



<b>PTW CHECKLIST - NO. 30</b>		<b>Title: Lifting Operations Involving Crane or Gantry Offshore</b>	
<b>Owner:</b> Capability Coordinator			
<b>Approver:</b> Capability Coordinator		<b>Max Validity Period: 5 yrs</b>	
<b>Permit No.:</b>		<b>Date:</b>	
<b>Latest Rev</b>	<b>Date</b>	<b>Details</b>	<b>Authorised By</b>
15.0	Jan 2016	Full revision	S Elliott
15.1	Feb 2017	Pg 3 Drum lifter chain sets	S Elliott
15.2	Aug 2017	Added Lifting Plan cover sheet requirement	M.Birdsall

Other Checklists That May Be Relevant: [56](#), [57](#)

HRA Checklists:

**REFERENCE DOCUMENTATION**

- The Shell document, Manage Logistics – Lifting and Hoisting Standard HSE EP2005-0264 defines the standard for lifting and hoisting within STL. This checklist is derived from this standard.
- [Adverse Weather Working Guidelines Doc ID PRD-ACT03-003](#)
- [Charterer's Instructions to Owners and Masters of Vessels](#) - Includes Installation Data Cards, Checklist Support Vessel/Installation operations checklist and Bulk Transfer Checklists.

**PRIOR TO PERMIT ISSUE:**

Before any lifting commences, the correct class of lift is to be identified.

The persons designated to the following positions are to be identified for all classes of lift and made known to all involved with the lift. They shall also hold the appropriate competencies as listed at the bottom of this checklist:

PICOL\* (Person In Charge Of the Lift) Name: \_\_\_\_\_ HSSE Critical Role

Competent Rigger/Slinger\* Name \_\_\_\_\_ HSSE Critical Role

Competent Dogman/Banksman\* Name: \_\_\_\_\_ HSSE Critical Role

Crane Driver Name: \_\_\_\_\_ HSSE Critical Role

\* May be same person

**NOTES:**

- 1 All lifts will usually be a 3 person activity i.e. Crane Operator, Dogman & Assistant. For minor lifts the 3<sup>rd</sup> person may not be required and is at the discretion of the PI
- 2 This checklist does not cover drilling top drive systems, helicopter lifting operations or marine towing.
- 3 Nothing in this checklist shall be deemed as relieving any person from complying with the requirements of the STL Lifting & Hoisting Management Manual DOC ID – 9131538 and the OSH Approved Code of Practice (ACOP) for Load-Lifting Rigging.
- 4 Containers will normally be bottom lifted using appropriate container lifting lugs and equipment. Where this is not possible and access to the top lifting points is required, "Work at Height" procedures shall apply.

**LIFT CLASSIFICATIONS – (Routine, Non-Routine, & Complex Lifts)**

**COMPLEX LIFT**

Tick when done

Y	N	NA
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- Are these lifts over live plant designated by Operations (ROS/PI) as high risk?
- Does lift exceed 90% of the crane Safe Working Load (SWL) at the working Radius?
- Does lift exceed 20 tonnes in gross weight?
- Does lift exceed 10 tonnes in gross weight and requires rigging up on site using non dedicated rigging equipment?
- Is any load to be transferred from one lifting appliance to another?
- Is load to be lowered or lifted from a Confined Space?
- Is the lifting of personnel or use of Man-Riding winches involved?
- Does the lift require two or more cranes or lifting appliances to place/remove the object to be lifted?
- Is the Centre of Gravity (COG) of the lift difficult to estimate, i.e. not below the lifting point, or the load can rotate or overturn?
- Are unusual rigging or lifting arrangements being used?
- Is the load weight unknown or unable to be accurately estimated?



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*If the answer is No to all the above, proceed with a Non-Routine Lift.*

- Nominate Operations Representative:

Name \_\_\_\_\_

- An approved Lift Plan is appended to the permit  
This includes Lifting Plan cover sheet, drawings/sketches detailing the crane location, the load, lifting arcs and angles, the crane safe load charts and load lay down point. Specific lifting equipment shall also be listed and certificates supplied.

**NON-ROUTINE LIFT**

- Are lifts over or within 5m of live plant designated by Ops (ROS/PI) as low risk?
- Is there limited head-room or restricted access?
- The load is very long, an awkward shape, or liable to be affected by wind.


*If the answer is yes to any of the above, proceed as a Non-Routine Lift. If the answer is No to all the above, proceed with a Routine Lift.*

Nominate Area Operations Representative (if required by the PI):

      

Name \_\_\_\_\_

- A lifting procedure reviewed by the PICOL and a Lift Plan is appended to Permit. This includes Lifting Plan cover sheet, drawings of the crane location, the load, lifting arcs and angles, the crane safe load charts and load lay down point. All lifting equipment required for the lift is listed with minimum capacity specified (Note: SO numbers and certificates not required).

**ROUTINE LIFT**

- Any lift in “non process” areas or in a process area with perimeter of load more than 5 metres to adjacent ‘live’ plant and equipment
- Load has known weight, known COG and standard rigging arrangements
- The load is <90% of the normal operating parameters of the crane.

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*If the answer is yes to all of the above, proceed as a Routine Lift.*

**NOTE:** A Lift Plan is not required for Routine lifts. Detail to be included in JHA.

**PREPARATION FOR ALL CLASSES OF LIFTS - PRIOR TO PERMIT ISSUE:**

- PI or AT have confirmed requirements for plant isolation / protection

Y	N	NA
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**PRIOR TO COMMENCING TASK:**

PICOL to confirm the following:

Tick when done

- Lift is ready to proceed in compliance with the lift plan where applicable. 

Y	N	NA
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
- The methods of rigging, suspension, attaching/detaching and load stability have all been determined.
- All lifts can be carried out within the crane and rigging rated capacity.
- Crane checks including limit alarms and safe load indicators have been checked and are functioning where appropriate.
- The initial and final load positions have been identified, with obstructions (light poles, scaffold, cable racks etc) being brought to the attention of the crane drivers and noted on the JHA. This is to be discussed in the toolbox talk.
- The PICOL shall ensure that the lifting operation is safely within the limit outlined in the [Adverse Weather Guide PRD-ACT03-003](#).

Y	N	NA
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

List maximum wind speed: \_\_\_\_\_

- If the scope or conditions changes, the lift shall be aborted, the PI / Engineer shall be informed, Lift procedures and JHA revised, and a new toolbox talk held.
- Signalling methods and communications agreed using a sole designated radio channel when the load is unsighted by the crane driver
- All rigging equipment i.e.: slings, shackles, lever blocks, chain blocks, turfets etc have been inspected and are within certification date.
- Tag lines are to be used wherever possible to ensure control over the load is maintained and to prevent load spin.
- Loads are not left suspended when the crane is unattended.
- Prior to the use of lifting lugs on manway flange closures, hatches or motors, Visual checks have been carried out by a Facilities Inspector or Mechanical Engineer.
- Has the weather forecast, venting and flaring operations been considered and discussed with the PI.
- Drum lifter chain sets that attach on the drum rim, are not to be used to transfer loads between decks, over process or walkways.
- The lift area has been roped off and/or signs and barriers are erected to warn personnel in adjacent areas.
- When operating in the vicinity of wellheads, ensure nothing can fall through hatches and impact on wells.

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**Additional for Working Supply Boat:**

Tick when done

- Is a Deck Cargo Plan required for separation of installation's cargo, urgent dangerous goods, bulk commodities, special handling or heavy lifts?  
Appendix 11 of [Charterer's Instructions to Owners and Masters of Vessels](#) - Deck Cargo Plan. 

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- Ensure all back loading cargo is stowed and secured correctly inside containers and baskets.
  
- All container doors are closed, locking pins inserted fully and security seals in place.
  
- Ensure load checked for insecure objects that have potential to fall.
  
- All documentation eg: cargo manifests/dangerous goods declarations completed.
  
- Ensure sufficient tag lines available for all lifts and a suitable tag line fitted to the crane leader.
  
- Check to ensure all lifting shackles are correctly pinned and/or moused prior to lifting.
  
- Immediately prior to working the supply boats, ensure Mipeg is switched to 'dynamic' and appropriate sea state selected.

**Additional for Bunkering Bulk Supplies:**

- Determine the amount of diesel/water/glycol to be bunkered and list the transfer volumes: \_\_\_\_\_ 

Y	N	NA
  
- Confirm the **Bulk Transfer Checklist EP2005-0262-TO-83 has been completed.**

**NOTE:**

*The crane operator shall rack the crane and exit the cab prior to helicopter arrival or as advised by the Helicopter Landing Officer (HLO). He must not resume crane operations until advised by the HLO that the helicopter is clear of the installation. The only exception is when the crane is holding the Well-services lubricator, attached to a well. In this case the crane driver (having confirmed the crane is braked) will remain immediately outside the crane cab during the helicopter operations on the platform.*

Position/Role	Required Competencies And Qualifications (Unit Standards)	Competency held by (insert name)
Person-in-charge of lift (PICOL)	Must hold NZQA Unit Standard: <ul style="list-style-type: none"> <li>• 3789 – Sling regular loads and communicate during crane operations</li> </ul>	
Person-in-charge of lift (PICOL) <b>For Complex Lift</b>	Must hold Unit Standard 3789, and <b>at least one</b> of the following: <ul style="list-style-type: none"> <li>• 3799 – Plan and direct complex lifting operations</li> <li>• 9561 – Manage the lifting and placing of complex loads on a petrochemical offshore installation</li> <li>• National Certificate – Intermediate Rigging Level-3 which includes Unit Standards 4214, 4215 &amp; 4216</li> </ul>	
Dogman/Banksman/Rigger/Slinger	Must hold <b>at least one</b> the following NZQA Unit Standards or STL approved equivalents: <ul style="list-style-type: none"> <li>• 26350 – Use common rigging equipment to lift and move loads</li> <li>• 9559 – Sling routine loads and communicate during crane operations in a petrochemical workplace</li> <li>• 3789 - Sling regular loads and communicate during crane operations</li> </ul>	
Crane Operator Offshore	<ul style="list-style-type: none"> <li>• Have passed a offshore crane operator course from an STL approved training facility, appropriate to the type and capacity of crane they will be required to operate</li> </ul> <p>For lifts on the platform, must hold <u>one</u> of the following NZQA Unit Standards or STL approved equivalent:</p> <ul style="list-style-type: none"> <li>• 9563 – Operate, lift and place loads with a platform crane on a petrochemical offshore installation</li> <li>• 9564 – Lift &amp; place loads between a petrochemical chemical offshore installation and a supply boat using a platform crane</li> </ul> <p>For lifts between the platform and the supply boat, must hold the following NZQA Unit Standard or STL approved equivalent:</p> <ul style="list-style-type: none"> <li>• 9564 – Lift &amp; place loads between a petrochemical chemical offshore installation and a supply boat using a platform crane (<b>NOTE – 3 year validity</b>)</li> </ul>	
Overhead Gantry Crane Operator (>10 tonne SWL)	<ul style="list-style-type: none"> <li>• Must have passed an overhead crane operator training course appropriate for the equipment being used or have been assessed in the use of the equipment by an independent party and hold the following Unit Standards</li> <li>• 3800 – Operate a pendant controlled overhead crane and lift and place regular loads</li> </ul>	