

THE OPERATIONS PERFORMED
WHEN AN OIL TANKER
RECEIVED

BERTHING
OPERATION



LOADING
OPERATION

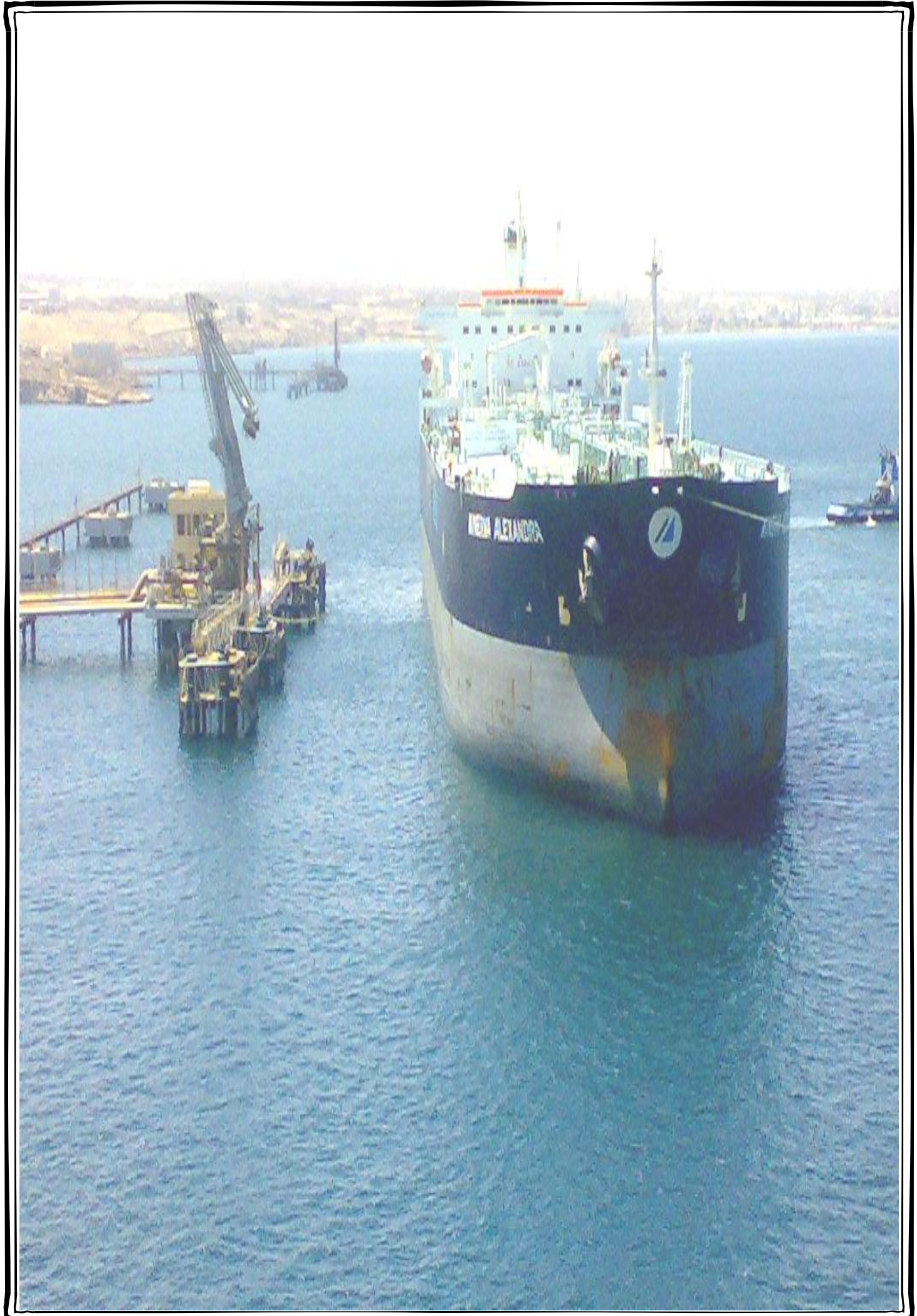


SAILING
OPERATION



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BERTHING OPERATION

Preparation Before Tanker Arrival

● Tanker information before loading :-

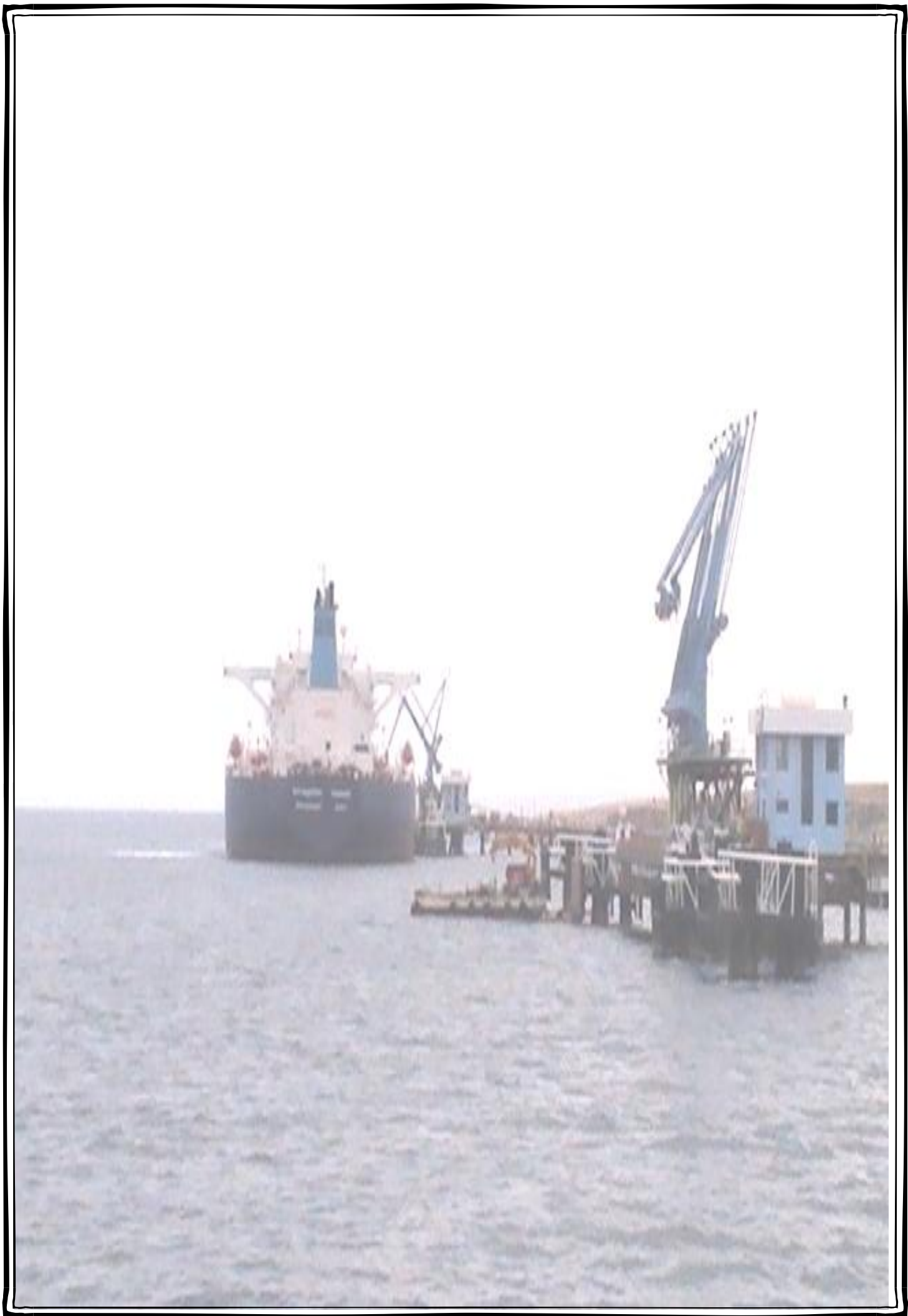
After pilot boards the oil tanker for berthing operation he will ask the captain some questions which important for loading operation and he will pass all this information to the loading master through (VHf CH9) .

The main loading information us follows :-

- ✓ Master request .
- ✓ Rate request .
- ✓ Manifold size (If the manifold is 14" or 12' then a spool adaptor of the appropriate size terminating in 16") .
- ✓ Number of hoses will be connected (Minimum manifold distance on vessel is (1200mm) if less than this only two arms can be connected to a ship with 3 or 4 manifolds leaving out a manifold between connection) .
- ✓ Ballast information (if available) .
- ✓ Ship or shore stop loading .

● Tanker Berthing and Spotting :-

- ✓ Tanker should be stopped so that the centre line of the arm manifold group is in line with the oil tanker manifold .
- ✓ Spotting and observing the marks on the Tankers which medical the Tanker manifold to the jetty loading arms which it is a distant .
- ✓ finally position given good position between manifold Tanker and jetty loading arms .
- ✓ do not forget the good position for gangway .



LOADING OPERATION

● Some information about The solid booms :-

- ✓ The solid booms hose loading systems are designed to be safer and require less control and supervision by the operator .
- ✓ The Loading Arm movement of the ship and no adjustment is necessary during the loading operation .
- ✓ It is preferable to have two operators to connect and disconnect The solid booms .
- ✓ Do not use the loading arm to lift anything to the ship's deck .

Preparation Before loading operation

● Check for :-

- ✓ The drain valves in the jetty (Make sure all the drain valves are closed) .
- ✓ Make sure all Loading valves are closed .
- ✓ Make sure the vent that in the top of hose is closed .
- ✓ Make sure of all arms are empty.
- ✓ Ensure that arm is capable of moving under hydraulic control without restriction .

Connection of Arms to the Tanker

- ✓ Ensure that is the main switch of electrical supply is "on" .
- ✓ Plug the pendant in the jetty control box .
- ✓ Select switch at main panel on "control " .
- ✓ Select Arm required for operation via Selector Switch .
- ✓ Open the hydraulic valve which is situated at the back of the Arm for each arm required .
- ✓ start up the hydraulic pump from the panel via Selector Switch to start .
- ✓ Disengage the inner arm stow locks and slew lock pin .
- ✓ Ensure all lacks are freed before moving the loading arm .
- ✓ Press the buttons on the pendant to move the arm to anyway .

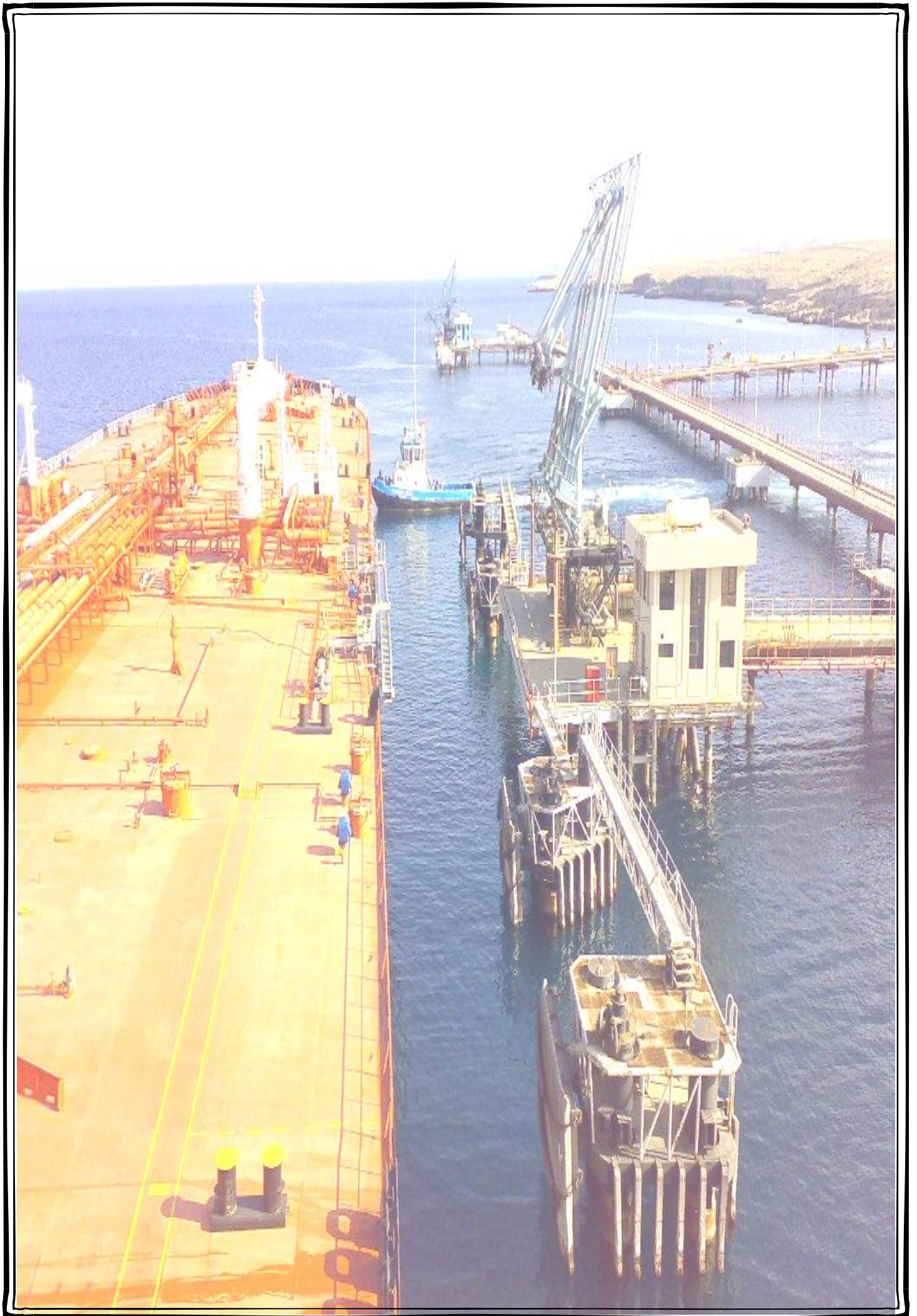
- ✓ The buttons in the pendant are :-
 - coupler open :- to open the cover of the arm head.
 - coupler close :- to close the cover of the arm head.
 - slew right :- to move the arms to right.
 - slew left :- to move the arms to left.
 - outer arm to shore :- to move the arms to the shore.
 - outer arm to ship :- to move the arms to the ship.
 - inner arm lower :- to move the arms to the lower.
 - inner arm stow :- to move the arms to the high.
 - start motor :- to start the hydraulic pump.
 - stop motor :- to stop the hydraulic pump.
- ✓ when arms which will be connect moving from platform jetty to the tanker deck unplug pendant from the jetty control box and transfer to the tanker deck .
- ✓ Select switch on "control " . (This switch is located on the end of arm) .
- ✓ Plug the pendant into the boom control box (This box is located on the end of arm) .
- ✓ Open the vent valve to allow any pressure trapped in the pipeline to be dissipated, then close when any air or product is drained .
- ✓ With completed Connect the loading arm Make sure all ship's manifold valves are closed .
- ✓ push the button of the pendant to open the claws of the arm to maximum to enable the blanking plate to be removed .
- ✓ Remove the blanking plate by rotating it counterclockwise until free of the lock pins .
- ✓ connect the arm head to the manifold of tanker and close the claws of the arm to maximum (make sure no gaps) .
- ✓ Switch arm control to "Freewheel" using the switch on the boom end control box .
- ✓ Repeat this operation for remaining loading arms to be connected .
- ✓ Remove pendant to safe storage .
- ✓ Set control panel mounted Freewheel security switch to "Freewheel".

⊙ start up the loading

- ✓ ask the captain to open the manifold .
- ✓ open the arm valve .
- ✓ open the main valve until the required rate .

⊙ After start up the loading Check for:-

- ✓ any leaks in the valves, arms, vents, and the manifold .
- ✓ coordination between the captain and the control room abut decrease or increase the rate .
- ✓ observation for the jetty and the tanker from berthing tanker until the sailing .



UN BERTHING & SAILING OPERATION

Preparation Before un berthing

● Disconnection on Completion of Loading :-

- ✓ When loading is completed , stop loading and close jetty valves .
- ✓ open the vent that in the top of hose .
- ✓ Drain the loading Arm of crude oil to the ship and shore .
- ✓ The loading arm must be emptied before disconnection .
- ✓ Close the vent that in the top of hose when the loading arm is empty .
- ✓ Set freewheel security switch to "control" at the main panel.
- ✓ Set freewheel security switch to "control" at the Switch arm control on the boom end control box .
- ✓ Plug the pendant into the boom end control box .
- ✓ Disconnection the loading arms from the ship manifold .
- ✓ Allow any product residue to drain into a container .
- ✓ Bring the arm from the ship .
- ✓ Repeat the operation for remaining arms to be disconnected
- ✓ Transfer the pendant to jetty at the main panel .
- ✓ set back the loading arms to the safety position and fix the pins for each arm .

● After the Tanker sailing :-

- ✓ checkup all fender .
- ✓ all movements has to be written in vessel particulars and time card .