

Lesson Plan – 4.3-1 Anchoring

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AIM:

To give crew a deeper understanding of the Procedure for deploying the anchor, safety considerations and steps for deployment.

Training Afloat –

- Briefing
- Notifying coastguard where applicable
- Preparing for anchoring
- Deploying anchor
- Resetting anchor
- Paying out line
- Preparing for recovery
- Action for fouled anchor
- Stowing anchoring
- Considerations when anchoring if moving into a veering down situation (see veering down lesson plan)

Training Shoreside –

- Discuss safety of crew and equipment
- Hazards of lines , anchor locker, not keeping low or leaning over. lines under tension (little finger)
- Communication and the importance
- Walk through the process on the ILB while in the boathouse
- Cleaning the equipment after use and stowing correctly

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Safety

Importance of hatch remaining shut until deployment.

Securing yourself preferably on your knees thus lowering your centre of gravity so you don't go overboard.

Never straddle the anchor

Visors down when warp is under load

Terminology

Kedge, Weighing Anchor, Anchor aweigh, Clear or Foul Anchor, Dragging Anchor, Snub anchor, Shortening in, To Grow.

Types

Bruce, Danforth, Delta, Fisherman's, Plough or CQR, Grapnel

Parts of the Anchor (Add pic page 207 handbook)

How Anchor works (Add Pics page 207)

Length (Pic 207)

Equipment:

A 14.75 kg delta Anchor is attached to 9.1m of galvanised Chain. This in turn is connected to the 82m nylon warp. The Anchor and Chain are stowed in a locker below the deck in the bow of the boat the warp is permanently connected to the chain and feeds from the locker into a channel that runs down the starboard side of the boat and onto a reel in front of the steering console. There is a fairlead fitted to the bow of the boat and cleats fitted to the tube supports on both the Port and Starboard side forward of the reel. The Starboard cleat is usually used unless operational conditions dictate a necessity for the port side to be used.

NB - no rings should be worn on hands, and only gloves that have been confirmed as suitable can be worn.

Preparing for deployment:

The boat is positioned safely with due regard to wave height directions and power plus depth & swinging room

Release the anchor reel bungee and pull the warp from the channel in the deck.

Feed the anchor warp through the bow fairlead and lock off on the starboard Cleat

Take up position on the deck aft of the anchor locker lid in a secure position

Do not - open the anchor locker during this process

Deployment

Manoeuvre the boat into the required position with due regard for the casualty if veering down (refer to veering down lesson plan)

On command of the helmsman open the locker lid and secure with the Velcro strap

Lift the anchor and deploy it over the port sponson taking care to keep it clear of the sponson. a few moments should be allowed for the anchor to settle down before engaging the engines slowly astern to help dig the anchor in and fix on the sea bed.

Retain at least a full turn on the cleat for control ease out the line under direction from the helm to 6 times the depth of water; this may be considerably more if the helm is preparing for veering down. Be ready to lock off the line quickly if directed by the helm. (Pic of turn on cleat?)

NB - a longer line paid out will create a more horizontal line between the boat and anchor which will help with securing it in first time.

Once the correct length of warp has been deployed Lock off on the cleat

Engage engines gently astern to ensure the anchor isn't dragging.

To check secure you can:

1) Take a transit off the land or set Estimated Bearing line on the Radar to monitor drift. Maintain watch

2) visually see the bow sponson bend down under the weight of the line as tension increases.

If the anchor fails to hold , then the helm may either ask for more line to be paid out or request it be recovered and reset.

Recovery

A second crew member should remove the reel handle from its stowage position by 4th seat and attach to the reel.

The Helm will remove the engine power to allow for the recovery of the line. The helm may also manoeuvre the boat slowly ahead and maintain constant communication to ensure the warp is not run over if the line cannot be pulled in while static.

One crew member shall recover the warp through the fairlead until the chain is reached. A second crew member shall wind the recovered warp back onto the reel as it is recovered to ensure loose warp is not on the deck. To do this the crew member will maintain their position in bow with their back to the port sponson and feet / foot on the starboard sponson. They use their left hand to pull on the line between the fairlead and cleat then use their right hand to take that slack through the cleat. at which point the second crew member will reel it in. this is repeated time and time again until the chain is reached (shout out chain visible).

Once the chain is reached, lock off the warp on the cleat

keeping low in the bow, open the hatch and recover the chain over the sponson straight into the stowage locker until the anchor is reached (shout out recovering anchor), then stow the anchor immediately and then close the hatch.

Release the warp from the cleat and fairlead and secure back into the channel in the deck.

Replace the securing bungee cord and stow the anchor reel handle.

Short stay, long stay, up and down.

NB: If conditions allow; once the anchor is sighted, you may wish to dip it in and out of the water to remove any mud before bringing on to the lifeboat.

Breaking out of a fouled anchor

With anchor warp taut up and down make fast on board. Use engines to zig zag with caution to attempt to free the anchor, if this fails pay out more warp to alter angle and try again. If this still fails turn in a circle using astern power. If it remains fouled, buoy the anchor, and return at lower water.

Reference Material:

SOP - Anchoring

Video Clips -

Horizon Guidance -