When towing astern, you notice that another vessel is about to pass between the towing vessel and the tow. You should immediately __________. 
A. turn away from the approaching vessel  
B. shine a spotlight in the direction of the approaching vessel  
C. sever the towline  
D. slow down and pay out the main tow hawser  

When your tug reduces speed to shorten tow, the __________. 
A. length of the tow gets shorter as the strain is reduced  
B. tow may continue its momentum and overtake the tug  
C. towing hawser may drag the bottom and put the tug in irons  
D. All of the above  

Which factor(s) can affect the performance of a river towboat? 
A. The draft of the towboat and the draft of the barges under tow  
B. The placement of the barges within the tow  
C. The presence of flanking rudders and Kort nozzles  
D. All of the above  

When maneuvering a heavy barge up a wide channel with a tug, the tow may be most closely controlled by making up to the barge __________. 
A. with a short tow astern  
B. nearly bow to bow, at a small angle  
C. amidships, parallel to the barge  
D. nearly stern to stern, at a small angle to the barge  

When you have a tow alongside, your stern should extend aft of the tow in order to __________. 
A. avoid obscuring your stern light  
B. provide a better lead for your lines  
C. obtain better steering control  
D. let the barge deflect floating objects from your propeller  

Where should a vessel being towed alongside be positioned for increased maneuverability? 
A. Stern of the towed vessel aft of the stern of the towing vessel  
B. Stern of the towed vessel even with the stern of the towing vessel  
C. Stern of the towed vessel forward of the stern of the towing vessel  
D. Bow of the towed vessel even with the bow of the towing vessel  

To obtain better steering control when you are towing alongside, your vessel should be positioned with its __________. 
A. bow extending forward of the tow  
B. stern amidships of the tow  
C. stern extending aft of the tow  
D. bow even with the bow of the towing vessel  

Which towing method maintains the most control over the tow? 
A. Tandem towing  
B. Honolulu towing  
C. Tandem tug towing  
D. Breasted tug towing
9  1346  Ref: Towing, Arrangement, Breasted Tug Towing  C
Towing a structure using two tugs approximately side by side, each using one hawser, is referred to as a
__________.
A. tandem tow  C. breasted tug tow
B. Honolulu tow  D. tandem tug tow

10  1711  Ref: Towing, Arrangement, Tandem Tug Towing  B
When maneuvering from pull towing to breasted (alongside) towing, a twin-screw vessel is more likely
than a single-screw vessel of equal horsepower to __________.
A. trip or capsize  C. go into irons
B. foul the towline  D. part the towing strap

11  243  Ref: Towing, Arrangement  B
A tow of 9 barges is made up three abreast and three long. The towboat is faced up to the center string
which is known as the __________.
A. main string  C. power string
B. push string  D. face string

12  244  Ref: Towing, Arrangement  C
A tow of 9 barges is made up three abreast by three long. The towboat is faced up to the last barge of the
center string. The outer two strings of barges are the __________.
A. port and starboard strings  C. drag strings
B. outer strings  D. side strings

13  2221  Ref: Towing, Arrangement  A
You are approaching a ship that is broken down and are preparing to take her in tow. BEFORE
positioning your vessel to pass the towline, you must __________.
A. compare the rate of drift between the ships
B. install chafing gear on the towline
C. secure the bitter end of the towing hawser to prevent loss if the tow is slipped
D. have traveling lizards rigged to guide the towline while it is paid-out

14  1791  Ref: Towing, Arrangement  A
When using two tugs to assist in mooring a large, deeply laden ship, the most powerful tug is usually
placed __________.
A. forward to control the bow
B. amidships to move the entire vessel evenly
C. aft to assist the ship's rudder and propeller
D. anywhere, since the maneuverability of the tug governs the placement not the power

15  1195  Ref: Towing, Barge, Design  A
The section of each end of a barge which is heavily reinforced to take the pressure of pushing is called
the __________.
A. headlog  C. collision bulkhead
B. towhead  D. bullnose

16  1590  Ref: Towing, Barge, Design  B
What shape barge offers the least resistance in river towing?
A. A square ended barge  C. Ship-shaped barges
B. Barges with raked shaped bows  D. Hopper barges

17  1659  Ref: Towing, Barge, Design  A
When barge headlogs do not meet or are not even with one another, the void or opening between them is
called a __________.
A. notch  C. spacing
B. hole  D. gap
<table>
<thead>
<tr>
<th>Question</th>
<th>Ref:</th>
<th>Towing Bridle, Chain</th>
<th>Number</th>
<th>Correct Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>18 1781</td>
<td>When towing, what is the main reason for using a chain bridle on a wire hawser?</td>
<td>B</td>
<td>A. It makes for an easy connection. B. It gives a spring effect to cushion the shock. C. It eliminates the necessity of a swivel. D. It does not chafe.</td>
<td></td>
</tr>
<tr>
<td>19 57</td>
<td>A chain bridle is preferable to a wire rope towing bridle on a long ocean tow because chain _________.</td>
<td>D</td>
<td>A. is more flexible and has the ability to absorb shock because of its weight B. is less subject to wear and damage from abrasion C. requires little maintenance D. All of the above</td>
<td></td>
</tr>
<tr>
<td>20 58</td>
<td>A chain bridle is used when towing astern because it _________.</td>
<td>B</td>
<td>A. is easy to connect B. provides an effective catenary and absorbs shock due to its weight C. makes rigging a swivel unnecessary D. prevents the tow from yawing by the drag of the chains in a seaway</td>
<td></td>
</tr>
<tr>
<td>21 752</td>
<td>On a long ocean tow, the bridle should be made up of two equal lengths of _________.</td>
<td>A</td>
<td>A. chain B. wire C. nylon D. polyester</td>
<td></td>
</tr>
<tr>
<td>22 792</td>
<td>One advantage of chain over wire rope for a tow bridle is that chain _________.</td>
<td>B</td>
<td>A. is better suited for inland towing B. resists damage from chafing C. handles more easily D. equalizes towing forces better</td>
<td></td>
</tr>
<tr>
<td>23 2110</td>
<td>Which type of bridle is the most effective for a heavy ocean tow?</td>
<td>C</td>
<td>A. Nylon because of its strength B. Polypropylene because it floats and is easier to handle C. Stud link anchor chain for chafe resistance and strength D. Wire rope for flexibility and strength</td>
<td></td>
</tr>
<tr>
<td>24 239</td>
<td>A tow astern is veering from side to side on its towline. The best way of controlling the action is to _______.</td>
<td>B</td>
<td>A. trim the tow by the bow B. trim the tow by the stern C. list the tow to windward D. adjust the length of the towing bridle</td>
<td></td>
</tr>
<tr>
<td>25 240</td>
<td>A tow bridle is attached to the main tow hawser at the _________.</td>
<td>C</td>
<td>A. bight ring B. tow hook C. fishplate D. swivel</td>
<td></td>
</tr>
<tr>
<td>26 408</td>
<td>As seen from the tow, what should connect the leading ends of both towing bridle legs to the main towing hawser?</td>
<td>B</td>
<td>A. A cable clamp B. A fishplate, flounder, or towing plate C. A pad eye D. The towing bitts</td>
<td></td>
</tr>
<tr>
<td>27 633</td>
<td>In a tow made up astern, the fishplate _________.</td>
<td>A</td>
<td>A. connects the hawser to the bridle B. connects the bridle to the tow C. keeps the hawser amidships on the tug D. is the capping piece on the &quot;H&quot; bitt</td>
<td></td>
</tr>
</tbody>
</table>
28. On a light tow, what could you substitute for a fishplate?
   A. heart-shaped shackle  
   B. pelican hook  
   C. swivel  
   D. ring

29. The legs of a tow bridle are joined together with a ________.
   A. bridle plate  
   B. shackle  
   C. fishplate  
   D. tri-link

30. You would be most likely to use a fishplate ________.
   A. when towing alongside  
   B. on a hawser tow  
   C. when pushing ahead or in the notch  
   D. when running "light boat"

31. What is used to prevent twisting of a towing bridle?
   A. A bitt  
   B. A bulkhead  
   C. A V-spring  
   D. A fishplate

32. Which best describes a "fishplate" used in towing?
   A. A triangular-shaped heavy steel plate with a round hole inset from each corner  
   B. A steel plate in the shape of a flat fish  
   C. A rectangular-shaped piece of heavy steel plate with four holes  
   D. A circular piece of heavy steel with three holes forming an equilateral triangle

33. How many legs does the bridle for an ocean tow have?
   A. One  
   B. Two  
   C. Three  
   D. Four

34. An ocean towing bridle should ________.
   A. have equal legs of sufficient length  
   B. have a large angle between the legs  
   C. be formed on a bight of cable through a ring  
   D. never be made up of chain

35. A bridle for an ocean tow consists of ________.
   A. two chains of equal length  
   B. a single nylon pendant rove through a heavy ring free to move on the pendant  
   C. two long legs of wire rope shackled to a fishplate  
   D. a single length of heavy chain with both ends secured on deck to welded pad eyes

36. An ocean towing bridle whose legs are of equal length, but too short, may ________.
   A. put excessive strain on each leg  
   B. cause unequal distribution of the load to one leg  
   C. cause the bridle legs to jump clear of the chocks or fairleads  
   D. None of the above

37. If the towing bridle legs are not of equal length ________.
   A. excessive strain is placed on the shorter leg  
   B. the shorter leg may fail  
   C. the longer leg is slack  
   D. All of the above
<table>
<thead>
<tr>
<th>Question</th>
<th>Ref:</th>
<th>Towing</th>
</tr>
</thead>
</table>
| 38       | 915 | The biggest problem encountered when towing bridle legs are too short is __________.  
A. retrieval  
B. adjusting tension  
C. excessive strain  
D. hookup to main towline |
| 39       | 1780| When towing, the least amount of tension will be on each bridle leg when the two legs __________.  
A. form a large angle with each other  
B. form a small angle with each other  
C. are of unequal length  
D. are joined by a fishplate |
| 40       | 2171| While towing, bridle legs of unequal lengths may cause __________.  
A. the bridle to foul  
B. the shorter leg to fail  
C. chafing on the fairlead or bitts  
D. a bent swivel |
| 41       | 1678| When connecting the tow bridle to a tug, the end of the bridle is passed with a __________.  
A. heaving line  
B. shot line  
C. high line  
D. messenger line |
| 42       | 1095| The MINIMUM acceptable size for a towing bridle would be that size in which the safe working load (SWL) of each leg of the bridle is equal to __________.  
A. one-half the SWL of the main towing hawser  
B. three-fourths the SWL of the main towing hawser  
C. that of the main towing hawser  
D. twice that of the main towing hawser |
| 43       | 2043| Which statement is FALSE about using a wire bridle on an ocean tow?  
A. The inboard end of each bridle leg should have a large eye splice to fit over the bitts.  
B. The strength of each leg should be at least one-half that of the main towing hawser.  
C. Each leg should be at least 60 to 90 feet long.  
D. None of the above |
| 44       | 1849| Which factor(s) must you consider when making up a towing bridle?  
A. The horsepower of the tug  
B. The beam of the barge  
C. The weight of the tow  
D. All of the above |
| 45       | 235 | A term used to describe the dip in a towline that acts as a shock absorber is __________.  
A. catenary  
B. step  
C. shock dip  
D. bight |
| 46       | 1373| Under the forces of its own weight, the suspended length of line will fall into a shape known as a _________.  
A. polygon  
B. holding arc  
C. catenary curve  
D. parabolic curve |
| 47       | 451 | Catenary as applied to tow lines denotes the __________.  
A. dip of the line  
B. stretch of the line  
C. strain on the line  
D. length of the line |
48 601 Ref: Towing, Catenary
If the situation arose where it became necessary to tow a disabled vessel, which statement is TRUE concerning the towing line?
A. The towing line between the two vessels should be clear of the water.
B. The towing line should be taut at all times between the vessels.
C. There should be a catenary so the line dips into the water.
D. None of the above

49 701 Ref: Towing, Catenary
It is good practice to use long towlines for ocean tows because the __________.
A. wear on the towline is equalized C. dip in the towline absorbs shock loads
B. weight of the towline increases the towing force D. danger of overriding is reduced

50 756 Ref: Towing, Catenary
On a shallow water tow, the catenary of the towline should be __________.
A. large C. eliminated
B. small D. adjusted frequently

51 923 Ref: Towing, Catenary
The catenary __________.
A. acts as a reserve length of towing hawser when the tug applies more power, and it dampens the surge effect of the tow
B. gives an approximation of the amount of strain on the towing hawser
C. is the dip in the towing hawser between the tug and the tow
D. All of the above

52 924 Ref: Towing, Catenary
The catenary in a towline is __________.
A. a short bridle C. another name for a pelican hook
B. the downward curvature of the hawser D. used to hold it amidships

53 970 Ref: Towing, Catenary
The effect of excessive catenary in shallow water may be __________.
A. dragging the towing hawser along the bottom and chafing it
B. snagging sunken or submerged objects
C. slowing, stopping or endangering the towing operation by placing the tug in irons
D. All of the above

54 1074 Ref: Towing, Catenary
The main reason a long towline is used during an ocean tow is that __________.
A. a margin of safety is provided should the line part C. there will be less stress on the towline
B. the towline will wear more evenly D. a slight increase in speed will be realized

55 2227 Ref: Towing, Catenary
You are attempting to take a dead ship in tow. All lines have been passed and secured. How should you get underway?
A. Order minimum turns until the towing hawser is just clear of the water, then reduce speed to that necessary to keep the line clear of the water.
B. If the towline is properly adjusted and weighted you can order slow or dead slow and the towline will act as a spring to absorb the initial shock.
C. Order minimum turns until the towing hawser is taut and then continue at that speed until towing speed is attained.
D. Gradually apply power until catenary almost breaks the water, but keep the catenary in the water.

56 1337 Ref: Towing, Catenary
To reduce the amount of catenary you may __________.
A. shorten the hawser or increase the tug's speed C. place your tug in irons
B. lengthen the hawser or reduce the tug's speed D. make a sharp turn
When towing astern, increased catenary will __________.
A. increase control of the tow  C. make the towing vessel less maneuverable
B. prevent the towing vessel from going in irons  D. reduce shock stress on the towing hawser

While towing in shallow water you should consider __________.
A. using a short towing hawser  C. the catenary and the effect it may have on the tow
B. using a floating hawser  D. All of the above

To reduce stress on the towing hawser when towing astern (ocean tow), the hawser should be ________.
A. secured to the aftermost fitting on the towing vessel  C. underwater
B. just touching the water  D. as short as possible

"check" line is __________.
A. a safety line attached to a man working over the side  B. used to measure water depth
C. used to slow the headway of a barge  D. used to measure the overhead height of a bridge

Kort nozzles are installed around the propellers of some vessels to __________.
A. increase the thrust of the propeller  C. prevent the propeller from striking barges towed on the hip
B. protect the propeller from striking sawyers  D. prevent the propeller from touching bottom in low water

The circular steel structure installed around the propeller of a towboat is the __________.
A. nozzle  C. strut
B. shroud  D. hood

A vessel brought alongside should be fended off the towing vessel by __________.
A. crew members using their arms  B. a boat hook
C. fenders  D. No fending is necessary due to the rugged construction of most towing vessels.

Good seamanship while towing in heavy weather requires all of the following EXCEPT __________.
A. reducing speed to reduce surging on the towline  C. dogging all hatches and watertight doors
B. lashing down or stowing all loose gear  D. streaming all of your towing hawser
"Hanging a barge off" means to __________.
A. moor a barge to the bank and leave
B. remove and deliver a loaded barge from a multiple tow
C. remove a barge while locking through
D. tow an empty barge astern

In towing, heaving lines are used for __________.
A. passing a tow bridle to the tug
B. passing a messenger line
C. heaving in the tow bridle
D. service lines with rocket line throwers

A tug in irons is __________.
A. rudder bound
B. being tripped by the towline
C. unable to maneuver
D. broached

When a tug is "in irons", she __________.
A. is made fast to the dock with engines secured
B. is in dry dock
C. may be in danger of being overrun by her tow
D. should pay out more towline

A towing vessel should be on the crest of a wave at the same time as its tow and in the trough at the same time. The term used to describe this is __________.
A. tow strain
B. catenary length
C. being in step
D. Williamson's Tow

In towing, it is desirable for the tug and the tow to ride wave crests simultaneously because __________.
A. shock loading on the tow line is reduced
B. towing speed is improved
C. the tow is more visible from the tug
D. the catenary of the towline is reduced

Synchronous towing means that the __________.
A. tug is on the crest of a wave while the tow is in the trough
B. tug is in the trough while the tow is riding on the crest of a wave
C. tug and tow are both in the same relative position on different waves at the same time
D. port and starboard engines on the tug are turning at the same RPM

What does "in step" refer to in regards to towing?
A. The towed vessel follows exactly in the wake of the towing vessel.
B. There is no catenary in the towing hawser.
C. When turning, both the towed and towing vessels turn at the same time.
D. Both the towed and towing vessels reach a wave crest or trough at the same time.
Ref: Towing, In Step
With a large ocean tow in heavy weather, you should NOT _________.
A. keep the stern of the tug well down in the water
B. adjust the towline so the tug is on the crest when the tow is in the trough
C. keep the low point of the catenary in the water
D. use a long towing hawser

Ref: Towing, In Step
When towing another vessel astern, the length of the towline should be _________.
A. as long as possible
B. such that one vessel will be on a crest while the other is in a trough
C. such that the vessels will be “in step”
D. not over two wave lengths in seas up to 10 feet

Ref: Towing, In Step
When towing another vessel, the length of the towing line should be _________.
A. as long as possible
B. as short as possible under the circumstances and not over two wave lengths
C. such that one vessel will be on a crest while the other is in a trough
D. such that the vessels will be in step

Ref: Towing, In Step
When towing in an open seaway, it is important to use a towing line _________.
A. made only of wire rope, due to possible weather conditions
B. that will have the tow on a crest while your vessel is in a trough
C. that will have the tow on a crest while your vessel is on a crest
D. with little dip to gain maximum control of the tow

Ref: Towing, Large Vessel Tow
When a tug makes up to a large vessel, the spring line should lead from the forward most part of the tug so that _________.
A. friction on the spring line is minimized
B. the length of the spring line is minimized
C. the head line and spring line can be worked simultaneously
D. the tug can pivot freely

Ref: Towing, Large Vessel Tow
You have a large, broken-down vessel in tow with a wire rope and anchor cable towline. Both vessels have made provision for slipping the tow in an emergency; however, unless there are special circumstances _________.
A. the towing vessel should slip first
B. the vessel towed should slip first
C. they should slip simultaneously
D. either vessel may slip first

Ref: Towing, Leaving Port
Before leaving port on an ocean tow, a tug captain should assure himself of all the following EXCEPT _________.
A. the towing hawser can be released quickly in an emergency
B. the correct navigation lights are rigged and operable on the tug and tow
C. an insurance underwriter has prepared a pre-sailing survey
D. a pick-up wire has been rigged on the tow in case of a breakaway.

Ref: Towing, Length of Tow
A tow consists of 8 barges: 6 jumbo barges made up 3 abreast and 2 long, with 2 standard barges abreast as lead barges. How long is this tow?
A. 525 feet
B. 545 feet
C. 565 feet
D. 595 feet
Which statement is TRUE concerning hawser towing?

A. The catenary in a hawser should be sufficient so that the hawser just touches the bottom.
B. The hawser is of sufficient length for towing when taut between tug and tow.
C. Increasing speed usually increases the catenary in the hawser.
D. Shortening the tow hawser generally decreases the maneuverability of the tug.

You have been towing astern and have just let go the tow. Your deckhands are pulling in and faking the towline by hand on the stern. The most dangerous action to take is to

A. continue ahead at slow speed
B. continue ahead at half speed
C. stop your engines
D. back down on your engines

What safety precautions must you take when maneuvering on a towing hook?

A. The engines must be operated on the slow bell.
B. Clear the afterdeck and fantail of personnel.
C. Lash the hook closed so it does not open accidentally.
D. The towing winch engine must be running.

While towing, what is the principal danger in attempting to swing a barge on a hawser in order to slow the barge's speed?

A. The barge may swing too quickly and run over the tug.
B. The barge may pass under the hawser and capsize the tug.
C. Free surface effect of liquid inside the barge may rupture the barge bulkheads when turning too quickly.
D. Dangerous wakes may result from the swinging barge and capsize the tug.

While towing, what is the principal danger in attempting to swing a barge on a short hawser in order to slow the barge's speed?

A. The barge may capsize from the sharp turn.
B. The barge may swing too quickly and run over the tug.
C. Free surface effect of liquid inside the barge may rupture the barge bulkheads when turning too quickly.
D. Dangerous wakes may result from the swinging barge and capsize the tug.

What is the principal danger in attempting to swing a barge on a hawser in order to slow the barge's speed?

A. Dangerous wakes may result from the swinging barge and capsize the tug.
B. The barge may swing too quickly and run over the tug.
C. Free surface effect of liquid inside the barge may rupture the barge bulkheads if the turn is too quick.
D. The barge may pass under the hawser and capsize the tug.

Once a towline is connected between the towing vessel and the disabled vessel, the towing vessel should

A. not exceed bare steerageway during the transit
B. take a strain as soon as you can to control the tow
C. come up to speed very slowly and maintain a “safe speed”
D. come up to speed quickly, then cut back power considerably to ease the strain

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To overcome the effects of static forces between two vessels of vastly different tonnages that may potentially part a line, you should __________.
A. rig a bridle at both the bow of the disabled vessel and stern of the towing vessel
B. commence tow at a slow bell and increase speed incrementally
C. pay out extra towline and increase speed rapidly to “jump start” disabled vessel
D. at slow bell alter course 30 degrees to both side of disabled tow

You are on a ship that has broken down and are preparing to be taken in tow. You will use your anchor cable as part of the towline. Which statement is TRUE?
A. The anchor cable should be veered enough to allow the towline connection to be just forward of your bow.
B. The anchor cable should be veered enough to allow the towline connection to be immediately astern of the towing vessel.
C. The strain of the tow is taken by the riding pawl, chain stopper, and anchor windlass brake.
D. The anchor cable should be led out through a chock, if possible, to avoid a sharp nip at the hawsepipe lip.

The effect of ocean current is usually more evident on a tug and tow than on a tug navigating independently because the __________.
A. speed of the tug and tow is less
B. towline catches the current
C. current causes yawing
D. current will offset the tow

What is the greatest danger of an overriding tow?
A. Fouling of the towing hawser
B. Loss of steering
C. Tripping
D. Collision between the tow and the stern of the towing vessel

A tow can override its tug as a result of __________.
A. a mechanical breakdown on the tug
B. adverse tidal current conditions
C. the tug reducing its speed
D. All of the above

With a large tow astern, there is immediate danger to the tug in the event of the __________.
A. tug losing power
B. tow line parting
C. bridle twisting
D. tow broaching

You are taking the bow line from the port bow of a large vessel that is underway when the stern of your tug comes in contact with the vessel. The forward motion of both vessels causes your tug to be turned toward the other vessel and contact the stem thereby being “stemmed”. You should immediately ________.
A. stop engines and the vessel's wake will push you clear of the bow
B. go full astern with rudder amidships
C. go full ahead with the rudder hard over to starboard
D. go full ahead with the rudder amidships

You are towing a large barge on a hawser. Your main engine suddenly fails. What is the greatest danger?
A. The tug and the tow will go aground.
B. The tow will endanger other traffic.
C. The tow will overrun tug.
D. The tow will block the channel.
98 1263 Ref: Towing, Overriding
The term "overriding" or "overrunning" when applied to towing, implies that ________.
A. there is more crew on board than required  C. the towing hawser comes out of the water
B. the tow has overtaken its tug  D. the Norman pins are not effective

99 127 Ref: Towing, Pike Pole
A long pole with a hook at one end, used to reach for lines, is known as a ________.
A. pike pole  C. line rod
B. jack staff  D. hooker

100 257 Ref: Towing, Position
A tug is best positioned for towing and maneuvering on rivers and other restricted waters where wave action is limited when ________.
A. directly astern and pushing the tow  B. towing on a hawser
C. towing alongside and parallel to the vessel it is towing  D. towing on the hip

101 260 Ref: Towing, Position
A tug would NOT assist a ship to steer if the tug is made up to the large vessel ________.
A. by a tow line ahead of the vessel  C. approximately amidships of the vessel
B. forward on either bow of the vessel  D. on the vessel's quarter

102 261 Ref: Towing, Power, BHP
A tug's horsepower available at the shaft is ________.
A. indicated horsepower  C. dynamic horsepower
B. brake horsepower  D. net horsepower

103 694 Ref: Towing, Power, BHP
Indicated horsepower refers to a towing vessel's power which is ________.
A. theoretically available  C. developed at the shaft
B. measured on a test bed  D. measured by dynamometer

104 1093 Ref: Towing, Power, Bollard Pull
The measurement of the amount of force a towing vessel is capable of applying to a motionless tow is called ________.
A. shaft horsepower  C. bollard pull
B. delivered horsepower  D. towrope pull

105 252 Ref: Towing, Power, Bollard Pull
A towing vessel's capability is BEST measured by horsepower, maneuverability, displacement, and ________.
A. stability  C. bollard pull
B. propeller design  D. towing winch horsepower

106 889 Ref: Towing, Power, Bollard Pull
The amount of force a tug can exert on a stationary pull is called its ________.
A. brake horsepower  C. shaft horsepower
B. indicated horsepower  D. bollard pull

107 1228 Ref: Towing, Power, Bollard Pull
The static bollard pull of a tug is measured in tons and consists of the brake horsepower of the tug's engine divided by 100 and multiplied by a factor of ________.
A. 0.5  C. 3
B. 1.3  D. 10
108 1258 Ref: Towing, Power, Bollard Pull
The term "bollard pull" refers to a towing vessel's __________.
A. propulsion horsepower available C. towing winch capability
B. pulling ability at cruise power D. pulling ability under static conditions

109 1941 Ref: Towing, Safety
Which of the following responsibilities should you assume once you have agreed to assist a disabled vessel?
A. All personnel on the disabled vessel don life jackets
B. All passengers move to the highest point on the disabled vessel to remain clear of towing gear
C. Operator of disabled vessel on the bow with a lifejacket and emergency tow disconnect equipment
D. Operator of disabled vessel to dump fuel and ballast to improve disabled vessel's towing movement

110 419 Ref: Towing, Securing, Back up
Back-up wires on a towed vessel provide __________.
A. a factor of safety C. a distribution of the towing load
B. additional strength D. All of the above

111 95 Ref: Towing, Securing, Face Line
A face line is used to __________.
A. prevent barge movement in a lock C. secure barges to the towboat
B. secure two barges end-to-end D. secure barges side-by-side

112 116 Ref: Towing, Securing, Scissor Wire
A lashing used to secure three or four barges at a common corner, lashed in an "X" fashion, is called a __________.
A. scissor wire C. breast wire
B. towing wire D. cross wire

113 384 Ref: Towing, Securing, Spring
An intermediate spring is __________.
A. fitted in each leg of the towing bridle
B. generally located between the "fishplate" and the main towing hawser
C. secured at the "H" bitts
D. usually made of manila hawser

114 2433 Ref: Towing, Securing, Swing Line
You attach a line to a stationary barge lying off your starboard beam in order to maneuver it into position to make up tow. The line used to do this is a __________.
A. jockey line C. check line
B. fore and aft line D. swing line

115 254 Ref: Towing, Securing, Towline
A towline should be fastened to __________.
A. the chocks at the bow of a towed vessel
B. the most forward, centermost point of a towed vessel such as a sturdy bow rail
C. the mast of a towed sailboat
D. a secure fitting near the bow of the towed vessel

116 22 Ref: Towing, Securing
A "loose" tow may cause all of the following EXCEPT __________.
A. loss of maneuverability C. damage to the towing vessel and tow
B. lines to part D. a saving in the transit time
117  505 Ref: Towing, Securing C
Fittings used for towing must be __________.
A. Coast Guard approved       C. securely fastened
B. stamped with maximum working loads D. positioned exactly at the bow of the towed vessel

118  592 Ref: Towing, Sinking Tow C
If a tow sinks in shallow water, you should __________.
A. release it immediately
B. attempt to beach it before it goes under
C. pay out cable until it's on the bottom and place a buoy on the upper end
D. shorten cable to keep it off the bottom

119  387 Ref: Towing, Sinking Tow C
An ocean tow is sinking in deep water. Attempts to sever the towing hawser are unsuccessful. Which action should now be taken?
A. Abandon the towing vessel.
B. Radio for emergency assistance.
C. Slip the towline and allow it to run off the drum.
D. Secure all watertight openings on the towing vessel.

120  1808 Ref: Towing, Sinking Tow A
Which action should be taken FIRST if your tow is sinking in shallow water?
A. Pay out the towline until the sunken tow reaches bottom.
B. Sever the towline.
C. Immediately head for the nearest shoreline.
D. Contact the Coast Guard.

121  2107 Ref: Towing, Stability, Ballast A
Which type of ballast is most commonly used in barges and ships?
A. Water C. Concrete and barite
B. Oil D. Sand, rock and gravel

122  1635 Ref: Towing, Stability, Drag C
When a tow is trimmed by the stern it is said to __________.
A. hog C. drag
B. sag D. list

123  2085 Ref: Towing, Stability, Watertight C
Which structural members improve a towing vessel's chance of surviving punctured shell plating?
A. Stringers C. Transverse watertight bulkheads
B. Longitudinals D. The rake

124  1835 Ref: Towing, Stability C
Which effects listed below does NOT influence stability of a towing vessel?
A. Free surface
B. Load heights
C. Towline length
D. Ice

125  87 Ref: Towing, Steamboat Ratchet D
A device used to tighten up remaining slack in wire rope when you are making up to a tow in inland waters is a __________.
A. tripping line C. norman pin
B. tripping bracket D. steamboat ratchet
126 104  Ref: Towing, Tow Bar, Dutch  B  
A heavy steel curved arch constructed athwartships and above the after deck on a towing vessel is sometimes called a __________.  
A. chafing bar  C. carling  
B. Dutch tow bar  D. None of the above  

127 105  Ref: Towing, Tow Bar, Texas Bar  B  
A heavy steel curved arch constructed athwartships and above the after deck on a towing vessel is sometimes called a __________.  
A. main brace  C. jockey bar  
B. texas bar  D. None of the above  

128 637  Ref: Towing, Tow Bar  D  
In astern towing, a tow span, also called the "tow bar" or "towing arch", is used to __________.  
A. insure that the hawser leads directly aft as it passes over the stern of the towing vessel  
B. increase the stability of the towing vessel by raising the hawser off the deck  
C. reduce chafing of the towing hawser  
D. prevent fouling of the hawser on deck gear located on the stern of the towing vessel  

129 1773  Ref: Towing, Tow Gear, Automatic Tension Winch  B  
When towing astern, chafing gear should NOT be used on a hawser which is __________.  
A. attached to an "H" bitt  C. held amidships by a gob rope  
B. attached to an automatic towing engine  D. connected to a swivel  

130 2029  Ref: Towing, Tow Gear, Automatic Tension Winch  C  
Which statement concerning an automatic towing engine is FALSE?  
A. It automatically maintains tow line tension.  
B. It prolongs the life of the hawser by distributing chafing as the hawser is paid out and taken in.  
C. As tension on the hawser increases, more line is taken in by the automatic towing engine.  
D. As tension on the hawser decreases, more line is taken in by the automatic towing engine.  

131 1707  Ref: Towing, Tow Gear, Back up Wires  D  
When making up a long, large coastwise tow, which of the following procedures is INCORRECT?  
A. A chain towing bridle is generally preferred  
B. Safety shackles should be used when connecting to the fishplate  
C. Rig tripping ropes (retrieving lines)  
D. Back-up wires are left slack  

132 1569  Ref: Towing, Tow Gear, Chafing Gear  A  
What is used to prevent wear on towlines that bear on hard surfaces?  
A. Chafing gear  C. Grease  
B. Chocks  D. Boots  

133 683  Ref: Towing, Tow Gear, Chock  A  
In towing, chocks are used to __________.  
A. protect the towline from chafing  
B. secure the end of the towline on the tug  
C. stop off the towline while retrieving it  
D. absorb shock loading on the towline  

134 909  Ref: Towing, Tow Gear, Cleat  A  
The best method to secure a tow line to a cleat is to __________.  
A. take a turn around the cleat, then figure-eights, and a half-hitch  
B. make figure-eights, followed by a half-hitch, then a figure-eight knot  
C. take a turn, a half turn, and a figure-eight  
D. take several turns around the cleat only
135 1050 Ref: Towing, Tow Gear, Cleat
The lead of a tow bridle is usually redirected with a __________.
A. bollard C. pad eye
B. chock D. devil's claw

136 1661 Ref: Towing, Tow Gear, Fairlead
When being towed, a fairlead is a __________.
A. fabricated shape used to change the direction of a flexible member of the tow hookup
B. fabricated shape used to secure the tow hookup to the towed vessel
C. line connecting the fishplate to the bridle legs
D. line connecting the tow bridle to the towed vessel

137 1414 Ref: Towing, Tow Gear, Fairlead
What could be used as fairleads on a towed vessel?
A. Chocks C. Roller chocks
B. Double bitts D. All of the above

138 2053 Ref: Towing, Tow Gear, Gob Rope
Which statement is TRUE about the use of a "gob rope"?
A. The gob rope is a mooring line for tying up lighters for working cargo alongside a vessel anchored in an open roadstead.
B. The gob rope is used to secure the towline aft over the centerline of a tug.
C. The gob rope is a line hung over a vessel's side to assist in boarding.
D. The gob rope is a rope used in mooring a vessel to a buoy.

139 1486 Ref: Towing, Tow Gear, Jewelry
What is NOT considered "jewelry"?
A. Steamboat ratchets C. Buttons
B. Manila lines D. Shackles

140 1708 Ref: Towing, Tow Gear, Screw Pin
When making up a tow connection, you should use __________.
A. safety hooks C. round pin shackles
B. plain eye hooks D. screw pin shackles

141 2124 Ref: Towing, Tow Gear, Shackle
Which type of shackle is used for most towing connections?
A. Safety shackles C. Screw pin shackles
B. Round pin anchor shackles D. Heart shaped shackles

142 1779 Ref: Towing, Tow Gear, Tow Hook, Quick Release
When towing, a tow hook is used to __________.
A. provide quick release of the hawser
B. pull a tow alongside
C. attach a hawser to a tow which has no bitts or pad eyes
D. join two hawsers for lengthening a tow

143 248 Ref: Towing, Tow Gear, Tow Hook, Release
A towing hook may be released from the __________.
A. tug's engine room or the bow
B. pilot house or aft steering station
C. forecastle
D. towing bitts by reaching over and releasing a lever

144 313 Ref: Towing, Tow Gear, Tow Hook, Release
A vessel that tows astern must have a/an __________.
A. towing winch C. oxy-acetylene cutting torch
B. method to easily release the towline D. ax or knife mounted near the towing bitts
145  1587  Ref: Towing, Tow Gear, Tow Hook
What purpose does a tow hook serve?
A. To quickly connect or release the towing hawser
B. To help pick up the towing hawser from the water
C. To prevent the towing hawser from fouling the propeller
D. To recover the towing hawser from a barge

146  1446  Ref: Towing, Tow Gear, Tow Hook
What is an advantage in the use of a towing hook?
A. To prevent the tug from becoming tripped
B. To quickly connect or release a tow, especially a sinking tow
C. To facilitate berthing maneuvers
D. All of the above

147  1802  Ref: Towing, Tow Gear, Tow Hook
Where is the best location to install a towing hook?
A. Forward of the towing bitts
B. On the fantail
C. Near the Norman Pins
D. Just aft of amidships

148  1800  Ref: Towing, Tow Gear, Towing Bitts
Where are the towing bitts best placed for towing purposes?
A. Near the centerline and over the rudders
B. On each side of the vessel near the stern
C. Forward of the rudder post and close to the tug's center of pivot
D. As far aft as possible

149  798  Ref: Towing, Tow Gear, Towing Bitts
One reason a tug's towing bitts are located forward of the rudders is because __________.
A. it makes it easier to hook up the towing hawser
B. this is where the towhook is located
C. this allows more responsive steering
D. it is traditional

150  1804  Ref: Towing, Tow Gear, Towing Bitts
Where should the foundation supports for towing bitts terminate?
A. Forward of the towing winch
B. In the frames or other substantial structural members below decks
C. On the deck plates in the engine room
D. On deck, aft of the towing winch

151  1660  Ref: Towing, Tow Gear, Towing Bitts
When being towed by one tug, the towing bridle should be connected to towing __________.
A. bitts with figure eights
B. pad eyes with pelican hooks
C. pad eyes with safety hooks
D. All of the above

152  2192  Ref: Towing, Tow Gear, Towing Bitts
Why are stern towing bitts placed well forward of the rudder when hawser towing?
A. To keep the hawser from fouling the rudder
B. To keep the towing bitts as far away as possible from the tugs pivoting point
C. To allow the stern to swing more freely when using rudder
D. To have as much of the towing hawser in use as possible

153  2476  Ref: Towing, Tow Gear, Towing Bitts
You should attach a towline to a trailer eye bolt using a(n) __________.
A. eye splice
B. bowline
C. towing hitch
D. square knot
Your vessel is being towed and back-up wires have been installed. Back-up wires carry the towing load in the event that the __________.
A. bridle legs part  
B. towing bitt or pad eye fails  
C. bight ring fails  
D. main towing hawser parts

When tandem tug towing, the more powerful of the two tugs should be __________.
A. the lead tug  
B. behind the lead tug  
C. towing at a right angle to the smaller tug  
D. towing at a faster speed than the smaller tug

When towing a small trailer-able boat, the sturdiest fitting available to attach a tow rig is the __________.
A. towing cleat on the bow  
B. most forward handrail stanchion  
C. trailer eye  
D. chock

A towing winch, that handles a wire towline, must have all of the following EXCEPT a __________.
A. device that evenly spools and tightly winds the towline  
B. brake with holding power appropriate for the vessel's horsepower or bollard pull  
C. brake that can be operated when there is no power available to drive the winch  
D. source of emergency power to operate the winch

You would NOT secure a line to a __________.
A. kevel  
B. stand pipe  
C. button  
D. timber head

What is NOT suitable for use in making up the towing rig for a heavy, long ocean tow?
A. Chain  
B. Ring  
C. Solid thimble  
D. A fishplate

The owner or Master of a vessel pushing ahead or towing alongside must ensure that each of the following is appropriate for the vessel's horsepower and tow arrangement EXCEPT __________.
A. hydraulic couplings  
B. face wires  
C. push gear  
D. spring lines

When hip towing, a line led from the stern of the towboat forward to the barge provides the towing pull when __________.
A. going ahead  
B. dead in the water  
C. in a following current  
D. backing

You are in the process of adding a barge to your tow. A line run from your power capstan and around timber heads on your tow is made fast on the new barge so that it can be pulled into position. This line is called a __________.
A. scissors wire  
B. capstan line  
C. spring line  
D. fore and aft line

When "checking down" a barge using a check line you should use __________.
A. one round turn and at least two figure-eights around the timber heads  
B. at least three figure-eights around the timber heads  
C. a clove hitch around one timber head  
D. at least three round turns around one timber head
What does "end for end" mean in regard to a towing hawser?
A. To take the kinks out of the hawser
B. To fake it down in figure eights
C. To increase the catenary
D. To swap ends of the hawser to minimize wear

What does the term "end-for-end" refer to in regard to a wire towing hawser?
A. Cutting off the bitter and towing ends of the wire rope
B. Splicing two wire ropes together
C. Removing the wire rope from the drum and reversing it so that the towing end becomes the bitter end
D. Removing the wire rope from the drum and turning it over so that the wire bends in the opposite direction when rolled on a drum

A towing hawser is readied for service by __________.
A. spooling it on a winch cathead
B. coiling it in a counterclockwise direction on the fantail
C. faking it on deck in a fore and aft direction
D. spooling it on a reel lying on its side to prevent rolling

To lay out a towing hawser in a fore-and-aft direction so each bight is clear and can run out freely without snagging describes __________.
A. flemishing C. spooling
B. faking D. worming, parceling and serving

A towing hawser should be stowed __________.
A. in a sealed locker with adequate air circulation
B. by spooling it on the winch
C. by faking on a rack
D. by hanging it in the engine room

While towing, sudden shock-loading caused during heavy weather can be reduced by __________.
A. using a short tow hawser
B. using a nonelastic type hawser
C. using a heavier hawser
D. decreasing the catenary in the hawser

What equipment is NOT used to protect a towing hawser?
A. Hawser boards and chafing gear
B. Halyards and snaphooks
C. Seizing wire, rope yarn and marline
D. Norman pins and tow spans

When must the owner or Master of a towing vessel retest a towline or remove it from service?
A. When the record of its material condition lapses for 3 months or more.
B. After it jams on the towing winch.
C. After it drags on the bottom.
D. When it has not been used for over 60 days.

When should you conduct a visual inspection of your towline?
A. Whenever its serviceability is in doubt.
B. In accordance with the manufacturer's recommendation.
C. At least once a month.
D. All of the above
173 1848 Ref: Towing, Tow Line, Inspection  D
Which factor(s) might indicate that a towline should be removed from service?
A. Visible damage to the towline, including fishhooks.
B. Measurements showing a decrease in diameter.
C. A surface condition of corrosion and discoloration.
D. All of the above

174 1347 Ref: Towing, Tow Line, Inspection  D
Towlines should be inspected for chafing where the towline __________.
A. passes over the stern of the towing vessel
B. passes through chocks
C. is attached to the disabled vessel
D. All of the above

175 1845 Ref: Towing, Tow Line, Inspection  C
Which factor would NOT lead to removing a towline from service?
A. An excessive number of miles of towing service.
B. Failing a tensile strength test that proved the towline was no longer appropriate for expected sea conditions.
C. When heavy grease on the towline saturates the core of the wire rope.
D. Its surface condition is noted, including its corrosion and discoloration.

176 1335 Ref: Towing, Tow Line, Messenger  C
To reconnect a broken tow line, it is better to use a polypropylene messenger line because it _________.
A. has great strength
B. is very supple
C. floats
D. absorbs shock by stretching

177 702 Ref: Towing, Tow Line, Nylon  A
It is not advisable to use nylon for alongside towing because it _________.
A. stretches too much
B. is too expensive for everyday towing usage
C. binds on the cleats
D. parts too readily

178 703 Ref: Towing, Tow Line, Nylon  A
It is NOT advisable to use nylon for alongside towing because it _________.
A. stretches too much
B. is too difficult to make fast
C. parts too readily
D. is too susceptible to mildew

179 742 Ref: Towing, Tow Line, Nylon  B
Nylon line is better suited than manila for __________.
A. towing alongside
B. towing astern
C. holding knots and splices
D. resisting damage from chemicals

180 744 Ref: Towing, Tow Line, Nylon  B
Nylon rope is often used in the makeup of a towline because it __________.
A. floats
B. stretches
C. handles easily
D. resists rot

181 954 Ref: Towing, Tow Line, Nylon  C
The disadvantage of using three strand nylon line for towing is its __________.
A. inherent weakness
B. tendency to rot if left damp
C. danger to crew if it parts
D. strength and shock absorbing abilities
182 1726 Ref: Towing, Tow Line, Nylon A
When paying out nylon line from around the bitts __________.
A. stand clear of the bitts and use two or more round Turns under your figure eights
B. you can surge the line even with a single turn
C. no extra turns are necessary since nylon has a high coefficient of friction
D. stand in the bight of the line

183 2050 Ref: Towing, Tow Line, Nylon C
Which statement is FALSE?
A. Nylon can stretch approximately 40% and still recover.
B. Only nylon stoppers should be used on nylon hawsers.
C. Nylon is most practical for use on hip towing.
D. With proper care nylon hawsers will greatly outlast manila and other natural fibers.

184 2126 Ref: Towing, Tow Line, Nylon C
Which type of towing hawser is preferred for towing astern?
A. Manila  
B. Polypropylene  
C. Nylon  
D. Polyester

185 603 Ref: Towing, Tow Line, Parting C
If the towline parts, you should __________.
A. start pushing ahead  
B. abandon the towing vessel  
C. retrieve the tow bridle  
D. relieve strain on the retrieving line

186 669 Ref: Towing, Tow Line, Preventer C
In securing a towing cable, consideration must be given to letting go in an emergency. The possible whip of towlines when released can be overcome by __________.
A. increasing the shaft RPM prior to release  
B. using a pelican hook for quick release  
C. using preventers  
D. using a short chain for the lead through the stern chock

187 1772 Ref: Towing, Tow Line, Quick Release B
When towing astern what equipment should be stowed ready for use near the towline?
A. First aid kit  
B. Axe or cutting torch  
C. Fire extinguisher  
D. Chafing gear

188 1350 Ref: Towing, Tow Line, Shackle D
Tugs sometimes shackle a length of chain in the towline in order to __________.
A. take the wear should the towline drag bottom  
B. assure that if the towline is overstressed it will part close to the bridle  
C. prevent the towline from whipping should it part  
D. put spring in the towline

189 1801 Ref: Towing, Tow Line, Surge Line A
Where is a surge line placed in the towing hookup?
A. Connected between the main towing hawser and the towing bridle  
B. Connected between the "H" towing bitts and the main towing hawser  
C. End of line fastened directly to the drum of the towing winch  
D. As both legs of the towing bridle

190 974 Ref: Towing, Tow Line, Terminal Gear B
The equipment used to control, protect and connect a towline is called __________.
A. cat head  
B. terminal gear  
C. level wind  
D. poured socket
When hip towing, a line led from the bow of the towing vessel aft to the vessel being towed would be a __________.

A. backing line  
B. towing line  
C. stern line  
D. breast line

What is NOT an advantage of a wire towing hawser?

A. Easy to handle when properly spooled on the drum of a towing winch.
B. Has more spring and shock resistance than synthetic.
C. Can be used to tow heavier loads because of its smaller diameter and more manageable size.
D. Subject to less deterioration than synthetic if properly maintained.

Wire rope is used in the towing industry __________.

A. for back up wires and main towing hawsers  
B. for face wires or jockeys when pushing ahead  
C. as stern wires when pushing ahead  
D. All of the above

How many wire clips must be used to make a temporary repair to a tow wire?

A. 3  
B. 4  
C. 5  
D. Wire clips are never, under any circumstances, permitted

Of which type of material may a towing hawser be constructed?

A. Wire rope  
B. Nylon  
C. Polyester  
D. All of the above

The condition of a towline must be monitored by __________.

A. keeping record of the towline's initial minimum breaking strength  
B. keeping record of each retest of the towline's minimum breaking strength  
C. conducting routine visual inspections of the towline  
D. All of the above

The connection to the towline must be secured with a __________.

A. galvanized screw-pin shackle  
B. hardened steel thimble  
C. shackle secured a nut and cotter pin  
D. shackle fitted with a swivel piece

The owner or Master of a towing vessel must evaluate whether the entire towline, or a part of it, is no longer serviceable. The towline should be removed from service in all cases EXCEPT __________.

A. when recommended by the manufacturer or an authorized classification society  
B. in accordance with a replacement schedule  
C. when the vessel is underway  
D. depending on the mileage or time that the towline has been in service
The owner or Master of a towing vessel that tows astern must keep records of the towline(s) that include all of the following information EXCEPT _________.

A. the towline's initial minimum breaking strength as determined by the manufacturer
B. an invoice showing the cost of the towline
C. the towline's nautical miles of use or time in service
D. the history of loading of the towline

The size and material used for towline(s) must meet all of the following requirements, EXCEPT _________.

A. be appropriate to the vessel's horsepower or bollard pull
B. be strong enough to handle any static or dynamic loads expected during its service life
C. fit any spare wire clips carried on board the vessel for repair purposes
D. be suitable for exposure to the marine environment

To lead the towing hawser over the center of the stern when not under a strain you could __________.

A. fairlead it through a stern roller chock
B. lead it through the Norman pins
C. hold it in the median position by a gob rope
D. All of the above when so equipped

When towing astern, each towline must meet all of these requirements, EXCEPT _________.

A. being suitable for use as soon as it is removed from its normal stowage location
B. having wire clips for other than a temporary repair
C. having the end either spliced with a thimble or fitted with a poured socket
D. being free of knots

A towing vessel is tripped when __________.

A. it is overtaken by the tow
B. it is pulled sideways by the tow
C. the weight of the towing hawser causes loss of maneuverability
D. the propeller is fouled by the towing hawser

A towing vessel becomes tripped while towing on a hawser astern. What factor is LEAST important when assessing the risk of capsizing?

A. Length of the towline
B. Height of the towline connection
C. Length of the barge
D. Direction of opposing force

A tug is to assist in docking an oceangoing vessel on a hawser. The greatest danger to the tug is __________.

A. from the ship's propeller when making up aft
B. from being overrun if making up forward
C. hull damage while alongside passing a hawser
D. getting in a tripping position

A tug may be in danger of tripping when __________.

A. towed sideways by an overwhelming force on the towline
B. her tow moves parallel to and forward on either side of the tug
C. the tow is no longer directly astern but moves up on her quarter
D. All of the above
207 550 Ref: Towing, Tripping
How do the height and location of a tug’s towing bitts relate to the danger of tripping?
A. The further forward and closer to amidships the more readily the tug will trip.
B. Placement further aft permits more effective pulling, better steering and eliminates the danger of tripping.
C. Installing the bitts down low lowers the center of gravity.
D. The height and position of towing bitts has no significance.

208 699 Ref: Towing, Tripping
Is tripping limited to harbor and coastal towing?
A. No. Forces tending to capsize a tug are as dangerous on the high seas as they are in harbor and coastal work.
B. Yes. The long towing hawser used in ocean towing eliminates the danger of tripping.
C. No. Tripping is common in ocean towing because of more frequent maneuvering.
D. Yes. Because of increased water depths, forces required to capsize a tug are not usually found in ocean towing.

209 948 Ref: Towing, Tripping
The danger of a towing vessel tripping is increased the closer the towline is secured to __________.
A. the stern  
B. amidships  
C. the bow  
D. the quarter

210 1376 Ref: Towing, Tripping
Under which condition is a tug likely to be tripped?
A. When the tow “jumps” on the line
B. While making up to tow a large oil rig
C. When the towing hawser leads forward of the quarter
D. When the tug exerts maximum bollard pull with the tow close astern

211 1436 Ref: Towing, Tripping
What imminent danger results from tripping?
A. The barge(s) collide with the stern
B. Capsizing your tug
C. Your tug being pulled backwards by your tow
D. The stern of the tug submerges causing flooding into engine room

212 1509 Ref: Towing, Tripping
What is the effect of releasing the towline in a tripping situation?
A. It disconnects the capsizing force and allows the tug to recover from its list.
B. It frees the tug from its towing responsibilities.
C. There is no effect other than relief.
D. Yawing

213 1578 Ref: Towing, Tripping
What may prevent a tug from tripping or capsizing when towing a large vessel?
A. Surge lines  
B. Norman Pins  
C. Under riders  
D. Safety shackles

214 2102 Ref: Towing, Tripping
Which towing equipment can be used to prevent the tripping of a tug?
A. Bridles  
B. Chafing boards  
C. Gob ropes  
D. Drogues
Your vessel is being towed and you are using a tripping rope. A tripping rope of fiber or wire is used to __________.
A. give added strength to the main tow hawser
B. retrieve the main tow hawser
C. retrieve the outboard legs of the bridle where they are connected to the fishplate
D. open the pelican hook at the fishplate

An advantage of the modified Christmas Tree towing method is to __________.
A. increase the towing hawser's catenary and provide more spring
B. reduce catenary, allow operation in shallower water, and to release one barge without breaking up the entire tow
C. enable one tug and its crew without any outside assistance to make up or break down the tow
D. provide rapid delivery of logs from the northwestern United States to Hawaiian sawmills

The Honolulu (Christmas tree) tow was devised to __________.
A. keep the catenary to a minimum
B. allow easy removal of a center tow
C. reduce hawser length
D. increase the catenary

The tow makeup that is designed to keep the catenary of the tow hawser to a minimum is called the __________.
A. Christmas tree tow
B. tandem tow
C. British tow
D. tandem tug tow

A tow that veers to the side on the end of the towline is said to __________.
A. yaw
B. surge
C. sway
D. swing

The biggest problem you generally encounter while towing a single tow astern is __________.
A. the catenary dragging on the bottom
B. swamping of the tow
C. the tow tending to dive
D. yaw

The choice of length of tow bridle legs is governed by the __________.
A. expected towing forces
B. capability of retrieving gear
C. freeboard of the unit being towed
D. need to reduce yaw

What will NOT reduce yawing of a tow?
A. Increasing the length of the towing hawser
B. Trimming the tow by the stern
C. Stowing deck loads forward
D. Drogues put over the stern
When towing astern, one way to reduce yawing of the tow is to __________.
A. trim the tow by the stern  C. have the tow on an even keel
B. trim the tow by the head  D. list the tow on the side it is yawing

Which statement describes the motion of a yawing tow?
A. The tow twists, sometimes violently, astern of the tug
B. The tow sheers to one side behind the tug and maintains a position in a line diagonal to the tug's forward movement
C. The tow snakes behind the tug
D. All of the above

Which will NOT reduce yawing of a tow?
A. Increasing the length of the towing hawser  C. Trimming the tow by the stern
B. Trimming the tow by the bow  D. Drogues put over the stern

Yawing can be described as __________.
A. jumping on the towline as the tow pitches
B. jumping on the towline as the tow slams into waves
C. veering from side to side on the end of the towline
D. corkscrew motion of the tow due to wave action

You are being towed by one tug. As you lengthen the bridle legs you __________.
A. increase your chances of breaking the towing hawser
B. reduce the yawing of your vessel
C. reduce the spring effect of the tow connection
D. increase your chances of breaking the bridle legs

You intend to tow a barge with one tug and expect continuous high winds from the north. To reduce the yaw of your tow, you should __________.
A. reduce the draft of the barge  C. place bulky deck loads as far aft as possible
B. shorten one leg of the bridle  D. trim the barge down by the bow