

This method statement covers the following work practice:

Lifting operations whilst lifting and relaying anchors.

This includes the following combinations for anchor work.

1. Recovery and deploying of single point moorings

Pre-Work Practice

- Assess both present and forecast weather outlook along with current sea state.
- Skipper to conduct a visual inspection of the area where the anchors are to be lifted from and to. The weight of anchors are known in most cases during installation and loading. Whilst extracting from the sea bed there is the potential need for multiple lifts due to the combined weight of anchor and lengths of chain. If weight is unknown use load cell to work within safe perimeters for crane / winch and lifting accessories being used. Load cell to be used for the duration of the lift and details of the weight recorded for future reference in the lifting log.
- Crane operator to complete the lift plan operational record prior to lift and tool box talk with crew.
- All certificates for crane and personnel to be valid and in place.
- All appropriately rated lifting accessories onto deck prior to lift. Prior to use inspect all equipment is in safe working order and free from defects.
- Ensure deck space and escape hatches are free from obstruction.
- If offloading to shore, ensure the landing area is free from obstruction.

Work Practice

Lifting & relaying anchors or concrete blocks.

Precautions to be adhered to throughout this work practice.

- All personnel must have & use appropriate PPE
- Check the whole route for the lift, check and prepare landing zone.
- Continue to assess for all hazards in the area ensure the load is controlled during movement, remaining aware always of other vessels and structures.
- Crane operator to select a position that they can see from and be seen by other crew.
- Check SWL against load chart, if the weight of anchor is unknown therefore making the lift complex use the load cell to remain within SWL.
- Ensure good communication between personnel throughout the lift.
- When using the winch to retrieve anchors from the seabed if lifting from the trip end of the anchor all personnel **must keep clear at all times whilst wire / ropes are under tension**
- Ensure all personnel are aware at all times of additional trip hazards of chain, wire and ropes.

## Procedure for recovery and deploying single point moorings (Anchor or block)

### RECOVERY

- Connect crane to the marker buoy and lift clear of the water to remove any mussels or seaweed prior to offloading it onto the landing area. Secure chain or rope to the vessels secure point, lower the buoy completely onto the landing area, slings relaxed and free for removal by slinger, disconnect the chain from the buoy. Store the marker buoy safely on deck.
- Connect the mooring chain to the main winch rope or wire or crane with lifting chains or appropriately rated lifting hook. Retrieve the mooring chain from the water using the main winches or crane until all anchor chain and or rope is on board the vessel. Multiple lifts may be required, securing the chain at all times to maintain the safety of all personnel and keeping the working area as clear from obstruction as possible throughout each lift.
- When anchor or concrete block is visible, secure the chain. Attach the crane to the main shackle on the anchors and or joining shackle for the blocks using the appropriately rated strop or lifting chain. Using the crane lift the anchor or block clear of the water, remove any sediment off the anchor or block prior to offloading it onto the landing area. Lift load to the landing area following the signalers instructions, ensuring that nothing enters the work area.
- Lower load into landing area, slings relaxed and free for removal by slinger.
- All recovered equipment to be offloaded at a location specified by client.
- Record any observations regarding the lift on the lift plan operational record. For example, if the weight of the mooring is heavier than normal record the weight.

### DEPLOYING using the winch

- Set up the mooring on the deck, all shackles tightened and cable tied.
- Connect the crane to the main shackle on the anchor or joining shackle on the concrete blocks using lifting chains or appropriately rated lifting hook. Using the crane lift the anchor or concrete blocks into the water off the front or the side of the vessel following signalers instructions ensuring nothing enters the work area.
- Attach the mooring chain onto the to the main winch and run the chain onto the winch drum until the chain becomes tensioned on the winch.
- Lower the crane till strops or lifting chains become relaxed and disconnect the anchor or concrete blocks from the crane.
- When the vessel is in the correct position lower the chain from the winch to the seabed until the tension is off the chain. All personnel to stand clear whilst chain is being lowered.
- Run all excess chain off the drum and secure the mooring chain a few meters from the end to the vessel secure point and disconnect the mooring chain from the winch.
- Connect the marker buoy to the mooring chain. Using the crane lift the marker buoy until the tension is on the mooring chain and disconnect the mooring chain from the vessel secure point, lower the marker buoy into the water and disconnect from the crane.
- Mooring is now detached from the vessel, tidy the deck area of all ropes, chains etc.

## DEPLOYING by free fall blocks only (more common work practice on EMMA C)

- Set up the mooring on the deck for deploying and snake chain on the working area of the deck checking all shackles have been tightened and cable tied.
- Connect the crane to the joining shackle on the concrete blocks using lifting chains or appropriately rated lifting strop. Using the crane lift the concrete blocks into the water off the front or the side of the vessel following signalers instructions ensuring nothing enters the work area.
- Insert an appropriately rated rope through the joining shackle on the concrete block and connect to the vessel secure point.
- Lower the crane until the lifting chains or strops are relaxed and disconnect the block from the crane.
- Secure the marker buoy to the side or front of the vessel.
- Release the appropriately rated rope which is securing the blocks to let the blocks free fall to the seabed. **Ensure all personnel are clear of the working area whilst the chain is running off the vessel.**
- Attach the marker buoy to the crane and lift into the air to ensure the mooring chain is clear of obstruction and that concrete blocks have landed correctly.
- Lower the marker buoy into the water and disconnect from the crane.
- Mooring is now detached from the vessel, tidy the deck area of all ropes, chains etc.

### Who will perform the job?

Any personnel trained and certified to operate the crane on the ANNIE E or EMMA C. All relevant documentation completed by Skipper or crane operator.