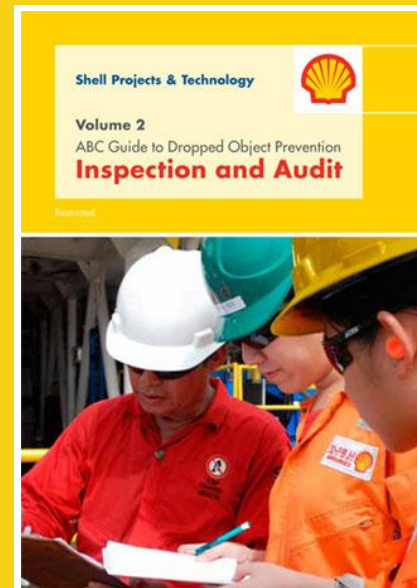




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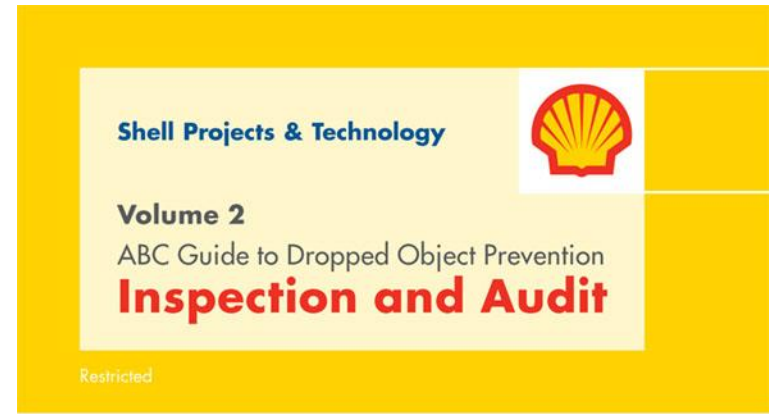
Presentation for use by
Managers and Supervisors



ABC GUIDE TO DROPPED OBJECT PREVENTION INSPECTION AND AUDIT

Agenda

- Prevention of Dropped Objects Campaign
- Principles and mandatory requirements
- Potential barriers to effective inspection and audit
- Inspections
- Audits
- How to implement the guide



CAMPAIGN FOR THE PREVENTION OF DROPPED OBJECTS

PREVENTION OF DROPPED OBJECT CAMPAIGN

The Campaign is designed to:

- eliminate dropped objects from our business
- prevent harm to people from dropped objects
- prevent damage to equipment from dropped objects



Objectives

- To eliminate dropped object incidents by:
- communicating the scale of the problem to everyone
- training key personnel on how to avoid dropped object incidents
- mobilising the workforce to play their part in eliminating the hazards
- complying with the mandatory requirements of the Prevention of Dropped Objects Manual (EP2009-9039) on a day to day basis on all sites

Changing Behaviours

PREVENTION OF DROPPED OBJECT CAMPAIGN

What has been achieved to date

- Prevention of Dropped Objects Manual (EP2009-9039) issued, adopted and used daily across different countries and cultures, for over 100 rig locations and over 100 well completions and intervention activities
- Prevention of Dropped Objects Campaign Focal Points and Leads appointed and trained
- ABC Guide to Prevention of Dropped Objects issued
- ABC Guide to Prevention of Dropped Objects – Inspection and Audit issued

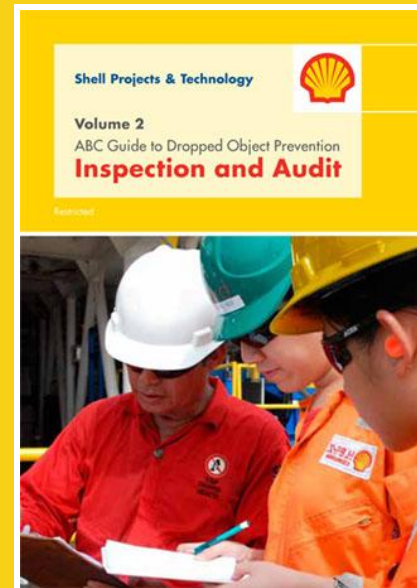
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WHAT HAS BEEN ACHIEVED TO DATE? (CONTINUED)

- Training and information packs and animations issued for:
 - Red Zones No-Go Zones
 - Tubular Handling
 - Lubricators & Tool Strings
 - Tools at Height
- Training and information packs and animations coming soon:
 - Drilling Equipment and Winches & Tuggers
- Inspection visits and DROPS audit programme commenced



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Principles and mandatory requirements

- Inspection and audit expands on the mandatory requirements of Principles 2, 3 and 4 of the Prevention of Dropped Objects Manual (EP2009-9039)
 - Principle 2: A systematic dropped object inspection programme shall be in place.
 - Principle 3: Worksite Hazard management for dropped objects shall be in place.
 - Principle 4: Audits to check for compliance with Dropped Object Prevention Scheme shall be in place.

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Potential barriers to effective Inspection and Audit

- No supervisor confirmation that inspections are being conducted
- No Quality Assurance process to check quality of performed inspections
- Incompetent Inspector and/or Auditor
- Insufficient time to conduct the inspection and audit
- Inadequate frequency of the inspection and audit
- Poor quality or non-existent inspection support material
- Inclement weather
- Operational delays

continued 

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Potential barriers to effective Inspection and Audit

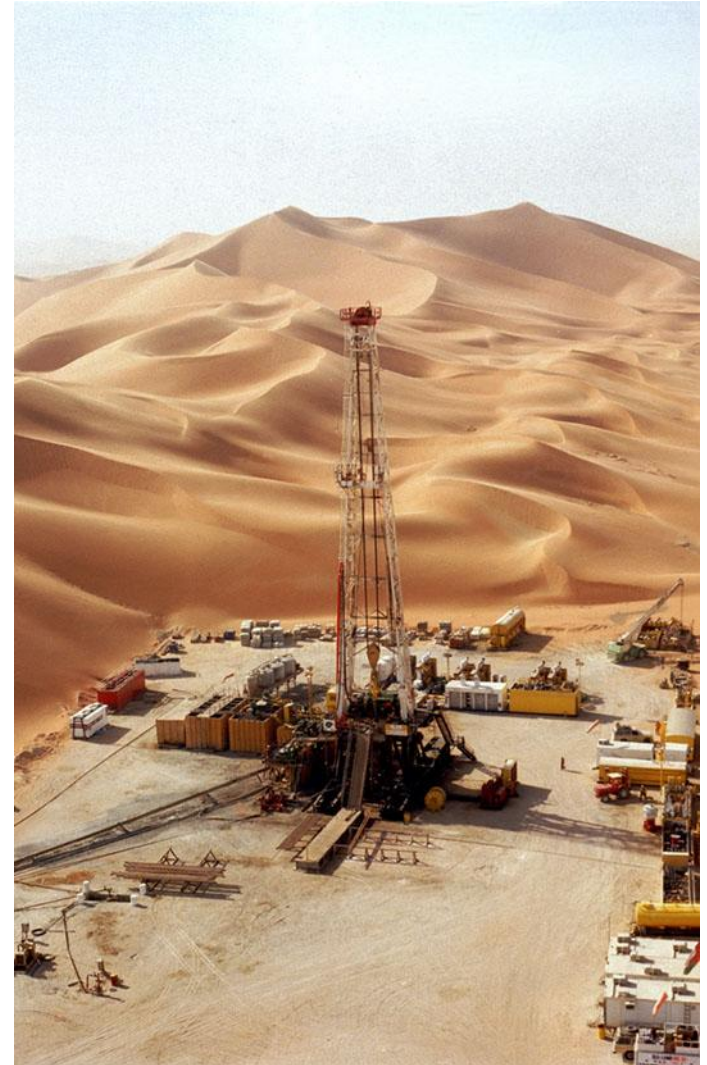
- Inspection and audit personnel not available
- Lack of leadership and/or supervision commitment regarding the inspection and audit process
- Unclear expectations from leadership and/or supervision regarding the inspection and audit process
- Poor record keeping
- Inadequate corrective action process
- Delays in addressing findings from inspections and audits
- Inadequate auditing of the inspection process.

INSPECTION

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Types of Inspection

- Transport inspection
- Routine weekly inspection and verifications
- Independent surveys of permanent installations
- Mast raising and lowering inspections
- Unplanned event inspections
- No-Go Zones/Red Zones



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Transport Inspection

- Mandatory requirement 2.1 states that,
“All equipment and loads shall be inspected prior to transportation for secure retention or removal of loose objects not intended for transportation to the operations site or return to logistics base”.
- Ensure all cargo freight properly secured during transit in accordance with industry standards
- Use Register of Lifting Equipment prior to carrying out any lifting operation
- Use packing and handling checklist

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Routine weekly inspection and verifications

- Mandatory requirement 2.2 states,
“Routine Prevention of Dropped Object inspections shall be performed weekly and on rig-up of other well intervention equipment”
- Typical items to check for during inspection:
 - securing method
 - secondary retention (if required)
 - loose objects
 - corrosion
 - damaged equipment
 - redundant equipment
- Dropped object inspection book (Picture Book) key deliverable
- Areas in scope must be divided into zones

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Independent surveys of permanent installations

- Mandatory requirement 2.3 states,
“An independent dropped object survey of the permanent installation structure (fixed derrick type rigs) shall be performed prior to all rig start-ups and every two years thereafter”.
- All sub-contractor personnel conducting 3rd party independent dropped object surveys/inspections should demonstrate competence in:
 - Survey and Inspection Techniques
 - Structural Integrity Assessment
 - Industry Recognised Rope Access Certification (where appropriate)
 - Safe Working at Height Procedures
 - Permit to Work Procedures
 - Use of approved Tools at Height systems.

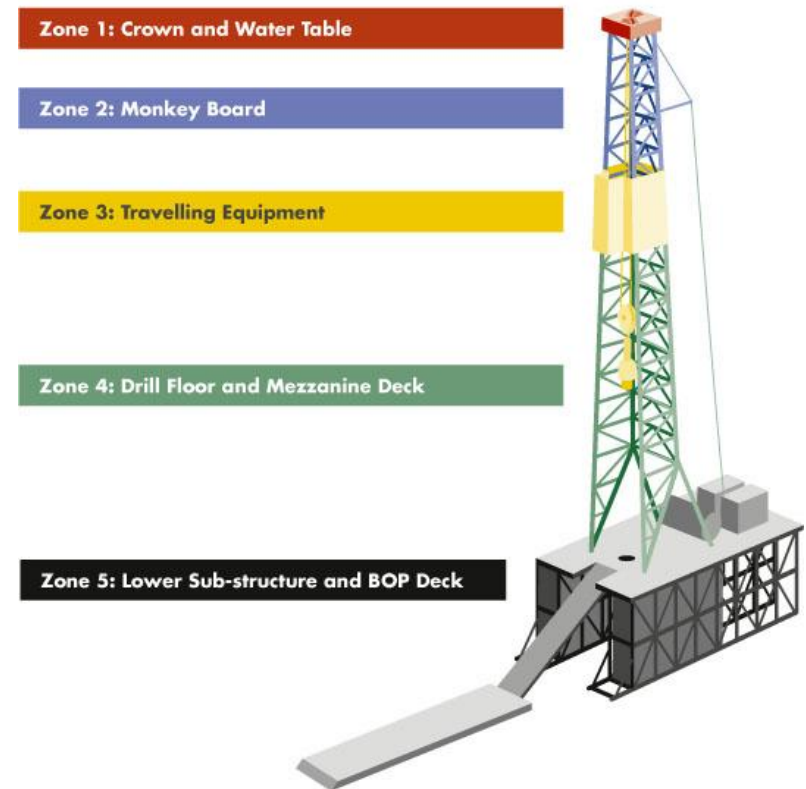
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Independent surveys of permanent installations

Independent Dropped Object Survey Criteria

Best practice criteria:

- Inspection areas
- the survey
- deliverables



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Mast raising and lowering inspections

- Mandatory requirement 2.4 states,
“A documented procedure for pre-mast raising, post-mast raising and pre-mast lowering inspections shall be in place and strictly followed”.
- Checklist for pre and post-mast raising to be used

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Unplanned event inspections

- Mandatory requirement 2.5 states.

“Dropped object inspections shall be performed following jarring of stuck pipe, activities causing excessive vibrations or severe storms”.

- High possibility of damage to a Top Drive occurring during a jarring operation or during hard drilling. Use the post-jarring checklist
- Two major areas of collision risk and when collision checklists should be used:
 - top drive
 - crane operations

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No-Go Zones/Red Zones

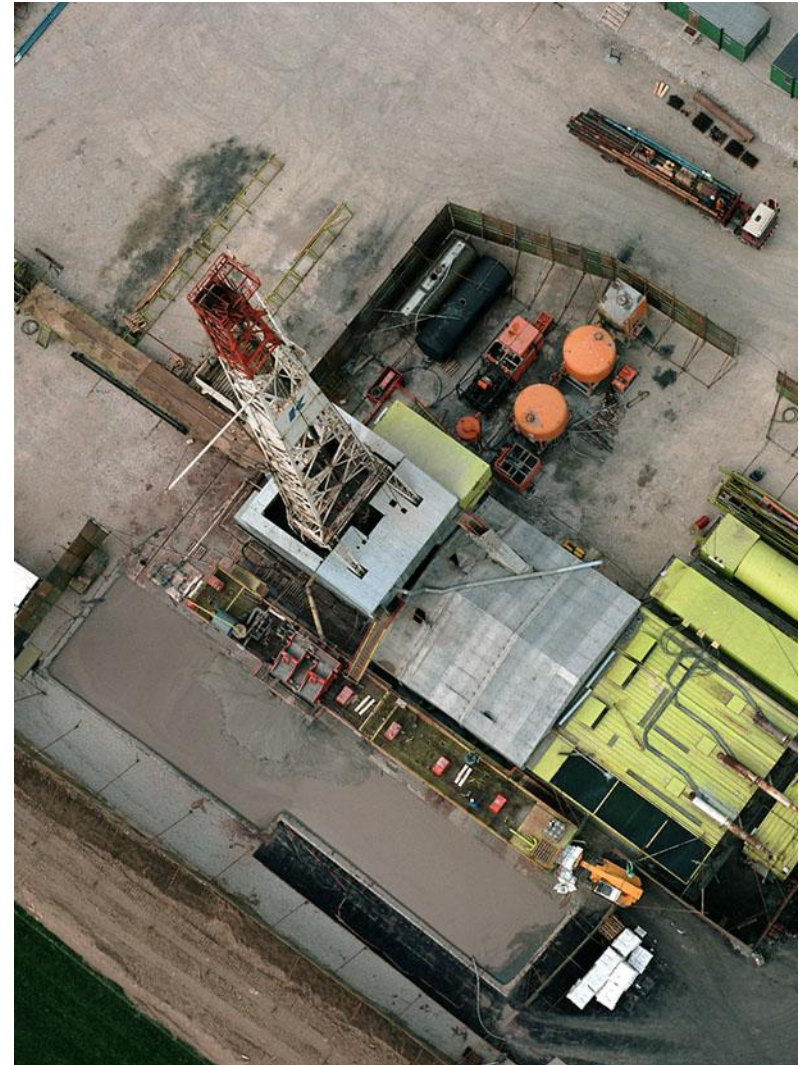
- Mandatory requirement 3.12 states,
“All rig locations and C&WI locations shall indicate No-Go Zones and Red Zones. All persons on location shall be made aware of these zones”.
- No-Go Zones are restricted areas only to those with a permit to work for that area
- No-Go Zones should always have hard barriers
- Red Zones are areas where authorised people are needed and should not stay longer than necessary

continued 

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No-Go Zones/Red Zones

- Red Zones have fixed gates across designated access points and are controlled by the authorised person in charge of the zone
- Step Back Safety Zones on the rig floor are adjacent to the Red Zone
- No-Go and Red Zones change shape and size depending on the height of the potential dropped object and its weight

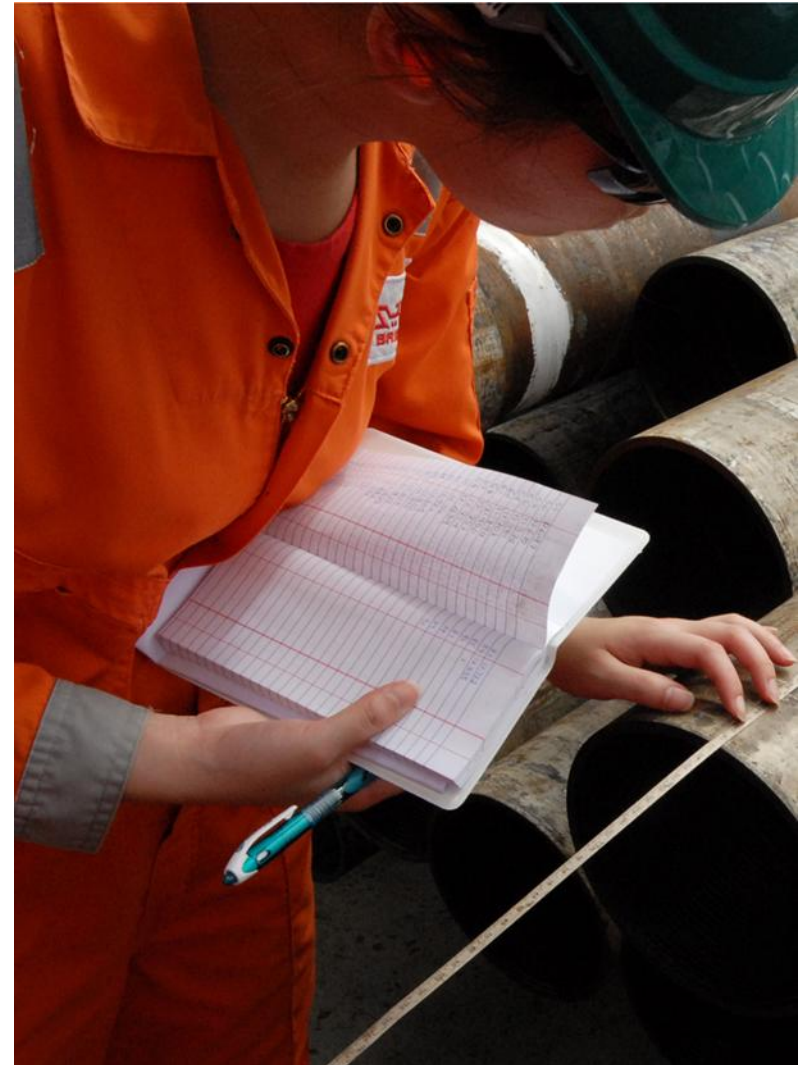


AUDIT

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Audit

- Audit checklist available for use:
 - www.shell.com/hse/pt/wells/drops/inspections.html
- CW&I Rig up Audit mandatory requirement 4.2 states,
“CW&I operations shall be audited on completion of rig-up for non-routine operations and on an annual basis for routine operations”.
- A checklist is available for use for CW&I Rig up Audit



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What happens next?

- Roll out this guide and confirm your staff and contractors have received it.
- Plan for cascade sessions (use this pack) with staff and contractors.
- Identify and agree action plans with staff and contractors.
- Monitor adherence to the principles and log improvements.
- Q3 FIP DROPS Self assessment – included in ABC Guide (Page 44)



Q & A

