correct answer: C

52. The Federal Water Pollution Control Act requires the person in charge of a vessel to immediately notify the Coast Guard as soon as he knows of any oil discharge. Failure to notify the Coast Guard can lead to a monetary fine and imprisonment up to what duration?

- A. 5 years
- B. 3 years
- C. 2 years
- D. 1 years

Correct answer: A

53. What do pollution regulations require of each scupper and/or drain that is located in an enclosed deck area?

- A. The scuppers must be a soft rubber plug
- B. The scuppers must be wooden plugs
- C. The scuppers shall be a two-piece soft patch
- D. The scuppers shall have a mechanical means of closing

Correct answer: D

54. Fueling results in the collection of waste oil in drip pans and containers. Which is an approved method of disposing of the waste oil?

- A. Mixing it with dispersants before draining it overboard
- B. Adding sinking agents and discharging it into the water
- C. Discharge to a proper reception facility
- D. Draining it overboard when the vessel gets underway

Correct answer: C

55. What is the period of validity of a Merchant Mariner Credential?

- A. 1 year
- B. 5 years
- C. 3 years
- D. 2 years

Correct answer: B

56. When shall an Operator of an Uninspected Passenger Vessel be required to produce his/her MMC?

- A. An Operator of an Uninspected Passenger Vessel is not required to carry his/her MMC
- B. Only when the vessel has at least 6 passengers for hire and requested by a USCG boarding officer
- C. Immediately, when requested by a USCG boarding officer
- D. Only when the vessel is involved in a marine accident

Correct answer: C

57. Which is the requirement for the name and hailing port of a documented commercial vessel?

- A. It is required to be marked on the stern with the name of the vessel marked on both bows
- B. It is not required to be marked anywhere on the vessel
- C. It is required to be marked on both bows and on the keel
- D. It is required to be marked on the keel, stern, and both bows

Correct answer: A

58. Which is TRUE concerning the official number of a documented vessel?

- A. It is not required to be marked anywhere on the vessel
- B. It is required to be permanently marked on the vessel's structure
- C. It is required to be painted on the vessel's stern
- D. It is required to be painted on the vessel's bow

Correct answer: B

59. What is considered a Serious Marine Incident?

- A. An allision that results in \$500 damage to a boat dock
- B. An injury to a crewmember, passenger, or other person which requires professional medical treatment beyond first aid
- C. A vessel experiencing bottom suction over a sandbar that does not result in injuries and/or any damage to the vessel
- D. None of the above

Correct answer: B

60. Under federal regulations, what minimum level of Blood Alcohol Content (BAC) constitutes a violation of the laws prohibiting Boating Under the Influence of Alcohol (BUI) on commercial vessels?

- A. .18% BAC
- B. .04% BAC
- C. .06% BAC
- D. .10% BAC

Correct answer: B

61. What represents poor sanitary procedures?

- A. Keep and use a separate filling hose for potable (drinking) water.
- B. Locate potable (drinking) water tanks as low as possible in the bilge.
- C. Eliminate enclosed spaces in which trash, food particles, dirt may gather.
- D. After washing dishes with soap and warm water, sterilize them in water of at least 170°F (76.7°C).

Correct answer: B

62. Normally, where is the potable water systems directly connected to?

- A. The potable water tank
- B. A freshwater sanitary system
- C. The feed-water system
- D. The vessel's fire-main system

Correct answer: A

63. A quick and rapid motion of a vessel in a seaway is an indication of a(n) _____.

- A. large GM
- B. high center of gravity
- C. small GZ
- D. excessive free surface

Correct answer: A

64. How may the change in trim of a vessel be found?

- A. By dividing the trim moments by MT1
- B. By subtracting the LCF from the LCB
- C. By dividing longitudinal moments by the displacement
- D. By looking at the Hydrostatic Properties Table for the draft of the vessel

Correct answer: A

65. During cargo operations, your vessel develops a list due to the center of gravity rising above the transverse metacenter. Which is the most prudent action to correct the list?

- A. Shift weight to the centerline
- B. Add weight in the center line lower holds or double bottoms
- C. Shift weight to the high side
- D. Remove weight from the lower holds or double bottoms

Correct answer: B

66. You are using VHF channel 16 (156.8 MHz) or 2182 kHz. You need help but are not in danger, which signal signifies urgency?

- A. "PAN-PAN"
- B. "MAYDAY"
- C. "ASSISTANCE NEEDED"
- D. "SECURITE"

Correct answer: A

67. Maintaining good working order of fuel pumps and injectors in auxiliary diesel engines requires the use of _____.

- A. day tanks
- B. fuel filters
- C. an injector test stand
- D. fuel/water separators

Correct answer: B

68. Before any machinery is put in operation, you should take which action FIRST?

- A. Take for granted that there are no fuel leaks
- B. Just turn the key and start up
- C. Assume there are no volatile fumes in the engine space
- D. Ventilate all compartments, see that the machinery is clean and there are no obstructions

Correct answer: D

69. Which of the following is one of the most important safety procedures that should be adhered to prior to starting a gasoline engine on a motorboat?

- A. The bilges, cabins, etc. are thoroughly ventilated
- B. The gasoline tank is full
- C. You have fresh water on board
- D. Each of the above is followed

Correct answer: A

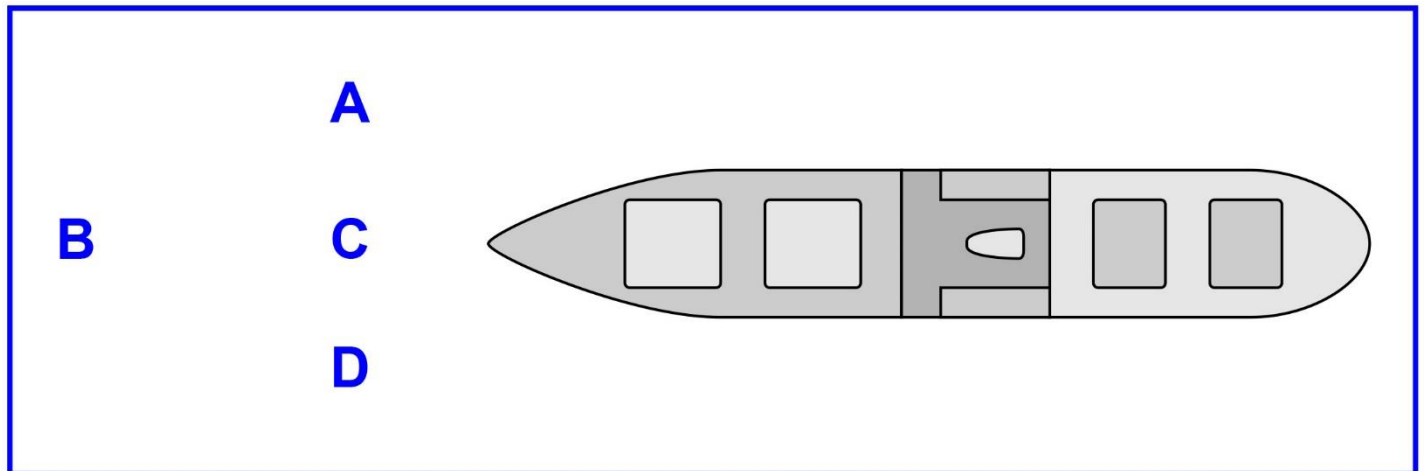
70. If a gasoline engine turns over freely but will not start, the cause is generally _____.

- A. a defective ignition system
- B. too heavy a load
- C. low lube oil level
- D. weak valve springs

Correct answer: A



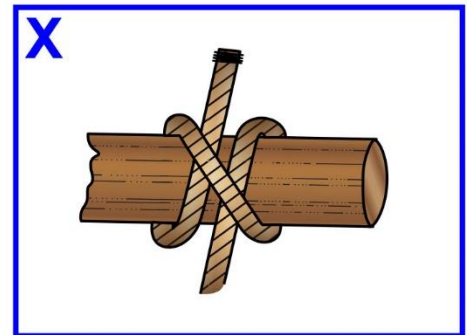
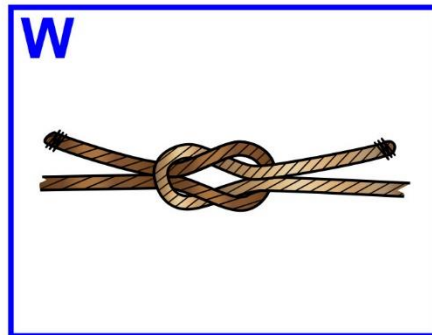
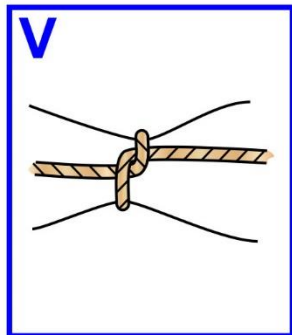
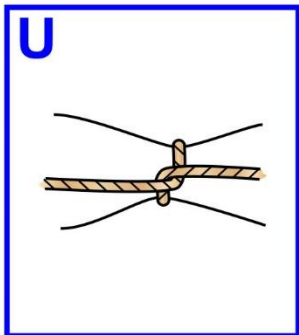
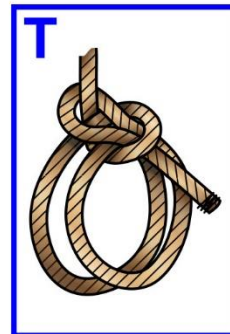
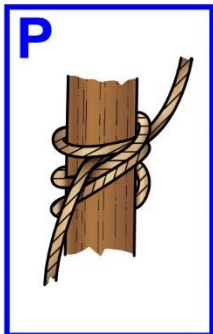
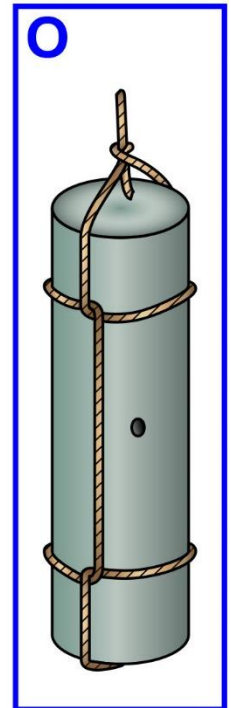
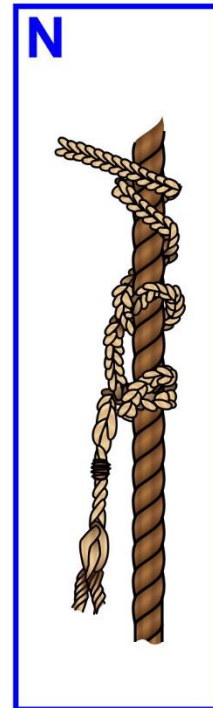
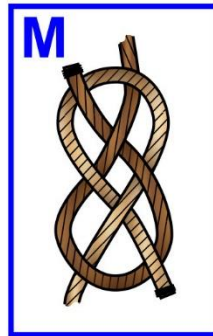
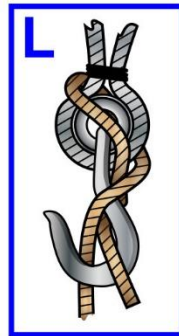
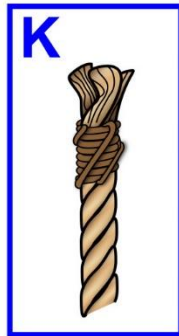
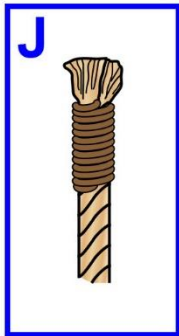
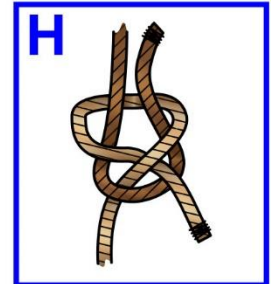
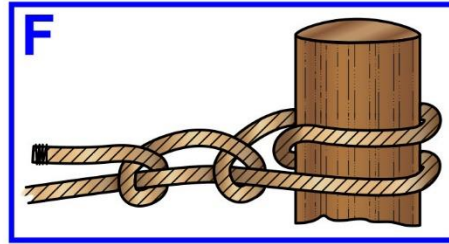
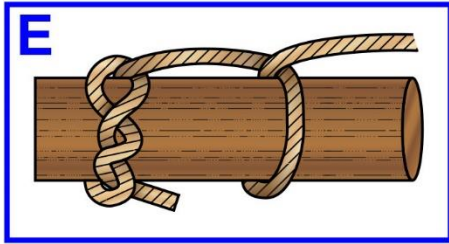
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United States Coast Guard National Maritime Center



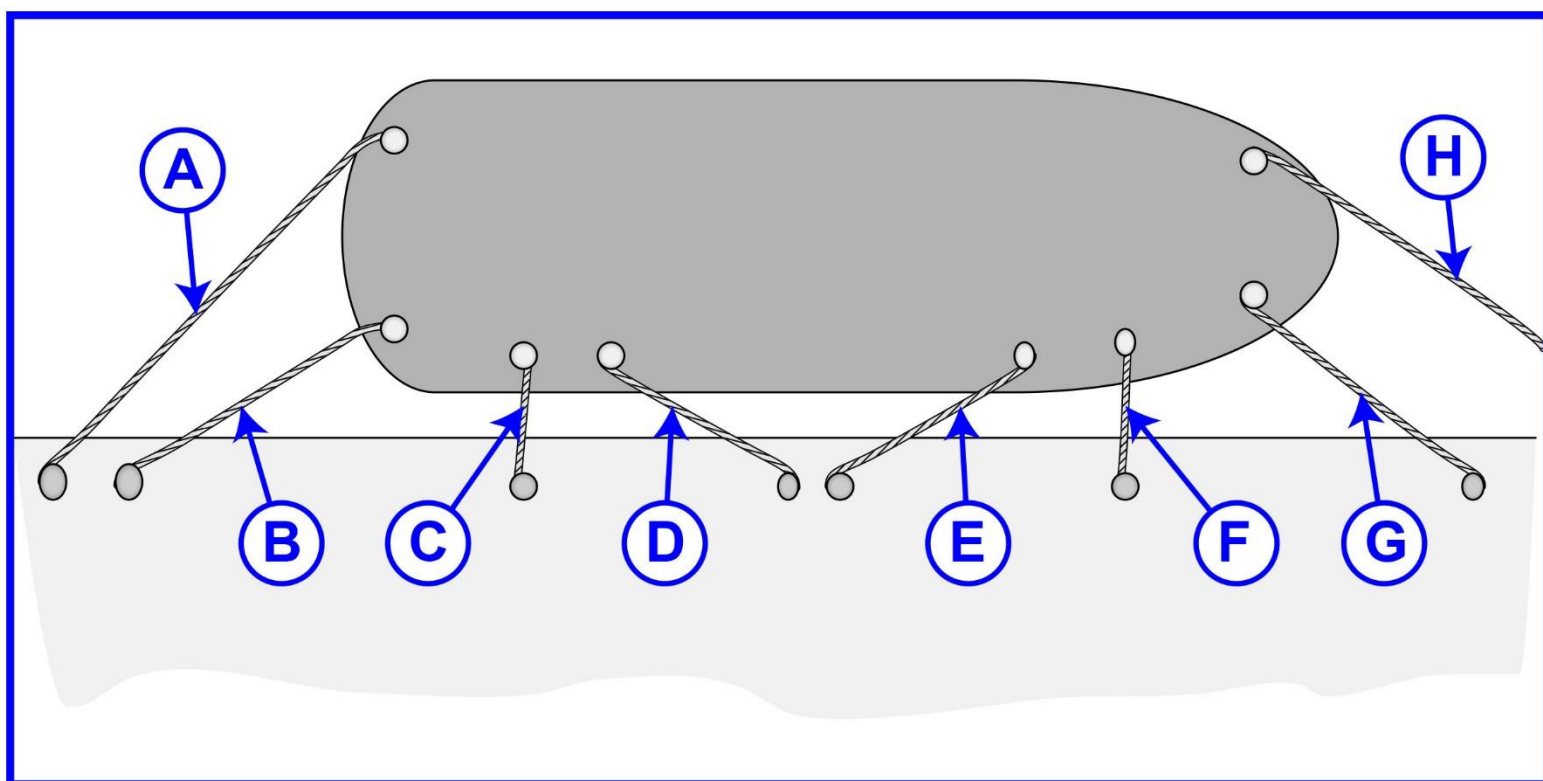
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