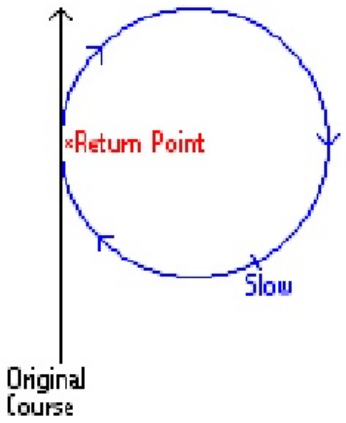
Man Overboard Recovery

The Anderson Turn



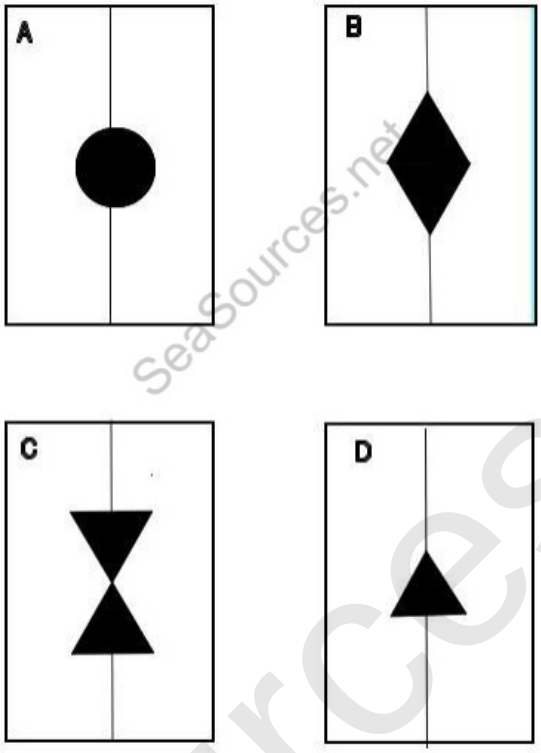
The Anderson Turn is a maneuver used to bring a ship or boat back to a point it previously passed through and is most appropriate when the point to be reached remains **clearly visible**.

Procedures

1. Stop the engines. Put the rudder over full.
2. Put the rudder toward the person (e.g., if the person fell over the starboard side, put the rudder over full to starboard)
3. When clear of the person, go all ahead full, still using full rudder.
4. After deviating from the original course by about 240 degrees (about 2/3 of a complete circle), back the engines 2/3 or full.
5. Stop the engines when the target point is 15 degrees off the bow. Ease the rudder and back the engines as required.
6. If dealing with a man overboard, always bring the vessel upwind of the person. Stop the vessel in the water with the person well forward of the propellers.

anderson_turn

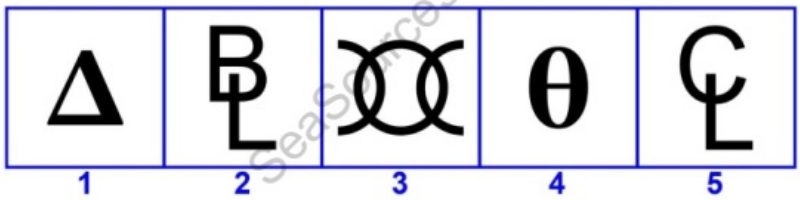
D016RR



Rules of the Road

d016rr_wm_052416

D041DG



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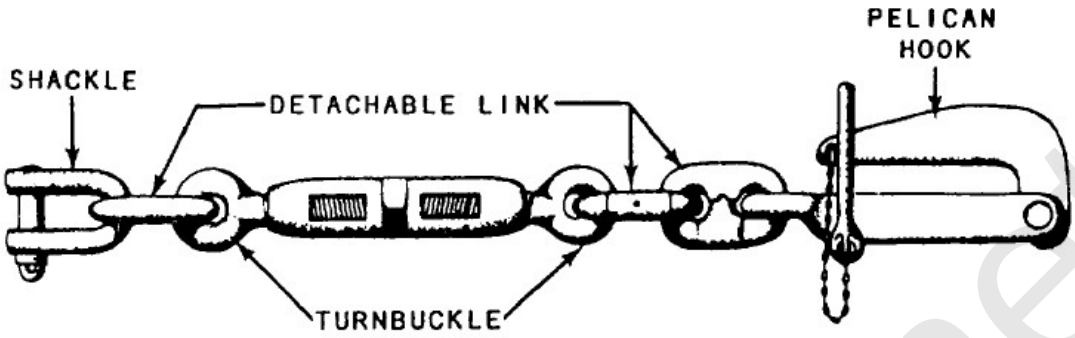
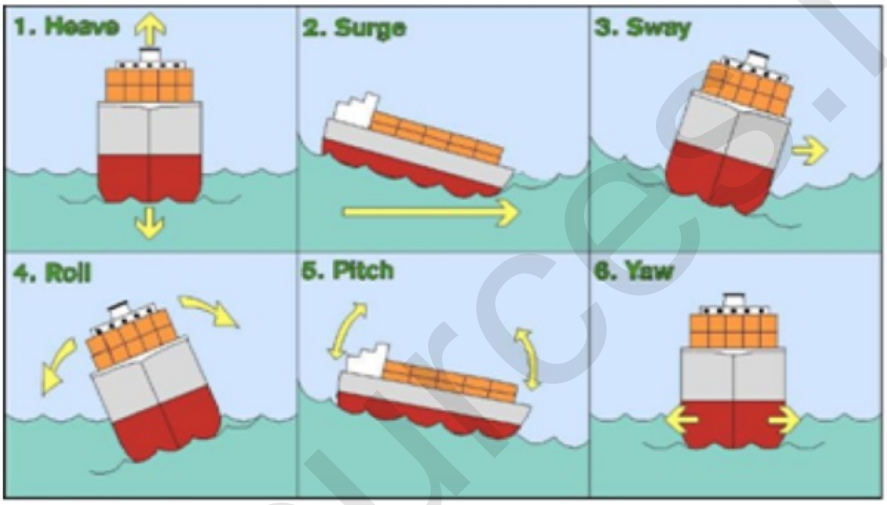


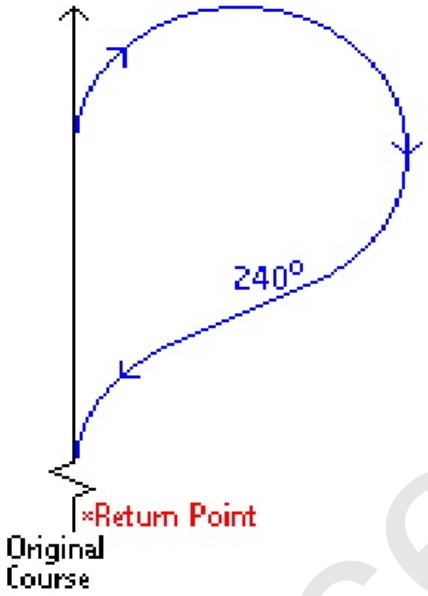
navychainstopper



pitch_roll_yaw

Man Overboard Recovery

The Scharnow Turn

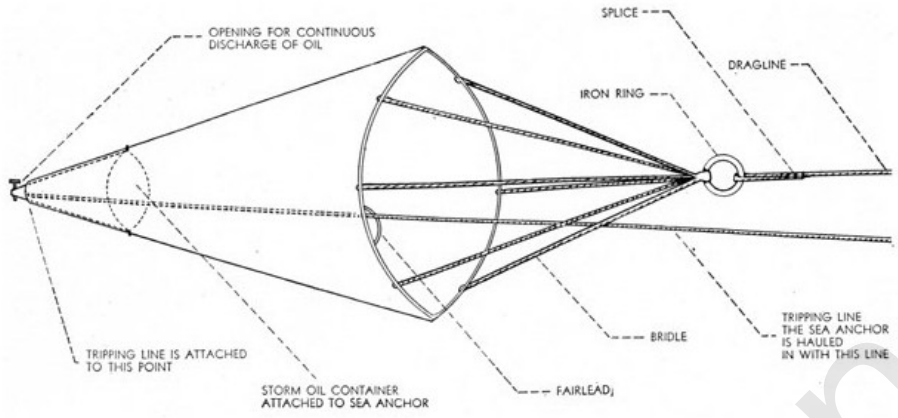


The Scharnow Turn is a maneuver used to bring a ship or boat back to a point it previously passed through and is most appropriate when the point to be reached is significantly further astern than the vessel's turning radius.

Procedures

1. Put the rudder over hard. If in response to a man overboard, put the rudder toward the person (e.g., if the person fell over the starboard side, put the rudder over hard to starboard).
2. After deviating from the original course by about 240 degrees, shift the rudder hard to the opposite side.
3. When heading about 20 degrees short of the reciprocal course, put the rudder amidships so that vessel will turn onto the reciprocal course.
4. If dealing with a man overboard, always bring the vessel upwind of the person. Stop the vessel in the water with the person well forward of the propellers.

scharnow_turn



THE SEA ANCHOR

seaanchor

The following equations are of use when making basic stability calculations:

(1) $$Roll\ Period = T = \frac{0.44 \times Beam}{\sqrt{GM}}$$

(2) $$Loll = \tan(\theta) = \sqrt{\frac{2GM}{BM}}$$

(3) $$Moment = KG \times Weight$$

(4) $$Total\ KG = \frac{Total\ Moment}{Total\ Weight}$$

(5) $$Shift = \frac{Weight \times Distance}{Displacement}$$

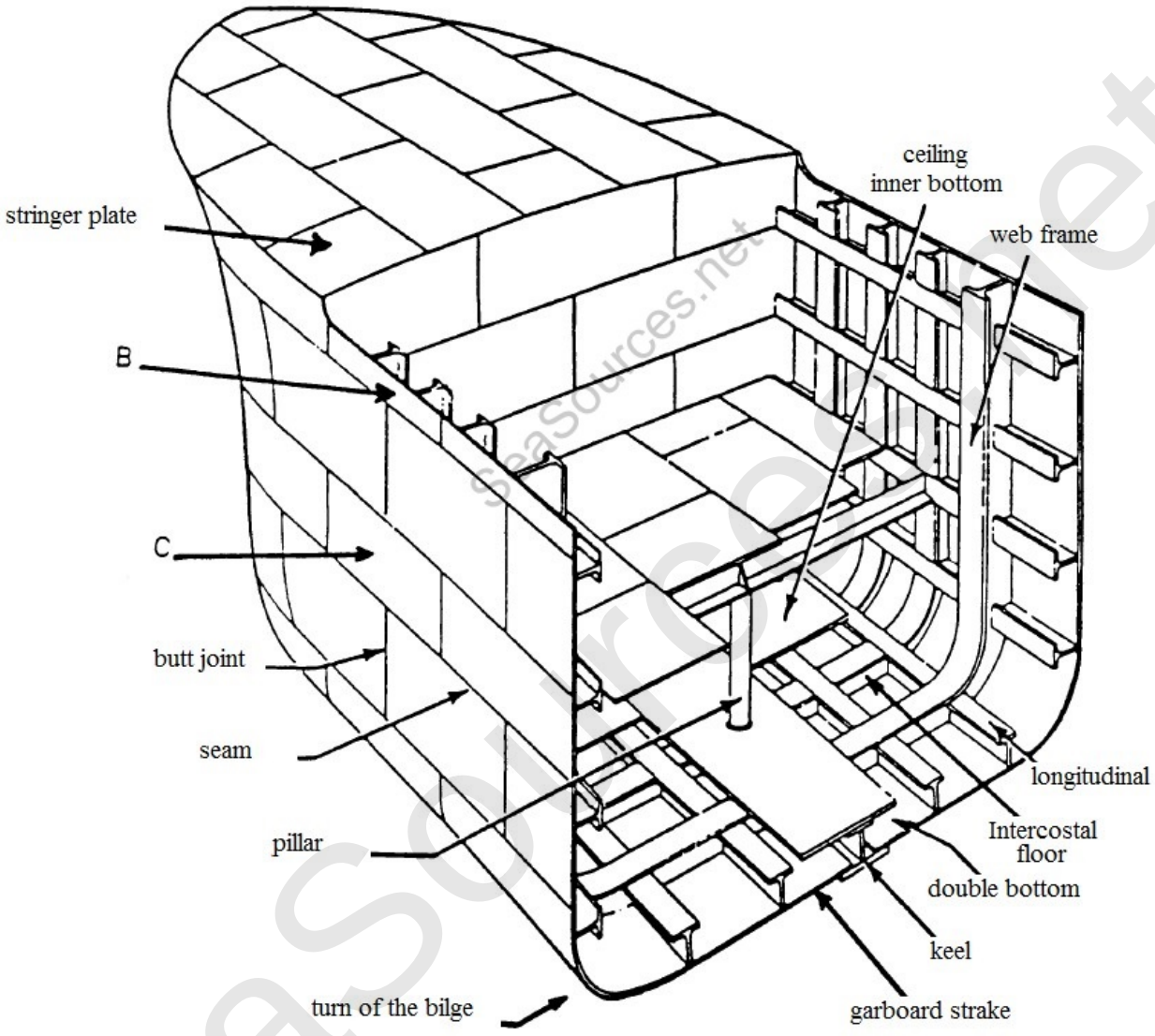
(6) $$KB = 0.53 \times Draft$$

(7) $$Parrallel\ Sinkage = \frac{Weight}{Tons\ Per\ Inch\ Immersion}$$

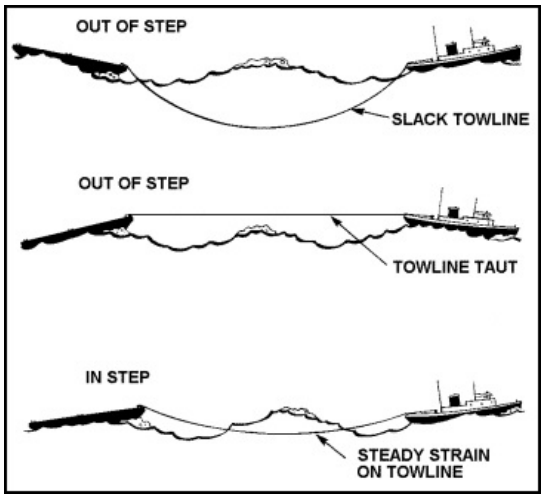
(8) $$Tons\ Per\ Inch\ Immersion = \frac{Waterplane}{420}$$

(9) $$Waterplane = Length \times Beam \times Coefficient$$

stabilityformulas



structuralmember_wm

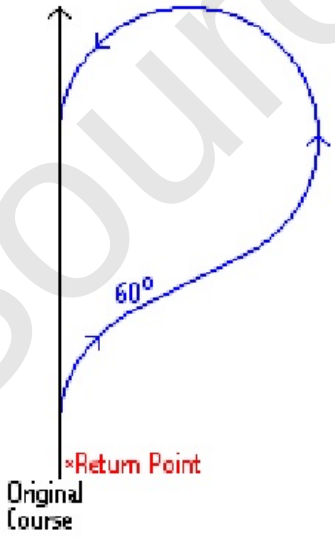


tow in step

Man Overboard Recovery

The Williamson Turn

The Williamson Turn is a maneuver used to bring a ship or boat under power back to a point it previously passed through, often for the purpose of recovering a man overboard and is most appropriate at night or in **reduced visibility**, or if the point can be allowed to go (or already has gone) out of sight, but is still relatively near.



Procedures

1. Put the rudder over full in the same direction as the person (e.g., if the person fell over the starboard side, put the rudder over full to starboard). Stop the engine.
2. When clear of the person, go ahead full using full rudder.
3. When about 2/3 of the way around, back the engine 2/3 or full. Stop the engine when the person is 15 degrees off the bow. Ease the rudder and back the engine as required.
4. Bring the vessel upwind of the person, stop the vessel in the water with the person along-side, well forward of the propellers.

williamson_turn