

1-4572

1) BOTH INTERNATIONAL AND INLAND: You are underway in low visibility and sounding fog signals. What change would you make to the fog signal immediately upon losing propulsion?

Not Under Command – Rule 3 (f) defines this vessel as follows: “A vessel which through some exceptional circumstance is unable to maneuver as required by these Rules and is therefore unable to keep out of the way of another vessel.”

A. Begin sounding two prolonged blasts at two-minute intervals.

Incorrect: This signal indicates that a power-driven vessel has deliberately stopped its engines and is “making no way through the water.” This vessel is able to continue making way, immediately upon an engine order.

B. Begin sounding one prolonged blast followed by three short blasts at two-minute intervals.

Incorrect: This signal is sounded only by a manned vessel being towed.

C. Begin sounding one prolonged blast followed by two short blasts at two-minute intervals.

Correct Answer: The moment that propulsion is lost, the vessel is considered to be “Not Under Command” and the vessel is no longer able to maneuver to avoid a collision.

D. No change should be made to the fog signal.

Incorrect: One prolonged blast at intervals of not more than two minutes is the signal for a power-driven vessel, underway, and making way through the water, under normal conditions.

3-815

2) When entering from seaward, a buoy displaying a composite group (2+1) flashing red light indicates _____.

A. a junction, with the preferred channel to the left

Correct Answer: The light is the same color as the topmost band with the preferred channel to the left, hence the secondary channel to the right. This buoy would be painted with three horizontal bands, such as red on top, green in the middle and red on the bottom in this instance.

B. a sharp turn in the preferred channel, to the right

Incorrect: The characteristic of the light marking a sharp turn in the channel is quick flashing and would not be that of the composite group (2+1) because the latter characteristic is permitted only on junction buoys. A sharp turn to the right, in either the primary or the secondary channel, would be marked with a red buoy on the inside of the turn and, if lighted, would be red.

C. the starboard side of the secondary channel

Incorrect: The starboard sides of the primary and secondary channels are always marked with red buoys. When lighted, the lights will be red, but not with the composite group (2+1) characteristic.

D. a wreck, to be left on the vessel's port side

Incorrect: A sunken wreck near either boundary of a buoyed channel will be marked with a lateral mark. If lighted, the light color will be the same as the buoy color, and it would not have the composite group (2+1) characteristic. Therefore, the marker for a wreck on or near the left hand boundary would be green. As an alternative, this wreck may be marked with an "isolated danger mark".

3-2179

3) A vessel is heading magnetic northwest and its magnetic compass indicates a heading of 312°. The quadrantal spheres are arranged athwartships. What action should be taken to remove this error during compass adjustment?

Note: Ideally, the compass would indicate 315° on this heading, but indicates 312° because of the deviation caused by the mass of "soft iron" in the vessel's structure. Quadrantal spheres are made of "soft iron" and compensate for this type of deviation. The quadrantal spheres can be arranged either fore-and-aft or athwartships, the latter being much more common. The distance that a sphere can be moved "all the way in" (toward the compass) or "all the way out" (away from the compass) is approximately six inches. The required movement of the athwartship spheres is opposite in direction to their being installed fore-and-aft, and the mass of the spheres proportionally affects the amount of compensated deviation.

A. If the quadrantal spheres are all the way in, replace them with larger ones.

Incorrect: This would only be true if the spheres were arranged fore-and-aft.

B. If the quadrantal spheres are all the way out, remove one of the spheres.

Incorrect: Removing one of the spheres would make the deviation asymmetrical and more detrimental.

C. If the quadrantal spheres are all the way out, move the spheres in.

Incorrect: This would only be true if the spheres were arranged fore-and-aft.

D. If the quadrantal spheres are all the way out, replace them with smaller spheres.

Correct Answer: The three degrees of easterly deviation exist because the spheres are overcorrecting.

4-3696

4) The equipment required to remove an on-deck oil spill on a barge transferring oil must either be carried on board or _____.

A. on a tug standing by

Incorrect: Under normal circumstances a tug is not required to stand by during an oil transfer.

B. available by contract with the shore facility

Correct Answer: Title 33 CFR 155.215 (c) The oil barge owner or operator may rely on equipment available at the transfer facility receiving from or discharging to the barge, provided the barge owner or operator has prearranged for the use of the equipment by contract or other means approved by the Coast Guard.

C. kept at the shoreside hose connection during transfer

Incorrect: There is no requirement for the equipment to be near the hose connection.

D. kept in a protected shoreside location readily accessible

Incorrect: Although in practice the equipment may be sheltered, the only requirement is that it must be "ready for immediate use".