

421: Waste Food Disposal

Summary: Compliance with Aberdeen Harbour Board.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Support vessel eg Supply, Standby

Activity Type: Marine activity, shuttle offloading

Description: *No details available.*

Specific Equipment: *No details available.*

Lessons Learnt: *No details available.*

Task Description: *No details available.*

Recommendations: Can all vessels please ensure compliance with the following received from Aberdeen Harbour Board.
“Aberdeen Harbour is subject to National Legislation, namely The Importation of Animal Products and Poultry Products Order 1980 (as Amended), made under the Animal Health Act 1981 which regulates the landing in Scotland of waste food (containing animal and poultry UK livestock from exotic food-borne disease. In order to comply with these regulations Ships Masters, Owners, and Agents must ensure that all ship’s galley and other food waste is put into sealed leak proof containers, prior to being deposited into Harbour skips. The use of heavy-duty plastic ‘bin bags’, which have been properly closed would be acceptable for this purpose. For more information, or clarification of the above please do not hesitate to contact – Animal Health Office Thainestone Court Inverurie AB51 5YA Tel No. 01467-626300 Captain

J R Shaw Assistant Harbour Master” Should you require further information or clarification on the content of this memo please do not hesitate to contact the undersigned.

Contact Details: Stephen Wilson Marine Safety Technical Advisor

422: Risk Assessment

Summary: Like all safety management systems, Risk Assessment can improve safety on board a ship, but only if it is used correctly, identifies and addresses ALL the hazards and is not viewed as just another piece of bureaucratic paperwork to satisfy the Authorities. The introduction of Risk Assessment seems to have improved shipboard safety to quite a large extent, but accidents are still happening and people are still taking unnecessary risks and getting hurt in the process. Clearly there is room for improvement with the process and/or its application. The following recent incident descriptions illustrate this.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Support vessel eg Supply, Standby

Activity Type: Marine activity, shuttle offloading

Description: MEDICAL TREATMENT INJURY A ship had been cleaning dry bulk tanks using an eductor. On completion of the cleaning, a seaman and an Engineer Cadet were clearing up the equipment used and were in the process of pulling the eductor hose back up to the bulk room 'tween deck. The Cadet was in the lower bulk room feeding the hose through an open hatchway, whilst the seaman was pulling the hose up through the hatchway. The hose appeared to stick and the seaman gave it an extra tug, using his body weight to pull backwards. The hose was not stuck and the extra effort used caused the seaman to lose his balance and fall backwards off a one metre high platform. He fell heavily onto a main transverse frame which was sitting on the 'tween deck

behind him, bruising his shoulders. Findings from the initial investigation were - See MTI Note below NEAR MISS (HIGH POTENTIAL) A vessel was working deck cargo alongside a production platform. During the operation, one of the deck crew on the ship was observed, standing on a painting platform adjacent to the ship's crane, with one foot on the platform and one foot on the rail at the aft end of the accommodation. The rail his foot was on, overhung the main deck at an elevation of some 20 feet. No safety harness was in use and the man was not wearing a hard hat. Whilst a hard hat is no defence against a falling container, it does provide some protection should a loose object fall, either from the installation or one of the lifts. In addition, although the man was only some three feet above the deck he was working on, the deck space was virtually a walkway at the aft end of the accommodation, not very wide, and the potential fall distance was approximately 20 feet to the main deck!

Specific
Equipment: *No details available.*

Lessons Learnt: MTI a) Poor positioning on the part of the injured seaman. b) Hazards not adequately marked, e.g. obstructions, openings etc. c) Area of accident and similar areas to be subject to revised Risk Assessment. The IP recovered from the fall and returned to work after medical treatment and rest. MTI Learning: Use of risk assessments to highlight hazards and improve working techniques is fundamental to achieve safety improvements. Near Miss Learning: Risk assessment should have picked up both the PPE and the height factors, but they didn't!

Task Description: *No details available.*

Recommendations: There is clearly a need for continuous review and update of the Risk Assessment process and portfolios on every ship. Crew members cannot rest on their laurels and consider that their task was done when the first Risk

Assessments were completed. It is also vitally important to engage crews at all levels in the process, particularly those who actually carry out the tasks that are being assessed. The quality of the Risk Assessments is directly proportional to the following; The COMMITMENT to the process of those conducting the assessments. (Duty of Care) The WILLINGNESS of personnel to act on the outcomes. (You are your own safety rep.) Regular REVIEW of the outcomes for suitability. (Ever changing needs) Regular SAFETY AUDITS in the work environment for compliance. (Looking out for one another) This is why it is vital to gain everyone's full understanding of the process and their acceptance of the value it delivers in terms of safety. If YOU do not understand it – ask! Details of Risk Assessment can be found in MGN 20 or the “Code of Safe Working Practices”. The rewards of a good Risk Assessment process are high – a reduction in accidents and reduced harm to people and the environment!

Contact Details: Ali Dillon - MSF Secretary

423: Major Hydrocarbon Release

Summary: This alert highlights the lessons learned from a major hydrocarbon release.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Fixed Installation

Activity Type: Well services / intervention

Description: A hydrocarbon release in a processing module was detected by the platform fixed gas detection system. An automatic ESD was initiated and the plant safely blown down from the Control Room. Initial investigations following the release confirmed that the cause of the leak was a pipe work rupture at a reducer downstream of the condensate outlet level valve, on a gas test separator (see Figure 1). This rupture was of some 40mm in length and 10mm across, (Figure 2) The condensate line was found to have a large quantity of proppant within it, proppant was also found in the area local to the pipe work rupture. Proppant is a pellet like material used for well frac jobs to fracture the formation and improve flow rates. The test separator had been used for a well clean up (Well 47) after the completion of a well frac in the days leading up to the release. Well 47 clean up and test was completed and a further well (Well 39) was on test at the time of the incident. The failure of the condensate pipework downstream of the level control valve was caused by rapid erosion of, initially, the level valve and, subsequently, the downstream pipework following gas blowby from the test separator with entrained proppant.

Specific *No details available.*

Equipment:

Lessons Learnt: Gas blowby occurred because the low condensate level trip to an ESV on the test separator had been inhibited and liquid level was lost. Proppant was present in the vessel because filters installed for the well frac clean up had collapsed, allowing significant quantities of proppant to pass into the gas test separator. These failures were not detected by the sand detectors or during the operation. It should be noted that the test separator was not designed to handle solids. The potential consequence of the release was increased by back-flow of a significant quantity of condensate from downstream pipework which routed to a higher level. The condensate flashed to atmosphere generating a second (larger) gas cloud than the initial release. There was a failure to identify that changes in operation had occurred since previous frac jobs. The original HAZOP and risk assessments should have been reviewed in the light of these. The risk assessments used for the task did not reflect the actual test separator used for the well clean-up. The final contributing factor was associated with the pipework design which included a severe reduction (6" to 2" to 1") over a short length adjacent to the level control valve (see Figure 1). This had the potential to induce turbulent flow and erosion, even without the presence of solids. The level control valve had been changed out on a frequent basis (every 18 months on average) but the significance of this had not been recognised.

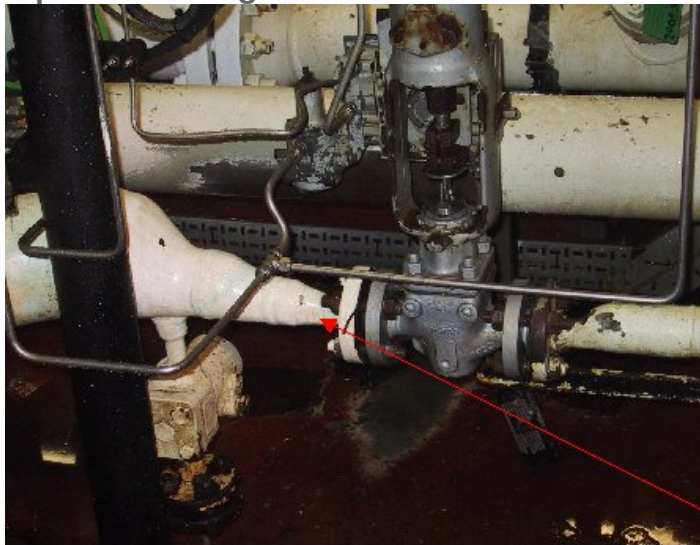
Task Description: *No details available.*

Recommendations: 1. Prior to completing well cleans ups etc, ensure any filtration units are fit for purpose and adequate solids monitoring is in place. 2. Ensure a control of inhibits procedure is in place, communicated to all, and effectively monitored. 3. Review pipework system design on long lengths of pipework where reverse flow could create a

hazard. 4. Review pipework design to ensure severe pipework reductions cannot cause potential turbulent/erosive flow. 5. Ensure risk assessments reflect the actual task being undertaken and the equipment being used.

Contact Details: Robert Hirst at Total E&P UK PLC on 01224 297891 or robert.hirst@total.com

Pipework Configuration



Failure occurred
at this point – 6
o' clock position

Hole in Pipework



424: Loading of Trailers Using Forklift

Summary: Basket went through trailer floor.

Incident consequences
(potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Onshore office, support base, heliport

Activity Type: Land transport

Description: A preventable incident occurred recently, whereby a driver collected a full pre-loaded trailer of Franks material. The driver secured his load and delivered it to Franks Intl as planned, but on arrival, he discovered that the basket pictured below had gone through the floor of the trailer, subsequently damaging the trailer floorboards. Although the resulting damage was minor, it could have easily been avoided.

Specific Equipment: *No details available.*

Lessons Learnt: There have been discussions between us and Franks Intl, of which they have informed us that all-new build baskets come with load support that evenly distributes the load across the trailer floor. Franks Intl, QA Safety Manager is currently reviewing the costs for modifying existing old stock, along with ascertaining numbers of units and their potential life span, prior to them making a final decision on whether to modify or replace.

Task Description: *No details available.*

Recommendations: There have been discussions between us and Franks Intl, of which they have informed us that all-new build baskets come with load support that evenly distributes the load

across the trailer floor. Franks Intl, QA Safety Manager is currently reviewing the costs for modifying existing old stock, along with ascertaining numbers of units and their potential life span, prior to them making a final decision on whether to modify or replace. Therefore would all personnel involved in loading trailers please ensure that appropriate timber batons are used when loading Franks International old style baskets (as pictured above), or any other vendor equipment that may present similar problems to these. Through adoption of this process we will eliminate a similar recurrence of this type of incident. Should any further information or clarification on the content of this memo be required, please do not hesitate to contact the undersigned.

Contact Details: Iain Thomson Transport NNS

425: CCU Checking - Raising Awareness

Summary: 20ft Half Height with shackle nut missing.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Fixed Installation

Activity Type: Inspection/testing

Description: On the 7th April 2003, an offshore installation reported a 20ft Half Height on the platform with the shackle nut missing. (See attached photograph) On investigation, it has been ascertained that the supplier and ASCO signed off that all relevant checks had been conducted against appropriate checklists prior to this half height coming into service and subsequently being shipped offshore.

Specific Equipment: *No details available.*

Lessons Learnt: As the incident was reported 4 x weeks after the shipping date, it has been difficult to establish if the half height was shipped in its condition below, or if the nut was removed offshore. However, it MAY have been the case that this half height was shipped offshore in the condition pictured below.

Task Description: *No details available.*

Recommendations: We must raise AWARENESS and prevent the possibility of a unit in such a condition passing through the ASCO system in future. Accordingly, I request that all ASCO Managers and Supervisors responsible for cargo receipt, handling and shipping operations, ensure that the information contained within this correspondence is

delivered to their personnel by means of departmental safety meetings and briefings.

Contact Details: Steve McDonald NNS Operations Manager

426: Seafastening of Cargo CCUs

Summary:	Seawater pump shipped offshore with insufficient sea-fastening restraints.
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	Fixed Installation
Activity Type:	Inspection/testing
Description:	A recent incident occurred on the 20th April 2003, when a seawater lift pump was shipped offshore with insufficient sea-fastening restraints. The item arrived at Peterhead Base in-situ in a lifting/transportation frame (See attached photograph). A Base joiner using timber sea-fastening method, braced the pump and frame assembly against a bulkhead of a 20ft open-top container, prior to onward shipment offshore. During transit, the pump/frame, which was on wheels/castors, moved inside the open top container, and dislodged the timber sea fastenings, thus leaving it free to move around within the confines of the Container, during shipping. The item had to be returned to the supplier for inspection and overhaul.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	Current Process The current process empowers the joiner to unilaterally decide on the most suitable form of sea fastening, bearing in mind worst possible sea-state conditions.
Task Description:	<i>No details available.</i>

Recommendations: Process Improvement: In order to ensure this type of incident does not re-occur, the responsible employee within the area, and the joiner, will assess all sea fastening requirements of cargo prior to shipment offshore. This Mobility (i.e. on wheels or ♦ Weight ♦ Dimensions ♦ assessment shall include: Most suitable form of sea fastening (e.g. Timber, cord strap, ♦ free standing) Other restrictions, which may change securing ♦ ratchet straps, welding) methods. On agreement by both employees, the item will be sea fastened and the appropriate paperwork will be marked with “packed by” and “secured by” signatures, following subsequent inspection. ASCO Managers and Supervisors shall ensure that the information contained within this correspondence is delivered to their personnel and subsequently implemented, by means of departmental safety meetings and briefings. Procedural changes will be made in due course.

Contact Details: Steve McDonald NNS Operations Manager

427 CCU Checking - Chemical Containers from On-site Vendors /Tenants

Summary: Failure of CCU checking procedures.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Onshore office, support base, heliport

Activity Type: Inspection/testing

Description: A recent incident investigation has highlighted a failure in our CCU checking procedures at Peterhead, where the potential for shipping non-conforming CCUs was evident. Chemical containers returning from offshore are normally sent to the on-site chemical companies for emptying. Once these units have been emptied, the same containers are often re-used for chemical shipping without being properly inspected by ASCO, as on occasions these containers have then not gone through the inspection process normally carried out by personnel at the goods-in receipt gantry.

Specific Equipment: *No details available.*

Lessons Learnt: *No details available.*

Task Description: *No details available.*

Recommendations: Empty CCUs Before these units are to be re-used, the containers must be subjected to a full CCU Inspection as per the CCU Checking procedure. For Shipping Prior to shipment, all cargo including chemicals from on-site tenants must be inspected via the cargo Inspection Gantry system. In order to prevent future breaches of

ASCO process relative to container inspection, ASCO Managers and Supervisors shall ensure that the information contained within this correspondence is delivered to their personnel by means of departmental safety meetings and briefings.

Contact Details: Steve McDonald NNS Operations Manager

428 Positioning of EPIRB's

Summary: Inspection by the MCA

Incident consequences
(potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Support vessel eg Supply, Standby

Activity Type: *Any Activity Type

Description: Details of an incident that recently occurred on one of the Shell term vessel's at Torry dock. The vessel was undergoing a Port State inspection by the MCA in conjunction with a Radio Surveyor. During inspection of the EPIRB it was noted that it was of a type that had to be removed from the holding bracket. The bracket is a spring clip type with a designated amount of tension that was mounted on the outside handrail on the Monkey Island. When the surveyor unclipped the EPIRB the spring tension of the bracket forced it out of his grip resulting in the unit falling to the main deck below (approximately fifty feet). This could have resulted in Major injury to personnel.

Specific Equipment: *No details available.*

Lessons Learnt: *No details available.*

Task Description: *No details available.*

Recommendations: We would therefore request all Masters to carry out a swift review of the position of EPIRB'S on board their vessels and move the holding brackets to a safer location if necessary.

Contact Details: Alan Marwick Marine Technical Manager

429 Twistlock Trailers

Summary: 20ft Half Height snagging on a twistlock

Incident consequences
(potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Onshore office, support base, heliport

Activity Type: Land transport

Description: An Incident occurred in Peterhead on Friday 9th of May, as a result of a 20ft half height snagging on a twistlock as it was being discharged from a trailer. Minimal damage was sustained to the twistlock mechanism, however the potential for a more serious incident was very much evident as the trailer lurched to one side. During the investigation it became obvious that neither the driver nor the squad or crane driver were aware that the half height had been loaded on twistlocks and therefore were unable to take the precautionary measures to prevent such an incident. It was only due to the skill and experience of the personnel on the quayside that they were able to prevent a more serious incident occurring. The learning's below, all relating to lorry/truck driver actions, shall be shared with all operational departments. During briefings, it is important that Managers / Supervisors stress the importance of effective communication between all parties concerned.

Specific Equipment: Twistlock Trailers

Lessons Learnt: Any driver dropping a loaded trailer for shipping with the
•Lessons Learned: twistlocks in place must ensure that paperwork is marked stating that the twistlocks are in

the CLOSED position. This will ensure that when the checker calls for the trailer at a later date, effective communication can be made to both the shunter driver, base operatives and crane driver to ensure the lift is removed safely. Any driver dropping a trailer ready for despatch with the twistlocks in place must ensure that the cargo docket is marked stating that the twistlocks are in the CLOSED position. This will ensure that the driver actually delivering the load back to the vendor is aware of how the equipment is loaded and that he can inform the necessary personnel at the vendor to ensure that the equipment is offloaded safely. If a trailer has been dropped with the twistlocks in a closed position securing the item to a trailer, it will be the DRIVER's responsibility to open the twistlocks to enable the lift to be discharged from the trailer. Should you require further information or clarification on the content of this memo please do not hesitate to contact the undersigned.

Task Description: *No details available.*

Recommendations: Any driver dropping a loaded trailer for shipping with the twistlocks in place must ensure that paperwork is marked stating that the twistlocks are in the CLOSED position. This will ensure that when the checker calls for the trailer at a later date, effective communication can be made to both the shunter driver, base operatives and crane driver to ensure the lift is removed safely. Any driver dropping a trailer ready for despatch with the twistlocks in place must ensure that the cargo docket is marked stating that the twistlocks are in the CLOSED position. This will ensure that the driver actually delivering the load back to the vendor is aware of how the equipment is loaded and that he can inform the necessary personnel at the vendor to ensure that the equipment is offloaded safely. If a trailer has been dropped with the twistlocks in a closed position securing the item to a trailer, it will be the DRIVER's responsibility to open the twistlocks to enable the lift to be discharged

from the trailer.

Contact Details: Jamie Marr&

430:Summertime

Summary: Summer outdoor incidents.

Incident consequences
(potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Onshore office, support base, heliport

Activity Type: Marine activity, shuttle offloading

Description: The very word conjures up images of Barbecues, camping, boating, hiking, and travelling to new and exciting places. Summer can also be a time of hazards as well. According to statistics May, June, July and August are the most likely months for outdoor accidents. At this time of year on all our vessels there is inevitably an increase in outdoor activities on board ship, these will include overside painting, working at height, chipping, scraping and grinding, rigging stages and bosuns chairs to name but a few.

Specific Equipment: *No details available.*

Lessons Learnt: *No details available.*

Task Description: *No details available.*

Recommendations: A few simple reminders, if followed, will ensure that you and your fellow crew members will enjoy many more summers. Working safely can mean the difference between life and death. All employees must be aware of how safety procedures apply to their responsibilities and job tasks in the workplace. By following the correct procedures when asked to perform a particular job these

- Toolbox Talks
- Risk Assessments
- should include but

not be limited to: • Correct equipment for that particular job •Correct wearing of PPE Stop the job culture BE SAFE AND ENJOY YOUR SUMMER•Accountability for safety

Contact Details: Alan Marwick Marine Technical Manager

431: Lifting Gear - Snagging Points

Summary:	Lifting equipment caught on a piece of structure within a skid.
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	Onshore office, support base, heliport
Activity Type:	Inspection/testing
Description:	Minor asset damage was recently caused to a lift at Torry Marine Base, involving the lifting equipment as it caught on a piece of the structure within the skid.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	In order that any re-occurrences of the incident are prevented, we strongly recommend that, prior to leaving the vendors yard, all future frames / skids are assessed to prevent the lifting equipment from snagging. Lifts that present any risk of snagging, will be rejected by ASCO Cargo Inspection.
Task Description:	<i>No details available.</i>
Recommendations:	Appropriate preventative measures should be put in place prior to arrival at Cargo Inspection, which mitigate the potential for lifting gear to get caught in the lift. In the event that you require supplementary information, please do not hesitate to contact the undersigned.
Contact Details:	Chris Coull Shell TMB Base Supervisor

432; West Gate Access / Egress - Altens Operations Base

Summary: Long load exiting AOB came into contact with gate.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Onshore office, support base, heliport

Activity Type: Land transport

Description: On Thursday 26th June 2003 a truck carrying a long load was exiting the Altens Operations Base via the west gate. The overhanging load on the trailer came into contact with the gate causing it to fall across the pedestrian walkway. A Cairntoul employee was about to enter the base by this walkway and potentially could have been seriously injured.

Specific Equipment: *No details available.*

Lessons Learnt: As a result of this incident changes to the area are to be implemented including the relocation of the pedestrian walkways allowing the exit gates to be widened to increase room for loads exiting and entering the base. These changes are expected to take 3 – 4 weeks to complete.

Task Description: *No details available.*

Recommendations: In the interim period could all personnel ensure that when using the walkway Remain fully alert and aware of any•as a means of exiting the base they: Wait till the area is completely clear of•traffic movement in this area Could all drivers remain•transport before exiting or entering by the walkway vigilant as to ALL pedestrian

movements around them

Contact Details: Les Clark General Manager - Shell Contract

433: Accident / Incident and Near Miss Reporting – Reminder

Summary:	DEFINITION: An incident is an undesired event or set of circumstances which gives rise to a fatality, an actual or potential injury, ill health condition, harm to the environment or damage to property, plant product or production. This includes a near miss, which has in slightly different circumstances, the potential to cause any of these.
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	Onshore office, support base, heliport
Activity Type:	Production operations
Description:	PURPOSE: The purpose of this correspondence is to re-emphasise the requirement of formally reporting “out of the ordinary occurrences,” which occur on ASCO work sites and / or in operations managed by ASCO. This includes, but is not limited to the following accident / incident types: Near Misses While• Environmental Spillage’s or Releases •/ Property Damage most people are fully aware of this process and the importance of reporting, the reporting protocol and timing associated with a recent occurrence, indicates that a reminder is required. It should also be borne in mind that ASCO have a legal obligation to investigate all incidents, which occur within its operations. Additionally, certain category incidents must also be reported to the UK, Health and Safety Executive, under the RIDDOR requirements and in Norway to their respective authorities.

Specific Equipment: *No details available.*

Lessons Learnt: *No details available.*

Task Description: *No details available.*

Recommendations: PROCEDURE: In the event of an incident, as described in the bullet points above, the following actions in respect of reporting and pending Investigation, Report the Incident (includes Near Misses) to your Line•must be taken: Supervisor or safety representative immediately. If the latter, the Safety Representative shall inform the appropriate Line Manager / Supervisor as soon as Visitors or 3rd Parties / Contractors must report any•practicably possible Incident to the person in charge of the actual activity, to the ASCO Line Ensure•Manager / Supervisor responsible for them and to their own employer nothing is moved from the scene of the incident provided the safety of others If possible capture the•and the security of the site is not being compromised Where•details of the scene by taking photographs, or drawing a sketch The•appropriate Line Managers must report the incident to Senior Management. HSEQ Department shall receive a copy of the first two pages of the Accident / Incident Report as soon as possible thereafter, but at least within 24 hours of the occurrence. If you require any further information relative to this topic, please view the Incident Reporting and Investigation Procedure, which is on the Intranet - HSEQP010. Or contact your area HSEQ Representative.

Contact Details: John Fraser VP HSEQ - Europe

434: Handling Tubulars - Sharing Learnings

Summary:

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Support vessel eg Supply, Standby

Activity Type: Lifting, crane, rigging, deck operations

Description: Most of you will have heard about the recent incident where a crew member suffered two torn tendons and a badly dislocated ankle as the result of standing next to a bundle of tubulars, on top of the stow, when that bundle rolled over onto his foot. News has just come in of a recent Near Miss where a vessel was discharging bundles of casing (3 per bundle). The stow extended right across the deck in two layers and the deck crew had started discharging from the port side, working towards starboard, hooking on two bundles at a time (one from top and one from bottom layers). This enabled the deck crew to avoid standing on top of the pipe, after the initial lifts had been made. When they had reached approximately the centre of the deck, one of the top bundles slipped off at the forward end of the stow, following the removal of the adjacent bundles. The deck crew came out of the safe area and were in the process of hooking on this slipped bundle and the next lower bundle, when the other end of the top one slipped off. The crewman attempting to hook on at the aft end stepped back until the stow had settled before attempting to hook on again. The discharge then resumed successfully with no further incident.

Specific *No details available.*

Equipment:

Lessons Learnt: The initial slippage changed the discharge of the casing from a routine operation to a “non-routine” operation, clearly making this a “Management of Change” issue. At the very least, the operation should be stopped and a tool box talk held, to discuss how the changed situation can be safely addressed. A Risk Assessment should also be conducted if the change is large enough to warrant it.

Task Description: *No details available.*

Recommendations: It was difficult to understand why the bundle slipped, as all had appeared normal after cargo had been loaded and after discharge had started. However, in the absence of any clear-cut evidence to identify the cause of the top bundle slipping, it is felt that the following steps should be taken to mitigate the risks involved when handling tubulars; 1. Deck bedding ropes should always be used to limit slippage. 2. Pipe posts should be fitted to restrict any movement and create safe areas on deck. 3. Chocks should be inserted to ensure no movement whilst hooking on. 4. Bulldog grips to be visually checked, where possible, before hooking on. 5. Use of boat hooks to pull slings to pipe ends and avoid need for personnel to climb on top of pipe. Consideration should also be given to leaving at least two bottom bundles between the edge of the stow and the first top bundle, when discharging as described above. This should have the effect of limiting movement after slippage. Please also bear in mind the risks involved in making the first lift, i.e. can slings be arranged so that the first lifts can be hooked on from the safe haven? WHEN HANDLING TUBULARS – STOP, THINK AND BE SAFE!

Contact Details: George Allan Promarine

435: Reporting of Ship Board Incidents - All ASCO Europe Bases

Summary:

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Support vessel eg Supply, Standby

Activity Type: Marine activity, shuttle offloading

Description: Recently, a vessel operating out of the port of Peterhead and using ASCO South Base facilities had an incident onboard, which was unrelated to ASCO activity. The crewmember involved had to seek medical attention. As a result he left the vessel and was repatriated home for a period of convalescence.

Specific Equipment: *No details available.*

Lessons Learnt: Due to confusion within the communications loop, the event, although reported to the Clients DCR went unrecognised for almost one week and it was by virtual default that ASCO, the owners/operators of the Base, became aware of the incident.

Task Description: *No details available.*

Recommendations: Unless you are directly chartered or managed by ASCO you may not be required within your Company's or Clients, Accident/Incident Reporting System to copy ASCO on your incident reports. However, as a matter of courtesy, when berthed at ASCO Base facilities, it is essential that you advise the Base Manager (through Operations Control) of any incident that is reported

onboard, or occurs to your vessel. All information will remain confidential. The contact numbers for the ASCO Peterhead base are: ASCO Base Control - Normal Tel: 01779 873036 Emergency Tel: 01779 873000 Radio Contact: VHF Ch. 11 Call - ASCO Base This reporting protocol relating to on-board incidents on non-ASCO vessels shall apply at all ASCO owned/managed Bases. On other locations the local Operations Control should be advised, accordingly.

Contact Details: Alastair McArthur Marine Technical Manager - ASCO Europe

436: Securing of Casing on ASCO Trailers

Summary:

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Supply base, warehouse, workshop, dock

Activity Type: Land transport

Description: In a recent incident casing fell from an ASCO vehicle whilst being delivered to a vendor's yard. Fortunately, on this occasion there was no injury to personnel and only slight damage was caused to the vehicle. However, there was high potential to have caused serious personal injury should anyone have been in the vicinity of this incident, at the time.

Specific Equipment: *No details available.*

Lessons Learnt: This type of occurrence must be prevented. Therefore, with immediate effect, vehicles owned and/or operated by ASCO, which are engaged in the haulage of casing or pipes, shall not be moved unless the pipe pins have being put up on both sides of the trailer, or the casing has been suitably secured to the vehicle.

Task Description: *No details available.*

Recommendations: If you are asked to move your vehicle to a different offload area after you have removed your load-securing equipment, then you MUST ensure that pipe pins are up, or you re-secure casing before you move.

Contact Details: Iain Thomson Transport Safety Advisor

437: Securing Loads by the Use of Rope Hooks

Summary: Use of rope hooks for securing loads - practice to stop.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Supply base, warehouse, workshop, dock

Activity Type: Land transport

Description: It has become common practice for some drivers to use rope hooks for securing loads to their trailers; this is a practice that shall stop. Not only does this method of load securing contravene the Company's two-strap policy, as laid out in procedure TRANP006. But also contravenes a Department for Transport, Code of Practice, "Safety of Loads on Vehicles," which states: "It is common practice to use the rope hooks found on most platform vehicles, welded or bolted to the underside of the side rail or outriggers, as the anchor points for the load restraint systems. ROPE HOOKS SHOULD NOT BE USED TO ANCHOR LOADS. Rope hooks are not subject to constructional standards, and as so they vary in strength, size and material content and are rarely designed to withstand forces exceeding 1 to 1.5 tonnes. Many fall far short of this strength being so weak that they can be distorted by applying a ratchet buckle to tighten a webbing strap" Crown copyright

Specific Equipment: *No details available.*

Lessons Learnt: Example: A driver secures his load by means of a strap fed through the bottom of a tank containing a corrosive liquid. Where a ratchet is applied the strap then goes

down the side of a trailer to a rope hook and is then passed through the frame of the tank and another ratchet applied. During transit it is involved in an incident that was not necessarily the fault of the driver but introduced forces to the tank that exceed the safe working load of the hook. which then failed, causing the tank to fall from the vehicle spilling its contents. Offence committed by the driver would be Insecure Load. The proof of this being a failure to follow the Code of Practice. The onus is then on the driver to prove that using the rope hook to secure his load was equal or exceeded the requirements of the Code of Practice. The Road Traffic Act 1991 states that:

1. A person is also guilty of using a vehicle in a dangerous condition if he uses, or causes or permits another to use, a motor vehicle or trailer on a road, when the purpose for which it is used, or the weight position, or distribution of its load, Or the manner in which it is secured is such that the use of the motor vehicle or trailer involves a danger of injury to any person. The Max Penalty for this offence if committed in respect of a Goods Vehicle is a £5000 fine + 3 penalty points and/or disqualification. Other penalties to consider, which are dependent on the severity of the offence, are: Dangerous Driving 2 Years imprisonment Death by Dangerous Driving 10 Years imprisonment

Task Description: *No details available.*

Recommendations: Should escaped chemical contaminate a watercourse, then a maximum fine of £20,000, plus the cost of the cleaning up affected water, is possible. This does not take into account the possibility that the tank comes off the vehicle and kills another road user. It could be a member of your family. The implications of this bad practise are severe. Therefore, any driver who continues to use this practise for securing cargo will be dealt with severely and in line with Company disciplinary procedures. This communication shall be viewed as a mandatory

instruction. Is it worth the Risk?

Contact Details: Zak Fleming Transport Manager

438: Safe Packing and Handling of Cargo to and from Offshore Locations

Summary: Tubular joint not secured within basket.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Supply base, warehouse, workshop, dock

Activity Type: Land transport

Description: On the 3rd August 2003, a 20" Tubular joint contained in a CCU basket was dispatched from Torry Marine Base via road transport to ABB Vetco Grey at Montrose. The 20" joint was not secured within the Basket, which had been offloaded as Inbound Cargo from the Ocean Guardian location. The failure to Check and Observe the insecure 20" joint resulted in a Potential Dropped Object with safety implications to the vehicle driver, general public and ABB Vetco Grey personnel.

Specific Equipment: *No details available.*

Lessons Learnt: Personnel are reminded that it is their duty to carry out LOLER checks as to the integrity of all lifts before the task is carried out which includes a visual check, and where possible when materials are contained in a CCU. We must raise the awareness of visual checks and ensure that all safety concerns are raised and met with the required safe actions to prevent us exporting risk to Offshore locations, vehicle drivers, general public or vendors.

Task Description: *No details available.*

Recommendations: Accordingly, I request that all ASCO Managers and Supervisors responsible for Cargo receipt, handling and shipping operations, ensure that the information contained within this correspondence is delivered to their personnel by means of departmental safety meetings and briefings.

Contact Details: Willie Mackie TMB Base Manager

439: CTC Container Slings

Summary: Concerns raised over slings on CTC 22 x 9 open top containers.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Supply base, warehouse, workshop, dock

Activity Type: Land transport

Description: Throughout Shell AOB and TMB operational areas concerns have been raised over the slings on CTC 22' by 9' open top containers. These slings (as seen in the attached photographs) are exceptionally long due to the angle of the pad eyes on the containers.

Specific Equipment: *No details available.*

Lessons Learnt: As a result of this various hazards have been introduced into our operation Forklift• Snagging hazards during transportation, loading or offloading •e.g. Manual•hazards (slings becoming trapped under forklift wheels or attachments) handling injuries to transport drivers or cargo handlers due to weight of slings Marine hazards if the slings are trapped under other deck cargo or snag on the• vessel during load / offload This situation exposes various personnel within our The Drivers•sphere of influence to unacceptable levels of risk e.g. Other road users and members of•responsible for transporting these containers Forklift operators responsible for lifting and moving the container•the public Cargo handlers and vessel crews•

Task Description: *No details available.*

Recommendations: Having considered these issues it has been decided that until further notice these containers will not be acceptable for use. Would all relevant personnel please be informed that any of these containers in there present condition should not be used and are to be rejected when or if they arrive for shipping. Any of these containers which are in transit offshore should be handled by the appropriate means when they return to base, ie by the following processes: Toolbox talk Task Based Risk Assessment Manual Handling Assessment Should you require further information or clarification on the content of this memo please do not hesitate to contact Chris Coull @ TMB or Alex John Strachan @ AOB.

Contact Details: Les Clark General Manager - Shell Contract

440: Compressor Doors

Summary:

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Supply base, warehouse, workshop, dock

Activity Type: Lifting, crane, rigging, deck operations

Description: Two similar incidents occurred in September involving air compressors (of the type pictured) in ASCO's operations in Great Yarmouth. The compressors are designed so that the 6 doors must be removed for access during operation but are refitted for transit. The hinges are designed so that the doors can readily be lifted off when the door is opened. However due to the design of the hinges and the closing mechanism it is possible for the door to bump off the hinges, even with the door properly closed. The first incident involved the compressor being snagged and bumped by a waste cube, causing the door to fall off. The second incident occurred when being moved by a forklift. It went over a bump while moving the compressor from the lay down area to the quay, the door fell off and was run over.

Specific Equipment: *No details available.*

Lessons Learnt: ASCO, the Client and the suppliers investigated the incident. The problem with the doors was discussed and a simple but effective solution found. A bolt was fitted to the door to prevent it riding up if "bumped" in the closed position. This modification still allows the door to be removed when in the open position. Two further bolts

were fitted, one to the door and one to the frame, which allows a tie-wrap to be used to ensure the door can not open. AIRPAC the major supplier of these compressors in Great Yarmouth is modifying their units when they are returned from offshore.

Task Description: *No details available.*

Recommendations: For any compressors already offshore without this modification, the nut on the door handle should be tightened to prevent any movement when closed and the doors taped to the frame. If this is not possible the doors should be removed and placed inside the compressor, prior to sending ashore Any air compressor with doors of this type, without this or a similar modification, will be rejected and not shipped by ASCO in Great Yarmouth. Should you require further information or clarification on the content of this memo please do not hesitate to contact Iain Gibson at ASCO GT Yarmouth.

Contact Details: Iain Gibson Acting HSEQ (SNS)





441: Loading of Tubulars

Summary:	Slung Drill Collar slid through headboard of trailer.
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	Supply base, warehouse, workshop, dock
Activity Type:	Land transport
Description:	An Incident occurred recently, the end result was a slung drill collar sliding through the headboard of a trailer. Minimal damage was sustained to the trailer, however the potential for a far more serious incident was very much evident. Incident Details: Sub Contractor driver loaded full load of tubulars at Maitland Quay for onward delivery to four separate vendors. Slings were entangled throughout the load and made it impossible for the vendors to offload their material in a safe manner. Due to the configuration of the load with the metal to metal contact, trapped slings, weight distribution and wooden headboard, one of the tubulars slid through the headboard of the trailer whilst the vehicle was in the process of braking on a public road.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	Driver should always be in a position to supervise the loading of his trailer therefore ensuring the correct weight distribution is obtained and that the cargo is loaded in a safe manner for onward transportation. If the driver is unable to supervise the actual loading then he must ensure that he checks the load before commencement of journey and any concerns

are highlighted to the necessary people in order that the trailer can. Wherever possible tubulars must be loaded as close to the headboard as possible to ensure any movement during transit is restricted to a minimum. All cargo handlers and/or base operatives must always ensure that a minimum of two slings are positioned under the load and that they are easily accessible for vendors to discharge in a safe manner. tubulars must be split onto separate trailers to reduce the need for mixed and split loads, which will become problematic for the vendor to offload. Tubulars can be loaded together as long as vendors equipment is clearly identified and can easily be accessed / offloaded at the relevant premises. sticks and chocks must be used when loading tubulars to prevent any movement during transit as well separating vendors tubulars and reducing the overall risk. Under no circumstances should tubulars be loaded onto metal to metal contact. a wooden headboard trailer, where the potential risk of a serious incident is greatly increased.

Task Description: *No details available.*

Recommendations: ASCO Managers and Supervisors are asked to ensure that the information contained within the Safety Memorandum is delivered to their personnel and subsequently implemented. Procedural changes will be made in due course.

Contact Details: Jamie Marr

442: CTC Container Slings – Update

Summary: Update on modifications to CTC Container Slings on 22 x 9ft Open top Containers.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Supply base, warehouse, workshop, dock

Activity Type: Modification of plant/structures

Description: Throughout Shell AOB and TMB operations concerns were raised over the slings on CTC 22' by 9' open top containers. These slings were exceptionally long due to the angle of the pad eyes on the containers. As a result of these concerns Safety Memorandum 33/03 was issued by ASCO in September highlighting the hazards associated with the container slings during transport, shipping and handling. Memo 33/03 stated that these slings exposed personnel to an unacceptable level of risk and therefore were unacceptable for use. Any one of these containers arriving for shipment was to be rejected.

Specific Equipment: *No details available.*

Lessons Learnt: *No details available.*

Task Description: *No details available.*

Recommendations: NOTE: Could all relevant personnel please be aware that CTC Container Services have now modified these units as demonstrated in the attached "before and after" photographs. The modified units are certified to BS 7072

allowing the slings to be certified to BS 1290. In order to achieve this, the SWL of the container has been reduced from 12 to 10 Tonnes. Any of these modified containers arriving at our operations for transport or shipping are now perfectly acceptable for use.

Contact Details: Les Clark General Manager - Shell Contract

443: Shell Vessel Fleet - Fouled Propeller

Summary: An incident has occurred on a Platform Supply Vessel recently where the Port propeller fouled on an empty bulk hose. The vessel had accepted 2 hoses from the installation on the aft Port discharge manifolds (mud, base oil). On completion of transferring base oil the hose was not disconnected and returned to the rig. Mud transfer ongoing.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Support vessel eg Supply, Standby

Activity Type: Marine activity, shuttle offloading

Description: An incident has occurred on a Platform Supply Vessel recently where the Port propeller fouled on an empty bulk hose. The vessel had accepted 2 hoses from the installation on the aft Port discharge manifolds (mud, base oil). On completion of transferring base oil the hose was not disconnected and returned to the rig. Mud transfer ongoing.

Specific Equipment: *No details available.*

Lessons Learnt: In this particular case it was the empty base oil hose that snagged, we would advise all vessel staff involved in bulk transfer operations that on completion of transfer of product that any hose not in use, so far as is reasonably practicable, must be RETURNED IMMEDIATELY to the installation

Task Description: *No details available.*

Recommendations: .Weather at the time of the incident, were at the upper limits for weather side working (as per UKOOA guidelines). Although within the working parameters in this case we would like to take this opportunity, as the winter months are upon us, to remind all Masters to avoid working the weather side of an installation where possible

Contact Details: Eric Annand Marine Technical Safety Advisor

444: Dropped Liner Joint

Summary: While picking up a joint of 5 ½" Hydril 521 liner, from the V-door to the Rig Floor, the lifting nubbin became detached from the joint. The joint eventually came to rest on the catwalk. No injuries occurred as a result.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Fixed Installation

Activity Type: Drilling, workover

Description: A dropped object incident occurred on an Offshore Drilling Platform. The incident occurred during the running of 5 ½" liner. The liner being run did not have an upset and subsequently a lifting nubbin was being used, in conjunction with single pick-up elevators and the Drill Floor tugger, to lift the joint from the V-door and into the mousehole. The lifting nubbin is screwed into the joint, by hand, once the joints are landed at the V-door. The single pick-up elevators are then latched around the joint and lifted from the V-door to the mousehole. A total of 129 joints had been successfully run prior to the incident. The lifting nubbin was installed into joint 130 and the pick-up elevators installed. The joint was then picked up the V-door. When the bottom of the joint was +/- 2ft from the top of the V-door the joint fell. The joint fell to the bottom of the V-door, overbalanced and fell onto the Drill Floor. The joint bounced back up and continued down the V-door before coming to rest on the catwalk. No injuries occurred as a result of people standing in safe positions as identified in part of their TRIC and during active monitoring.

Specific
Equipment: *No details available.*

Lessons Learnt: Visual and dimensional checks were performed on the lifting nubbin and the joint of tubing. They were both found to be within manufacturing tolerances and free of any defect at the time of the incident. Based on the information gained from the subsequent incident investigation it was agreed that the Leadhand, tasked with installing the nubbin, had only placed it into the joint and not screwed it in. The pick-up elevators were then installed. Due to the type of thread on the nubbin and the angle at which the joint is picked up, the joint was successfully raised until almost in the vertical position. When the nubbin is correctly made up to the joint there is an approx 2" gap between the nubbin and joint.

Task Description: *No details available.*

Recommendations: If you are to run this type of tubing the recommendation following the Incident Review Panel was: Amend Work Guideline & Risk Assessment to include the following; once the lifting nubbin has been installed into the joint, and prior to latching the elevators, a "no-go" gauge will be used to ensure the nubbin is fully made up. A second person will confirm the lifting nubbin is fully made up, prior to lifting the joint.

Contact Details: Ally Brain, HSE Co-ordinator 01224-299600

Figure A - Picture shows nubbin correctly screwed into joint



445: Working at height – hacksaw

Summary: The hacksaw in an "at height" (Snap on tools) kit has been discovered to be of wrong specification. Because this wrong spec. hacksaw requires the blade to be in place to maintain its structure, there is a danger of part of the frame becoming a "dropped object" should blade failure occur in use.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Drilling unit

Activity Type: Drilling, workover

Description: Whilst inspecting equipment on the deck, individual noticed the potential for a dropped object.

Specific Equipment: *No details available.*

Lessons Learnt: Correct specification has a screw positioned on the top of the handle to keep the top arm of the hacksaw in place if the blade fails at height.

Task Description: *No details available.*

Recommendations: 1) Inspect all snap on working at height tool kits. (The hacksaw is located in the top storage drawer of the kit). 2) Withdraw incorrect specified hacksaws from service 3) Send Snap on Tools hacksaw to J Taylor. (Tool will be modified within three days at no charge).

Contact Details: Jonathan Taylor jtaylor@snaponindustrial.co.uk Tel:
07711 700469

Correct Specification



446: Climbing on Top of Trailers

Summary:

Incident consequences
(potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Supply base, warehouse, workshop, dock

Activity Type: Land transport

Description: *No details available.*

Specific Equipment: *No details available.*

Lessons Learnt: *No details available.*

Task Description: *No details available.*

Recommendations: With immediate effect no driver is allowed to climb on top of the trailer for any reason. If the trailer requires to be cleared of any loose waste or the net needs to be rearranged and this can not be accomplished from the gantry ladder, then the trailer must be rejected and Greengairs operations informed immediately so that other arrangements can be made to rectify the problem. This instruction is to protect YOUR health and safety. Anyone found not following this instruction shall be dealt with inline with company procedure.

Contact Details: Iain Thomson Transport Safety Advisor

447: Knuckleboom Pipehandler Incident

Summary: During routine pipehandling operations a joint of 7" diameter casing/tubular 42 ft long weighing 570kg slipped out of the grab and fell 30ft to the lower deck. The pipedeck and catwalk had been barriered-off, but not the lower deck. Nobody was hurt. Minor asset damage occurred.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Fixed Installation

Activity Type: Lifting, crane, rigging, deck operations

Description: During routine pipehandling operations a joint of 7" diameter casing/tubular 42 ft long weighing 570kg slipped out of the grab and fell 30ft to the lower deck. The pipedeck and catwalk had been barriered-off, but not the lower deck. Nobody was hurt. Minor asset damage occurred.

Specific Equipment: *No details available.*

Lessons Learnt: The pipehandler is designed with a safety system that requires the operator to press two separate foot controls at the same time in order to open the grab. The most likely cause of the incident is a combination of a mechanical fault with one of the controls (the 'enable' button) together with the possibility of the second control being operated inadvertently. The main underlying cause was a lack of maintenance, which led to the 'enable' button being excessively worn and/or contaminated with

dirt.

Task Description: *No details available.*

- Recommendations:
1. More comprehensive inspection and maintenance guidelines for the machines including the cab controls will be issued by the manufacturer in the form of carrying-out a 'Healthcheck' programme on all the units and updating the manuals. In future, if there are any signs of wear and tear or contamination of items highlighted on a 'Pre-operations check sheet' then the Operator will not use the machine and be responsible for ensuring that it is isolated under a Permit.
 2. Operators are to be reminded to keep their feet away from the grab operation pedal while making the lift and place them in the adjacent foot supports provided or under the seat. The operation manuals will be amended accordingly.
 3. The tool box talk/pre-job risk assessment reference material is to be amended to prompt a consideration of the safest direction to move the load and to barrier-off adjacent areas accordingly, including lower decks.

Contact Details: *No details available.*

448: Fatality - Drill Floor

Summary: Crew member was fatally injured when fall arrest lanyard became wrapped around Kelly bar.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Drilling unit

Activity Type: *Any Activity Type

Description: A 23 year old was fatally injured after his 6 foot rope lanyard was wrapped around the Kelly bar. The deceased had just completed work in the derrick and was wearing a full body harness with a 6 foot rope lanyard attached to his shock absorber secured to his back dorsal D ring. After climbing down from the derrick the worker walked across the rig floor passing in close proximity to the rotating Kelly. The lanyard wrapped around the Kelly bar pulling the worker into the rotating bushing. The rotary table was turning at approximately 130 RPM

Specific Equipment: *No details available.*

Lessons Learnt: *No details available.*

Task Description: *No details available.*

Recommendations: The following steps must be implemented immediately on all company sites. All personnel must review current practices associated to the wearing of full body harnesses and the attachments required. Review the following key points : Remove fall protection attachments immediately (example – web or rope lanyards, anchor slings, carabineers, self retracting life lines, tools etc...) following

work at height. Do not work with any personal protective equipment or clothing unsecured or loose around moving equipment. Full body harness must be donned or removed away from moving equipment. All straps must be secured properly and tucked away to allow protection from hazards associated to moving / rotating equipment. Review safe work procedures around rotary table and rotating equipment. Review the following key points: No one should step on the rotary table, or touch while rotating equipment is turning. Water hoses / steam hoses / air hoses / wash guns must not be pulled around rotary table area while it is turning. When the rotary table is turning, rig floor personnel must not swing winch lines near the rotary table, rotary bushings, or spinning Kelly. Equipment around rotary table, pipe tongs and slips for example, must be secured back away from rotary area while it is turning. Personnel must not work, or walk, in close proximity (1 meter) to the rotating table. The Company is currently conducting an on site investigation in conjunction with all relevant including the Operator.

Contact Details: *No details available.*

449: Air Hose Incident – Fatality

Summary: During abrasive blasting work a 75mm airline hose failed at the coupling to the air dryer. This failure resulted in the airline becoming free and uncontrolled. Because of this a nearby worker was struck by components associated to the blasting equipment and a fatality resulted.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Onshore terminal

Activity Type: Painting/sandblasting

Description: This incident occurred when a subcontractor's equipment failed during shot blasting. During abrasive blasting work a 75mm airline hose failed at the coupling to an air dryer. This failure resulted in the airline becoming free and uncontrolled. Because of this a nearby worker was struck by components associated with the blasting equipment and a fatality resulted.

Specific Equipment: *No details available.*

Lessons Learnt: The company where the incident occurred is having all high pressure plant and equipment (690KPa and above) examined to ensure connections are compliant with industry standards and site procedures.

Task Description: *No details available.*

Recommendations: The owner of the plant and equipment, be it hired or personally owned is recorded on a register at the site. The type and brand of hose, connections, whip-checks, clamping systems will also be recorded. The person

responsible for fitting clamps to this equipment will have their name recorded. Inspection of procedures, plant and equipment will be undertaken at the site. Ensure that equipment identified as faulty is tagged "out of service" and repairs are carried out to rectify the situation.

Contact Details: Sue Leighton, OHS Systems Manager, Stanwell Corporation Ltd. Tel No.: 07 3335 7539
Email:sue.leighton@stanwell.com



Clamps similar to this were used to hold the flexible airline in place.



A safety whip-check was installed similar to this.



Some hoses have internal whip-check protection – wire rope up the inside of the pipe.



An internal whip-check protection in a poor state of repair – frayed wire.



An example of an airline being used by a contractor. A piece of extra hose was fitted under the worm drive clip to allow the hose to be tightened onto the barbed air fitting.



From the photo you can see the use of duct tape to increase the size of the barbed tailpiece.

450: Dropped Object Incident - Supply Vessel Cargo Handling

Summary: During routine supply vessel cargo handling operations an aviation warning light fitted to the crane boom tip became dislodged and dropped onto the supply vessel deck shattering the glass globe, a piece of the glass hit one of the supply vessel deck crew members resulting in a minor abrasion cut.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Support vessel eg Supply, Standby

Activity Type: Lifting, crane, rigging, deck operations

Description: During cargo handling operations alongside an FPSO a 20 foot half-height CCU was landed adjacent to the vessel port hose area. The crane operator was advised by the vessel deck crew to reposition the CCU for better access to the lifting bridle. This was done and upon landing the CCU on the vessel deck the aviation warning light fitted to the crane boom tip dislodged and fell to the supply vessel landing on the edge of the CCU, on impact the glass globe cover shattered sending shards of glass in all directions. A piece of the glass hit one of the vessel deck crew on his gloved left hand resulting in a minor abrasion cut. The correct use of PPE and use of safety barriers prevented this incident from being more serious. Although the aviation warning light was fit for purpose the manufactures welds securing the light to installation bracket failed. The light was not secured by any secondary device such as retaining chain.

Specific: *No details available.*

Equipment:

Lessons Learnt: *No details available.*

Task Description: *No details available.*

Recommendations: Awaiting failure report to be initiated.

Contact Details: Dave Smith, HSEQ Supervisor, Sparrows Offshore

Aircraft warning device crane boom mounting bracket



Damaged aircraft warning light



451: Near Miss - Breathing air samples containing excessive oil mist and water

Summary: Breathing air quality samples were taken from equipment to be used by painting contractors. The samples contained excessive amounts of oil mist and water. The equipment was declared unfit for the supply of breathing air.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Fixed Installation

Activity Type: Painting/sandblasting

Description: The contractors had been employed to undertake painting, which involved abrasive blasting. A compressor was to be used for the supply of air both to the blast pot and operatives blast helmets, with the air to the blast helmet passing through a filter unit.

As part of the normal routine procedures for checking equipment to be used on site the painting supervisor was asked when the last air quality checks had been carried out on the equipment prior to it arriving on site and to provide the required certification.

He was unable to confirm the date or provide certification. A label attached above the compressor outlet manifold read "Not to be used for breathing air".

An air quality check of the equipment was carried out. The checks showed high oil mist and water.

Samples taken from other compressors (without warning

signs) and filter units also failed the air quality checks.

Specific
Equipment: *No details available.*

Lessons Learnt: *No details available.*

Task Description: *No details available.*

Recommendations: Regular air quality checks should be carried out on all equipment to be used for breathing air.

Contact Details: *No details available.*

452: Industry Awareness – Management of Potable Water Delivery

Summary: A recent situation concerning the standards applied in the process of supplying “potable” water over the quayside to supply vessels, for subsequent delivery to the offshore community has raised a number of issues associated with the potential for bacterial contamination.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Supply base, warehouse, workshop, dock

Activity Type: *Any Activity Type

Description: These have prompted a review of the process within these operations, with particular attention being paid to the standards and procedures applied in the following areas: • hygiene and general cleanliness at fresh water supply point and associated with the handling of delivery hoses and fittings • husbandry associated with the storage, protection and handling of hoses and other equipment used in the process • the cleaning regime associated with fittings and other equipment prior to use • dealing with standing water covering fittings at quayside supply points • the maintenance and replacement regime associated with hoses and other equipment • the testing and flushing regime prior to supplying over the quayside • the assessment of risk to personnel through failure in any of the areas above • the application of appropriate PPE in respect of personal safety and associated with hygiene in the handling of equipment • review of training needs of personnel involved in the potable water delivery process
In order to ensure appropriate ownership and input within

ASCO a work group comprising of operational managers with the responsibility for the process, personnel directly involved in the delivery of potable water to marine vessels and staff from the respective Water Boards involved, reviewed the processes currently being used. The remit was development of a procedure for the delivery of potable water across the quayside, which recognised and addressed all the bullet point topics listed above. The procedure in hand is now being applied as a Standard across ASCO operations, although it may be subject to minor change in order to take stock of issues specific to each location.

Specific Equipment: *No details available.*

Lessons Learnt: *No details available.*

Task Description: *No details available.*

Recommendations: Acknowledgement that in the delivery of potable water we are talking about a critical process associated with the delivery of “drinking water” to personnel offshore and their expectation is access to clean fresh water to the standard that they would expect from a tap at home. We must ensure that in collaboration with the respective Water Boards, we apply the highest possible standards of hygiene and cleanliness in the delivery process of potable water at the quayside in order to prevent the potential for bacterial contamination from such as e.coli, legionella etc. Personnel involved in this process must be given appropriate training associated with general cleanliness and hygiene and awareness of the potential wide-ranging effects of getting it wrong. Ensure a robust Audit regime is in place and that this critical process is tested regularly. This should include observation relative to the application of the process and the storage of equipment and not just the “paper trail.” That other areas of the supply chain need to look at their current procedures associated with the management of potable water to ensure that they are

dealing with it at an appropriate level of criticality, in order that bacterial contamination is prevented. This of course includes offshore facilities and supply vessels. The latter have guidance available in - Marine Safety Agency, Guidance Note MGN 61 – Guidance for Food Hygiene on Merchant Ships and Fishing Vessels - Section 12 Potable Water.

Contact Details: John Fraser ASCO VP HSEQ 01224 580396

453: Carriage of Dangerous Goods by Air

Summary:	Dangerous goods incorrectly packaged, labelled documented and presented for carriage by air
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	Any Location Type
Activity Type:	Air transport
Description:	Substances that had been classified as flammable so that it could be transported by air were presented for carriage to the operator with the following faults: No consignors details on the freight; Weight of freight not indicated on item; Incorrect shippers declaration used, (Maritime not air, consequently no declaration that the goods have been packaged in accordance with national government regulations); Incorrect label used; Weight of consignment on the upper limit of the box design test criteria; Insufficient absorbant material for packing group II inside outer package; No orientation label; No check list carried out; Not in use NOTOC (Notice to Captain) used with no emergency code or location of freight: All of the above breach the statutory legislation for the carriage of dangerous goods by air. It may be that the freight was incorrectly classified, however, the knowledge that it was going by air as dangerous goods should have required the above to have been corrected by a person that should have been competent in the classification, packaging, labelling and shipping of dangerous goods by air. Part of the statutory requirements to ship dangerous goods by air is for the operator to carryout checks prior to accepting the goods, this is done by means of a checklist and is

designed as a second check. Where the operator is not present, the vessel, platform, rig or wherever acts as the operators agent and a competent person trained in dangerous goods is required to carryout these duties on behalf of the operator. On this occassion no such check was carried out.

Specific
Equipment: *No details available.*

Lessons Learnt: The objective was achieved (the samples got onshore) and nothing happened other than the operator suspending carriage of dangerous goods from that location until confirmation that failures had been rectified. At no time did anyone say STOP: the product was incorrectly packaged and labelled, the wrong transport document used and no second check carried out, but the requirement was still to get it shoreside no matter what. Commercial pressure dictated the levels of safety on this occassion.

Task Description: *No details available.*

Recommendations: When you carry out internal systems audits, check who is responsible for dangerous goods, are they in date for training (every 2 years) do they have all the necessary equipment for them to carry out their role, correct UN packages, adequate labelling, correct documentation. Check who carry's out the duties of the operator as the agent and do they know what they have to do. Dangerous goods documentation is required to be kept for a minimum period of 3 months, is this so for your organisation. The Aircraft Operator can only carry dangerous goods by air if they have an exemption to their Public Transport Licence granted by the CAA Safety Regulation Group. This exemption can be revoked as such incidents have to be mandatorily reported. If the permission to carry dangerous goods is removed then such cargo would then have to go by sea. It is therefore to everyones' benefit to get it right first and every time. As

with any unsafe act, STOP and re-assess, put in the correct controls; contact the operator who would be only too willing to assist.

Contact Details: Lawrence.baldwin@bristow.co.uk

454: Damage to Scaffold Fittings

Summary: An incident occurred offshore recently when, during particularly windy weather, a scaffold board came loose. On investigation it was determined that the strength of the wind had caused the board to vibrate against the Limpet fitting that was holding it down.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: *Any Location Type

Activity Type: Temporary access

Description: An incident occurred offshore recently when, during particularly windy weather, a scaffold board came loose. On investigation it was determined that the strength of the wind had caused the board to vibrate against the Limpet fitting that was holding it down. The result can be seen in the photograph below. Fortunately the loose board was quickly noticed and properly lashed before it became a potentially lethal weapon.

Specific Equipment: *No details available.*

Lessons Learnt: *No details available.*

Task Description: *No details available.*

Recommendations: Until investigations into the cause are completed with the manufacturer, Limpet fittings should only be used to secure scaffold boards on scaffolds being built inside modules, etc where they are not likely to be subject to severe weather. Conventional lashings should be used on all external scaffold boards and consideration given to

double lashing scaffold boards in exposed areas.

Contact Details: John Boyce Group HSEQ Manager 01224 246385



455: Tools at height - Snap on tools product update

Summary:	An incident occurred where a 1 metre lanyard became detached from a tool.
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	Drilling unit
Activity Type:	Drilling, workover
Description:	An incident occurred where a 1 metre lanyard became detached from a tool. Investigation as to the cause of this suggests that the lanyard/tool interface was an interference fit and because of this pressure from the operative leaning against the work area caused the spring clip to depress and the lanyard to be forced out of the tool.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	1. The lanyard system is a secondary restraint device designed to arrest a tool dropped whilst in actual use. Do not use it to secure loose tooling that you are not actually using - use the "at height" storage bags specifically designed for transporting tools to the work site. 2. The lanyard you choose to use should be able to freely rotate within its attachment point. Most of the tooling in the kit has attachment points designed to work with the wrist strap lanyard system. 3. Use of the 1 metre lanyards should be carefully considered - use only if the lanyard clip is free to rotate in the tool attachment point. 4. All lanyard spring clips should be checked for tension before use - a "weak" clip (compare to other clips to

evaluate)should be immediately withdrawn from use.
(This was NOT a factor in the reported incident).

Task Description: *No details available.*

Recommendations: As above

Contact Details: Jonathan Taylor Tel: 07711 700469
jtaylor@snaponindustrial.co.uk

456: Manual Handling Injury to Stretcher Bearer

Summary:	A Lost Time Injury occurred to a stretcher Bearer during casualty extraction from an enclosed space. The injured person sustained a leg muscle injury whilst assisting a casualty up a steep stairway from an enclosed space.
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	Floating production/storage unit
Activity Type:	Training incl. emergency response
Description:	The injured party was fulfilling his emergency duty as a member of the stretcher party (first aid team). As a member of the stretcher party he was assisting in carrying a heavy individual (suffering from chest pain) up the stairs of the focsle to the exit. This is a very enclosed space with little room for manoeuvre. When the casualty was reaching the top step the IP twisted whilst still weight bearing, at that time he experienced pain in his right hip.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	Manual handling of casualties can be a significant issue due to the differing forms of access and egress across platforms. Whilst regular drills give stretcher parties experience of casualty movement, it does not generally address the more difficult area of the installation. This is mainly due to the fact that access and egress from spaces is not a problem for able bodied persons. Man handling an injured person on a stretcher poses a whole new set of problems.

Task Description: *No details available.*

Recommendations: 1. Review, in conjunction with the other departmental supervisors, all spaces which are visited at least once per month and tabularise the results for distribution to the area accountable person. 2. After determining which are the restricted access/egress areas develop a casualty evacuation procedure for each area assuming the utilisation of a stretcher/chair and that the casualty will be of more than moderate stature. 3. Ensure that stretcher parties are familiar with these areas and practice casualty extraction.

Contact Details: nigel.taylor@maerskcon.co.uk

457: Removing Securing Equipment

Summary: Lifting sling tied to the trailer by a length of rope.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Onshore office, support base, heliport

Activity Type: Office / warehouse activities

Description: A forklift operator was offloading a trailer at Altens Base and when he attempted to lift a compactor the rear wheels of the forklift lifted off the ground and the item did not lift. It was subsequently discovered this was due to the fact that the lifting sling on the load was tied to the trailer by means of a length of rope. The truck driver had removed all the securing straps and ratchets but had omitted to untie the rope on the sling. A visual inspection of the forklift was carried out to check no damage occurred due to overload, the truck driver removed the securing rope and the operation was then safely completed.

Specific Equipment: *No details available.*

Lessons Learnt: *No details available.*

Task Description: *No details available.*

Recommendations: In light of this incident could all: 1. Area Supervisors share this information with the drivers and forklift operators within their sphere of influence and emphasis the need for diligence in this area 2. Drivers please ensure that all securing equipment is removed from loads before offloading commences and that you remove

yourselves to a position of relative safety. 3. Forklift truck operators should assess each load before commencing any lifting activity and should exercise due care while lifting any load.

Contact Details: LES CLARK&

458; High Pressure Jetting Incident

Summary:	A High Pressure Operative received a minor cut and suspected infusion to his left hand while carrying out a planned cleaning activity to drain-lines.
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	*Any Location Type
Activity Type:	*Any Activity Type
Description:	A High Pressure Operative received a minor cut and suspected infusion to his left hand while carrying out a planned cleaning activity to drain-lines. The incident happened when cleaning pipe work of which had a varying diameters, from 3" up to 6" returning to 3". A 1/4" Flexi Lance operating at a pressure of 10,000 psi was used to clean the pipe. Due to a blockage within the pipe the 1/4" flexible jetting hose returned on itself and headed towards the Operator. The Operator was unaware of this fault and when the nozzle left the pipe his hand came in contact with the high pressure water. The Operator was taken to the Accident and Emergency at Aberdeen Royal Infirmary for potential water infusion and was given the all-clear after observation.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	The system had been changed but not communicated suitably. Good communication between Management and Site Operatives is essential whenever change occurs.
Task Description:	<i>No details available.</i>

Recommendations: There is a possibility that the Flexi Lance Nozzle can return on itself when introduced to larger pipe work. Therefore, hose trials will be completed to determine the minimum diameter at which flexible hose can return on itself and this will be communicated to all Operatives. Jetting procedures will be reviewed. Generic risk assessments will be reviewed to incorporate this hazard and Operatives will be informed of the update. A hose stringer /stuffing box system will be trialed to prevent the possibility of the hose escaping from the pipe work. A review / trial of various types of gloves used in this operation will be conducted to ensure suitability.

Contact Details: Gary Jenkins at Rigblast Group Ltd. Tel; 01224 722888
Email: gary.jenkins@rigblast.com

459: Chain Block Light Load Slippage

Summary:	When attempting to lift pipe spool, it was found that after weight was applied to a 2 tonne chain block, the gypsy chain would unwind causing the load to lower when personnel removed hand control from chain
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	*Any Location Type
Activity Type:	Lifting, crane, rigging, deck operations
Description:	During lifting operations, a pipe spool weighing approximately ¼ tonne was lifted to lower through a penetration in the deck into its final position. The spool was lifted to the vertical position using a 2 tonne chain block. Another 2 tonne chain block was attached to a 5 tonne shackle / sling which was holding the spool. When taking then weight of the pipe spool, (transferring the load onto the second chain block), the Rigger let go of the gypsy chain, only to find that it started to unwind releasing the load. The load was only 2" off the main deck and still attached to the other block. When hand pressure was applied to the gypsy it stopped. The spool weighed approximately ¼ ton. If the load is equally distributed between two 2 tonne chain blocks then the load on each would be 125 kg and around 6% of the SWL. Furthermore, as the full weight of the load was being transferred from the 'good' block to the other block, it would have been loaded at much less than 50/50 distribution and would have been loaded below the 5% level at which light load slippage would be a critical factor.

Specific
Equipment: *No details available.*

Lessons Learnt: Light load slippage – The International Rigging & Lifting Handbook contains a warning to “avoid lifting loads below 10% of the hoist’s capacity and NEVER lift loads below 5% of capacity as the weight of the load may not be enough to activate the friction brake. Paragraph 133 of the HSE Technical Guidance on the Safe Use of Lifting Equipment Offshore (HSG 221 published 2002) states “Chain/lever hoists should also be subjected to a light load test to validate the effectiveness of the braking system.... The light load is meant for test purposes only and the chain hoist should not be used to lift loads of under 10% of the SWL for normal operations.”

Task Description: *No details available.*

Recommendations: Personnel involved in planning and conducting lifting and rigging operations should be reminded that light load slippage can occur and of the need to select a chain block appropriate for the lift, where the load will be between 80% to 20% of certified SWL.

Contact Details: Ian Reynolds Tel:01224 291277

460: Use of inappropriate hand tool

Summary: The injured party was cutting through tie-wraps that were holding a hydraulic hose in place using a spring loaded stanley knife. In cutting downward he cut through the tie-wrap, his workgloves and lacerated his left thumb.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Drilling unit

Activity Type: Well services / intervention

Description: The injured party was clearing a blockage from a hydraulic hose that was connected between a Martin Decker chart and a Transducer Sender Unit on a cement unit. The hose had to be removed from its fitting to a guard rail and cable tray to which it had been secured by cable-ties. The injured party decided to use a safety knife to cut the tie-wraps. The stanley knife used was spring loaded with the user having to keep their thumb depressed against a button to keep the blade exposed. The knife was in new condition with a sharp blade and the IP was wearing general work gloves which afforded minimal cut protection. The first two tie wraps were cut without any problem but the third was very tight against the hydraulic hose. The IP gripped the hose with his left hand and pulled it away from the cable tray to reveal a clear section of the tie-wrap to cut. At this point due to the equipment layout he did not have a clear view of the position of his left hand. As he cut downward through the tie-wrap with the knife using his right hand he cut down through the tie-wrap through the work glove and penetrated into his left thumb. The injury required

onshore hospital treatment and post surgery the injured party will have his thumb immobilised for a considerable period.

Specific
Equipment: *No details available.*

Lessons Learnt: 1.The task had not been properly risk assessed and the identification of the correct tool missed. 2. Even a safety knife can be the wrong tool for a job. 3. The employee had placed his left hand in the potential path that the knife blade would travel after penetrating the cable-tie. 4. A pair of cutting snips was available and would have been the correct tool to use for this task. Even with a tight tie-wrap it could have been prised sufficiently clear to permit use of the snips. 5.Haliburton accountability for Safety requires everyone to use the right tool in the right way for the job.

Task Description: *No details available.*

Recommendations: 1.Reiterate the importance of conducting risk assessments before any task however routine it might appear to all personnel.Think about what hazards are introduced by using specific tools. 2. Tools that have a safety label are only safe for the specific purpose they have been designed for. 3. Ensure all employees are fully aware that tie-wraps can only be cut using snips. 4. Remind employees that they must select the safest tool for the task and use that tool in the prescribed manner. Users should always consider where the force they exert on a tool might go if the work piece shifts or the tool slips and position their body to avoid the chance of injury.

Contact Details: Jason Harrower&

461: Dump Bailer Cement - HPI Export Cement

Summary:	HPI Cement cannot be used on UKCS as it is not registered.
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	Fixed Installation
Activity Type:	Well services / intervention
Description:	We have been using this cement routinely around the world, but for UK use it must be registered by CEFAS and added to the OCNS list of approved chemicals under the Offshore Chemicals Regulations 2002. HPI cement shown below is now withdrawn from UK use immediately. Alternative cement kits can be obtained from Well Services - Cementing. CEFAS template must be provided for customer before shipping
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	Check with Offshore Chemicals Regulations 2002 routinely.
Task Description:	<i>No details available.</i>
Recommendations:	Ensure all operational staff, stores, case hole group, desc, ACM's, clients are aware.
Contact Details:	Jamie Grover - Wireline Base Tel: 01224 728000

LOW PRESSURE HYDROLYTIC INC.

1000 10th Street, Suite 100
Burlington, Ontario L7R 4K6
Phone: 781-933-2222

Controlled Risk Time (CRT)

HIP MIX - HIP/0 MIX AD BOND - EXPORT

PN: 190-191-02

For CRT at 100° - 200°F

Control Systems for Oil Well Applications

HEALTH

1

FLAMMABILITY

0

REACTIVITY

10

Control Systems
for Oil Well Applications

Control Systems
for Oil Well Applications

Control Systems
for Oil Well Applications

462: Slip, Trip, Fall

Summary:	Steward sustained bruising and sprain to right ankle
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	Fixed Installation
Activity Type:	Catering / hotel services
Description:	While carrying a bundle of 33 towels down the ALQ stairwell on his left shoulder and holding the hand rail with his right hand IP miss footed the last step on the stairs and went over his right ankle. Platform Medic was contacted immediately.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	See recommendations from investigations findings
Task Description:	<i>No details available.</i>
Recommendations:	Findings from the investigation found that the individual was wearing trainers, at time of incident. Personal Protective Equipment is issued to each employee for their protection therefore safety shoes are to be worn at all time whilst on duty. Carrying 33 towels is excessive. A maximum of 20 towels per individual is to be adopted as the standard. We also have a towel carrier available and can be obtained from our clothing supplier, which enables the individual to have both hands free.
Contact Details:	john.fraser@universalsodexho.co.uk

463: CRUSH INJURY WHILST OPERATING HYDRAULICALLY POWERED TORQUE TOOL

Summary: A work party were engaged in the rebuilding of an Plate Pack Cooler using a hydraulically powered torque tool to tighten the nuts on the cooler tie-bolts.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Fixed Installation

Activity Type: Maintenance

Description: A work party were engaged in the rebuilding of an Plate Pack Cooler using a hydraulically powered torque tool to tighten the nuts on the cooler tie-bolts. Normal operation would involve rotating the cassette head hydraulically to align the Hydratorque tool with the nut, whilst holding it clear of the nut itself. However in this case, the tool engaged the nut, this caused the reaction arm to move, trapping the thumb of the technician holding the tool. This resulted in the amputation of the tip of the technicians thumb. The reaction arm was not being used in accordance with the manufacturers recommendations.

Specific Equipment: *No details available.*

Lessons Learnt: *No details available.*

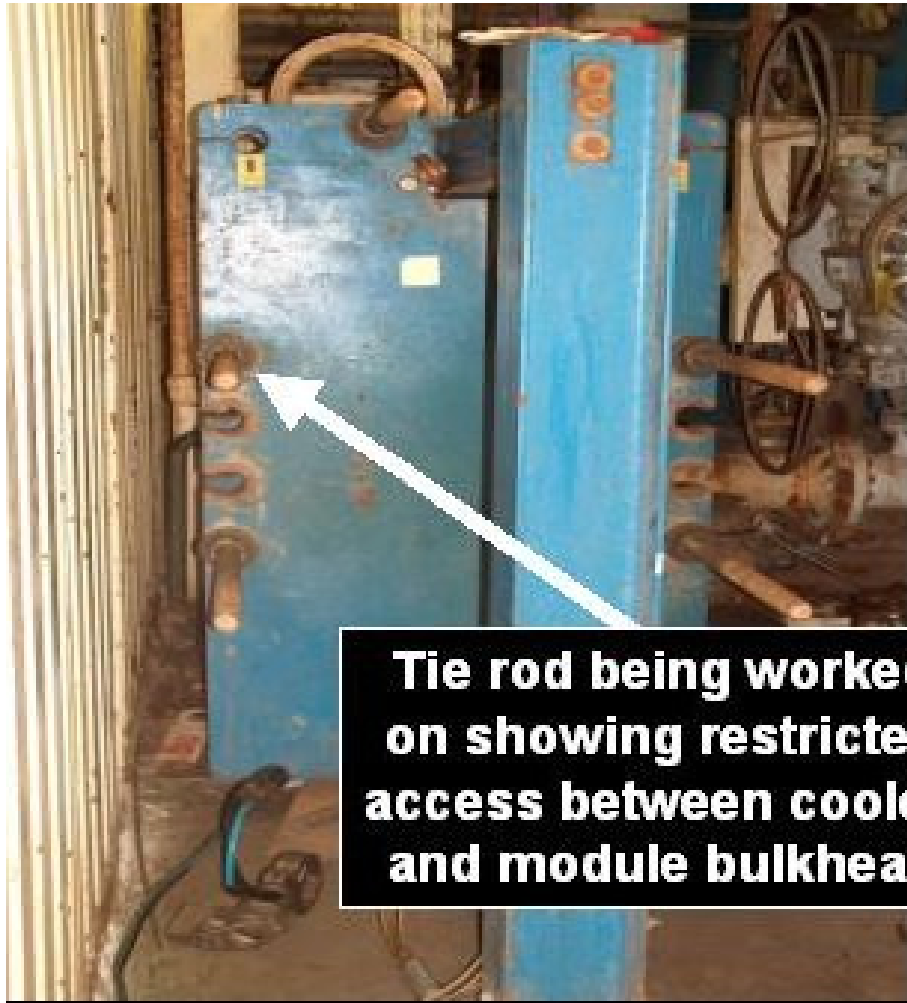
Task Description: *No details available.*

Recommendations: Any site that operates this type (or similar) of hydraulic torque equipment should ensure that: - Any risk assessment developed for the use of this equipment, clearly recognises the hazards of nip and pinch points

created during the operation of the tool. This should be discussed at a toolbox talk to address any specific operational difficulties in using the tool. Any personnel who operate this equipment have received training from a recognised source (i.e. manufacturer or approved provider) and understand the tool operating and safety instructions. To this end any training must include an explanation and demonstration of these operating and safety instructions. The Equipment Operating Manual & Safety Instructions are strictly adhered to. The manufacturer recommended manning levels are adhered to. When 2 man operation cannot be avoided, the risk assessment and toolbox talk must fully address communication and co-ordination of tool operation between the two users. The hydraulic pump must be STOPPED at all times when placing the cassette head on the nut / bolt, or when manually adjusting the cassette head alignment. The practice of 'inching' the tool hydraulics to align the cassette head in close proximity of the nut / bolt is to be strictly prohibited. Hands MUST be kept clear of potential 'pinch' points at all times.

Contact Details: Telephone Talisman HS&E Department on 01224 352500

Tie Rod Shown Restricted Access



**Tie rod being worked
on showing restricted
access between cooler
and module bulkhead**

Hydratorque kit in position



Pinch Point

**Hydra-torque unit
In working position**

Simulated trapped thumb



**Simulation of
thumb trapped
between reaction
arm and cooler
end plate**

464: Lifeboat Release Mechanisms

Summary: Recently a NORSAFE Miriam 8.5 meter lifeboat equipped with NORSAFE Camsafe release mechanism fell from a semi-submersible mobile offshore drilling unit during initial preparation for sea trials. While the lifeboat was being recovered and raised to its stowage position, the aft hook unexpectedly released at a height of about 70 feet, followed by the disengagement of the forward hook as it took the full load of the boat. The boat tumbled and fell to the water landing upside down, causing one fatality and injuring two other crewmen.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: *Any Location Type

Activity Type: *Any Activity Type

Description: The NORSAFE Camsafe release mechanism became available in 2000. It is not Coast Guard approved, however, it may be fitted on some NORSAFE lifeboats accepted by the Coast Guard based on Norwegian approval. After the accident the release mechanism control lever was found in the locked position inside the boat, but it is apparent that the hook itself was not fully engaged with the cam inside the release mechanism. Subsequent investigation found that the release mechanism control lever could be placed in the locked position even though the locking cam had not properly engaged the hook. In this condition, the mechanism can appear upon casual examination to be locked and, due to the design and roughness of the hook and cam surfaces, it could bear a significant load. However, the hook can in

fact release at any time without warning. Satisfactory engagement and locking of the release device is dependent upon successful mating between the male and female portions of the cam and hook, respectively, as shown in the attached drawing. When properly engaged, the seam between the edges of the mating components will be clearly visible in the inspection window located on one side of the release mechanism. Observation of the components within this window will enable confirmation of complete cam-to-hook engagement. It is important to note that this window is impossible to see from inside the lifeboat and the associated lifeboat and release mechanism manuals are not clear on what the viewer should look for to ensure proper engagement.

Specific Equipment: *No details available.*

Lessons Learnt: *No details available.*

Task Description: *No details available.*

Recommendations: The casualty investigation is not complete. Additional recommendations are likely to follow. In the interim the Coast Guard strongly recommends: 1. That only those launching and recovery operations that are absolutely necessary should be carried out with lifeboats having the Camsafe release mechanisms. 2. Prior to launching the lifeboat, proper cam engagement must be verified as well as each time the boat is lifted for recovery operations.

Verification Procedure All ships with NORSAFE lifeboats should be inspected immediately to determine whether they are fitted with Camsafe release mechanisms. Lifeboats fitted with Camsafe release mechanisms should be examined as described below. With the lifeboat in the STOWED position, and MAINTENANCE PENDANTS FITTED, check the inspection window of the hook (which may be outboard) to determine whether the cam and hook are completely engaged. IMPORTANT - The inside surface of the opposite side plate (or half) of the release

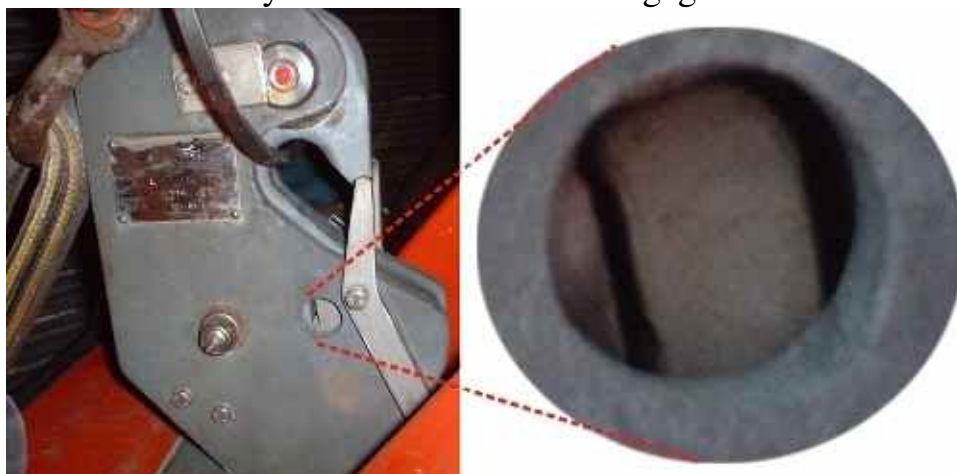
mechanism will be visible, unless a significant portion of the hook is out side the side plates. If the cam and hook are not completely engaged, the load of the boat must be temporarily transferred from the release mechanism and on to the maintenance pendants. Next the release lever at the helmsman's station is reset while the hook is pushed into place by hand to ensure the cam and hook are completely engaged. The load may then be returned to the release mechanism after confirming complete cam engagement through the inspection window. With the cam and hook completely engaged, the release mechanism is safe to use. However, until the investigation has been completed, and the need for corrective measures for the Camsafe release mechanism and/or installation has been determined, **ONLY THOSE LAUNCHING AND RECOVERY OPERATIONS THAT ARE ABSOLUTELY NECESSARY SHOULD BE CARRIED OUT**, with lifeboats having the Camsafe release mechanisms.

Contact Details: Questions regarding this information and reports of any Camsafe release mechanisms found not completely engaged may be addressed to LT Todd Howard of the Coast Guard's Life Saving and Fire Safety Division at (202) 267-6854 or THoward@comdt.uscg.mil.

Drawing of Hook and Cam Assembly



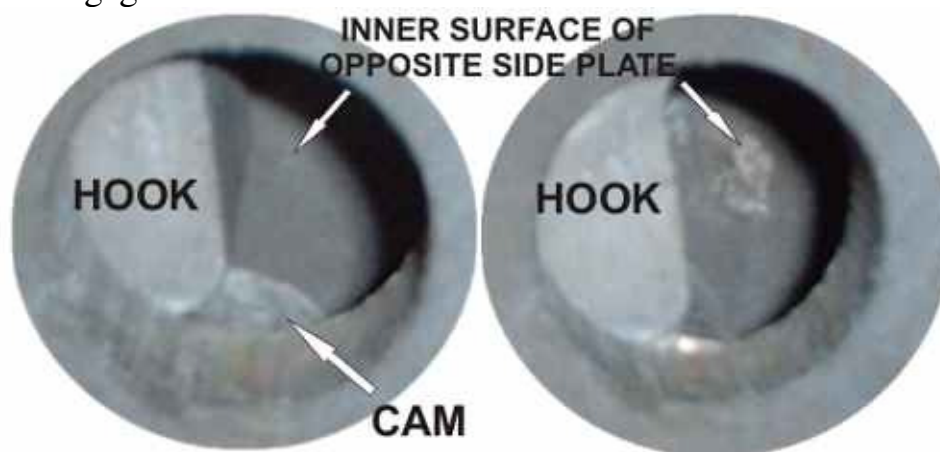
Release Assembly with Hook and Cam Engaged



Close-up of Inspection Window and Seam



Disengaged Hook and Latch



465: Reel Skid

Summary:	Load was lowered and the strop freed itself but in doing so the adjacent skid fell onto its side.
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	Support vessel eg Supply, Standby
Activity Type:	Marine activity, shuttle offloading
Description:	Supply vessel at a North Sea installation working cargo. When the platform's crane commenced lifting a 9t reel skid from the supply vessel, it caught on another reel skid adjacent to it. The load was lowered and the strop freed it self but in doing so the adjacent skid fell onto its side. Using the platform crane an attempt was made to right the reel. As soon as the lift was done the reel rolled off the skid. The skid was lifted clear, and the crew secured the reel with wedges. A risk assessment was carried out and a strop was supplied from the platform. The reel was slung and hooked on. The crew then cleared the deck and the reel was lifted to platform with out further incident.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	The skids have a flat base, and the reel is placed on top, and secured by chain. There are hooks at the corners which attach to a lifting beam. The hooks at the corners of the skids are the area where snagging is possible. The vendor informs that these type of skids are being replaced by cage type skids with phased implementation complete by mid year

Task Description: *No details available.*

Recommendations: .. Until the old type skids have been replaced to reduce the risk of snagging, the following actions are proposed: • Skids be loaded at the back of the block stow, and away from other open type units. • If loading more than one skid consideration to be given to placing containers in between the skids.

Contact Details: Kerry.scott@seaforth-maritime.com 01224 288509

466: Contaminated Equipment

Summary:	Contaminated equipment recieved from offshore installation representing a significant risk to personnel onshore.
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	*Any Location Type
Activity Type:	*Any Activity Type
Description:	Sulzer Wood are in regular receipt of equipment from offshore installations, which is used for pumping hazardous substances. We expect that any such equipment received into our workshop for repair will have been thoroughly cleaned and flushed of any hazardous substances. Recently a chemical pump was received from an offshore imstallation which had not been cleaned or flushed. This represented a significant risk to our personnel and appropriate steps were taken to carry out thorough cleaning of the pump before any further work was undertaken.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	<i>No details available.</i>
Task Description:	<i>No details available.</i>
Recommendations:	1. All equipment from an offshore installation must be subjected to a flushing/cleaning process prior to arriving at onshore workshops. 2. Where it is not possible to flush/clean the equipment, then the equipment should be clearly marked as hazardous and transported to a

specialist onshore contractor for de-contamination. 3. In all cases where the equipment has been in contact with process fluids(hazardous substances) confirmation of cleaning/flushing must accompany the equipment.

Contact Details: *No details available.*

467: Compactor - Dropped Object

Summary: A steel plate which provides access to the hydraulic rams on a Swire PPM Type waste compactor became detached and fell during a lifting operation. The plate had been secured to the unit with aluminium rivets which had corroded.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Onshore office, support base, heliport

Activity Type: Lifting, crane, rigging, deck operations

Description: A steel plate which provides access to the hydraulic rams on a Swire PPM Type waste compactor became detached and fell during a lifting operation. This plate should be secured with steel Allan Screws, stainless steel bolts or welds. When the returned unit was inspected it was apparent that aluminium rivets had been used at some point in its 14 year life to secure the ram access plate. A combination of corrosion of the rivets, corrosion of the steel around the rivet heads and impact forces had caused the plate securing method to fail.

Specific Equipment: *No details available.*

Lessons Learnt: Reinforcement that aluminium rivets must not be used on structural parts of offshore containers. Reinforcement that inspection procedures must ensure that no changes to an approved design have been effected during a repair or maintenance work

Task Description: *No details available.*

Recommendations: All Swire PPM type waste compactors must be inspected prior to lifting to ensure that the ram cover plates are secure . If the plate is not secure it should either be secured with nuts and bolts (where practical) or removed and discarded. The unit must then be returned to Swire for repair. Any secure plates found to be secured by rivets should still be returned to Swire for repair

Contact Details: Roy Burrell, Operations Manager,&

468: Lifting Incident

Summary: An incident occurred offshore recently where a small pump weighing approximately 100kgs was being lifted by a shackle and soft sling attached to any eye bolt on the top of the pump. During what was a blind lift the pump caught on a handrail, the eye bolt failed and the pump fell into the sea. Fortunately nobody was injured in this incident.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Any Location Type

Activity Type: Lifting, crane, rigging, deck operations

Description: An incident occurred offshore recently where a small pump weighing approximately 100kgs was being lifted by a shackle and soft sling attached to any eye bolt on the top of the pump. During what was a blind lift the pump caught on a handrail, the eye bolt failed and the pump fell into the sea. Fortunately nobody was injured in this incident.

Specific Equipment: Lifting equipment

Lessons Learnt: All items used for lifting must be colour coded to the current platform colour code. The lift was not properly risk assessed as this would have identified that the eye bolt was not an acceptable lifting point.

Task Description: *No details available.*

Recommendations: Ensure that no "blind" lifts take place. Banksman should always be in view of a lift at all times. Ensure lifting

equipment is fit for purpose and that adequate risk assessment has been carried out with all risk reduction measures in place prior to commencement of the task

Contact Details: John Boyce&

469: Beam trolley unit passed under lifting beam end stop

Summary:	Beam trolley unit passed under the lifting beam end stop during lifting operations.
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	Fixed Installation
Activity Type:	Lifting, crane, rigging, deck operations
Description:	A mechanical fitter was required to overhaul an electric motor in the mechanical workshop. Once the task was complete, the motor was rigged to an overhead lifting beam using a portable 1 tonne beam trolley unit and a half tonne chain block (the lift was 204 Kilos). The motor was raised about one foot from the ground and then slid along the beam, through an open double door into the end of a second work bay (about 10 metres). When the trolley reached the end of the beam, instead of stopping, it continued and half the trolley overshot the beam end. Two of the wheels had fallen off the end of the beam and the remaining two had lifted up behind the stop plate. At this time the Mechancial Fitter confirmed that the beam trolley did not fall.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	1. The person who originated the removal plan for the beam trolley unit should have instigated a Control of Change process, as the use of the beam for lifting a variety of lifting equipment was foreseeable. In mitigation, the beam could have been used at any time with any lifting equipment before the 'as built' trolley unit was

removed. On balance, the investigation team still think that Control of Change was appropriate. 2. If the end stop had been the full height of the beam, no trolley unit could have come off, regardless of size. An extra 2 inches of steel at the manufacturing stage would have eliminated the risk totally. 3. The individuals using the equipment (on four different occasions) did not carry out a thorough enough inspection to discover this latent hazard. In mitigation, the workshop is split into two halves by a double door. The work area where rigging is used is completely segregated from the half where the beam stop was located. Only when the doors were opened and the motor moved along the beam was the hazard realised. 4. The risk to the individual would have been lower if he had been wearing the correct PPE, a safety helmet. While there is no absolute rule regarding PPE in the workshop, PPE should be dictated by the potential risk. Having said that, the likelihood of an object suspended at just above floor level may not trigger an immediate warning that your head may be at risk. 5. There are other beam stops with similar gaps and potential onboard.

Task Description: *No details available.*

Recommendations: 1. Runway beams shall be inspected to ensure adequate end stops are fitted for any type of beam trolley that can be potentially used. End stops should be modified as appropriate. 2. Safety alert to be raised via STEP change to communicate the lessons learned industry wide. 3. All platform teams to receive a presentation regarding the incident and all the learning's. Focus on Control of Change and the range of changes the procedure encompasses. End April 04. 4. Review the workshop risk assessment that covers activities of significant risk such as this.

Contact Details: Britannia SEQA Co-ordinator, 01224 327211

Beam trolley underneath end plate and partially off the end of the runway beam



Runway beam from mechanical workshop into fabrication workshop



470: Loose Drums Falling from Container

Summary: 53 gal drum fell from top shelf of a container

Incident consequences
(potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Supply base, warehouse, workshop, dock

Activity Type: Maintenance

Description: Recently an incident occurred at our Wellington Circle facility where a 53 gal drum fell from the top shelf of a container sent in from an offshore installation just missing the person opening the container. Little or no effort was made to secure drums onto pallets/the majority of the restraining nets on the containers were not fixed to the container (they were hanging loosely inside the container)

Specific Equipment: *No details available.*

Lessons Learnt: This Alert has been raised to highlight the issue and request that the following remedial actions be taken.

Task Description: *No details available.*

Recommendations: This Alert must be distributed to all Staff. Yellow Back load tags must be used on all baskets and containers being returned from offshore. Review this incident in QUEST, Report Number 20031217152218. Read and understand work instruction DW-UKI-W303 especially section 3.10 Back Loading Chemicals. This Service Quality Alert to be discussed at SOIM's through March, 2004

Contact Details: Neil Ferguson Service Quality Coach Tel: (01224)
404572

471: High Pressure Water Jetting Incident

Summary:	A High Pressure Operative received a minor cut and suspected infusion to his left hand while carrying out a planned cleaning activity to drain-lines.
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	*Any Location Type
Activity Type:	*Any Activity Type
Description:	An operator was retro-jetting a 3" line approximately 3' long. The line then opened out into a 6" T piece which then reduced down to a 3" line. The operator was using a 1/4" Flexi-Lance operating at 10,000psi. The Flexi-Lance was to unblock a blockage on the 3" line which was after the 6" T piece. The operator marked the Flexi-Lance to indicate the distance of Lance still inside the pipe work. As the operator was inserting the Flexi-Lance the nozzle which was inside the 6" T piece at the time was able to turn back on it's self, due to the blockage and the size increase. The operator proceeded to insert the Flexi-Lance unaware that the Flexi-Lance had actually turned back on it's self, which resulted in the nozzle exiting the pipe work and striking the operators left hand.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	The possibility of the lance returning on itself in larger pipework will be reviewed to prevent this type of incident. The jetting procedure will be revised and generic risk assessments will incorporate control measures to prevent the likelihood of injury from this process. Operatives will

be informed of the updates and trained in any new processes developed to counter this risk.

Task Description: *No details available.*

Recommendations: The Rigblast team designed and implemented a Flanged Retention Assembly for small bore pipework, which prevents the hose from exiting the pipework and injuring the operator. The Assembly is now a closed system which has been fitted with a drain point, this prevents the operator unnecessarily getting wet, with the waste directed to a designated drain point which also prevents spillage on the associated decks. The drain hose is clear for the first meter allowing the operator to view the ejected waste and identify potential blockages / restrictions inside the pipework. The components of the Retention Assembly are: 1 x Flange (size to be agreed before mobilisation) 1 x 1 meter clear hose 1 x 2" T Piece 1 x Retention Assembly c/w nut & collet As part of the remedial actions all Rigblast Water Jetting Procedures and Risk Assessments have been reviewed by an independent company with all changes introduced and now been implemented. After the successful trials of the Retention Assembly and positive feed back from the operators and clients this is now standard equipment for Retro Jetting Operations where applicable. All Rigblast workforce who carry out Retro Jetting Operations have been trained in the use of the Retention Assembly as part of the workshops carried out in-house.

Contact Details: John Walker at Rigblast Group Ltd. Tel: 01224 722888
Email: john.walker@rigblast.com



472: Traversing wheel and chain fell to deck while operating beam trolley

Summary:	Traversing wheel and chain fell to deck while operating beam trolley
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	Fixed Installation
Activity Type:	Lifting, crane, rigging, deck operations
Description:	During operation to transfer a CAT generator (4.3 t) within the sack store using an overhead beam trolley (SWL 5 t) the roll pin securing the traversing wheel to the drive shaft sheared causing the traversing wheel along with the operating chain (total weight approx 5.5 lbs) to separate from the drive shaft and fall 4.8mtrs to the deck.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	The roll pin, which was the primary method of securing the traversing wheel onto the drive shaft, had sheared. Trolley had become stuck on a welded joint on the runway beam. This weld had not been dressed when the beam was installed. Additional force had been applied to the traversing chain and thence to the wheel and the retaining pin in an effort to pass the trolley over the weld. No secondary device in place to prevent the wheel coming free in the event of failure of the retaining pin. Design of trolley failed to consider the need for retaining devices for dropped objects.
Task Description:	<i>No details available.</i>

Recommendations: Weld to be dressed flush to enable unobstructed travel. All beams within the drilling package, which are used with beam trolleys, are to be checked to ensure unobstructed travel over the full length of the beam. All beam trolleys with a similar retention system are being changed out for type (Riley Superclamp) with Keyway and Nut retention system. <http://www.superclamp.co.uk/index>. Incident to be presented to the DROPS Forum for inclusion and consideration by the POV (Production, Offshore & Vendor) Sub-Committee Safety.

Contact Details: Roy Brown - KCADeutag&

473: Dangerous GRP ladder

Summary:	The rungs of the vertical G.R.P. access ladder attached to V3405 expansion drum were found to be in a dangerous condition. Over a period of time the rungs at the point of contact with the stiles of the ladder had deteriorated in some cases to the point of failure.
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	Fixed Installation
Activity Type:	Production operations
Description:	The rungs of the vertical G.R.P. access ladder attached to V3405 expansion drum were found to be in a potential dangerous condition. Over a period of time the rungs at the point of contact with the stiles of the ladder had deteriorated in some cases to the point of failure. Vibration from adjacent equipment has contributed to the wearing of the GRP material. In some cases 75% of the wall thickness on the supporting rung had been removed.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	Maintenance & inspection of GRP ladders prevented a potentially serious accident
Task Description:	<i>No details available.</i>
Recommendations:	.Remedial repairs on this and other defects found on similar GRP ladders to be implemented immediately
Contact Details:	Britannia Operator Ltd , SEQA Co-ordinator, 01224

327122.

474: Mechanical Lifting is Potentially Fatal

Summary: Mechanical Lifting is Potentially Fatal

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Fixed Installation

Activity Type: Lifting, crane, rigging, deck operations

Description: 2nd April 2004, 06:14hrs- Offshore Production Platform, Norway. While reinstalling a deck hatch, the tip of the telescopic crane hit the drilling rig cantilever. A section of the dropped object deck (platform preventing objects from falling below) was dislodged and fell onto the deck of the production platform below. Falling object bounced on the floor on the production platform top deck approximately 15 metres below, and hit the Well services crew member standing nearby. Employee sustained Serious injuries on right Leg and face.

Specific Equipment: *No details available.*

Lessons Learnt: Always assess risk and minimize to ALARP (As Low As Reasonably Practicable) level before commencing job. Ref: OFS QHSE Standard 020.

Task Description: *No details available.*

Recommendations: Always consider hazards around work area. Only use maintained and certified lifting equipment and devices. Never stand or walk underneath a suspended load. Always make sure safety devices such as limiting switches are functioning properly.

Contact Details: Nitin Vaidya - Schlumberger Stavanger 47 51 946016
(direct)

475: Failure of 2" Crestex gate valve

Summary: A 2" Crestex gate valve with a rated working pressure of 5,000 psi failed during routine drilling operations, the mud pump pressure at the time was 4200 psi.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Drilling unit

Activity Type: Drilling, workover

Description: A 2" Crestex gate valve with a rated working pressure of 5,000 psi failed during routine drilling operations, the mud pump pressure at the time was 4200 psi. The coupling failed just above the threaded section allowing the complete assembly including the gate valve and seat, to blow out of the 2" valve body, hitting the mud pump pressure gauge flange 1 1/2 foot away.

Specific Equipment: *No details available.*

Lessons Learnt: 1) Immediate visual inspection of the failed coupling revealed internal cracking. 2) Subsequent investigation with the manufacturer revealed that the failed 2" gate valve came from a batch that had been incorrectly manufactured with respect to the required wall thickness of metal around both the threaded section and the valve body.

Task Description: *No details available.*

Recommendations: 1) All Crestex 2" gate valves are to be removed from service for inspection and replaced if required. 2) All 2" gate valves that are part of the high pressure mud pump

system are to be added to the planned maintenance system to include a six monthly MPI inspection.

Contact Details: Richard Mearns - HSE Co-ordinator GlobalSantaFe Tel: 01224 6545

failed valve



failed valve



failed valve



failed valve



failed valve



476: Overside Scaffold Work

Summary:	A scaffolder suffered first aid injuries when two tubulars came free from their lashings and dropped 10-12feet.
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	*Any Location Type
Activity Type:	*Any Activity Type
Description:	A team of scaffolders were erecting a scaffold structure at the base of an escape-to-sea ladder. Equipment was lowered using rope and pulley; however, during this operation two tubulars came free from their lashing and dropped 10-12feet. One of the scaffolders, who was several feet away from the initial tubular impact onto the escape-to-sea platform, suffered first aid injuries when one tubular came into contact with the side of his body. The scaffolder received medical attention to his minor bruising then returned to work.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	The tubulars were approximately 5feet long and lowered in pairs and were tied in the recognised method, using a Rolling Hitch. However, the tubulars were being lowered inside the ladders back-scratcher frame, which is a confined space with several obstructions to catch on. Since the tubulars were lashed with one knot they would not lie completely perpendicular and therefore allow the possibility of impact against the ladder or the back-scratcher, which could splay the tubes and weaken the knots grip. The rope used in this incident was 20mm

diameter, which suited the pulley that was sent in conjunction with the rope. This rope is considered to be too large in diameter to ensure a good grip of the poles, therefore this was considered to be another factor that lead to this incident.

Task Description: *No details available.*

Recommendations: When the situation does not allow mechanical means to transport equipment and manual handling is restricted due to weight or distance, then a rope and pulley (gin wheel) will be employed. There will be one person in charge of the worksite and he will co-ordinate the work. The diameter of the rope will be restricted to no larger than 14mmØ, and a Rolling Hitch will be applied off centre to the objects centre of gravity. A Half Hitch will be applied at a reasonable distance from the Rolling Hitch, using the same rope. This will ensure the tubulars are as perpendicular as possible. The workforce where the material is being lowered to will stop work during transference of materials and will monitor lowered and retrieved material until instructed to do otherwise by the person in charge. The lifting operations should be assessed to identify the hazards and a lifting plan and job specific risk assessment completed. Note: 1. Further to the above recommendations for lifting and lowering tubes, it is recommended that a timber hitch is used for the lifting and lowering of boards (as with tubes a half hitch should be used to keep the boards as perpendicular as possible) 2. The lifting and lowering of fittings by rope should be carried-out by using a purpose made lifting container (bags specific for the uses of lifting or lowering scaffold fittings are available) a bowline knot should be used to attach the rope to the bag handles. 3. In order to assist the manual lifting and lowering of the above items by rope it is permissible to use a 20mm rope attached to a 14mm rope (correctly spliced or knotted) this will give the user a better grip of the rope for pulling or lowering, whilst at the same time ensuring that the correct size of rope is being

used to secure the items being lifted/lowered.

Contact Details: Rigblast Group Ltd, Gary Jenkins Tel No 01224 722888
email; gary.jenkins@rigblast.com

477: POTENTIAL DROPPED OBJECT

Summary: Cargo Operations

Incident consequences
(potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Support vessel eg Supply, Standby

Activity Type: Marine activity, shuttle offloading

Description: During the routine discharge of cargo to platform, a 3 ft long chain hook was found to be on top of a half height. The ships crew had previously used the hook to reach slings at another location, after retrieving the sling; the hook was placed on the half height while the container was secured for hoisting. The crew then moved to safe position. The half height was subsequently discharged at the next location with the hook on it.

Specific Equipment: *No details available.*

Lessons Learnt: This was an oversight of the deck crew.

Task Description: *No details available.*

Recommendations: To lessen the risk of this happening again it was felt a good idea to: - Paint all such hooks a fluorescent orange for easy identification. Stow all such hooks in a prominent place with the number onboard known. Remind all crew to give CCUs a visual check before they are discharged.

Contact Details: Ali Dillon c/o Promarine (01224) 211176

478: Foot Injury

Summary:	A Ship's Assistant was engaged in routine shipboard work, as per planned maintenance system and was conducting the weekly cleaning of the seawater cooling line "basket" filter on the maindeck, immediately abaft the accommodation. The route used to access the maindeck was that normally taken to prevent the contents of the basket filter from making a mess in the accommodation.
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	Support vessel eg Supply, Standby
Activity Type:	Marine activity, shuttle offloading
Description:	As this was a routine task associated with ships maintenance, the Chief Engineer and other personnel in that area knew what the Ship's Assistant was doing. The Bridge was unaware on a need to know principle for this activity. Having cleaned the filter, he re-entered the accommodation block via the direct access to the engine room. He opened the watertight door leading into the engine room and placed his left foot on the step inside the doorway. Placing the basket filter against the bulwark on the landing inside the doorway and with his right foot remaining on the step outside, i.e. astride the door opening. He then reached up to unclip the door latch and started to pull the door closed. At that moment the ship moved violently in the heavy sea and the acceleration caused by this motion created a very heavy closing force on the door. Taken by surprise and sensing what was potentially about to happen, IP quickly lifted his right foot and placed it on the top step of the stairway down to the

engine room, effectively crossing his legs. While continuing to hold onto the watertight door, the vessel's motion caused most of the IP's weight to transfer to his right foot. Due to the relative speed with which all this was happening, the IP's right foot had landed half on and half off the right hand edge of the top step of the stairway.

Specific
Equipment: *No details available.*

Lessons Learnt: The step is raised some 6 centimetres above the landing and consequently the right edge of IP's foot twisted over towards the door, effectively causing him to sprain his ankle.

Task Description: *No details available.*

Recommendations: The critical factor in this incident was the layout of the inside of the doorway into the engine room from the maindeck. If the deck landing had been level with the top step of the stairway, the IP's right foot would not have twisted over as his body weight came on it. Additionally, the small step inside the doorway was not large enough, in its original form, to allow the IP an effective platform on which to stand to resist the closing motion of the door and to secure it. The fact that the IP had raised this issue at the very recent Safety Meeting on board, and that a commitment had been taken to rectify the situation, reinforces the competence and safety awareness of the personnel on board.

Contact Details: Ali Dillon c/o Promaine (01224) 211176

479: Trip over deluge nozzle

Summary: Employee caught his foot under a deluge head that was protruding through deck grating in well bay area

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: *Any Location Type

Activity Type: *Any Activity Type

Description: While assessing a task with his Supervisor in the Wellbay area an Electrical Technician turned 180 degrees and his right foot caught under a deluge head that was protruding through the deck grating. He lost his balance and fell against some adjacent scaffolding. He attended the sick bay and was subsequently sent onshore for an x-ray that confirmed a spiral fracture of a bone in his right ankle.

Specific Equipment: *No details available.*

Lessons Learnt:

- Well bay areas are typically very congested, with obstructions at head, body and floor level.
- The deluge nozzles had been painted with luminous paint approximately 2 years ago - they were a recognised hazard.
- Personnel may still be exposed to hazards even though they have been highlighted in risk assessments and toolbox talks.

Task Description: *No details available.*

Recommendations:

- An engineering review should be carried out to establish the most appropriate method to re-locate, redesign or eliminate the deluge heads.
- Consideration should be given to the design of existing or new deluge systems to

eliminate similar hazards wherever reasonably practicable.

Contact Details: Ian Reynolds ian.reynolds@amec.com

Deluge head protruding through deck



480: Corrosion under deck penetration

Summary: A gas leak occurred when a 2" relief line failed during a compressor blowdown on a production platform. External corrosion was found under a passive fire protection sleeve of a deck penetration. Sometime during the lifetime of the penetration, water ingress is likely to have occurred, creating corrosion under insulation. This particular type of penetration was found to be rare, nevertheless a number of prudent actions are recommended.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Fixed Installation

Activity Type: *Any Activity Type

Description: The relief line was located at high level (scaffold access required), exiting the module roof through a deck penetration. At the deck penetration, the 2" pipe was wrapped in foam glass insulation and encapsulated in Mandalite passive fire protection. The top of the deck penetration was further sealed with Mandalite passive fire protection and again further sealed with a foam glass layer. A stainless steel lid was fitted over the top of the penetration and sealed with mastic to prevent external water ingress. The top of the penetration had been damaged in the past, at that time probably allowing water ingress into the penetration.

Figure 1 shows the Module roof indicating the failed 2" line which was originally covered by a Mandalite "cup"

Figure 2 shows the remains of the Mandalite "cup" and

displaying the rust stained insulation material inside. The 2" line ran top to bottom through the centre of the "cup". Location of the failure coincides with the rust staining on the insulation material

The investigation revealed the failure mechanism to be external corrosion caused by fluid / water ingress from the module roof, entrapped and hidden from view by the Mandalite passive fire protection. It is considered highly unlikely that external visual inspection of the fully encapsulated arrangement would have revealed the corrosion.

Specific Equipment: *No details available.*

Lessons Learnt: Deck penetrations can potentially cause external corrosion cells when water ingress takes places due to damage or insufficient quality of water protective seals or sleeves. The "cup" shape of the Mandalite passive fire protection can potentially trap moisture.

External visual inspection of these types of deck penetrations under module roofs are unlikely to be effective due to the fully encapsulated arrangement of the Mandalite passive fire protection.

This particular type of penetration was found to be rare, nevertheless a number of prudent actions are recommended to prevent recurrence.

Task Description: *No details available.*

Recommendations: 1. Identify, locate and inspect deck penetrations utilising Mandalite passive fire protection. Remove the Mandalite passive fire protection prior to inspection.

2. Inspections to be carried out:

- external visual inspection to determine the external condition of the pipework (photographs required);

- Ultrasonic wall thickness checks to determine any internal corrosion of the pipework. Include 0.5 m of pipework upstream and downstream of the penetration.

After inspection, reinstate deck penetration/passive fire protection.

Contact Details: *No details available.*

Figure 2 - Remains of the Mandalite "cup"



Figure 1 - Module Roof



481: Incorrectly sized elevators results in dropped drilling jar

Summary: While picking up an 8" jar from the v-door the jar slipped through the closed elevators and fell 20' with the box end penetrating the roughneck's doghouse wall.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Fixed Installation

Activity Type: Drilling, workover

Description: The 9 5/8" Milling assy had been picked up, along with 12 joints of 6 5/8" HWDP (6 5/8" FH). A Set of 8" Jars & accelerator were lifted in to the V door by the crane. The lifting nubbin was installed in to the jar(6 5/8" Reg). The V door tugger was attached to the jar by means of a 3 ton sling double wrapped around jar body. The jar was picked up with the tugger & the elevators were latched around the nubbin, the tugger was then slackened off. Personnel assumed their pre planned positions & the blocks were raised. At approx 20ft (elevator height)the jar slipped through the elevators & came to rest on the back doghouse wall. The pin end of the jar was still at the edge of the V door & had not been raised off the ground during the incident. No injuries occurred.

Specific Equipment: *No details available.*

Lessons Learnt: Failure to identify and communicate the body size of the lifting nubbin 6-5/8" nubbin but with 5-1/2" body. There was failure to identify the requirement to change the elevators from 6-5/8" to 5-1/2" to suit the lifting nubbin.

Task Description: *No details available.*

Recommendations: Ensure that thorough dimensional checks are completed on lifting nubbins and compatibility with elevators. Ensure nubbin sizes are communicated and elevator changes identified Where reasonably practicable trial fit the elevators on the tubular to be lifted. Lifting plan can be improved.





482: Dropped Bondura Bolts and Plate

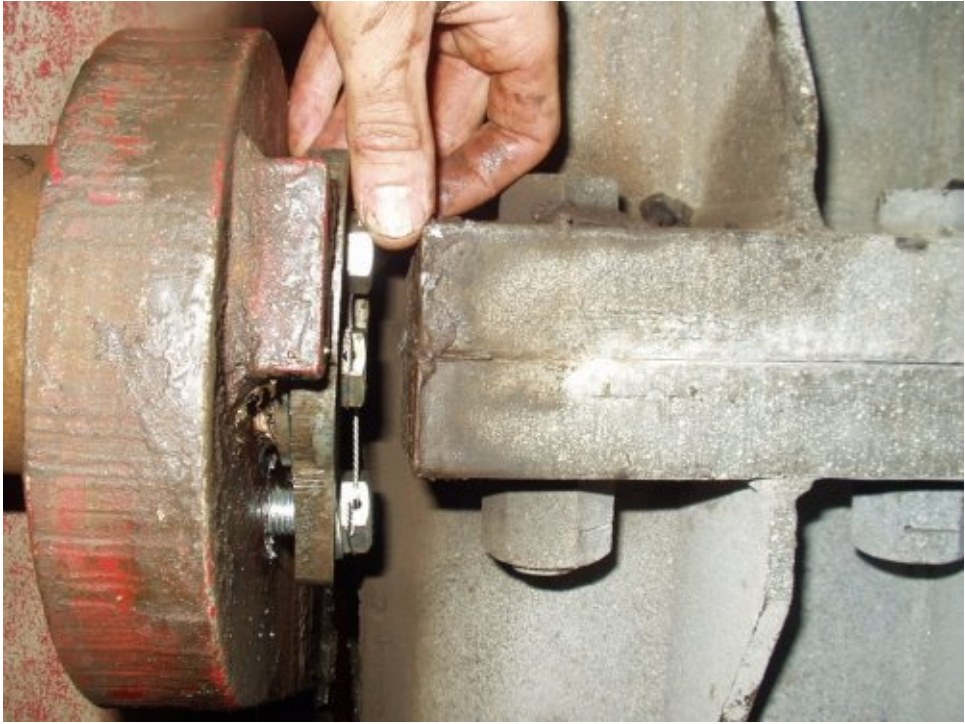
Summary:	Whilst the top drive was descending there was a collision when the same dolly retract mechanism came into contact with one of the flange mountings on the drillers side dolly track.
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	Fixed Installation
Activity Type:	Drilling, workover
Description:	whilst the top drive was descending there was a collision when the same dolly retract mechanism came into contact with one of the flange mountings on the drillers side dolly track. Three bolts had sheared and dropped along with the retaining plate (shown on the left). In total, the dropped objects included 3 M14 bolts (51 grams each) and the 775 gram retaining plate itself. The retaining plate was found near the man riding winch at the v-door and the bolts almost directly below the dolly track. One Floorman was on the rig floor at the time, standing 14 ft from the dolly track and bolts and 12 ft from the landing point of the retaining plate.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	1.The clash was due to the lack of clearance between Bondura bolt retaining plate and flange whilst the top drive was being lowered to the rig floor. 2.The clearance between the dolly frame rollers and the dolly tracks is critical to the amount of clearance between Bondura bolt and flange as this is related to the play allowed in the

dolly frame. 3. There is no standard or minimums for required acceptable clearances between rollers / tracks and between the Bondura bolt / dolly track flange. 4. Maintenance routines (PM's) do not cover a check or measurement of either the roller / track clearance or of the clearance between the Bondura bolts and the flanges

Task Description: *No details available.*

Recommendations: 1. Engineered modifications are required to engineer out the risk of future collision by increasing clearance sizes between the bondura plate/bolts and dolly track flanged joint connections along the full length of the dolly tracks. All proposed modifications shall be subjected to the management of change process 2. Top drive shall be operated under a formal risk assessment reflecting present mode of operation. 3. Until permanent modification of this problem is complete a temporary sacrificial indicator shall be fitted onto the dolly track to give early indication of track and top drive collision 4. The planned maintenance routine shall be revised to include: • Acceptance criteria in relation to wear on top drive roller. • Acceptance criteria in relation to the minimum clearance that is acceptable between the dolly track and top drive bondura plate.

Contact Details: SEQA Co-ordinator 01224 327122



483: Slickline Unit Operator's Chair Collapsed

Summary: Slickline/Wireline Unit Chair Collapsed causing lower back injury

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Fixed Installation

Activity Type: Maintenance

Description: Whilst using an Schlumberger owned & ASEP made Slickline/Wireline unit the Operators chair collapsed causing lower back injury to one of our personnel, which has been recorded as an LTI. After carrying out an investigation we would like to bring to your attention a quality issue concerning the operator's chair that has been installed in our ASEP made K-Winch "Landline D" Slickline/Wireline unit. Due to a possible manufacturing defect in the chair, of the mark "Zwaardvis", it may have been manufactured without sufficient epoxy or rivets between the chair column and the pedestal. Chairs without sufficient epoxy, or without rivets, in this connection may in time become loose and unstable. ASEP had received and installed such a defective chair, whereby during use the chair column had become loose from the pedestal. For safety concerns, it is imperative that the chair is inspected for this possible fault. Below are photos of the operator's chair in question. The underside of the pedestal is where you need to check. The best way to inspect the underside of the chair assembly is to remove the six bolts, which hold the chair's pedestal to the floor. See Photo 2. Then carefully turn the chair on its side to view the underside of the pedestal.

The following photographs show the location of the epoxy, and the visible traces, which accompany a proper chair assembly.

Specific Equipment: *No details available.*

Lessons Learnt: All operational Slickline/Wireline personnel to check this type of unit as specified above.

Task Description: *No details available.*

Recommendations: For safety concerns, it is imperative that the chair is inspected for possible faults.

Contact Details: Simon Baker - Onshore Slickline Supervisor Tel: (01224) 406000





484: Severe fracture and partial amputation to finger

Summary: Two Technicians were involved in the task of installing cable ladder racking at one of our sites. This task required the use of an electric power drill. Having installed ladder racking at a lower level, there was a need to move to a scaffold platform at a higher level in order to progress the work further.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Fixed Installation

Activity Type: Construction, hook-up, commissioning

Description: Two Technicians were involved in the task of installing cable ladder racking at one of our sites. This task required the use of an electric power drill. Having installed ladder racking at a lower level, there was a need to move to a scaffold platform at a higher level in order to progress the work further. When relocating the power drill to the higher working platform one of the Technicians when holding the drill by its handle, passed the drill (which was still connected to the power supply) through a gap in the scaffold to his colleague positioned on the working platform above. His colleague took hold of the drill. During this transfer it is thought that the trigger mechanism of the drill fouled on the scaffold platform causing the chuck /drill bit to rotate and snag the man receiving the drills gloved index finger. This resulted in partial amputation of the finger.

Specific Equipment: *No details available.*

Lessons Learnt: Power supply to the Electric Drill was not disconnected prior to equipment transfer. Potential hazards were not identified by personnel. Task specific Risk Assessment did not address the transfer of equ

Task Description: *No details available.*

Recommendations: Equipment. Portable tools must be disconnected from power supplies when:- unattended before handling or working on the “active” part of the tool, e.g changing drill bits or cutting discs The “active” part of Portable tools / equipment must never be touched or handled while the equipment is connected“

Contact Details: Talisman HSE&A Dept 01224 352500

485: Lifeboat entanglement and snag hazards

Summary:	The US Coast Guard has recently been notified by a tank ship operator of a problem discovered during lifeboat launching drills, whereby a gripe snagged on the lifeboat as it was being lowered.
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	*Any Location Type
Activity Type:	*Any Activity Type
Description:	The Safety Alert below has been issued by United States Coast Guard. SAFETY ALERT - LIFEBOAT GRIPES March 11, 2004 Washington, DC. The U.S. Coast Guard has recently been notified by a tank ship operator of a problem discovered during lifeboat launching drills. Although this event did not result in injury or death, there have been a number of lifeboat launching casualties that have. Readers should note that other manufacturers' boats and launching arrangements need to be examined for similar possibilities of entanglement and snag hazards. It is reported that on several occasions during lowering of a 6.7 meter totally enclosed lifeboat, the ring on the released end of the aft gripe snagged the boat's "gripe bollard." The "gripe bollard" may be known as a "stern post" or "lashing chock." The purpose of the gripes is to secure the lifeboat against the davits when in the stowed position. The gripes are essentially straps which attach to the ends of the boat and are secured to the davits. One end attaches to a tightening and turnbuckle device, while the other end is attached to a ring that is placed over a slip hook. When the lifeboat is brought to its

stowed position, the free end of the gripe is payed over the gripe bollards on both ends of the vessel and the rings are placed over the slip hooks. The slip hooks are then shifted to their closed position. When the need to abandon ship occurs, the lifeboat is boarded, crewmembers are strapped in their harnesses and its lowering is initiated by a coxswain from inside the boat. A single lever releases the gripes by causing the slip hook to rotate allowing the rings at the terminal ends of the gripes to fall off. Simultaneously the brake is released and the boat begins to lower. As the boat lowers, the gripes travel on the bollard. Because the ring at the free end of the gripe is larger than the circular outer edge of the bollard, the ring can catch the bollard. Level lowering will continue until the gripe takes the load at which point the end of the vessel which hasn't snagged will continue to lower. The gripe may or may not break when the lifeboat begins to hang. This condition is unacceptable and may contribute to the loss of life during emergency evacuations or drills. The Coast Guard strongly recommends that owners and operators of vessels having any type of webbing or wire cable used in a gripping/securing system -

- contact the respective lifeboat manufacturers and class society representatives to find out what type of gripe entanglement incidents have been reported, and
- develop appropriate solutions that will minimize potential risks associated with such designs.

The IMO Ship Design and Equipment Sub-Committee has recently developed a draft MSC Circular related to this subject, which should be approved and published soon. Included in the draft circular entitled "Guidance on Safety During Abandon Ship Drills Using Lifeboats" is the recommendation -- "To prevent lashings or gripes from getting entangled, check proper release before swinging out the davit." The Sub-Committee continues to work on long-range solutions. This material is provided for informational purposes only and does not relieve any existing domestic or international safety, operational or

material requirement. Specific questions regarding this safety alert may be addressed Mr. Ken Olsen of the Office of Investigations and Analysis at kolsen@comdt.uscg.mil or 202.267.1417. Technical questions regarding other lifeboats and emergency equipment or to report similar occurrences may be addressed to LT Todd Howard of the Coast Guard's Life Saving and Fire Safety Division at thoward@comdt.uscg.mil or 202.267.6854.

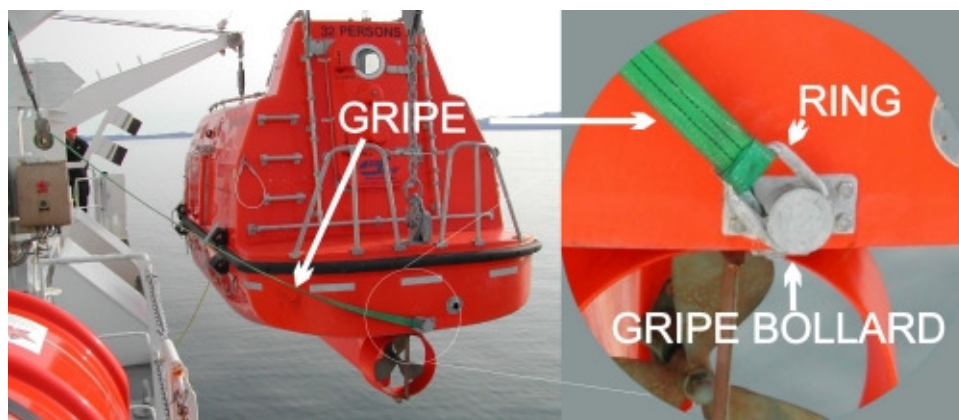
Specific Equipment: *No details available.*

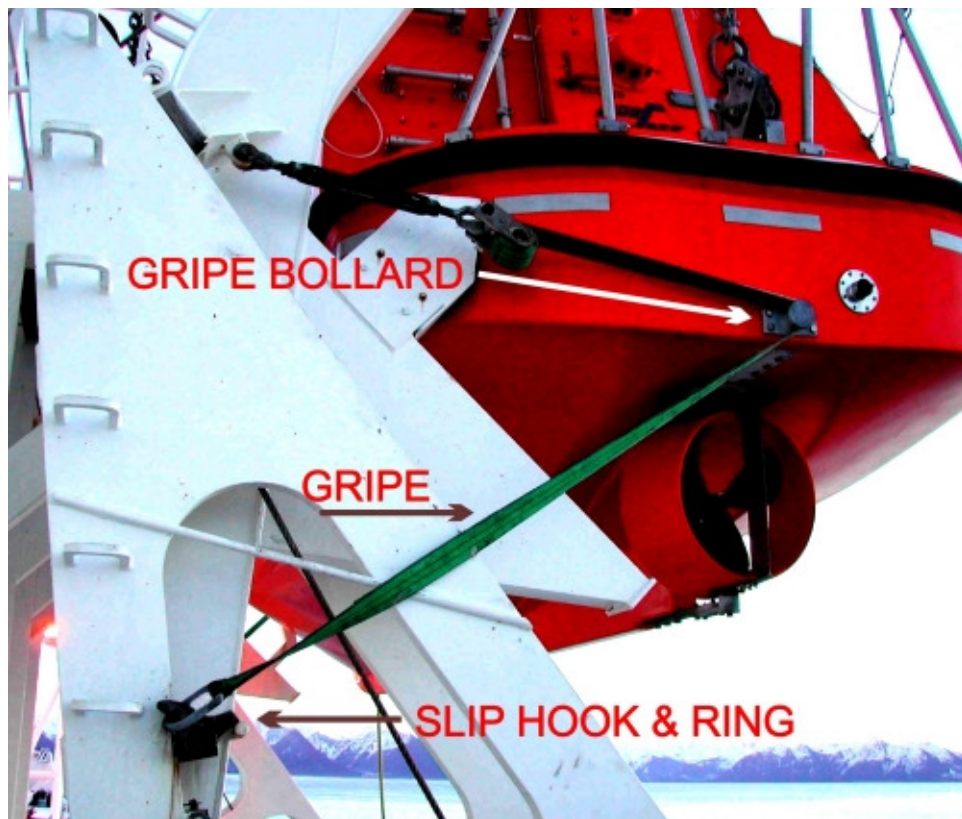
Lessons Learnt: Readers should note that other manufactures' boats and launching arrangements need to be examined for similar possibilities of entanglement and snag hazards.

Task Description: *No details available.*

Recommendations: See safety alert

Contact Details: This Safety Alert has been entered onto the SADIE database by H Smallman (HSE Offshore Division) hugh.smallman@hse.gsi.gov.uk 0151 951 3188. General queries to HSE about lifeboats on Installations in the UK offshore Oil and Gas sector should be addr





486: Dropped Object

Summary:	An incident occurred offshore recently when a 6' scaffold tube was dislodged from where it had been stacked. The tube then fell 25 metres to the deck below. Fortunately the area beneath where the scaffolding materials were stacked had been barriered off as an exclusion area so no-one was injured.
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	*Any Location Type
Activity Type:	*Any Activity Type
Description:	An incident occurred offshore recently when a 6' scaffold tube was dislodged from where it had been stacked. The tube then fell 25 metres to the deck below. Fortunately the area beneath where the scaffolding materials were stacked had been barriered off as an exclusion area so no-one was injured.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	A combination of events led to this incident. The scaffold materials were from three hanging platforms which had been dismantled to allow a destruct crew to commence work. Because of time constraints it was agreed that the materials would be left at the Monkey Board level to be lowered by winch and basket the next day rather than use a gin wheel and rope. For various reasons the materials were not removed the following day but were left in situ for five days before the destruct crew went up to remove them. Whilst the boards had been secured against wind

and weather the tubes and fittings had been left loose on the Monkey Board walkway and it was a destruct crew member climbing across the tubes that dislodged the tube that fell.

Task Description: *No details available.*

Recommendations: There are three main lessons to learn from this incident: firstly – whenever scaffold materials are left stacked away from the racks they must always be secured against movement. secondly – never make assumptions that others will have the same awareness as yourself of potential hazards. thirdly – communicate effectively with all parties involved in a work activity, particularly when deviations from normal working practices take place.

Contact Details: John Boyce Group HSEQ Manager Salamis Group Ltd
01224 246385 john.boyce@salamis.co.uk

487: Scaffold Corrosion

Summary:	There have been two incidents recently where whilst dismantling long term scaffold, high levels of tube corrosion have been discovered when fittings have been unfastened. On one occasion as the fitting was unfastened from a 16' tube, the tube folded in two and half broke away and fell into the sea.
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	Any Location Type
Activity Type:	Maintenance
Description:	There have been two incidents recently where whilst dismantling long term scaffold, high levels of tube corrosion have been discovered when fittings have been unfastened. On one occasion as the fitting was unfastened from a 16' tube, the tube folded in two and half broke away and fell into the sea.
Specific Equipment:	Scaffolding
Lessons Learnt:	During routine inspections of scaffolds, particularly those that are in exposed areas and remain in situ for long periods, careful attention should be paid to the area of tube around the fittings. Occasionally a fitting should be loosened so that the tube behind it can be checked for corrosion. When dismantling such scaffold extra vigilance should be maintained by all personnel to ensure that corroded tubes do not become missiles or dropped objects.

Task Description: *No details available.*

Recommendations: During routine inspections of scaffolds, particularly those that are in exposed areas and remain in situ for long periods, careful attention should be paid to the area of tube around the fittings. Occasionally a fitting should be loosened so that the tube behind it can be checked for corrosion.

Contact Details: John Boyce Group HSEQ manager&

488: Oxygen / Acetylene Cutting Equipment - Flash Back

Summary: As a result of a “flash back” incident when an employee was using oxygen / acetylene cutting equipment a fire occurred which partially melted both regulators. The prompt action by the employee prevented a more serious accident from occurring.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: *Any Location Type

Activity Type: Maintenance

Description: A welder had been using an Oxygen/Acetylene cutting torch earlier in the day and when he went to ignite the torch again a “flash back” occurred. The “flash back” shredded both the oxygen and acetylene hoses their full 20 metre length, from the cutting torch back to the flash back arrestors fitted at each bottle regulator. After the pressure wave had subsided the flash back arrestors then allowed the gas to begin flowing again. This resulted in a fire which partially melted both regulators, it was only due to the intervention of the welder reaching through the flames and shutting the cylinders off that a far more serious incident did not occur. Note: Non Return Valves were fitted at the torch end of the hoses.

Specific Equipment: *No details available.*

Lessons Learnt: I have attended the aftermath of two “flash back” fires in the last 12 months and it has become apparent that if reset FBA’s had been fitted there would have not been any fires flaring up after the “flash back” incidents had

occurred. Reset FBA's have a cut out facility preventing the gas from flowing once any back pressure has been detected. Another recent incident being in a factory where a forklift truck had run over the oxygen/acetylene hoses severing them, which resulted in the workshop being flooded with combustible gas. Again reset FBA`s would have prevented this occurrence as the backpressure caused by the hoses being compressed would have triggered the cut off mechanism. The cut off mechanism can be re set simply by pushing in a button on the FBA.

Task Description: *No details available.*

Recommendations: I personally do not recommend the use of normal inline FBA's on offshore installations, mobile drilling units, refineries, etc. and would strongly recommend that only reset FBA`s be used for cutting and welding applications.

Contact Details: Michael Oakes 01224 222325

489: Test bar ejected by trapped pressure

Summary: As part of the CT rig up process a pressure test was required to confirm the integrity of the BOPs. The test was completed on line with pressure generated from the cement unit and the subsequent trapped pressure upstream of the NRV ejected the test bar when the rams were being opened on completion of the test

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Fixed Installation

Activity Type: Well services / intervention

Description: During the Coiled Tubing (CT) rig up process a pressure test was to take place to ensure the integrity of the BOPs. Tool Box talks were conducted ahead of the task between the CT team and the cementer to establish the communications links. This was significant because the CT team were to be located on or near the drill floor and the cementer would be present at the cement unit. The 1 3/4" OD and 10' long test bar was located into the BOP and the instruction to pressurise to the initial 500 psi test point was given. After five minutes the initial pressure was increased to 5000psi and the test was deemed successful. The CT Supervisor communicated to the cementer to bleed off the pressure and to confirm when this had been carried out. Initial investigations indicate that the CT Supervisor did not take into account the stored energy between the 'in-line' Non Return Valve (NRV) and the BOP. When the CT Supervisor started to open the BOP rams, the test bar which was restrained by a bulldog clamp and dog collar and secured to the BOP

body by a sling, was ejected from the BOP. The test bar was ejected with sufficient force to make it travel from from the centre of the rig floor and strike the the coiled tubing reel on the pipe deck. The bar was deflected back towards the rig and fell down into the void between the pipe deck and rig some thirty feet. No one was injured in this event

Specific
Equipment: *No details available.*

Lessons Learnt: Established procedures were not complied with

Task Description: *No details available.*

Recommendations: 1. Test procedures amended to state 'under no circumstances will on line pressure testing be carried out using a test bar unless explicit written permission from the operations manager has been given. 2. Confirm all supervisory personnel are fully conversant with and maintain the Change Management Procedure. 3. Reiterate to all employees the importance of of carrying out a risk assessment before every task however routine. 4. Reiterate to all employees the importance of carrying out comprehensive tool box talks which include all of the personnel involved in the task. 5. Confirm all euipment is thoroughly examined and accurately checked by the operations supervisor prior to mobilisation in accordance with the procedure.

Contact Details: Norman Marwick HSE 01224 795076

This picture shows the BOP and the pressure test lines leading up to it. The pressure test lines lead down to the wellhead deck 118 feet and across the well head deck 30 feet before it gets to the NRN.

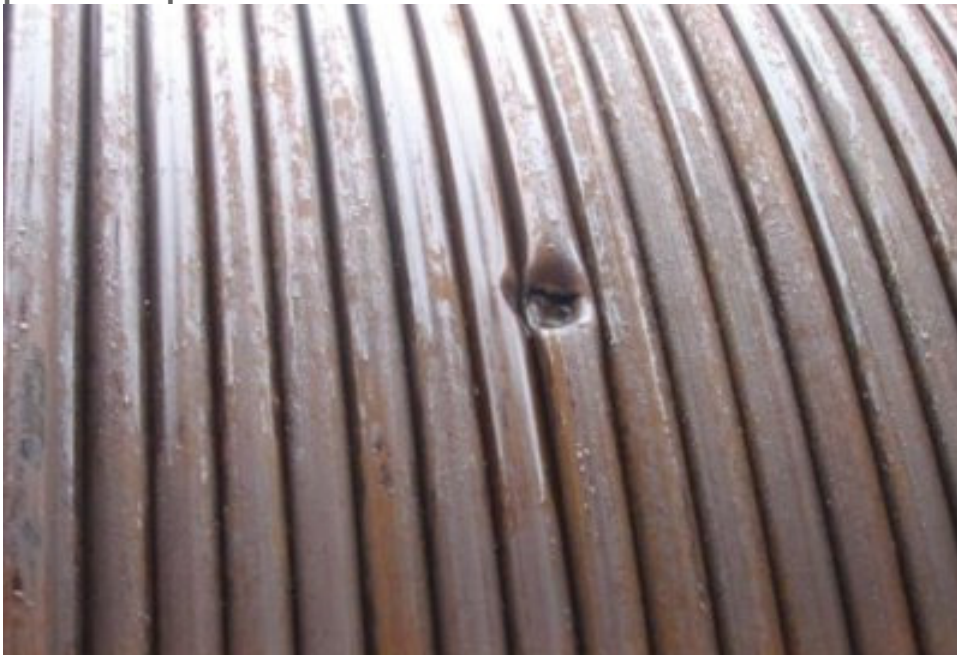


The arrows demonstrate the path taken by the ejected test bar which

was 10 feet long and 1 3/4" in diameter



The damage to the coiled tubing in the reel located on the pipe deck is clearly evident. It also demonstrates the force behind the test bar at the point of impact.



490: Incorrectly rated fittings included in a pressure spread

Summary:	4 off t-pieces rated for 10,000 psi were included in a pressure spread integrity test of 13,083 psi.
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	Specialist vessel eg diving, construction, survey
Activity Type:	Inspection/testing
Description:	4 off t-pieces with a certified safe working pressure of 10,000 psi were included in a 15,000 psi pre-commissioning pressure spread which was subject to an integrity test pressure of 13,083 psi. Following the test, the spread was de-rigged, then later reassembled for further checks prior to use. During the documentation checks prior to the re-assembly, it was noticed that the T-pieces were rated for 10,000 psi when the spec was for a 15,000 psi rated spread. The T-pieces were removed from the system, an Initial Incident Report raised and an investigation carried out.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	The subcontractor personnel involved were the ones who identified the problem. They were commended on their honesty, openness and readiness to highlight this incident to the Client. Incident causes included :- A failure to properly check the certificates for the fittings prior to the initial pressurisation . A failure of the Supervisor to check the pressure system to ensure each component of the spread was suitably rated for the component to which it was attached (as per sub-contractor procedure). The

fittings were sour gas fittings downrated from 15,000 psi to 10,000 psi and routinely have green bands affixed or painted on. There were no green bands on these fittings, however there was a metal band clearly showing the SWP. The Subcontractor had gone to a third party supplier for the fittings, and the 15,000 psi specification had been given verbally. The SWP of the components were not checked against requisition requirements on arrival at the subcontractor onshore facility or when they were received at the worksite. The components were not identified during a Company pre-mobilisation audit as they had not been sourced at that time.

Task Description: *No details available.*

Recommendations: The subcontractor reacted swiftly and comprehensively to the findings of their own and the Client investigations, amending purchasing and QC procedures and amending 'Goods-in' procedures to ensure items are checked against the relevant requisition. Discussions were also held within both companies to highlight the incident and the findings of the investigation among the respective workforces.

Contact Details: *No details available*

491: Unauthorised alteration of regulators

Summary:	A bottle gas regulator had a plug removed from a manufacturing aid and inserted into the regulated outlet port. The hose was then connected to the port which is a manufacturing aid and bottle pressure gas bypassed the regulator and was delivered at up to 230bar pressure. The regulated requirement was 4bar
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	*Any Location Type
Activity Type:	Construction, hook-up, commissioning
Description:	A recent incident where a hose failed and “burst” is currently being Investigated. An initial finding is that the regulator used, at the nitrogen supply, had been “modified” When supplied, the regulator had a plug fitted to a port which should not be used under any circumstances. (although it is stamped HP). Sometime in the past, the plug was removed and fitted in the regulated outlet port. Used in this condition the incoming pressure bypasses the regulator and the Safety Relief Valve, giving the potential to cause serious injury The regulator in this instance is a SAFFIRE 300 SERIES but this could happen to any regulator that has this arrangement (The photograph is a rear view of the regulator)
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	Lack of competency, personnel not aware of correct use of regulators and no recognition of associated risk. No management system in place to control temporary

equipment

Task Description: *No details available.*

Recommendations: Appropriate training required Immediate “sweep” of assets to identify and remove any similarly adapted regulators

Contact Details: Mick O'Connor mick.oconnor@ajs-isc.com



492: Manriding Winch Failure

Summary: While performing Manriding operations using an Ingersoll Rand Liftstar150 Tugger to work on a Coil Tubing Injector head some 23ft above the Drill Floor the IP gave the signal to be lowered to the Tugger operator. After lowering the IP some 3ft the Tugger then went into freefall resulting in the IP falling some 20ft to the Drill Floor. Fortunately the IP only received bruising to his hands.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Fixed Installation

Activity Type: Well services / intervention

Description: The operation was to go up on a manriding tugger, (Ingersoll Rand Liftstar 150) to perform an operation some 23ft above the Drill Floor. A similar operation (inspection of injector head) had been carried out the previous two shifts involving the same personnel. The IP was raised to the necessary height. On completion of the task he gave the signal to be lowered down. Almost immediately after starting to descend the Manriding tugger went into freefall.

Specific Equipment: *No details available.*

Lessons Learnt: This was due to a failure on a Ingersoll Rand Liftstar150 Tugger. Ingersoll Rand recommendations have been issued and are being completed fleetwide

Task Description: *No details available.*

Recommendations: . Until the cause of this incident and failure mode can be verified no routine operations involving the above model of winch shall be undertaken. Alternative methods of working should be implemented and planned into the task early enough to minimise disruption. If no other means of access is practicable, secondary fall protection **MUST** be used in conjunction with the winch. Such contingency measures should only be implemented after a full risk assessment has been conducted which has also taken into account any additional risks that such an additional safety measure may bring, e.g. additional fouling potential etc. These additional risks will need to be mitigated and proposed use of the equipment discussed with the Rig Manager before implementation

Contact Details: Ian Dunton, KCAD Maintenance Department.

493: Is your Pressure Test Bay Operations Safe?

Summary: During a hydrostatic pressure test of a Tubing Retrievable Flow Control valve inside a 10,000psi rated test fixture at Belfast Product Centre, there was a major failure of the fixture at 6900psi. This resulted in the test fixture being propelled in one direction and the test cap being propelled in the opposite direction.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Onshore office, support base, heliport

Activity Type: Maintenance

Description: During a hydrostatic pressure test of a Tubing Retrievable Flow Control valve inside a 10,000psi rated test fixture at Belfast Product Centre, there was a major failure of the fixture at 6900psi. This resulted in the test fixture being propelled in one direction and the test cap being propelled in the opposite direction. The test fixture hit one end wall and the test cap hit the opposite end wall of the pressure test bay. A NPT fitting was projected outside the pressure test bay and impacted the wall of the main building before coming to rest more than 10m away from the test bay. Both end walls of the test bay suffered severe damage, including the collapse of one end wall onto the operator console. Three employees were injured resulting in two lost time injuries. (QUEST report 20040409135814)

Specific Equipment: *No details available.*

Lessons Learnt: The multi catastrophic potential of this incident highlights the importance of compliance to the POM and of effective use of Hazard Identification and Risk Control processes.

Task Description: *No details available.*

Recommendations: The non-POM compliant pressure test bay was constructed as recently as July, 2002. It was constructed of 9-inch concrete blocks without additional reinforcement. Ensure that all pressure test bays and pressure bearing and/or controlling equipment are POM compliant. Ensure that effective risk assessments have been conducted and prevention / mitigation measures are in place prior to pressure operations. Ensure that all personnel performing pressure operations are certified. The test fixture was not secured during the test, allowing the fixture to be propelled into the end wall. Ensure that procedures are followed during all pressure operations. (All tools and fixtures are securely anchored before conducting pressure test.)

Contact Details: Robin Bjoroy/Adriano Bastos c/o Graeme Anthony Schlumberger Oilfield Services Westhill Tel: (01224) 35608

494: Hi-Potential Transportation Incident

Summary: 55 foot Riser Basket fell from trailer onto roadway.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Onshore office, support base, heliport

Activity Type: Land transport

Description: An incident occurred on the 4th May 2004 during transportation of a 55 foot Riser Basket weighing 19.3 tons. The Basket fell from the trailer onto the carriageway. Fortunately, there were no injuries sustained. An Investigation Team has been assigned and details will be communicated when the circumstances associated with the incident have been established.

Specific Equipment: *No details available.*

Lessons Learnt: *No details available.*

Task Description: *No details available.*

Recommendations: In light of this HIGH POTENTIAL Incident all Drivers should ensure that:

- All securing equipment is in good condition and fit for purpose
- An adequate number of Straps/chains are used relative to the weight and dimension of the load
- The weight of the load and the SWL (Safe Working Load) of Straps or Chains is used to calculate the number required
- When transporting Long Baskets Trailer pins shall be used as an additional aid, where practical

Managers and Supervisors are asked to ensure that this

Safety Alert is communicated to all Drivers within their sphere of operation and all staff are asked to be diligent during the handling of Long Baskets.

In the event that further information or clarification on the content of this communication is required, please do not hesitate to contact your Line Supervisor or HSEQ Advisor.

Contact Details: WILLIE MACKIE TORRY MARINE BASE MANAGER
ASCO / SHELL CONTRACT



495: Wearing of Seatbelts

Summary:	If seatbelts are fitted to your vehicle then they must be worn by you and any passenger(s) unless otherwise exempt (i.e. *local deliveries, medical certificate etc.) this is a legal requirement under the following legislation. Sec14(3) Road Traffic Act 1988 and Regulation 5 of the Motor Vehicle (Wearing of Seatbelts) Regs 1993.
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	Supply base, warehouse, workshop, dock
Activity Type:	Land transport
Description:	Goods vehicles over 3.5 tonnes GVW must be fitted with seat belt anchorage points. If seatbelts are fitted to these anchorage points then the driver and any passenger of the vehicle MUST wear the seatbelt (unless one of the prescribed exemptions mentioned above applies). It would be an offence to remove any seatbelts from a vehicle that was already fitted with them. Any damage to the seatbelt must be reported through the usual defect reporting procedure, for immediate repair. It is also Company Policy that employees use any safety equipment provided to them. The wearing of a seatbelt shall be considered as part of your PPE requirements and as such MUST be worn whilst driving. Statistics have shown that the wearing of seatbelts whilst driving has greatly reduced the potential for a more serious injury, when involved in an accident. It is therefore imperative that you wear any fitted seatbelt to protect you from a more serious injury, in the event of an incident. *This exemption would not be applicable to ASCO's operations

so can not be applied. Should any further information or clarification on the content of this memo be required, please do not hesitate to contact the undersigned. The above requirement will take effect immediately.

Specific
Equipment: Seatbelt

Lessons Learnt: Statistics have shown that the wearing of seatbelts whilst driving has greatly reduced the potential for a more serious injury, when involved in an accident. It is therefore imperative that you wear any fitted seatbelt to protect you from a more serious injury, in the event of an incident.

Task Description: *No details available.*

Recommendations: Always wear a seatbelt when the vehicle is in motion

Contact Details: ZAK FLEMING&

496: WORRYING TREND OF FORKLIFT OPERATIONS RELATED INCIDENTS

Summary:	Transport has had a number of recorded incidents over the last month where a forklift involved in loading or unloading, has struck the vehicle and or dropped the load.
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	Supply base, warehouse, workshop, dock
Activity Type:	Land transport
Description:	Transport has had a number of recorded incidents over the last month where a forklift involved in loading or unloading, has struck the vehicle and or dropped the load. On all occasions this has resulted in damage to an ASCO vehicle, there is a real risk of a high potential incident occurring resulting in a death or serious injury. In line with ASCO policy everyone involved in, or in the vicinity of any vehicle that is being loaded or unloaded by forklift must ensure that the operation is carried out in a safe and controlled manner. If not then they must "STOP THE JOB" and discuss any concerns with those involved in the operation.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	UNLOADING The driver must not allow the forklift operator to unload the vehicle until all load securing equipment is completely removed and the driver has indicated to the forklift operator that it is safe to commence the unloading operation. LOADING The driver

must ensure that no load securing equipment is applied to the load until the forklift driver has fully completed the loading of the trailer. The driver must also remain in a safe position whilst the forklift is operating within the close vicinity of the trailer. The forklift operator must also ensure that the forklift is manoeuvred in a smooth and considerate manner at all times.

Task Description: *No details available.*

Recommendations: We can consider ourselves fortunate that to date we have only suffered from asset damage; please do not allow the opportunity for a more serious incident to occur. Could each relevant business unit please ensure that they review their current Task Based Risk Assessment for this operation. Should any further information or clarification on the content of this memo be required, please do not hesitate to contact your local HSEQ Advisor.

Contact Details: ZAK FLEMING&

497: KALMAR FORKLIFT INCIDE

Summary:	An Incident occurred at TMB on Mon 1st March 04 when a Kalmar Forklift was being operated to offload general cargo from a loaded trailer.
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	Supply base, warehouse, workshop, dock
Activity Type:	*Any Activity Type
Description:	The forklift had been lying unused for 2 days in severe cold conditions. The Operator carried out his daily checks and proceeded to start the forklift and then approached the loaded trailer. Whilst entering the forklift toes into the forklift pockets he depressed the foot brake which had no pressure and failed to operate which resulted in the cargo being partially pushed off the trailer on the opposite side.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	The forklift was then taken out of service until maintenance checks were carried out. During investigation it has come to light that a similar incident occurred at a NON ASCO site on the same day.
Task Description:	<i>No details available.</i>
Recommendations:	Your attention is drawn to the braking system that when you are required to operate a Kalmar Forklift that you MUST depress the brake pedal to ensure that there is pressure before you drive off. Lex Harvey have asked Kalmar to investigate the braking system and will report the findings of which learning will be shared and the

relevant personnel informed in due course. Should any further information or clarification on the content of this memo be required, please do not hesitate to contact your local HSEQ Advisor.

Contact Details: WILLIE MACKIE ASCO TORRY MARINE BASE
MANAGER

498: REQUIREMENTS FOR THE REPORTING OF SPILLS OF HAZARDOUS SUBSTANCES AND MATERIALS - TO ASCO DGSA

Summary: Reporting of Spills to DGSA

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Supply base, warehouse, workshop, dock

Activity Type: *Any Activity Type

Description: Purpose: The purpose of this communication is to emphasize the importance, and the legal obligation of all personnel to report all Incidents involving the spillage of dangerous goods or materials on ASCO premises to the appointed Dangerous Goods Safety Advisor (DGSA).
Legislation: The Transport of Dangerous Goods (Safety Advisers) Regulations 1999, SI 1999 No.257, Para 4 - (1) "No employer shall transport dangerous goods by road, railway or inland waterways unless": (a) he has appointed an individual as a Dangerous Goods Safety Adviser for the purpose of advising him as to health, safety and environmental matters in connection with the transport of those dangerous goods by mode or modes of transport concerned; and (b) That Dangerous Goods Safety Adviser has functions and duties, which relate to that mode of transport and those goods. Functions and Duties of Dangerous Goods Safety Advisers: 5 – (2) "A Dangerous Goods Safety Adviser shall ensure the preparation of a Report on any accident, which affects the health and safety of any person or causes damage to the environment or to property and which occurs during the transport of dangerous goods by the employer who has appointed him." Definition: "Dangerous Goods" means

those substances and articles the carriage of which is prohibited by ADR, or authorized only under the conditions prescribed therein; or substances listed in the “Approved Carriage List” (Carriage of Dangerous Goods Road Regulations)“ and “Dangerous Goods List” (ADR) Dangerous Goods Safety Advisors Identification: The following personnel are the current Dangerous Goods Safety Advisors (DGSA’s) appointed and appropriately trained, within ASCO operations:

Specific Equipment: *No details available.*

Lessons Learnt: *No details available.*

Task Description: *No details available.*

Recommendations: Alfie Grant Altens Ops Base & Torry Marine Base
Off:01224 884639 Mob: 0776 4677814
alfie.grant@ascopl.com
Iain Thomson Transport –
Peterhead & Aberdeen Off: 01779 873069 Mob: 0777
9131504 iain.thomson@ascopl.com
Steven Flett Fuels & Lubes Off: 01224 241013 Mob: 0773 0057307
Steven.flett@ascopl.com
Paul Keith Dales Base Off:
01779 871210 Mob: 0781 2980826
Paul.Keith@ascopl.com
Graham Heaton GT Yarmouth
Off: 01493 856722 Graham.Heaton@ascopl.com

Contact Details: JOHN FRASER ASCO VP HSEQ EUROPE

499: SECURITY ONBOARD VESSELS ALONGSIDE ASCO PETERHEAD QUAYSIDES

Summary: Security onboard vessels

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Support vessel eg Supply, Standby

Activity Type: Any Activity Type

Description: Due to an increased focus on security onboard vessels alongside ASCO Peterhead's quaysides, could all ASCO personnel adhere to the following: A vessel procedure maybe in place on some vessels that requests you 'Sign' on and off at the boarding gangway. If such a procedure is in place, this MUST be complied with when you embark / disembark the vessel. Vessel facilities - Canteen, Toilets, Accommodation Block etc are strictly for the vessel's crew only and should be considered as 'Authorised Access Only'. Under no circumstances should ASCO Personnel attempt to use these facilities, unless expressly permitted to do so by the vessel's personnel. A number of vessels have contacted ASCO requesting that we inform ASCO personnel of these requirements, as some minor breaches in these procedures have occurred recently. Please ensure you Sign on and off the vessel and also ensure you DO NOT utilise the ships facilities unless you are given explicit permission to do so by the vessel's personnel. All Managers / Supervisors should discuss at local departmental safety meetings. Should any further information or clarification on the content of this memo be required, please do not hesitate to contact your line manager or local HSEQ Advisor. The above

requirement will take effect immediately.

Specific
Equipment: *No details available.*

Lessons Learnt: *No details available.*

Task Description: *No details available.*

Recommendations: Please ensure you Sign on and off the vessel and also ensure you DO NOT utilise the ships facilities unless you are are given explicit permission to do so by the vessel's personnel.

Contact Details: STEVE McDONALD&

500: OPERATION OF SHUNT BUTTONS AND TRAILER BRAKES

Summary:	A recent near miss incident occurred whereby a trailer was found in an Unsafe Condition i.e. with the Shunt Button activated.
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	Supply base, warehouse, workshop, dock
Activity Type:	Land transport
Description:	A recent near miss incident occurred whereby a trailer was found in an Unsafe Condition i.e. with the Shunt Button activated. This highlighted that possibly the trailer could „free wheel“, should YOU the driver not check that the trailer Park Brake has been fully applied before attempting to couple up, or in the event another trailer was reversing and came into contact with it. This could give rise to the possibility of someone being crushed between the trailer and another object with potentially fatal consequences. Fortunately the driver on this occasion discovered this before any serious incident occurred.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	<i>No details available.</i>
Task Description:	<i>No details available.</i>
Recommendations:	Instructions: „h With Immediate effect Shunt Buttons MUST NOT be used for any reason. „h ALL Trailer Parking Brakes must be applied when uncoupling trailers in accordance with ASCO Company procedure

TRANW030. „h All Trailer Parking Brakes MUST BE checked to ensure that it is applied before coupling in to a trailer, in accordance with ASCO's company procedure and with HSE guidance (INDG312). „h ALL Suzie Couplings must be connected to the trailer before it is moved any distance this includes any shunting duties, and on all bases. There are potentially serious implications for anyone found not complying with these instructions, and your co-operation is expected and duly appreciated. Should any further information or clarification on the content of this memo be required, please do not hesitate to contact the Transport Safety Advisor, Assistant Transport Manager or the undersigned. The above requirement will take effect for date of memorandum.

Contact Details: ZAK FLEMING ASCO TRANSPORT MANAGER

501: CARGO SECURING ;V WHEELED UN

Summary: A recent incident occurred whereby a basket, containing a wheeled unit, was shipped without timber being used to take the wheels off the floor of the container.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Supply base, warehouse, workshop, dock

Activity Type: Sea transport

Description: A recent incident occurred whereby a basket, containing a wheeled unit, was shipped without timber being used to take the wheels off the floor of the container. This resulted in damage to both the equipment and the container and had the potential of leading to personal injury.

Specific Equipment: *No details available.*

Lessons Learnt: *No details available.*

Task Description: *No details available.*

Recommendations: Accordingly all Yard Personnel are reminded that: 1. All wheeled units, irrespective of weight or dimension, must be packed with timber to take the wheels out of commission during transportation. 2. For heavier units, ratchet straps are to be considered as an option in preference to cord strapping. This decision will be taken as part of the Toolbox Talk prior to the commencement of loading. 3. Should any further information or clarification on the content of this memo be required, please do not hesitate to contact the your Line Supervisor or HSEQ

Advisor.

Contact Details: PAT McCULLOCH&

502: USE OF MOBILE PHONES WHILST WALKING

Summary:	Using Mobile Phones Whilst walking
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	Any Location Type
Activity Type:	Any Activity Type
Description:	MOBILE PHONES 1. Mobile phones are a very widely used and convenient means of communication both for work and personal situations. 2. Almost everyone now owns and uses a mobile phone, either in a business or personal capacity.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	POTENTIAL HAZARDS 1. The potential dangers of using a mobile phone while driving has been well publicised and the ASCO policy on hand-held mobile phones, has been clearly communicated to all employees. 2. Another hazard has been identified and that is the risk to persons speaking on mobile phones, while walking in areas where there is trip or slip potential, vehicular movement, or other dynamic activity being carried out. 3. There is the potential for serious injury or worse in the event that someone distracted by, or concentrating on a mobile phone call whilst walking: 4. Slips or trips and falls into, or in front of, a vehicle or forklift, or over the quayside into the water. 5. Walks directly into the path of an overhead load during cargo handling operations. 6. There is also the potential for adversely involving / effecting other personnel in the event that a vehicle driver, or a plant and

equipment operator, has to take evasive action to avoid a person who has been distracted, whilst using a hand-held mobile phone while walking.

Task Description: *No details available.*

Recommendations: RECOMMENDATION If you must make or respond to a call on a mobile phone, while you are in the work place:

- 1.Ensure that you know what is going on around you and that you are in a place of relative safety (designated walkway or safe haven).
2. Do not Walk and Talk.
3. You should also consider the benefit of applying the same behavioural attitude to this topic outside your working environment.

UNLESS IN AN EMERGENCY SITUATION
DO NOT USE YOUR MOBILE PHONE IN AREAS OF
HIGH ACTIVITY

Contact Details: JOHN FRASER&

503: SWARF

Summary: This Alert has been removed and replaced with an updated version. Please see Alert 623 entitled SWARF updated.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Support vessel eg Supply, Standby

Activity Type: Sea transport

Description: *No details available.*

Specific Equipment: *No details available.*

Lessons Learnt: *No details available.*

Task Description: *No details available.*

Recommendations: Please see alert # 623 for info

Contact Details: *No details available.*

504: Dropped casing due to incorrect elevator safety pin installation

Summary: During casing pulling operations on a land rig a joint of 7" casing was dropped from the rig floor.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: *Any Location Type

Activity Type: Well services / intervention

Description: During casing pulling operations on a land rig in Europe a Side Door Elevator opened while laying out a joint of 7" casing with the crane. The incident was initially caused by a member of the rig crew failing to ensure that the latch was fully engaged prior to inserting the safety pin. The safety pin had in fact been installed, however it had been installed at the wrong side of the latch handle, resulting in the elevator only being partially latched.

Specific Equipment: *No details available.*

Lessons Learnt: The equipment manufacturer had failed to clearly specify to equipment owners the location where retro-fit Safety Pins should be fitted. Allowing owners to make their own judgement. The equipment manufacturer needs to develop a robust distribution network throughout the oil industry worldwide, for Service Bulletins and Safety Alerts.

Task Description: *No details available.*

Recommendations: All owners of Blohm + Voss, Side Door Elevators should contact B+V for a copy of their Safety Notice No.04/6 and

Conversion Instructions for SDS Elevators safety pins. All owners of Blohm + Voss equipment should contact B+V to register for inclusion on their distribution list for future Safety Notices and Service Bulletins. Blohm + Voss Repair GmbH, Hermann-Blohm-StraBe 2, D-20457 Hamburg, Germany, Phone: +49-40-3119-2155, Fax: +40-40-3119-3405

Contact Details: Any additional information relating to this alert can be sourced from Colin Thatcher at Frank's International +44-(0)1224-248200

505: Static Induced Ignition of Flammable Substances during Emptying of Dew-Point Tower

Summary: During planned work to replace the silica gel 'Sorbead' in a dew-point tower a loud bang was heard immediately followed by the ejection of the top cover of the drum hopper. Flames were observed emanating from the hopper and these were promptly extinguished, with no injury to personnel or apparent major damage to equipment being sustained. Evacuation of the Sorbead was being carried out via a third party using a port flow hopper attached to the bottom manway of the vessel, a drum filling hopper and a separate skid mounted vacuum blower unit. The ignition occurred in the drum filling hopper and was of sufficient force to blow off the lid of the hopper, although not to detach it from the flexible hose to which it remained attached. It is believed that a potentially explosive atmosphere formed in the drum hopper due to a combination of atmospheric air and hydrocarbons arising from the Sorbead as it was vacuumed from the vessel. Ignition is most likely to have occurred from static electrical discharge from the flexible hoses attached to the drum hopper to earth. The hoses were subsequently identified to be high resistivity and offered no protection against static build-up from the high speed solids being handled through the system. Another contributing factor could have been the lack of independent earthing of the various components in the vacuuming system. The work activity risk assessment and the vendor risk assessment contained in the work pack had failed to recognise that static electricity and potentially flammable organic material might be present in the operations.

Incident consequences (potential or actual): *No details available.*

Cause of accident *No details available.*

or incident:

Activity Location: Onshore terminal

Activity Type: Maintenance

Description: During planned work to replace the silica gel 'Sorbead' in a dew-point tower a loud bang was heard immediately followed by the ejection of the top cover of the drum hopper. Flames were observed emanating from the hopper and these were promptly extinguished, with no injury to personnel or apparent major damage to equipment being sustained. Evacuation of the Sorbead was being carried out via a third party using a port flow hopper attached to the bottom manway of the vessel, a drum filling hopper and a separate skid mounted vacuum blower unit. The ignition occurred in the drum filling hopper and was of sufficient force to blow off the lid of the hopper, although not to detach it from the flexible hose to which it remained attached. An explosion of this type would require three conditions to be present: Fuel Source: The most likely source of fuel was the presence of organic flammable material inside the hopper originating from the dew-point vessel itself. It was not possible to establish the exact source but two possible theories were a trapped pocket of gas that had not been cleared during the preparatory vessel purging; or residual organic material adhering to the Sorbead flashing off in the sub-atmospheric conditions present in the drum hopper. Oxygen: The main method of Sorbead removal to the drum hopper was to vacuum it into an open ended hose or lance. This entrains large volumes of atmospheric air, although attempts had been made to minimise this effect through additional sealing and nitrogen purging of the port flow hopper at the time of the site investigation. Ignition: The most likely source of ignition was a build up of static electricity in one of the hoses associated with the drum hopper (see below)

Specific *No details available.*

Equipment:

Lessons Learnt: The generation of static electricity and the presence of residual organic material leading to the potential for a flammable environment to be generated must be considered in all future activities involving the vacuum handling of Sorbead and similar materials.

Task Description: *No details available.*

Recommendations: 1. All the main components in the vacuuming system should be independently earthed to the plant earth system. A metal lance with its own independent earth should be used in preference to the plastic lance observed at the work site. 2. All flexible hoses associated with the installation should be low conductivity (<1 MOhm end to end) anti static type. The hoses in use were 50 MOhm clear plastic with an embedded metal spiral, selected for their flexibility and durability. Low conductivity is achieved by hose materials and / or liners having carbon added giving them a characteristic black colour. 3. The installation should be checked for resistance to earth prior to commencement of operations and at regular intervals throughout the work activity. 4. The port flow hopper and the drum hopper should be checked at regular intervals for the presence of potentially explosive atmospheres. 5. Additional nitrogen purge arrangements for the vacuuming system should be considered through the management of change system for future operations. 6. The provision of an explosion panel or other suppression devices on the drum hopper should be considered for future operations. 7. Future risk assessments should include consideration of the possibility of hydrocarbon presence in the vacuuming system and the possibility of static electricity. 8. Consideration should be given to issuing specific guidance to job responsible engineers about the dangers of static electricity and methods of mitigation. 9. The

purging and preparation of the dew-point vessels should be reviewed to address and minimise residual hydrocarbons in the bed and possible trapped gas pockets.

Contact Details: HS&E Department Tel: 01524 864418 Fax: 01524 864115 E-mail: hs&e@hrl.co.uk

506: SWARF – updated

Summary:	Skips of swarf - “ferrous metal cuttings, borings, shavings in a form liable to self heat” were backloaded from an offshore location.
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	Support vessel eg Supply, Standby
Activity Type:	Sea transport
Description:	Skips of swarf - “ferrous metal cuttings, borings, shavings in a form liable to self heat” were backloaded from an offshore location. These shavings were a bi-product of drilling out a casing liner and were contaminated with oil based mud and cement. The swarf was loaded into normal skips with no covers on leaving the product open to the elements. It was noticed by the vessel the following evening that one of the skips had steam coming from it. On checking, it was found that the contents were hot to the touch. Upon arrival in Aberdeen, a blanket of CO2 and a tarpaulin were put on top prior to discharge. The skip was segregated and put into the bunded area overnight. The next morning, the skip was still hot to the touch. Further guidance was sought from the Fire Brigade, and approx 1T of sand was put over the swarf in the hot skip. A Dangerous Goods Declaration was provided for all the skips, and they were then labeled under IMDG regulations. The skips were then sent for disposal.
Specific Equipment:	<i>No details available.</i>

Lessons Learnt: It was found that the contents of the skips should have been transported under the IMDG code, (UN2793), however this did not happen. The offshore location did not recognize the swarf as being classified as Dangerous Goods. • UN Number 2793 • Class Div 4.2 • Sub risk N/A • Marine POL N/A • Pack Group III • Flash Point N/A • EMS No. F-G (water reactive substances) and S-J (wetted explosives and certain self-heating substances) As this product was contaminated with oil based mud a SEPA note had been raised and accompanied the cargo ashore.

Task Description: *No details available.*

Recommendations: Subsequent investigation and discussions with the MCA has been carried out. The properties and observations within IMDG state that the swarf should be protected from moisture. The MCA interprets this as swarf should be transported in water-resistant packages. Apart from the use of mud skips the other option would be to use sift-proof and water-resistant bags which may be sealed and placed inside the skips.

Contact Details: Kerry Scott HSE Coordinator Tel: 01224 288509

507: Safe Use of Tools

Summary:	Grinder returned onshore with the wheel incorrectly attached.
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	*Any Location Type
Activity Type:	Inspection/testing
Description:	A 4" grinder was returned onshore with the abrasive wheel still attached. Upon inspection it became apparent that the wheel was incorrectly attached to the grinder. A bolt (which is correct), a non-standard washer and a spacer were used to secure the wheel to the grinder. The correct locking disc was missing (see photograph). Using a grinder in this way could have caused a serious injury.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	Visually inspect all tools before use. Report defects immediately. Take out of service and quarantine defective tools. Spacers should only be used with flat discs. Do not use makeshift, substitute or non-standard parts.
Task Description:	<i>No details available.</i>
Recommendations:	Only competent trained and authorised personnel are permitted to mount abrasive wheels. Always ensure the grinder is fitted with the correctly rated abrasive wheel and secured using the correct locking devices. Always inspect tools before they are used.

Contact Details: garry.begg@woodgroup.com



508: Failed Alternator Pulley on Lifeboat Engine

Summary:	Maintenance personnel when running up lifeboat engine during service test heard the sound of metal being discarded from engine compartment to and around the inside of the lifeboat.
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	Fixed Installation
Activity Type:	Maintenance
Description:	Service tests were being undertaken on the platforms lifeboats, which are 45man FreeFall Watercraft. During the routine testing of 'A' lifeboat's engine the alternator pulley fractured into 2 pieces. The mechanic had not witnessed the failure but heard the event and witnessed part of the pulley leave the engine compartment.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	On investigation the team agreed the fitting of the pulley assembly was the cause of the failure. The pulley was not being driven by the drive key. As a result it was spinning and heating up behind the locknut washer. This resulted in stress cracking and failure of the pulley. It was recognised that had the mechanic been in close proximity when the pulley failed he could have sustained a serious injury. The same equipment on the other platform lifeboats was inspected. No similar condition was found but the decision was taken to replace all the pulleys and to ensure that the drive key was engaged to the pulley.

Task Description: *No details available.*

Recommendations: (1)The pulley checks and subsequent replacement of them has been deemed sufficient to remove the risk of future failure. (2)The Service company & the equipment supplier/manufacturer have been informed of this failure mode. (3) For information: Other users of similar pulley equipment be made aware of the specific type & model which is 'VALEO' Model No 2927750 / 9AR2775F.

Contact Details: Britannia Platform Safety Advisor

509: Rig Floor Dropped Object

Summary:	During liner running operations counterweight was dislodged and fell to the rig floor.
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	Drilling unit
Activity Type:	Drilling, workover
Description:	While picking up and running in hole with 5" liner, a joint was being raised to the rig floor using single joint elevators connected to the V-door winch. When the pin (lower) end of the joint was approximately 10 feet from entering the rig floor, the ferrule of the winch line caught under a disused pipe spinner counterweight (300lbs), raising it approximately 1 foot. At this point the ferrule slipped off the counterweight allowing it to drop back onto the frame base plate. The impact resulted in one of the top mounting bolts to shear, with the other top bolt pulling its nut through the retaining point. This allowed the base plate to tip far enough for the counterweight to slide off its runners and strike the joint of liner in the elevators, and fall 45 feet to the rig floor, landing approximately 10 feet from the winch operator and the person waiting to tail the joint into the mousehole.
Specific Equipment:	Pipe spinner counterweight
Lessons Learnt:	Ensure that once identified, redundant equipment is removed in a timely manner.
Task Description:	<i>No details available.</i>

Recommendations: Ensure that Risk assessment includes checking and removal of redundant equipment prior to commencing the task

Contact Details: None available

510: Slip, Trip, Fall

Summary:	Slip, fall incident involving a stewardess entering cabin area from toilet area once completing job slipped on matting. This caused her to fall backwards, striking her upper back and neck region on the sharp edge of the raised doorframe.
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	Drilling unit
Activity Type:	Catering / hotel services
Description:	The stewardess was dusting the bathroom. When finished she stepped out of the bathroom to dust the rest of the cabin. As she stepped out of the bathroom, the mat outside the door slipped under her foot. This caused her to fall backwards, striking her upper back and neck region on the sharp edge of the raised doorframe. She never used any water in that cabin that morning.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	Direct causes: Possible moisture under the mat. Newly polished floor. Material on the underside of the mat. Raised door frame from cabin floor to bathroom floor. Underlying causes: The catering has little time to do all cabins before people go to bed. This could cause some stress for the catering crew.
Task Description:	<i>No details available.</i>
Recommendations:	Actions Chief steward to check if it is possible to get mats that don't get slippery if water gets under. Signs warning

people about slip hazard to be posted inside bathroom door. Re-training of catering crew according to Company procedure. Use of TBRA and 4 point check within the catering to be verified. People to give the catering more time to do the cabins. Verification process for replacement to be according to Company induction procedure Ensure all mats in this area are "Fit for Purpose" or remove these completely.

Contact Details: john.fraser@universalsodexho.co.uk

511: Slickline Unit & Power Pack Doors & Access Hatches

Summary: Slickline Unit's access door opened and fell off its hinges.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Fixed Installation

Activity Type: Maintenance

Description: A Slickline diesel power pack was being back loaded from a platform in the North Sea. When landed on the vessel an access door opened & fell off its hinges, all doors were secured with plastic tie Wraps prior to being lifted & a checklist in place.

Specific Equipment: *No details available.*

Lessons Learnt: We recommend as stated in the SADIE Safety Alert that a suitable Nut & Bolt type fixture be used to secure all doors & access doors for ASEP style Units & Power Packs of the type shown in picture below. Plastic tie wraps MUST NOT be used to secure door & access hatches. There has also been similar incident with Air compressors which has been highlighted in a SADIE safety alert No-551.

Task Description: *No details available.*

Recommendations: All personnel responsible for carrying out loadout/backload & pre lifting checks on equipment with doors as shown above. Tie Wraps are not a sufficient method of securing this type of door should the unit sustain a heavy jolt whilst being lifted or landed

Contact Details: Simon Baker Onshore Slickline Supervisor Tel: (01224) 406000



512: Incorrectly fitted ferrule causes hose assembly failure

Summary: June 14, 2004 Flexible hose parted from fitting during operations, due to the ferrule of the hose assembly being incorrectly fitted.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Onshore terminal

Activity Type: Well services / intervention

Description: A flexible hose parted from one of its end fittings during utility operations. Subsequent investigation at a third party premises revealed that the ferrule of the hose assembly had been fitted the wrong way around. This mistake meant that the ferrule and the hose fitting tail were not locked together. Pressure testing of a hose assembly deliberately misassembled demonstrated that this error would not have been picked up through the standard post assembly testing. Additionally, there wasn't any obvious visual indication that the ferrule has been incorrectly fitted. One of the factors that contributed to the failure was the high temperature of the operation being carried out; the tests done on the incorrectly fitted assembly were done at ambient temperature.

Specific Equipment: *No details available.*

Lessons Learnt: *No details available.*

Task Description: *No details available.*

Recommendations: 1. All customers notified and inspection procedure issued to identify faulty assemblies. 2. Modified design

completed and tested that will eliminate the possibility of incorrect ferrule fitment. 3. In the interim period, until the new design is in production, marking of ferrules for orientation purposes and instructions detailing correct assembly. Additionally, independent inspection of the ferrule fitment during assembly of this particular hose/fitting/ferrule combination.

Contact Details: Ben Coutts Engineering Manager Hydrasun 392 King St
Aberdeen AB24 3BU U.K. tel: + 44 (0) 1224 618618
direct: + 44 (0) 1224 618706 mobile + 44 (0) 7764
594400 fax: + 44 (0) 1224 618701

513: Test assembly fatality - Middle East Region

Summary:	The rig was pressure testing BOPs and surface equipment. After breaking the top drive system (TDS) to assist with aligning the torque tube key slot, the slot was aligned and valve closed, the driller made up the TDS connection to the top drive. Rig tongs were placed on the TIW valve above the side entry sub for back up. While applying torque the tong bite broke and allowed the test assembly to rotate. The deceased was struck resulting in a fatality.
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	Drilling unit
Activity Type:	Drilling, workover
Description:	The rig was pressure testing BOP's and surface equipment. The test assembly had been made up with a side entry sub and lo-torque valves. On the 3rd test, the manual lower IBOP (inner blow out preventer) on the TDS (top drive system, could not be closed due to the position of the torque tube key slot. At this time the TDS connection was broken and backed out of the test string to align the torque tube key slot. After the key slot had been aligned and the valve closed the driller proceeded to make up the TDS connection to the test string. Rig tongs were placed on the TIW valve above the side entry sub for back up. While applying torque the tong bite broke and allowed the test assembly to rotate. The deceased was struck about the abdomen and upper body by the side outlet and lo-torque valve. (See picture 1 and picture 2). The deceased was rendered unconscious and was

removed to the rig sick bay where attempts to revive him by the medic proved unsuccessful. The exact cause of the accident and corrective measures to be undertaken are still under investigation.

Specific
Equipment: *No details available.*

Lessons Learnt: The failure to identify the hazard and assess the risk was a major factor in this fatality. An immediate fleet-wide procedural change prohibiting the attachment of any pressure testing assembly to a side-entry sub until all drill string connections have been made up to their full make up torque shall be effective immediately

Task Description: *No details available.*

Recommendations: In order to prevent this from reoccurring, a job risk assessment shall be developed and utilised on every rig for the specific procedure to be followed for future make up of side entry subs that will, as a minimum: 1. Prohibit the attachment of any pressure testing assembly to the side of the side entry sub until all drill string connections have been made-up to their full make-up torque 2. Ensure all side entry subs comply with the requirements of internal engineering standards 3. Ensure that a review of all precautions and inspections identified in the safety manual are thoroughly discussed and implemented. 4. Ensure no personnel are in a position that will place them in the path of a potential load or energy source. All OIMs and Rig Managers shall: a) Submit the job risk assessment meeting the above requirments for review and approval by regional management within 7 days.

Contact Details: richard.mearns@gsfdrill.com

Picture 1



Picture 2



514: Riser running tool equipment failure

Summary: The riser handling tool is used to pick up riser joints and the slip joint from the vertical position (rotary) to the horizontal position when laying out riser. The riser running tool was recently inspected as part of a LOLER inspection in December 2003. The riser running tool failed in service.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Drilling unit

Activity Type: Drilling, workover

Description: Whilst laying out the slip joint onto the riser trough a couple of bolts sheared from the riser handling tool when the top of the slip joint was approximately 20' from the rig floor. It was subsequently found that two bolts had sheared from the riser handling tool retaining ring, which holds the mandrel in place (see picture 1). 1 bolt weighing 140 grams was found on the rig floor. (The other one was not found). Due to the design of the lifting tool, the mandrel could not pull out of the main body of the running tool. Therefore there was no potential for a serious dropped load. (I.e riser etc).

Specific Equipment: *No details available.*

Lessons Learnt: The investigation into the incident has found that although the riser lifting handling tool was part of a LOLER inspection regime, only the lifting points were covered as per Industry practice. The maintenance system did not cover maintenance requirements for the bolts on the retaining ring and the original equipment manufacturer did

not explicitly state maintenance requirements for the riser lifting tool. The weight of the riser had been modified previously without a design review completed to incorporate the capability of the lifting tool. However, in this instance, it was not deemed critical to the riser lifting tool equipment failure

Task Description: *No details available.*

Recommendations: .1) Review safety alert at the next safety meeting 2) Inspection regime to be defined to cover the riser handling tools and entered into the maintenance system. (Regime to include load path etc., not just lift points) 3) Changes to equipment require appropriate design reviews. Internal procedure covering the control of modifications to be reviewed at the next weekly safety meeting

Contact Details: richard.mearns@gsfdrill.com

Picture 1



515: Gas Detection Systems - Failing to Reach Alarm Points

Summary:	An investigation into a gas condensate fire found that both portable and fixed gas detection systems failed to reach the alarm points for vapours released.
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	*Any Location Type
Activity Type:	*Any Activity Type
Description:	An ignition of condensate occurred following flushing of a vessel.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	An investigation into a gas condensate fire found that both portable and fixed gas detection systems failed to reach the alarm points for vapours released.
Task Description:	<i>No details available.</i>
Recommendations:	Portable gas detectors must be properly calibrated to detect gases expected. Portable gas detectors must be placed at the most appropriate level, remembering that some gases are heavier than air and may sit at lower levels. Reviews of fixed gas detector locations must be undertaken to ensure coverage of likely accumulations of heavier-than-air gases
Contact Details:	HSEQ Department, Petrofac

516: Lathe Operation & Unfenced Machinery

Summary:	Hand injury whilst using hand held abrasives in a polishing task in a lathe.
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	Floating production/storage unit
Activity Type:	Maintenance
Description:	Whilst operating a lathe a technician broke a finger whilst polishing a component with abrasive tape. This incident could have had a significantly worse outcome had the machine not been stopped quickly. During the polishing process the tape caught, and instantly drew his hand in to the rotating component and was bound by the abrasive tape until the finger broke. Whilst this task has been a recognised practice with this type of machine tool, it is clear that the risks involved are too high. In this case, a perceived routine task was poorly risk assessed and the real potential was not acknowledged. It is clear that the use of hand tools and hand held abrasives in a running machine tool is an unacceptable practice due to the high risk levels and severity potential.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	This clearly related to a failure of several systems: • This is not an acceptable practice • Risk Assessment was not completed • Hazards were not identified • Hands in close proximity to rotating equipment • Personal protection from unfenced machinery • Supervision failure to permit this

practice to occur without adequate risk control

Task Description: *No details available.*

Recommendations:

- All tasks must be suitably risk assessed
- The use of hand held abrasive must be avoided if possible. In circumstances where this is not possible the operator must:
- Not apply direct pressure to the work piece with the hand
- Use sufficient length of abrasive to keep operator at a safe distance
- Hold the abrasive lightly so it can be released easily should it snag
- Technicians whenever possible should adopt the use of :
 - Polishing sticks
 - Tool post adapters for polishing
 - Nutcracker type polishing tools

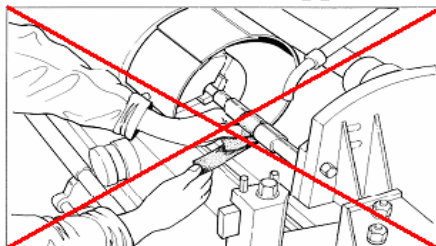
All shown below

- No work with rotating machinery can proceed unless appropriate guards are fitted and used
- Extreme care to be exercised whenever polishing processes are required, process must ensure operator is remote from rotating parts of machine tool and rotating work piece

Machine tools skills assessments to be developed by Management. In the interim until these become available, Supervisors should satisfy themselves that Technicians are competent in working with, and on, the workshop machinery at their respective sites, and the use of workshop machinery should be restricted to those persons.

Contact Details: andrew.taylor@akerkvaerner.com

How the incident happend



517: Ballooning of Scavenge Barrel

Summary: Explaining the use of the vent on grease barrels and why it is required to be opened.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Any Location Type

Activity Type: Maintenance

Description: There was a hydrate situation with some spent guns and the client had decided to pump methanol to try and aid the dispersion of the hydrate. The Methanol was pumped into our BOP'S at 10 Bar increments, and let it reduce by 5 Bar and increase by 10 Bar and so on till a max of 600 Bar was reached. We expressed our concern about the consequences of the hydrate moving. Unfortunately that is what happened and as a result the cable/downhole tool weak point was broken. Due to the loss of the tool weight, the well pressure ejected the cable from the well and subsequently out of the grease flow tubes causing a temporary loss of well control. The well fluids were then momentarily released at the top of the grease head and through the grease return line into the waste barrel. The grease return line was immediately manually closed at the skid to contain the flow of the well into the barrel, and the ball check valve automatically operated to control the fluid flow from the grease head. This temporary surge in pressure in the return line caused the barrel to "balloon" due to the velocity of the gas entering the barrel being greater than the velocity escaping. The vent on the barrel was not opened to prevent this, which is normally the case and had been overlooked. Normally when the

scavenge barrel has a substantial volume of grease it moderates the impact of any pressure surge in the return line.

Specific
Equipment: *No details available.*

Lessons Learnt: Please insure in future that the vent barrel on the scavenge barrel is always open, so as the above incident can be avoided.

Task Description: *No details available.*

Recommendations: Follow procedure to ensure that every aspect of the task is fully risk assessed and that suitable and safe risk reduction is in place

Contact Details: Mike Beattie &

518: Thumb injury using a pipe cutting/prepping machine

Summary:	A sub-contractor recently suffered serious injury to his thumb when using a "Clamshell" low clearance pipe cutting and prepping machine. The injury was caused when the IP accidentally started a control mechanism, crushing his thumb in a pinch point between the rotating machine and fixed motor.
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	Fixed Installation
Activity Type:	Construction, hook-up, commissioning
Description:	A sub-contractor recently suffered serious injury to his thumb when using a "Clamshell" low clearance pipe cutting and prepping machine. The injury was caused when the IP accidentally started a control mechanism, crushing his thumb in a pinch point between the rotating machine and fixed motor.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	The pinch point itself - this was neither identified as a hazard, or guarded. The design and operation of the control mechanism (which also acted as a deadman switch) allowed the inadvertent operation of the switch. The operation was perceived to be a routine specialist sub-contractor activity. There is no such thing as a routine or non hazardous activity. Hazards must be identified and managed to minimise the risk of hurting people.
Task Description:	<i>No details available.</i>

Recommendations: Pinch points are being highlighted on this and similar machinery. Design and operation of the deadmans switch mechanism is being revised Competency of machine operators is being reassessed. Identity cards are now being used to demonstrate operator competency Risk assessments and operating instructions are being revamped

Contact Details: david.rowson@ajs-isc.com

519: COFFEE JUG

Summary:	The handle of a shatterproof and heat resistant coffee decanter came off as the jug was being washed. If this had happened when the jug was in use it could have resulted in a serious scald.
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	*Any Location Type
Activity Type:	Catering / hotel services
Description:	The coffee jug was being rinsed out when the handle separated from the main body of the jug (see attached photograph). This type of jug is not dishwasher safe and it is probable that it had been passed through the dishwasher on several occasions. The item is supplied with washing limitations clearly indicated, but in time this instruction has been forgotten.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	It is common practice to pass most catering equipment through the dishwasher as this provides the most effective cleaning and sterilisation. If items of equipment need handling that is different from normal practice, it may be difficult to maintain this despite training and instruction. In this case it would therefore be safer to only use dishwasher safe coffee jugs.
Task Description:	<i>No details available.</i>
Recommendations:	Remove shatterproof perspex and stainless steel coffee jugs from use and replace with dishwasher safe (glass or

stainless steel) models. All handles should be checked for wear and tear as a matter of course.

Contact Details: bob.rae@compass-group.co.uk



520: Severe Cracking of HP Steam Non-Return Valve Body

Summary:	During inspection of 16 inch diameter, ASME class 1500 cast valves, severe cracks were found through approximately 95% of the original wall thickness. Valves were supplied between 1989 and 1993 by Walthon Weir Pacific.
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	Onshore terminal
Activity Type:	Inspection/testing
Description:	During inspections deep cracks were found in 2 out of 2 HP Steam Non-Return Valves at an onshore gas fired power station. In one case, the crack was found to be through approximately 95% of the original wall thickness. Metallurgical analysis of the cracked area revealed that the majority of the crack was attributable to defects in the original casting with only minor in-service growth. The specific valves that have been found to be defective have the following characteristics: - -Supplied between 1989 and 1993 by Walthon Weir Pacific -Body casting believed to have been sourced from the foundry of Fundiciones Guivisa, -16 inch diameter, ASME class 1500 cast valves, -Made of ASTM A217 WC9 steel, being of 2 ¼ Chrome 1 Molybdenum composition.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	The following actions were undertaken: 1. Removal of cracked valves from service. 2. Survey of plant to identify all Walthon Weir Pacific valves currently in service. 3.

Scheduled inspections and NDT of those valves considered to be at risk from poor quality castings. 4. Following risk assessment, implement access restrictions to areas where these valves are present to reduce personnel risks.

Task Description: *No details available.*

Recommendations: All similar valves in service should be inspected for potential casing defects.

Contact Details: Dave Broadbent Generation Performance Manager Tel: 01753 431313 Fax: 01753 431120 E-mail: dave.broadbent@centrica.co.uk

521: Falling Object Resulting in Injury

Summary:	Scaffold board made contact with avery-hardoll connection, connection fell to bottom of tank striking contractor on face.
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	Support vessel eg Supply, Standby
Activity Type:	Maintenance
Description:	At the time of the incident 3rd party contractors were engaged in lowering scaffold boards into a mud tank via the tank hatch situated at main deck level. Three men were engaged in this operation and the required permits and paperwork were in place. One man was positioned on the tank bottom at the base of the ladder, the IP was positioned at the halfway position of the ladder (in order to guide the scaffold board), and the third person was 'feeding' the board into the tank. During the operation, one of the boards came into contact with an avery-hardoll connection, which was positioned above the tank entry hatch. This contact caused the cover (ToDo cap) to be displaced and fall down into the tank. The cover fell approximately 3 metres before striking the IP a glancing blow to his face. The IP sustained minor facial injuries requiring a visit to the local hospital, and two butterfly stitches. He returned to work later the same shift.

Specific
Equipment: *No details available.*

Lessons Learnt: The contractor at the bottom of the tank was not hit. Although this incident is still under investigation, immediate observations are promulgated here in order to highlight the possible 'learning' and potential dangers from an 'every day operation'.

Observations: • The blanking cap of the avery-hardoll had a safety line fitted but it was NOT attached to the connection. • The blanking cap differed from the more 'normal' design, being of a type locked by the use of four retractable balls (ToDo cap), instead of the more usual three pin locking arrangement. It appears that the cap was initially affixed but not securely, and did not lock on fully. This resulted in a failure when anyone or anything came into contact with the cover. • The positioning of the persons involved exposed them to danger from 'falling objects'. • All those persons involved were wearing correct PPE, which reduced the possibility of serious injury. • Risk Assessment and Permit to Work documentation had been completed but failed to 'spot' the rogue cover.

Task Description: *No details available.*

Recommendations: • All covers for bulk connections should be checked immediately, and at regular intervals with regard to locking mechanisms and security lanyards, to ensure their integrity. • Risk assessment and Permit to Work should be in place for all tank entry. It is usual to concentrate on conditions within the tank; this incident highlights the need to address ALL areas, including the entry point, with special emphasis on possible falling objects. • Periodic checks by the those parties involved, including responsible member of the ships crew should be undertaken to ensure that the controls within the PTW are adhered to, throughout the operation.

Contact Details: Alastair D McArthur ASCO European Marine Technical Manager

Avery-Hardoll cover connected



Avery-Hardoll cover not connected



522: Dropped Object

Summary: Wooden piece of dunnage dropped 12 meters onto the deck from a methanol tank.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Support vessel eg Supply, Standby

Activity Type: Marine activity, shuttle offloading

Description: A Supply Vessel was alongside an Offshore Installation backloading deck cargo, a wooden piece of dunnage dropped onto the deck from a methanol tank. The height of the fall was approximately 12 metres above deck, the size of the piece of wooden dunnage was 4"x3" and 45 cm in length weight approximately 2.2 kgs, there was also rusty bolt attached to the wood. AB's were in the safe havens at the time the object dropped on deck. It is evident however that this object may have passed through many inspection processes in the supply chain. The installation does not hold Methanol Tanks on deck as the procedure is for the tanks to be lifted from the vessel decanted and sent back down to the vessel immediately.

Specific Equipment: *No details available.*

Lessons Learnt: *No details available.*

Task Description: *No details available.*

Recommendations: Initial investigation again proving difficult to ascertain where the dropped object originated from. All processes within the supply chain have a responsibility to ensure that pre-lift inspections are carried out, to ensure the

integrity/security of hatches, possibility of loose items e.g. tools, foreign objects etc. as per the UKOOA Guidelines for the Safe Packing and Handling of Cargo to and from Offshore Locations. This near miss is to be highlighted/discussed at all up and coming Safety Meetings onboard PSV's and throughout the supply chain to include vendors, cargo inspection and quayside staff for lateral learning purposes.

Contact Details: Alastair D McArthur ASCO European Marine Technical Manager

Dropped Object



523: Failure of Airline Hose

Summary:	Whilst carrying out work within a vessel using airline breathing apparatus the air supply hose to the wearer failed causing a loss of air supply to the mask. The wearer was working close to the entry point at the time and was quickly recovered from the vessel by other members of the workteam.
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	*Any Location Type
Activity Type:	*Any Activity Type
Description:	Whilst carrying out work within a vessel using airline breathing apparatus the air supply hose to the wearer failed causing a loss of air supply to the mask. The wearer was working close to the entry point at the time and was quickly recovered from the vessel by other members of the workteam. On inspection it was discovered that the hose had slipped off the hose tail on the female side of the CEJN coupling. Further examination revealed that the coupling was not a standard manufacturers spare part and did not provide for secure fitting of the hose.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	Use of spare parts not approved by the equipment manufacturer can lead to failure of the system. The use of alternative parts must be fully assessed and approved by competent personnel and must not lead to a deterioration of system integrity. Maintainers of BA equipment must

have sufficient safeguards in place to prevent substitution of parts without proper approval.

Task Description: *No details available.*

Recommendations: Confirm that maintenance of BA equipment has been carried out to manufacturers recommended standards and ensure that robust safeguards are in place to prevent unauthorised use of alternative part

Contact Details: Gerry Wyber, Total E&P UK PLC on 01224 297861

Failed Airline Hose



524: Rigging Practises

Summary: Rigging connected to live hydrocarbon line instead of structural anchor point

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Fixed Installation

Activity Type: Lifting, crane, rigging, deck operations

Description: Rigging equipment had been pre-installed for use during a shut down. The anchor points for two 1 ton chain blocks had been taken from production valve bodies directly above the lift location, one shackle and chain block were connected to the production valve casting maintenance lifting point. The lifting point on the valve body had been designed for installation of the production valve itself and not for suspending a load. A second set of rigging for an identical job was taken again from a production manifold valve lifting point which in this case was an eye bolt, again this does not satisfy the requirements for safe lifting operations. This is potentially more dangerous due to the eye bolt having being left in the production valve since its installation with no knowledge of inspection or certification. The main hazards were: Dropping of load
Distortion of the grayloc seal creating a gas leak path
Potential cast failure caused by applying weight to the valve (unlikely) Eye bolt threads could fail and personnel injury result

Specific Equipment: *No details available.*

Lessons Learnt: Rigging personnel should be trained on the identification of suitable anchor points. Pre-use inspections should review rigging arrangements. Not to underestimate the value of worksite inspections as this rigging arrangement was identified as unsuitable prior to use.

Task Description: *No details available.*

Recommendations: Action required: • Ensure that all lifting jobs are rigged to recognised lifting points i.e. beams • All rigging and lifting operations must comply with recognised Lifting procedures • Lifting plans must be clear, precise and be written by a competent person • Only competent persons to undertake rigging and lifting operations • De-rig ALL lifting equipment after use

Contact Details: Emma.Coutts@akerkvaerner.com

525: Storage of Grating Panels

Summary:	Person injured during the removal of grating panels from a storage area
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	Fixed Installation
Activity Type:	Maintenance
Description:	A person was injured during the preparatory work prior to replacing walkway gratings on the platform. The grating panels were stored at the side of a walkway. The personnel involved commenced removing a number of the securing ropes, which had been applied to secure the grating panels to the Bumper Bars. In order to remove a section of grating for measuring and marking prior to cutting, the securing ropes were removed. On their removal a number of the grating panels (6 off) toppled from the upright position (90 deg to the deck) to a position of approximately 45 deg to the deck, pinning the Injured Party by the thighs and against an adjacent walkway handrail.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	Grating panels were tied and secured as a batch of six instead of each panel being secured independently. Lack of potential hazard awareness / appreciation in relation to task performed. Inadequate Risk Assessment. Due to limited storage space the grating panels were stored in this manner.

Task Description: *No details available.*

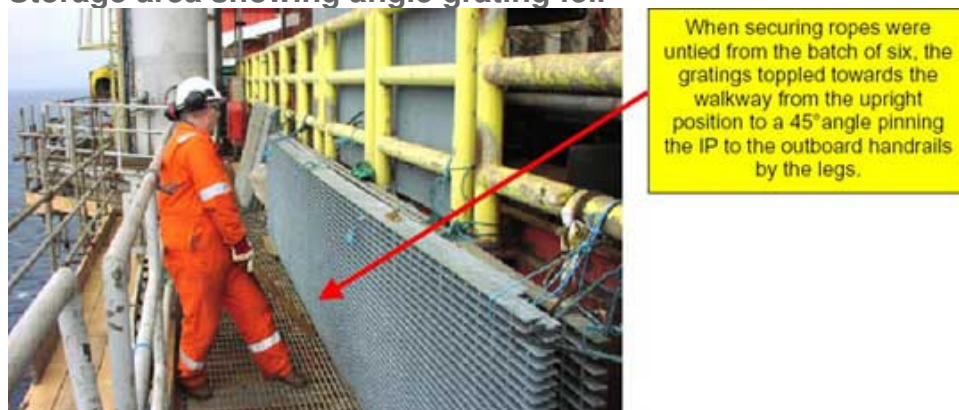
Recommendations: Alternative storage areas for the grating panels require to be identified. These are to be clear of walkways. The construction of a storage rack/station area Use of stanchion racks to avoid this and enable safe access and handling. Consideration to be given to ordering the grating panels in shorter lengths.

Contact Details: Talisman HSE&A Department 01224 352500

Storage Area



Storage area showing angle grating fell



526: Gas Release from Damaged Impulse Line

Summary: Interaction between a faulty trace heating tape and a stainless steel impulse line resulted in perforation of a pipe wall. Although the gas release was detected on 15th April 2004, the time period over which this perforation occurred is unknown.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Fixed Installation

Activity Type: Any Activity Type

Description: Interaction between a faulty trace heating tape and a stainless steel impulse line resulted in perforation of a pipe wall. Although the gas release was detected on 15th April 2004, the time period over which this perforation occurred is unknown.

Specific Equipment: *No details available.*

Lessons Learnt: The gas leak was caused by a combination of factors, rather than a single event, which included: 1. Damage to the trace heating tape Exposed heat tracing element. 2. Conductive path (moisture and air gap). 3. Arcing between pipework and heat tracing element. 4. No operation of the electrical trip circuit. 5. High temperature Perforation of the pipework The likely cause of the damage to the pipe wall is due to arcing between the trace heating tape and the pipework.

Task Description: *No details available.*

Recommendations: Put in place 6 monthly routines to check and monitor circuits. Implement a test procedure for trace heating tape to include: testing tape prior to insulation being replaced, testing tape after the insulation has been replaced but prior to re-energising the circuit.

Contact Details: This alert was taken from the old site therefore no contact details are available.

527: Controlled Gas Release through wipe hole on 4 1/6" BOP

Summary: On 15th August a piston rod sheared on pipe/slip ram on a 4.06" 10k psi TOT dual combi BOP that led to a limited gas release at surface incident whilst performing a CT operation on well.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Fixed Installation

Activity Type: *Any Activity Type

Description: On 15th August a piston rod sheared on pipe/slip ram on a 4.06" 10K psi TOT dual combi BOP, which led to a limited gas release through the ram weep hole whilst performing a coiled tubing operation. At the time of the gas release, the pipe/slip ram was in the open position, coiled tubing string was at surface and the well was secured. No abnormal operational loading or incorrect operating procedures have been identified during the 12 years service life of the BOP. The BOP operated within manufacturers recommended pressures. At the same time, BOP was compliant with Regulatory Inspection Requirements including full inspection and re-certification with NDT testing of failed component one month prior to the failure as per manufacturer recommendations. The failure was caused by fatigue accelerated by high stress loadings during body testing of BOP. The Piston Rod installed in BOP was not latest revision according to the manufacturer and it was subjected to stress concentration at head to rod transition. Latest engineering revision for piston size was not implemented, BOP pipe/slip ram had larger piston installed increasing imposed stresses on the

rod, particularly when body testing BOP to 10,000psi.
None of both engineering revisions were cascaded to the field.

Specific Equipment: *No details available.*

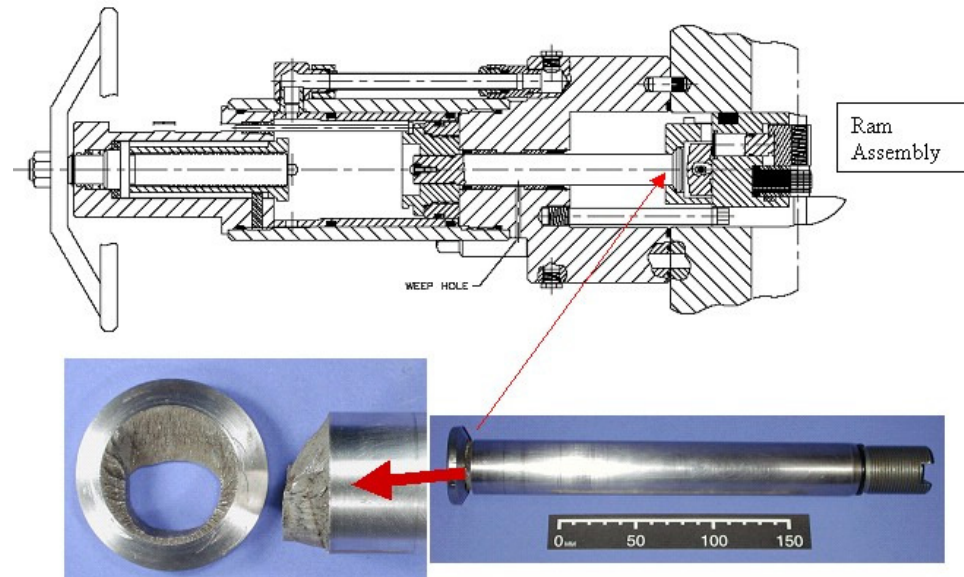
Lessons Learnt: 1.Ensure Equipment meets Manufacturers Design Upgrades. 2.Seek Advice from Manufacturer even if your equipment is well maintained to remain in service beyond expected life cycle.

Task Description: *No details available.*

Recommendations: Define and follow process to make sure Equipment is modified as per Manufacturer recommendations and is up to date with new designs even if it is maintained to remain in service beyond expected service life.

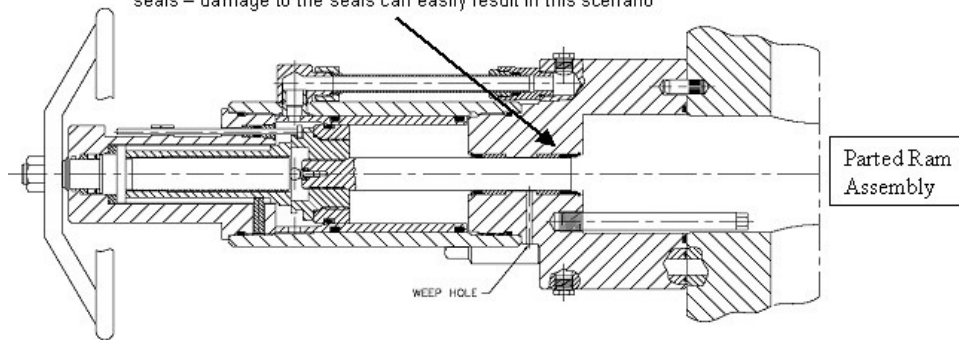
Contact Details: Juan Amado UKI CTS Manager Schlumberger (01224) 385522

Ram Assembly



Parted Ram Assembly

Note that the sheared piston rod has past the first of the front rod seals – damage to the seals can easily result in this scenario



528: Ladder and Step-ladder use

Summary: Accidents involving ladders and step-ladders have always been a safety concern in a busy working environment.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: *Any Location Type

Activity Type: *Any Activity Type

Description: Rigblast believe there is a need to raise the awareness of accidents associated with the use of ladders and step-ladders. The use of ladders and step-ladders to get to and from work areas is regarded as common-place practice on most worksites. An accident involving this type of equipment is associated with Working at Height Regulations and comes under the banner of Slips, Trips and Falls. There are a variety of ways in which people can be hurt when using ladders and step-ladders. Some common examples are: during climbing and descending, there is a potential that injury through contact with fixed objects such as brackets, backscratchers and scaffold fittings are the more obvious items that cause injury. While, when the need arises to work from step-ladders, there is the potential of over-reaching, which could cause a loss of balance. These type of accidents fall into the behaviour category, which accounts for 97% of all accidents. Behaviour, such as lack of attention to the environment, lack of concentration, unaware of danger, etc. are people issues and can be resolved by employees paying more attention to their surroundings and identifying the risks.

Specific
Equipment: *No details available.*

Lessons Learnt: Understanding the risk in all work, no matter how routine the work. Be observant to work surroundings

Task Description: *No details available.*

Recommendations: Rigblast will develop a Working at Height campaign comprising of posters and presentations

Contact Details: Rigblast Group Ltd. - Gary Jenkins 01224 722888

529: Release of Load during Lifting Operations

Summary: Failure of King manufactured (Prolift) model 501 range of chainblocks.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Fixed Installation

Activity Type: Lifting, crane, rigging, deck operations

Description: Following incident investigations involving the release of load during lifting operations the following has been discovered and should be noted:- several recent incidents have occurred whilst conducting lifting operation using chainblocks to lift/lower loads. **These incidents have occurred whilst hoisting loads at the lower end of the equipment capacity (light loads).**

Specific Equipment: *No details available.*

Lessons Learnt: Subsequent failure investigation has revealed that in certain circumstances, the brake mechanism can disengage and may fail to re-engage. This particular phenomena seems only to affect King manufactured (Prolift) model 501, range of chainblocks. Further investigation will be carried out by the supplier /manufacturer to determine the extent of the problem and any remedial actions that may be necessary. A sharp pull (as may be experienced if the chain were snagged and pulled) on the slack end of the load chain, may result in the disengagement of the brake mechanism
The brake may then fail to engage and when used may fail to arrest any load applied. It is also possible that if the

block is subjected to an impact following such an incident (such as may be experienced when a block was dropped even from waist height) the brake may re-engage and when subsequently tested or examined may appear to function correctly.

Task Description: *No details available.*

Recommendations: Users /suppliers should check inventories and contact the supplier for further advise. NOTE

Although this particular failure mode seems only to affect the model referred to, users are reminded that existing guidance applicable to offshore use advises that NO chainblock should be used to lift/lower a load of less than 10% of the maximum safe working load of the block.

Contact Details: HS&E TEAM Sigma 3

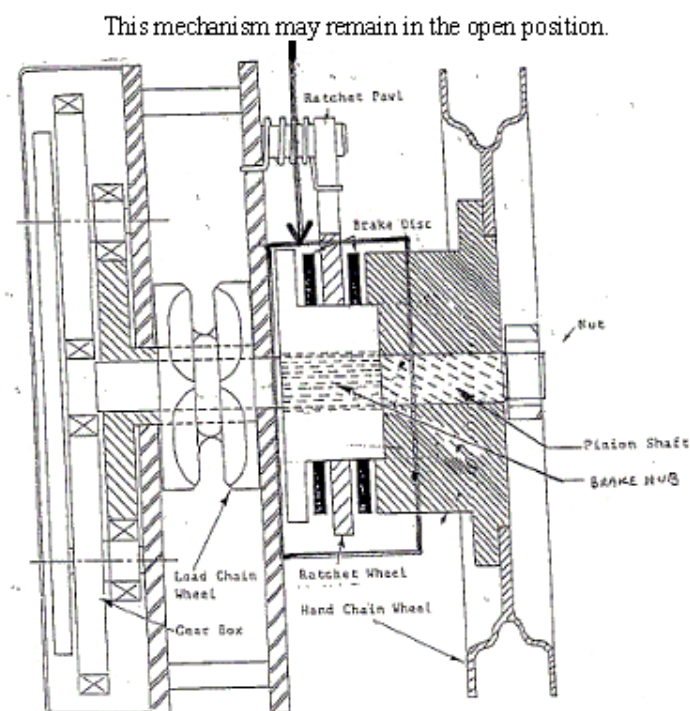


Figure 1

530: Incorrect Assemble of Full Body Harness

Summary: A full body harness incorrectly assembled was returned to a supervisor. The supervisor concerned, asked the employee to check the harness for correct assembly. The employee did not recognise the error and had previously worn the equipment whilst working at height.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: *Any Location Type

Activity Type: Maintenance

Description: An employee new to the offshore industry withdrew from a storage facility a full body harness to allow him to work at height. Before commencing his work he put on the harness and attached the Delta Maillon 450mm lanyard to the harness by the identity tag (refer figure 1). This is not the correct method of attaching this lanyard. If the employee had fallen, the strength in the identity tag would not have supported his fall and the employee could have been seriously injured if not killed. The employee assured his supervisor that he was familiar with wearing a full body harness, but found the offshore environment intimidating and thought due to this he was not concentrating on the correct assembly of the harness. There is also a concern about the lack of attention from the employee's colleagues to notice this safety breach. Two issues arise from this incident. First, the inspection and issuing of the harness was not properly controlled and had it been this would have alleviated the oversight by the employee. Secondly, the employee's workmates should have visually checked each other's harness to

ensure correct fitting and good condition.

Specific
Equipment: *No details available.*

Lessons Learnt: Colleagues have the right to STOP their workmates from endangering their lives. Supervisors need to be more watchful for the safety of employees new to the offshore environment.

Task Description: *No details available.*

Recommendations: Harness issue and receipt should be managed under a controlled process. Inspection of harness condition and use should be the responsibility of a competent person with final responsibility lying with the us

Contact Details: *No details available.*

Wrongly fitted lanyard



Correctly fitted lanyard



531: Dropped Objects on Drill floor

Summary: Dropped Objects on Drill floor following completion of cementing operations. Crew on the drill floor heard a noise coming from the derrick, immediately afterwards a clamp and bolt that secured the hard pipe to the Kelly hit the floor. All three persons in the vicinity evacuated the drill floor on hearing the noise. No personnel were injured.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Drilling unit

Activity Type: Drilling, workover

Description: Dropped objects from Drilling Derrick following completion of cementing operations. At 07:15 hours the drill crew started to circulate after cement job. At approx. 07:30 hours the crew on the drill floor heard a noise coming from the derrick and immediately after a clamp and one bolt for securing the hard pipe to the Kelly line hit the floor. All three persons present on drill floor quickly evacuated when they heard the noise. There were no personnel injuries. The height from where the clamp fell was approx. 100 feet, and the weight of the clamp is 10lbs. The job was shut down and blocks lowered to the floor for inspection. The inspection revealed that the bolts holding the clamp had sheared out. Shortly after 07:30 the OIM, Drilling Supt. and client rep. were informed. At 09:00 after establishing some facts the incident was reported to the HSE. The clamp was reinstalled with new bolts and safety sling fixed on clamp assembly.

Specific: *No details available.*

Equipment:

Lessons Learnt: *No details available.*

Task Description: *No details available.*

Recommendations: •Ensure the bolts holding the clamp are sufficiently rated to take the stress caused by the operational activities. •Ensure a suitable fall arrest method is applied to the bolting arrangement and clamp assembly. •Regularly conduct a dropped object survey or the derrick and associated equipment. •Review of dropped object survey to be done and blocks and hydra racker to inspected on an established time frame. To be done on a daily basis rather than weekly as present. •Inform Hydralift of the failure. •LONG TERM ACTIONS: Hydralift to evaluate the design of the clamp assembly to see if a better arrangement can be designed. •Relay information to industry

Contact Details: Barney Raku-Evans tel UK 01224 734960 Company BG UK Upstream. E-mail barney.evans.bg-group.com



532: Scaffold clash with Xmas Tree

Summary: A scaffold was erected around a Xmas Tree to allow tie-ins for treatment equipment. During the treatment operation the Xmas Tree reduced in height with the result the choke valve on the Xmas Tree came in contact with the scaffold and sheared one of the scaffold uprights.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: *Any Location Type

Activity Type: *Any Activity Type

Description: A scaffold was erected around a Xmas Tree to allow tie-in of scale treatment equipment. The injection of scale treatment lasted several hours, where cold sea water was injected and resulted in cooling the production tubing. This has been considered to be how the Xmas Tree came into contact with the scaffold. The shrinkage of the Xmas Tree and connected tubulars reduced the height of the Xmas Tree and choke valve and therefore the downward weight on the scaffold caused it to shear. This aspect of the process was not considered thoroughly during the risk assessment and no guidance was given to the scaffolders of the shrinkage. The scaffolders were aware of potential well movement however, due to the congestion in the area the scaffolders erected what they considered to be the best fit around the well.

Specific Equipment: *No details available.*

Lessons Learnt: This type of incident is not a one-off, but is recognised as a recurring risk that has not been fully addressed by the

site operators.

Task Description: *No details available.*

Recommendations: Guidance and supervision need to be provided to identify potential clash areas. A comprehensive risk assessment with all parties involved needs to be discussed at the work site so all hazards are recorded and control measures applied. Site Operators need to develop a procedure for the construction of scaffold within the well bay area.

Contact Details: Gary Jenkins of Rigblast, 01224 722888 Keith Greenwood of Shell SORT-4, 01224 882905

533: Heavy Contamination of Gas Turbine Lub Oil System

Summary:	Gas turbine failed to re-start due to low lub oil pressure. Investigation showed lub oil contamination with a large quantity of glass beads present in the turbine oil system.
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	Fixed Installation
Activity Type:	Maintenance
Description:	Following a trip on the fuel gas system on Ninian Northern Platform, the turbine failed to re-start due to low lub oil pressure. On further investigation, significant debris was found in the oil lubrication system which was then discovered to have destroyed all of the white metal bearings fed from the main lub oil system downstream of 5-micron nominal filters. Following a previous occurrence of oil contamination, the tank had been cleaned out and new filters fitted. A fresh charge of oil was added to the system. During the ensuing 2 year period, a large quantity of glass beads entered the turbine system. The beads were found in 4 main locations - the filter housing as a thick black sludge; under the 2 main lub oil line relief valves and under the tank filling hatch. The main lub oil pump has ingested a large quantity of these beads and sent them through the system. The beads were dumped out at one of the 2 valves before the main lub oil filters. The rest of the lub oil system was very slightly coated with the glass beads and shards of glass. Further investigation revealed the following:- DP gauge for the filters was not operational The filters had been in use for over 24 months Filters had ruptured allowing large debris through. The

glass beads were in the range 100-400 microns All internal wtted surfaces were coated with the glas beads. Although not visible they could be detected by hand or by flash photography (beads used in highway road markings due to their reflectivity) Over the years, numerous components in the hydraulic system had been changed out and "grit" found but not investigated or reported for further investigation.

Specific
Equipment: *No details available.*

Lessons Learnt: New oil must not be assumed to be "clean". Samples of new oil have been tested and found to be as high as NAS class 12. Turbine and critical systems should be below NAS class 6. Samples of new oil were found to have grit while pre-filtering during a top-up operation. Bulk tanks are more prone to contamination than drums Oil sampling will not necessarily detect glass beads in the samples. Appropriate investigative techniques are required when sampling. Oil sample points need to be in the right area. One sample from a tank is not indicative of the filter condition or bearing conditions. The glass beads proved difficult to clean from the components removed from the system and the tank. Several separate flushes & clenaing cycles were required to remove the beads. Final checks for glass beads were done with flash photography which aided the location of the last few remnants. Glass beads are used in cleaning metal. They are notorious in the automotive industry for destroying shafts and bearings if not thoroughly removed after use. Glass beads have a higher hardness than journal bearings and shafts. They will groove the bearings and remain embedded in the white metal. Compnoent failures need to be throughly investigated (root cause analysis) and not assumed to be as a result of low quality repairs or material supply.</LI<p>

Task Description: *No details available.*

Recommendations: No details available

Contact Details: Keith Dunnet Senior Mechanical Engineer CNR
International (UK) Ltd Tel: 01224 303747 Fax: 01224
303889 Email: keith.dunnet@cnrinternational.com St
Magnus House Guld Street Aberdeen AB11 6NT

534: Comms Failure during Platform Power Loss

Summary: During a recent incident all platform power was lost and the platform had to rely on the emergency generator to supply power to the emergency systems.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Fixed Installation

Activity Type: *Any Activity Type

Description: During a recent incident all platform power was lost and the platform had to rely on the emergency generator to supply power to the emergency systems. It became evident during initial comms that the cordless phones inside the accommodation were not working.

Specific Equipment: *No details available.*

Lessons Learnt: The cordless phones used on the platform rely on their base stations to be powered. Without an electrical supply these phones will NOT work.

Task Description: *No details available.*

Recommendations:

- Risk assess the use of any cordless phones.
- Where cordless phones are used in critical locations (e.g. Control Room), ensure the base station continues to receive power (either from the emergency generator or UPS) or ensure any cordless systems are backed up by a normal desk phone.

Contact Details: *No details available.*

535: Bulk silo failure

Summary:	While pressurising a bulk silo during product blending a small hole appeared in the saucer at the base of the silo.
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	Onshore terminal
Activity Type:	Well services / intervention
Description:	A 5000 cubic foot silo, of 44psi maximum working pressure, was being used for a blend of two powdered products. While pressurising the silo with air from a compressor, a small hole appeared in the saucer at the bottom of the silo. This was apparent from the high pressure discharge of dust from the edge of the saucer at the base of the silo. The plant operator immediately isolated the air supply and vented the silo to atmospheric pressure. Approximately 10 pounds of powdered product was discharged from the leak. The aeration system in the silo is based upon a porous Dacron membrane where air flows into silo through the bottom of the saucer and passes through the membrane. The air then enters the main silo body and fluidizes the contents. See attached sketch.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	The contents of the silo were removed by vacuum tanker and the saucer unbolted from the silo and removed for inspection. The membrane was removed and the saucer inner surface shot blast for inspection. Several areas of visible erosion were found on the metal where the edge of

the membrane is held in place by a clamp ring (photo 1) Erosion in one area caused a hole to form about 25mm long and a few mm wide (photo 2). It was noticed that the areas of erosion were mid-way between clamping bolt holes in the clamp ring. The mode of failure is believed to result from parts of the clamp ring between the clamping bolt positions lifting sufficiently to allow an air jet to escape around the edge of the clamp ring. The high velocity air jet carried cement particles and eroded the adjacent metal face inside the saucer. Continual erosion over time has locally washed out the metal to an extent that a hole has been created

Task Description: *No details available.*

Recommendations: Following actions conducted 1. Additional bolt holes were drilled and tapped between the existing holes in the clamp ring and sealing face doubling the number of clamping bolts. 2. A silicon sealant was applied to the flange surfaces prior to positioning the membrane and clamping it in place with the clamp ring. 3. All other silos of the same design are being inspected for signs of erosion to the saucer. 4. Before saucer refit seals tested for air leaks applying air and soap solution.

Contact Details: Jason Harrower HSE 01224 795904

Figure 1a

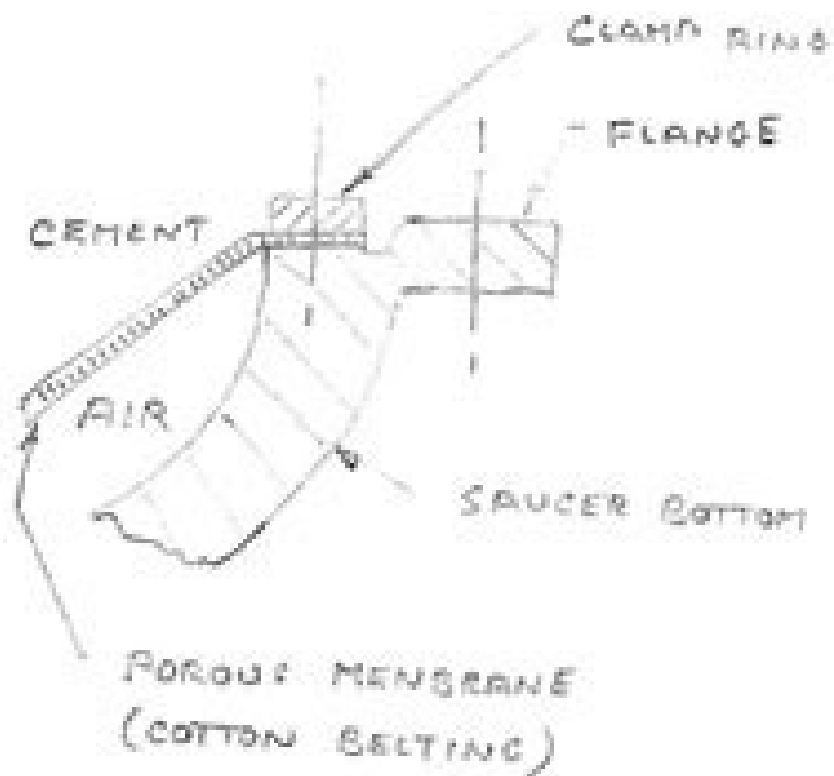
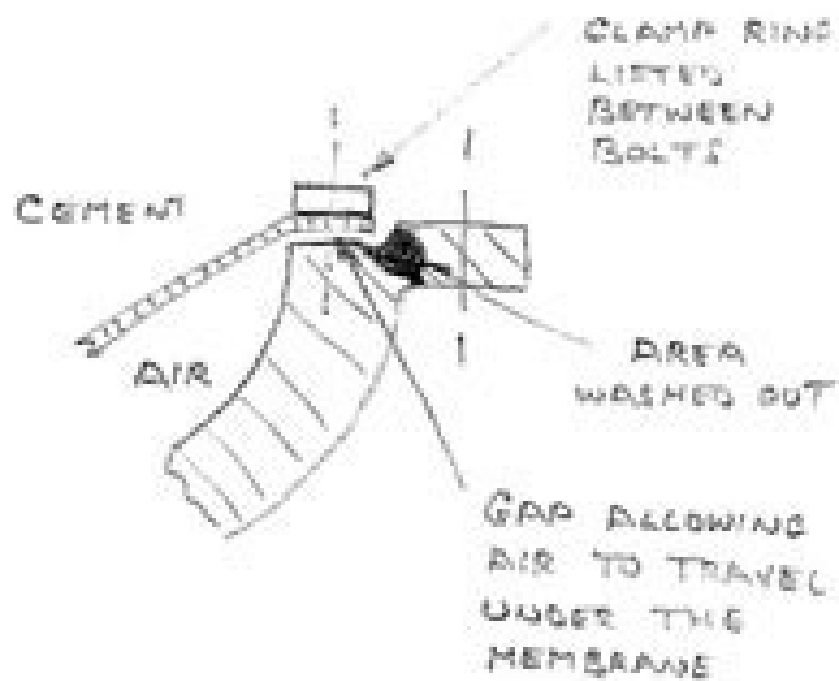


Figure 2a



Bulk Vessel Saucer Bottom



Wash out



536: VENTILATION / DUCTING SYSTEMS

Summary:	On renewing the ventilation system at one of our units bacterial growth was found in the inaccessible parts above the dish-deck and kitchen range ducting
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	Any Location Type
Activity Type:	Catering / hotel services
Description:	On renewing the ventilation system at one of our units bacterial growth was found in the inaccessible parts above the dish-deck and kitchen range ducting. After investigation a report detailed low risk bacteria found which would be expected due to the fact that these areas were not accessible for cleaning during deep cleans. Given this incident had the potential to be more serious in terms of what bacteria would be found in the ducting it raises the question whether there could be more dangerous bacteria in kitchen ducting throughout our onshore and offshore units which should be brought to our client's attention if they are inaccessible to us for deep cleaning these also may contribute to a fire hazard.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	At this unit the Facilities Manager has now a local deep clean firm scheduled to deep clean the kitchen after the kitchen ventilation works are completed and there will be access vents for cleaning cut into the ducting to prevent re-occurrence.

Task Description: *No details available.*

Recommendations: As we can not reach or see inside the ventilation ducting it is recommended that a specialist company completes this function to ensure there is not a build up of dust etc which may cause fire

Contact Details: john.fraser@universalsodexho.co.uk

537: Contaminated sustance returned to workshop from offshore

Summary: Contaminate ignited when gas sparker triggered in vicinity

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Supply base, warehouse, workshop, dock

Activity Type: Maintenance

Description: An incident occurred in the workshop where the contents of a container ignited when a gas sparker was triggered in the vicinity. The substance had been removed from the gearbox of a Sundyne pump unit returned from an offshore installation. Fire fighting equipment was used to extinguish the fire and no harm/damage resulted from this incident.

Specific Equipment: *No details available.*

Lessons Learnt: Supplier should confirm the unit has been de-contaminated prior to commencing any work and apply good fire precaution measures and heightened awareness when dismantling equipment.

Task Description: *No details available.*

Recommendations: Clients should ensure that all units are adequately flushed or make the necessary arrangement for decontamination by 3rd party and provide information of flushing/decontamination to the supplier.

Contact Details: Haudi Hayati - hhayati@sulzerwood.co.uk

538: Potential for Body Harness Leg Straps to Work Free

Summary: Whilst wearing a harness to work on a hanging scaffold, a scaffolder noticed that the harness leg straps had loosened to within 10mm of the buckle locks on both legs.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: *Any Location Type

Activity Type: *Any Activity Type

Description: Whilst wearing a harness to work on a hanging scaffold, a scaffolder noticed that the harness leg straps had both loosened to within 10mm of the buckle locks on both legs. Upon further inspection it became apparent that the leg straps had only one fold of material at the end of the straps, so allowing the end of the straps to pass through the plastic blockers to within 10mm of the buckle. The thickness of the fold at the end of the strap would not have prevented the end of the strap from passing through the buckle as well, so rendering the leg straps ineffective.

Attached photos show normal position (Fig 1), position as found with end of strap having passed through plastic blockers (Fig 2) and with the end of the strap through one slot of the buckle (Fig 3).

Specific Equipment: *No details available.*

Lessons Learnt:

- Body Harnesses should be inspected before use.
- An inherent safety culture was important in ensuring the problem was noticed and reported, and

the harness subsequently taken out of service.

Task Description: *No details available.*

Recommendations: • Cascade this information to all potential users of Body Harnesses, to ensure awareness of this problem with a particular make of Body Harness.</UL< p>

Contact Details: *No details available.*

Fig 1 Normal Strap Position



Fig 3 Strap Having Passed Through Buckle



Fig 2 Strap Having Passed Through Plastic Blockers



539: Cold Cutting Accident

Summary:	The task was to decontaminate redundant pipe spools that had a build up of Naturally Occurring Radioactive Material (NORM) To ensure the internals of the pipe spools were thoroughly cleaned before going for scrap the spools were cut open using cold cutting equipment.
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	*Any Location Type
Activity Type:	*Any Activity Type
Description:	NORM contaminated pipe spools were to be split in two to aid decontamination. The spools had a wall thickness of approximately 50mm. An area had been set up for the Cold Cutting operations and auxiliary equipment, which was inside a decontamination unit. The unit that caused the injury, which is recognised as the cutting head assembly has two hoses connected to it, which are the Ultra High Pressure (UHP) water hose and the grit inducement hose. This unit (the cutting head assembly) is then mounted onto one half of a support arm bracket, with the other half of the bracket mounted onto the manipulator (power head assembly). The manipulator is mounted onto a flexi track which guides the cutting head. To control the cutting operations, a control panel is situated remotely from the workface. The support arm bracket enables the cutting head to be positioned 6 – 10mm from the spool being cut. and is fitted with three thumb screws that secure the cutting head to the support arm bracket. During the cold cutting operations an incident occurred where the cutting nozzle and support

arm bracket parted and injured one of the operators who was 5.5 meters away from the workface .There is an investigation on going to find out the root cause, but as yet this has not been concluded. The equipment was supplied by Gardner-Denver Jetting Systems but potentially other types of cold cutting equipment could be affected.

Specific Equipment: *No details available.*

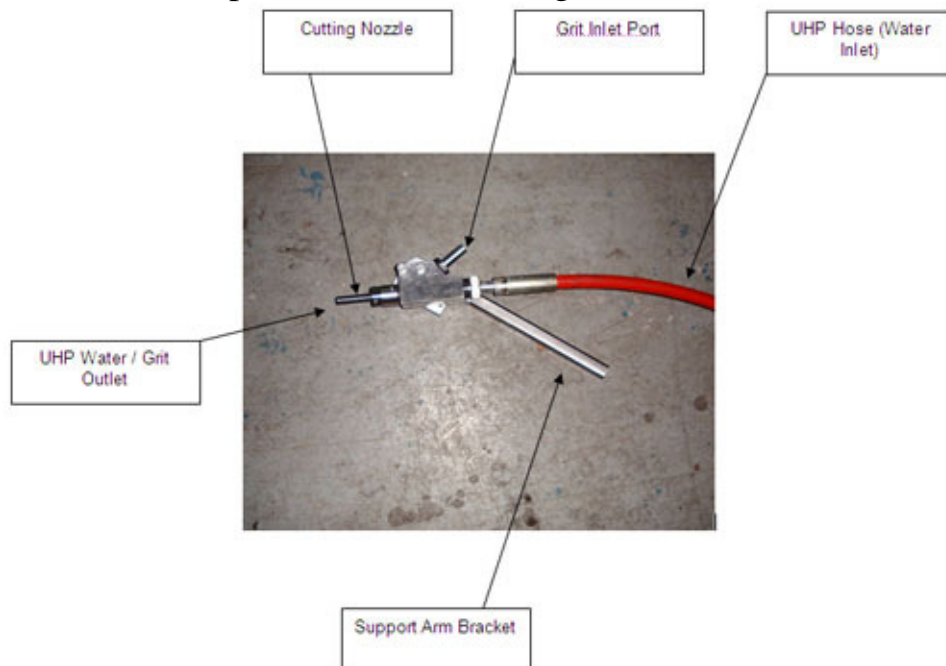
Lessons Learnt: This section will be completed after the investigation has concluded.

Task Description: *No details available.*

Recommendations: Quarantine all cold cutting equipment until the investigation is concluded and corrective actions have been agreed.

Contact Details: John Walker, Rigblast Group Ltd., TelNo. 01224 722888

Bracket which parted from the cutting unit



540: Hydrocarbon Leak during Grit Blasting Operation

Summary: During coating repair preparation, which included process pipework, the operator of the grit blaster detected a hydrocarbon odour in the area where he was working.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Fixed Installation

Activity Type: *Any Activity Type

Description: During coating repair preparation, which included process pipework, the operator of the grit blaster detected a hydrocarbon odour in the area where he was working. At this point the operator made safe his operation & identified a leak from a 2" gas line. He immediately reported the leak to the control room. An operator arrived on scene with a gas detector and confirmed the location of the leak. The process line in question was then isolated & depressurised. Investigation revealed a corroded part of the gas line had leaked due to the grit blasting operation.

Specific Equipment: *No details available.*

Lessons Learnt:

- Although the risk assessment covered the workplace hazards, it failed to adequately address the risk of blasting live process pipework.
- There was no formal procedure for grit blasting of live lines available; therefore it was not included in the initial risk assessment.

Task Description: *No details available.*

- Recommendations:
- Ensure risk assessments for grit blasting live process lines specifically addresses the potential for loss of integrity due to factors affecting wall thickness.
 - Procedures for mechanical preparation of steelwork including grit blasting must adequately cover work on live process lines.

Contact Details: Gerry Wyber, Total E&P UK PLC on 01224 297861 or gerry.wyber@total.com

Hole in underside of pipework



541: Riser Joint Protector

Summary: During backloading of a drilling riser joint weighing 4.6 tonne and approximately 10 meters in length a steel protector cap fitted to the pin end of the joint fell off as the riser touched down on the boats deck.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Support vessel eg Supply, Standby

Activity Type: Lifting, crane, rigging, deck operations

Description: The steel riser end protector caps are attached to the riser prior to lifting by the crane down to the vessel. The caps are secured to the riser ends by the means of 3/8" grub screws. These in light of the incident have been deemed as not adequate for the task they do.

Specific Equipment: *No details available.*

Lessons Learnt: The size of the grubs screws to secure the end caps to the risers are not substantial enough. The potential for a dropped object could have endangered personnel on the installation and the crew of the supply vessel had the cap become detached whilst being lifted & before it was landed on the vessels deck is not acceptable.

Task Description: *No details available.*

Recommendations: Relevant providers of riser joints & protectors to redesign the present method of securing steel cap protectors to drilling tubulars.

Contact Details: Installation Safety Advisor

542: Chalmit Evolution Safety Alert

Summary:	A safety alert concerning power factor correction capacitors fitted to Chalmit Evolution Zone 1 Floodlight exists.
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	Any Location Type
Activity Type:	Any Activity Type
Description:	Chalmit Lighting wish to alert users of their Evolution Zone 1 floodlight, that there exists at present a product safety alert on this product, details of which can be found on our website. This safety notice refers only to this Chalmit product and no other Chalmit Lighting product is affected.
Specific Equipment:	Chalmit Lighting Evolution floodlights sold prior to March 2003 Affected products can be identified by the year of manufacture and serial number stamped on the products name plate. For Evolution's dated 2003, only those with a serial number prior to W006700 are affected.
Lessons Learnt:	<i>No details available.</i>
Task Description:	<i>No details available.</i>
Recommendations:	Please refer to above web address for details of products affected and carry out instructions as deemed necessary. For further information please contact Chalmit direct.
Contact Details:	Sam Lee - Chalmit Lighting, 388 Hillington Road, Glasgow, Tel: 0141 882 5555, Email:

techsupport@chalmit.com

543: Damaged platform gratings

Summary: As platforms in the North Sea continue to age, the effects of the sea environment takes it toll on the platform infrastructure, including walkway gratings. There have been a number of incidents within the Industry involving corroded, missing, undersized or insecure gratings; including one where a 1m² grating slipped off its support and flipped vertically when an operator stepped on it. Luckily, he managed to avoid falling down the 11m drop.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Fixed Installation

Activity Type: *Any Activity Type

Description: As platforms in the North Sea continue to age, the effects of the sea environment takes it toll on the platform infrastructure, including walkway gratings. There have been a number of incidents within the Industry involving corroded, missing, undersized or insecure gratings; including one where a 1m² grating slipped off its support and flipped vertically when an operator stepped on it. Luckily, he managed to avoid falling down the 11m drop. Whilst there are continuous inspection & maintenance programs which replace gratings, some can still catch us out, as the incident mentioned above shows.

Specific Equipment: *No details available.*

Lessons Learnt: *No details available.*

Task Description: *No details available.*

Recommendations: It is vital that personnel consider grating condition when going about their daily tasks, particularly on NUI's. In general Task Risk Assessments focus on how the activity can be conducted safely and do not always consider the condition of what we stand on or work off. If you see grating that in your opinion is insecure, undersized, badly corroded or missing, then report it and get something done. Your action could avoid injury to yourself and others.

Contact Details: Ben Sparks ben.sparks@ajs-isc.com

Damaged grating



544: Potential Dropped Object

Summary: During delivery of an offshore container to warehouse, it was observed by a person working on the office first floor, that there was a large metal object lying on top of the container.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: *Any Location Type

Activity Type: *Any Activity Type

Description: During delivery of an offshore container to warehouse, it was observed by a person working on the office first floor, that there was a large metal object lying on top of the container. On closer examination, the loose object was removed and found to be a loose 4' metal rod/ brace. On investigating the incident, it was found that the driver had travelled several miles including passing through the city centre with this object on top of the trailer, which posed a hazard to all in the surrounding area of the truck.

Specific Equipment: *No details available.*

Lessons Learnt: In response to the incident, the haulage company are currently involved in reviewing the Risk Assessments covering their processes that involve loading; unloading and transport of containers.

Task Description: *No details available.*

Recommendations: All suppliers of material for shipment should be reminded of UKOOA guidelines, which detail the appropriate requirements and manner to present cargo for offshore

shipment.

Contact Details: Jamie Reekie at Total E&P UK PLC on 01224 297862 or
jamie.reekie@total.com

Large Metal Object Found on Top of Container



545; Dropped Object

Summary:	During the dismantling of scaffold a scaffolder was lowering a length of scaffold tube when a metal spike fell from the inside of a tube and landed on the deck.
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	*Any Location Type
Activity Type:	*Any Activity Type
Description:	There have been several incidents where tools and equipment have been left inside scaffold tubes that are part of a scaffold structure. The picture attached was the latest find, where a metal spike fell 7-8 feet to the deck narrowly missing a scaffolder as he was dismantling a scaffold. No one was injured; however there could have been a serious accident if someone had been struck by this tool. The root cause of this problem is the discipline of personnel working on the scaffold structures, who are using horizontal scaffold tubes as temporary storage areas, whilst they are undertaking a work activity. Unfortunately on completion of the work activity they are forgetting to remove that item and in doing so are not realising the consequences of their actions in relationship to subsequent events involving the scaffold tubes.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	All personnel working on scaffold structures have a responsibility to work safely and leave their working area in a safe condition. Therefore this is a reminder that personnel working on Scaffolding should: - i) Not use it as

temporary storage, and, ii) Remove all tools and equipment from the scaffold structure on completion of their individual work tasks.

Task Description: *No details available.*

Recommendations: In order to minimise the temptation for personnel to use scaffold tubes for storage the ends of guardrails and horizontal scaffold tubes should be capped with external caps or internal Cubby caps.

Contact Details: Gary Jenkins at Rigblast Group Ltd on 01224 742328 or email: gary.jenkins@rigblast.com

Metal Spike



546: Lifeboat damaged charging cable

Summary:	48volt AC feed cable to the lifeboat armoured braiding had corroded, the cores inside had parted within their individual insulation.
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	Fixed Installation
Activity Type:	Maintenance
Description:	During a lifeboat drill a coxswain noticed a light had failed within the lifeboat. Detailed fault finding led to the discovery that a 48volt AC feed cable to the boat had corroded armoured braiding and that the cores had parted inside their individual insulation. This wear was due to cable movement in wind due to too much slack and the cable rubbing against a steel handrail. Eventually the batteries would have depleted and the boat would not have started in the event of an emergency situation. The other lifeboats were checked and similar damage was found on the C boat (to a lesser degree) and some chaffing was evident on boats A and D.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	Planned maintenance was thorough but did not identify this latent hazard. Coxswain external checks identified the fault . This near miss report reinforces the importance of thorough visual inspections in relation to all of the external & internal lifeboat operational systems.
Task Description:	<i>No details available.</i>

Recommendations: To prevent recurrence the cables are to be re-routed slightly and dressed away from the source of the damage on all of the lifeboats. Manufacturer/Installer to be advised of this platform installation issue.

Contact Details: Britannia SEQA Co-Ordinator - 01224 827211





547: Barton Differential pressure gauge failure

Summary: Hydrocarbon leak from a Barton model no 224 differential pressure gauge after approximately 2 years in service. HSE figures indicate there have been 5 confirmed and at least 5 unconfirmed similar failures in the last 18 months.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Fixed Installation

Activity Type: Production operations

Description: The investigation concluded that the two of the four 17/4 PH stainless steel fasteners failed due to stress corrosion cracking. The primary cause of corrosion was chloride attack due to the material not being suitable for use in a marine environment. A secondary driver for the corrosion was the unfavourable galvanic couple between the 17/4PH stainless fasteners and the 316 stainless steel gauge body which results in the fastener corroding preferentially - normal good practice is to design fasteners in a more resistant material. Two of the bolts which had not failed were also examined - these looked to be in good condition even after cleaning. Examination under a microscope revealed what looked like slight cracking in the thread troughs but when sectioned they were found to be severely corroded and cracked to the point they could probably be broken by hand. See attached figures.

Specific Equipment: *No details available.*

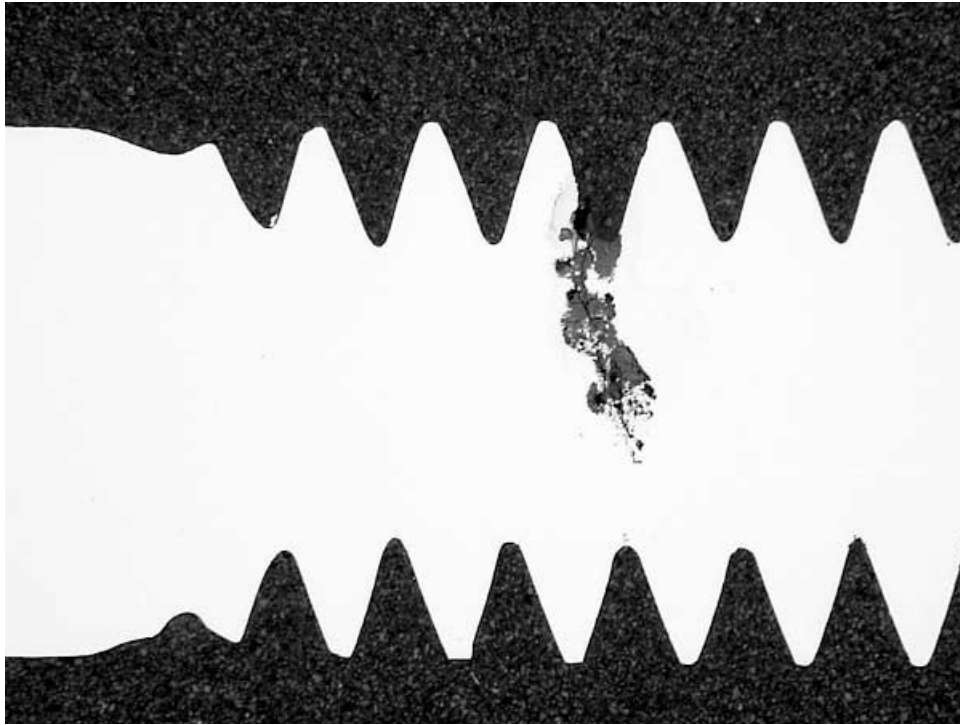
Lessons Learnt: 1. Previous SADIE alerts have referenced 15/5 PH and 17/4 PH stainless fasteners - neither are suitable for marine or coastal environment. 2. Previous SADIE alerts and HSE safety notice 3/2004 suggest visual inspection of the fasteners to look for evidence of corrosion as a means to ensure they remain servicable at least in the short term. Previous experience is that there was little external evidence of corrosion on unfailed fasteners yet when sectioned they were severely corroded and cracked (see attached figures). What appears to be a fastener in reasonable condition could have been snapped by hand. Visual inspection in situ is compounded by very limited access. 3. Barton have until last week not had a clear policy of supplying revised material specification for spare fasteners for use in marine environment - this has now been addressed. 4. The recommended replacement for the ASTM A453 type 660 stainless steel mat not be the best solution and may not have the required corrosion resistance in the long term - it is primarily a stainless for use at high temperature. We are working with Barton to review this material selection.

Task Description: *No details available.*

Recommendations: 1. Where possible all Barton Differential pressure gauges should be isolated immediately. 2. Fastener change out should be completed on all gauges with priority given to hydrocarbon and production critical systems. 3. Long term suitability of ASTM A453 type 660 stainless steel as a substitute for substitute for 17/4PH Stainless Steel to be confirmed.

Contact Details: Talisman HSE&A Department - 01224 352500

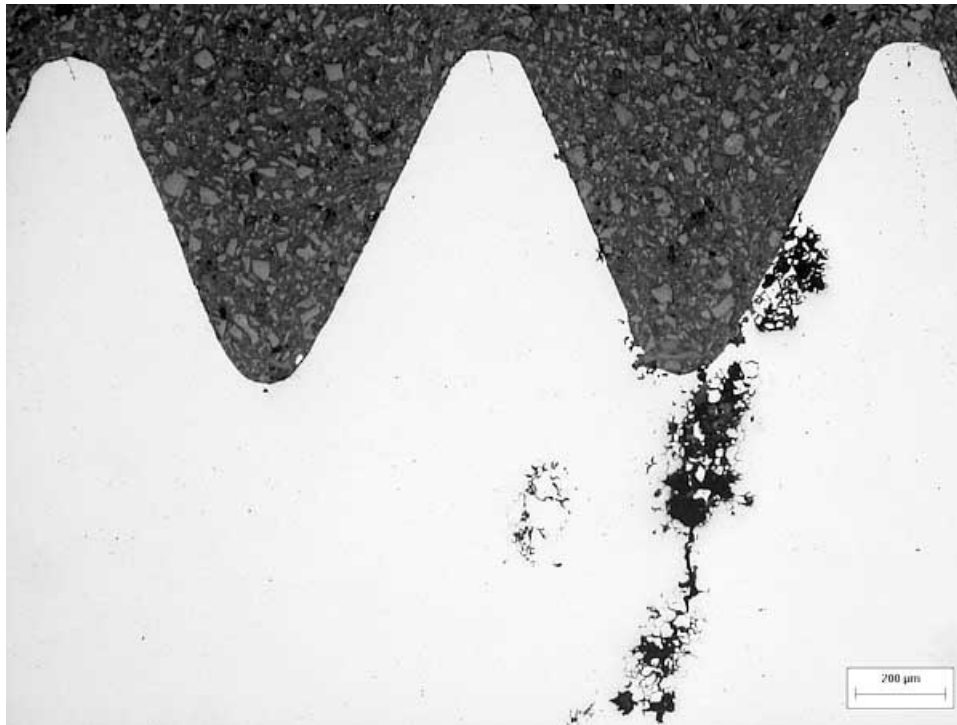
C1 Threads Macro



C2 Head Macro



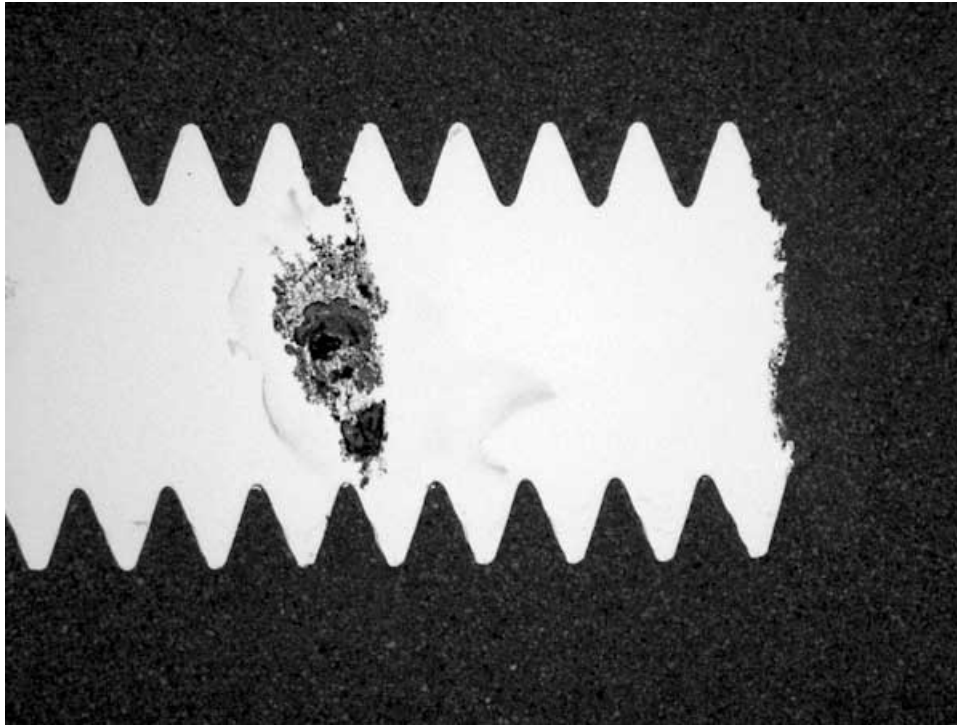
C2 Threads x50



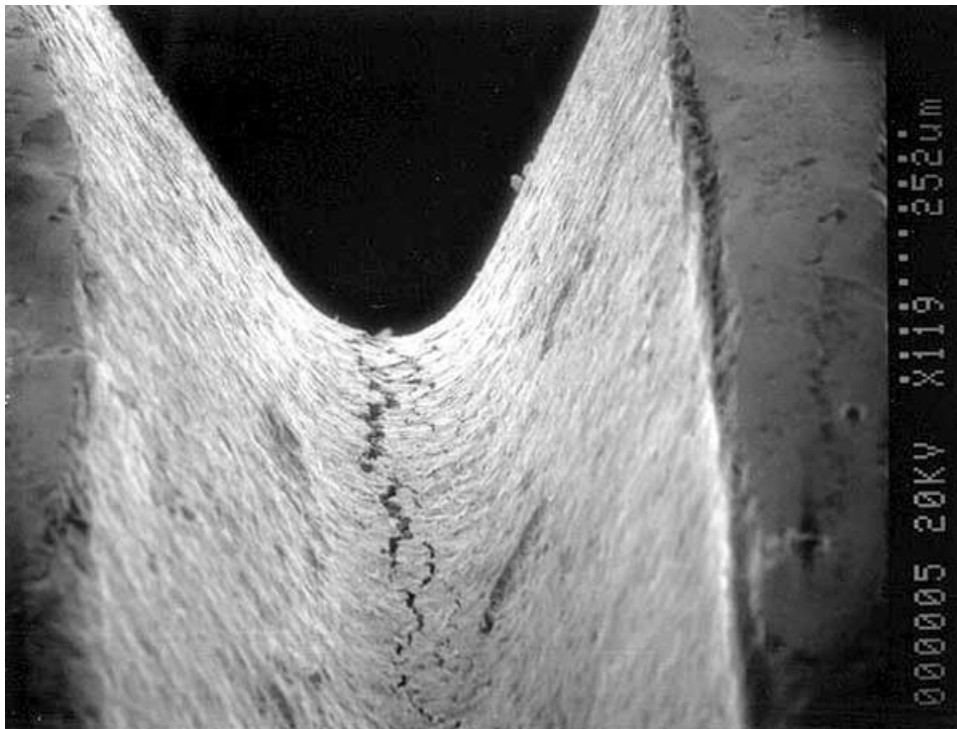
Close Up



F1 Threads Macro



SEM Cracked Thread Root



548: Failure of spline connection on lattice crane boom

Summary: During supply vessels operations, a lattice crane boom descended uncontrollably outboard of the installation footprint, causing damage to a platform walkway and secondary steelwork.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Fixed Installation

Activity Type: Lifting, crane, rigging, deck operations

Description: During supply vessels operations, a lattice crane boom descended uncontrollably outboard of the installation footprint, causing damage to a platform walkway and secondary steelwork. The failure had occurred at the spline connection between the winch drum and winch gearbox. The crane was over 20 years old, although the winch had been refurbished and changed out several times during the life of the crane.

Metallurgical analysis determined that the material had failed as a folding collapse of the splines following wear and was not due to fatigue or cracking.

Further analysis showed that the material properties of the female spline were below specification by approximately 20% and the male spline by 6%. This led to accelerated wear of the female spline.

Specific Equipment: *No details available.*

Lessons Learnt: • The winch design is such that there is no brake

after the spline connection apart from the boom pawl, which would be insufficient to stop an uncontrolled boom descent.

- The preventative inspection regime was inadequate in detecting the wear as it was limited to a visual inspection of the male spline only.
- There are no known standards for determining wear of splines to apply as acceptance criteria.

Task Description: *No details available.*

- Recommendations:
- Ensure current change control procedures are robust and fully implemented.
 - Carry out Failure Mode Effect Analysis (FMEA) study on cranes to ensure that Plant Maintenance Routines (PMRs) are suitable for timely detection of potential failures.
 - Develop a procedure for spline inspection that includes measurable acceptance criteria.
 - Revise PMRs using the change control process.
 - Implement new PMRs.
 - Investigate possible redesign to remove the critical failure modes.

Contact Details: *No details available.*

549: Kenmac Double Block and Bleed Valve Assembly

Summary: The threaded gland nut and valve topworks of an interlocked Kenmac double block and bleed valve assembly became detached from the valve body during a routine opening of the valve.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Fixed Installation

Activity Type: Maintenance

Description: The threaded gland nut and valve topworks of an interlocked Kenmac double block and bleed valve assembly became detached from the valve body during a routine opening of the valve. The two- piece stem had separated and the upper part of the stem had bottomed out and locked against an internal shoulder of the gland nut. Continued opening of the valve unscrewed the gland nut from the valve body.

Specific Equipment: *No details available.*

Lessons Learnt:

- Gland lock nut must be tight.
- Stem travel is only 10mm (7 turns) before the stem tip backseats and stem could separate into two parts.
- Interlocks must be set correctly i.e. key to be withdrawn within 5 turns maximum.
- Operators must limit the number of turns on all Kenmac HPHT double block and bleed assemblies (with or without interlocks) to 5

Task Description: *No details available.*

Recommendations: All existing interlocks on Kenmac valves to be replaced with interlocks designed specifically to limit the number of turns to 5

Contact Details: Darren Cornally at Total E&P UK PLC, tel 01224 7441 or darren.cornally@total.com

550: Crane Hook Injury

Summary:	A seaman on a supply vessel recently sustained a thumb injury whilst reaching for a crane hook during deck cargo operations at an FPSO.
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	Floating production/storage unit
Activity Type:	Lifting, crane, rigging, deck operations
Description:	The vessel had been working deck cargo alongside the installation for a period in excess of five hours and was nearing completion when the Injured Party (IP) came on deck for his watch. After some 30 minutes on deck with approximately two or three lifts left to discharge, the IP reached upwards for the crane hook to capture it and take it to the next lift. At the point when the hook came within reach, the pendant line on the crane 'whipped' and the hook landed over the IP's thumb, bending it backwards. The weather at the time was almost calm, with little or no wind and a very low swell; however, the FPSO was rolling, inducing motion in the crane hook.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	The reason for the pendant line whipping is not known; however, this advice is being issued to remind Masters of the need to be particularly careful when working FPSO's due to their rolling motion and the consequential effect that this has on the crane hook
Task Description:	<i>No details available.</i>

Recommendations: k.Masters of OSV's calling at FPSO's should be aware of the FPSO checklist, Appendix 13, of the UKOOA/COS Guidelines for the Safe Management and Operation of Offshore Support Vessel.

Contact Details: No details available

551: Serious Accident on a Supply Vessel When Venting Bulk Tanks

Summary:	A serious accident occurred on a supply vessel when venting bulk tanks after completion of discharge of cement to an offshore rig.
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	Support vessel eg Supply, Standby
Activity Type:	Lifting, crane, rigging, deck operations
Description:	Having rigged the flexible hose over the ship's side, the Bosun stayed at the ship's side to further adjust the lashing. The hose was weighted at its end by a 17kg shackle to keep the end under the water. The deck manual valve had already been opened (individual not identified) and the Second Officer proceeded to the control station to open the pneumatically controlled valve at the tank to release the pressure from the tanks. The Bosun signalled by hand to the Second Officer that he was not ready. Unfortunately, the Second Officer misinterpreted this and, thinking he was ready, opened the pneumatic tank valve. The instant pressure release through the flexible hose caused it to whiplash violently and its end, with the shackle attached, struck the Bosun on the head. Fortunately, serious injury was avoided as he was wearing a hard hat.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	Pre-job meetings (toolbox talks) are essential and necessary when more than one person is participating in

a task. This is of paramount importance when working under adverse conditions of high noise or limited visibility. Routine tasks should not be considered as safe tasks because of the frequency. There is a need to review JSA's and Risk Assessments for these activities on a regular basis to ensure a heightened awareness of the risks involved.

Task Description: *No details available.*

Recommendations: When elements of any task change, there is a need for a complete review of the JSA or Risk Assessment for that task to ensure that the new elements do not bring additional risk and that all hazards are adequately mitigated. The 'hierarchy of controls' must be applied during the risk assessment of all activities. The major hazards associated with this activity (and event) could have been engineered out.

Contact Details: *No details available.*

552: Backloading of Contaminated Slops to an OSV

Summary:	A dangerous condition arose on an offshore supply vessel when contaminated slops were backloaded from an offshore installation without proper tests being made beforehand.
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	Support vessel eg Supply, Standby
Activity Type:	Sea transport
Description:	The vessel loaded 295 Bbls of oily water slops which contained some Ethylene Glycol from an offshore installation on 19th July. The vessel then proceeded to Aberdeen. The Master requested to discharge the slops and was advised by shore base the slops would not be discharged on this visit as there was more to backload from the rig. A further 53 Bbls was backloaded at the same installation on 23rd July. When preparing to discharge in Aberdeen on 24th July, the LEL levels were found to be unacceptably high (70% on tank cleaners equipment) and the cargo was refused. All precautions were made, i.e. vents closed, no smoking throughout the ship, firefighting gear standing by, etc. The decision was made to proceed into Aberdeen Bay to aerate the cargo by splitting the load into two tanks and diluting the product. When it had been made safe the vessel returned to discharge a total of 796 Bbls.
Specific Equipment:	<i>No details available.</i>

Lessons Learnt: Investigation by the installation stated that the underlying causes of the incident were attributed to inadequacy of sampling techniques and also the failure to wait for the results of the second sample before backloading commenced.

Task Description: *No details available.*

Recommendations: The implementation of UKOOA Good Practice Guidelines for the carriage of oil contaminated cargoes for transportation by offshore supply vessel. Masters are advised to examine the analysis form to ensure that all safety criteria has been met prior to accepting a contaminated cargo.

Contact Details: *No details available.*

553: Fire in Cement Room On Board a Supply Vessel

Summary: A supply vessel suffered a fire in her cement room when fuel oil overflowed from a sounding pipe onto a hot engine exhaust.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Support vessel eg Supply, Standby

Activity Type: Sea transport

Description: A supply vessel was alongside an installation. The engine room was manned by both the Chief Engineer and the 1st Engineer. The crew started the discharge of fuel oil from 5 P and S wing tanks and 6 P and S bottom tanks. The discharge rate was very slow due to high backpressure. The Chief Engineer was monitoring the cargo pump and the pressures when he noticed open flames just inside the cement room. He ran towards the fire and noticed that the flames came from port side outside the watertight door and under the grating at the aft end of the cement room. He immediately alerted the 1st Engineer who came out from the control room. The fuel oil cargo pump was stopped and the bridge was informed that there was a fire in the cement room and to disconnect the fuel oil hose. The Chief Engineer then gave the order to evacuate the engine/cement room. A fire-fighting party entered the cement room and extinguished the fire with portable fire extinguishers and water.

Specific Equipment: *No details available.*

Lessons Learnt: Immediate Cause: 1. The vessel was, at the time of the incident, discharging fuel from four tanks simultaneously, two bottom tanks and two wing tanks with a higher centre of gravity. 2. Caps on sounding pipes for bottom tanks were left open. Due to gravity from the two wing tanks and the slow discharge slowly filling the bottom tanks forcing fuel to trickle out the sounding pipe. (See Illustration) 3. A flange on the exhaust pipe was not properly covered with insulation and was located close to the sounding pipe. Overflowing fuel from the sounding pipe soaked the insulation and ignited on the hot surface of the exhaust pipe/flange. Basic Cause: 1. Personnel onboard allowing discharge from tanks with different centres of gravity. 2. Lack of routine when using the sounding pipe. Cap was not closed after use. 3. The design allowing the exhaust pipe to pass close to and under a sounding pipe

Task Description: *No details available.*

Recommendations: . 1. Loading or discharging from or into tanks of different centres of gravity at the same time should normally not be allowed. If transfer between such tanks is needed, the transfer must be monitored closely and a risk assessment carried out. 2. A risk assessment should be carried out before any cargo operation involving petroleum products. Carrying out a risk assessment is important before any operation, including routine tasks. When carrying out a risk assessment, it is important to be critical when identifying the hazards. Two apparently similar routine operations do not necessarily involve the same hazards. 3. When using and operating manual sounding pipes, it is important to keep the sounding pipe sealed off/closed immediately after use. A procedure for operating manual sounding of bottom tanks will be implemented in the Safety Management System

Contact Details: No contact details available

554: Fire in Cement Room On Board a Supply Vessel

Summary: A supply vessel suffered a fire in her cement room when fuel oil overflowed from a sounding pipe onto a hot engine exhaust.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Support vessel eg Supply, Standby

Activity Type: Sea transport

Description: A supply vessel was alongside an installation. The engine room was manned by both the Chief Engineer and the 1st Engineer. The crew started the discharge of fuel oil from 5 P and S wing tanks and 6 P and S bottom tanks. The discharge rate was very slow due to high backpressure.

The Chief Engineer was monitoring the cargo pump and the pressures when he noticed open flames just inside the cement room. He ran towards the fire and noticed that the flames came from port side outside the watertight door and under the grating at the aft end of the cement room. He immediately alerted the 1st Engineer who came out from the control room. The fuel oil cargo pump was stopped and the bridge was informed that there was a fire in the cement room and to disconnect the fuel oil hose. The Chief Engineer then gave the order to evacuate the engine/cement room.

A fire-fighting party entered the cement room and extinguished the fire with portable fire extinguishers and water.

Specific
Equipment: *No details available.*

Lessons Learnt: Immediate Cause: 1. The vessel was, at the time of the incident, discharging fuel from four tanks simultaneously, two bottom tanks and two wing tanks with a higher centre of gravity. 2. Caps on sounding pipes for bottom tanks were left open. Due to gravity from the two wing tanks and the slow discharge slowly filling the bottom tanks forcing fuel to trickle out the sounding pipe. 3. A flange on the exhaust pipe was not properly covered with insulation and was located close to the sounding pipe. Overflowing fuel from the sounding pipe soaked the insulation and ignited on the hot surface of the exhaust pipe/flange.

Basic Cause: 1. Personnel onboard allowing discharge from tanks with different centres of gravity. 2. Lack of routine when using the sounding pipe. Cap was not closed after use. 3. The design allowing the exhaust pipe to pass close to and under a sounding pipe.

Task Description: *No details available.*

Recommendations: 1. Loading or discharging from or into tanks of different centres of gravity at the same time should normally not be allowed. If transfer between such tanks is needed, the transfer must be monitored closely and a risk assessment carried out. 2. A risk assessment should be carried out before any cargo operation involving petroleum products. Carrying out a risk assessment is important before any operation, including routine tasks. When carrying out a risk assessment, it is important to be critical when identifying the hazards. Two apparently similar routine operations do not necessarily involve the same hazards. 3. When using and operating manual sounding pipes, it is important to keep the sounding pipe sealed off/closed immediately after use. A procedure for operating manual sounding of bottom tanks will be implemented in the safety management system.

Contact Details: *No details available.*

555: TANK ROOF PLATE DISLODGED DURING BACK LOADING

Summary: Whilst carrying out back loading of several Nitrogen tanks to a supply vessel, a 1.5 m x 2.4 m roof plate became dislodged from the top of one of the tanks already on the vessel. The dislodgement occurred when a subsequent tank was lowered to the boat striking it. On examination, it was found that the stainless steel bolts that secure the roof plates had sheared, allowing the plate to be dislodged.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Support vessel eg Supply, Standby

Activity Type: *Any Activity Type

Description: Whilst carrying out back loading of several Nitrogen tanks to a supply vessel, a 1.5 m x 2.4 m roof plate became dislodged from the top of one of the tanks already on the vessel. The dislodgement occurred when a subsequent tank was lowered to the boat striking it. On examination, it was found that the stainless steel bolts that secure the roof plates had sheared, allowing the plate to be dislodged.

Specific Equipment: *No details available.*

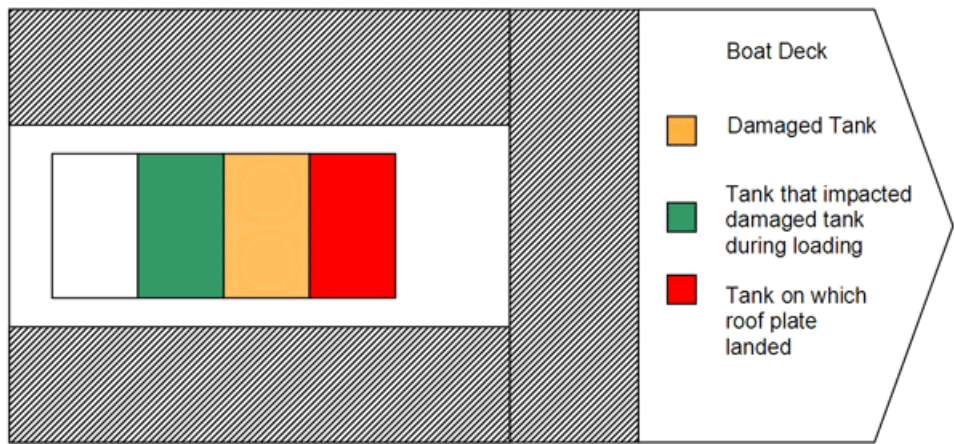
Lessons Learnt: *No details available.*

Task Description: *No details available.*

Recommendations: Nitrogen tanks should be inspected for damage caused by similar circumstances.

Contact Details: Sue Hynd - HSEQ Co-ordinator - UK Well Services -
01224 401424

Boat Deck Layout



556: Petrofac - East Crane Incident – Kittiwake

Summary:	On the 2nd November 2004 while off-loading a supply vessel, a near miss incident occurred with the East Crane on the Kittiwake Platform. A container was being hoisted from a supply vessel and when the boom was manoeuvred to bring the load inboard, the load descended by approximately 3m and it was noted that the hoist rope had come off the winch drum.
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	Fixed Installation
Activity Type:	Lifting, crane, rigging, deck operations
Description:	Upon investigation it was discovered that during preceding crane operations when the boom was at a low level, the loss of tension in the rope and the boom movement allowed the rope to slide across the standard fitted boom savers. The rope had dropped over the right hand edge of the midway boom saver causing the rope to snag and in turn causing miss spooling of the winch drum. At the point when the boom was raised the rope became free from snagging where the loss of tension allowed the build up of wraps on the right hand side of the winch drum to fall off causing a sudden jump in the rope and the load to descend. The types of cranes installed on the Kittiwake are OS150 Stothert & Pitt and are widely used across other North Sea installations. The types of boom savers fitted to these cranes are the standard design but there is nothing to prevent the winch rope from sliding off the edge as occurred during the operations prior to this incident.

Specific Equipment: *No details available.*

Lessons Learnt: *No details available.*

Task Description: *No details available.*

Recommendations: In order to prevent such a re-occurrence we have fitted to our cranes a redesigned boom saver arrangement to retain the rope within the top section of the boom so that if during normal operations the rope slackens off and slides across the boom, it will not fall over the edge and snag

Contact Details: crobertson@vpc.co.uk





557: Lifting sling on CCU

Summary:	A non standard sling fitted to a 50' basket had not been identified as such and replaced prior to a lift being attempted. The non standard sling had been fitted for a specific lift on an previous job.
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	Any Location Type
Activity Type:	Lifting, crane, rigging, deck operations
Description:	An attempted lifting operation on Friday 28th January identified that a non standard sling had been fitted to Swire unit 3013, a 50' basket. The basket is operated in accordance with BS7072 with a gross weight rating of 20300kg. It was originally supplied with a 27.6 tonne rated sling with all 4 legs being of equal length. The non standard sling had a rating of 18.2 tonnes and had 2 "short" legs. Investigation has confirmed that the original sling had been removed and the replacement sling fitted for a specific previous lift by a user of the basket to compensate for the uneven weight distribution of the load.
Specific Equipment:	Lifting equipment
Lessons Learnt:	This incident reinforces the need for the owner of equipment (in this case Swire Oilfield Services Ltd) to be notified and provided certification whenever a sling is changed on one of its units. Swire have also implemented additional checks at the routine trip inspection to positively confirm the sling specification and certification

details.

Task Description: *No details available.*

Recommendations: Do not remove lifting equipment from half heights, containers etc. These are matched sets and are certificated as such.

Contact Details: Roy Burrell, 01224 872707

558: Hand Injury

Summary: Whilst carrying out routine erection operations an individual suffered a blow to his left thumb as he applied the final tightening motion to the fitting

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Any Location Type

Activity Type: Any Activity Type

Description: Whilst carrying out routine erection operations an individual suffered a blow to his left thumb as he applied the final tightening motion to the fitting

Specific Equipment: *No details available.*

Lessons Learnt: Personal Risk Assessment must include a high degree of attention to the positioning of ones' hands to prevent suffering an impact hazard.

Task Description: *No details available.*

Recommendations: All tasks, no matter how small, must be fully Risk Assessed.

Contact Details: John Boyce&

559: Cut Scaffold Board

Summary: During the dismantle of a scaffold, a board was found with a fine cut. Fortunately the board had not failed whilst the scaffold was in use, the outcome could have been more serious.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Fixed Installation

Activity Type: Any Activity Type

Description: During the dismantle of a scaffold, a board was found with a fine cut. Fortunately the board had not failed whilst the scaffold was in use, the outcome could have been more serious.

Specific Equipment: Scaffold board

Lessons Learnt: The inspection process of checking all scaffold boards, tubes, clips and all other fittings was found to be effective in this case. Highlight to all that boards, tubes, clips and all other scaffold components should only be altered by qualified scaffolders. Under no circumstances should any person, interfere with the integrity of a scaffold structure.

Task Description: *No details available.*

Recommendations: Under no circumstances should any person, interfere with the integrity of a scaffold structure.

Contact Details: John Boyce&

560: Improper Covering of Deck Opening

Summary:	To cover an opening in the deck, short scaffold boards were laced together by 2No 4"x2"x23.5" timbers nailed to the underside at either end with 4" nails. This method was chosen to provide a flush surface with the deck and not to create a trip hazard.
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	Any Location Type
Activity Type:	Any Activity Type
Description:	To cover an opening in the deck, short scaffold boards were laced together by 2No 4"x2"x23.5" timbers nailed to the underside at either end with 4" nails. This method was chosen to provide a flush surface with the deck and not to create a trip hazard. It is believed that the construction was "solid" at the time of completion, however the period of time from Friday to Monday saw a high level of traffic through the area and the boards became loose. A scaffolder carrying boards over the covering dislodged a board and his right leg began going through the opening. As he continued falling the two remaining boards moved to the left side opening the gap and resulted in his body continuing to fall. His fall was halted by his leg hitting a steel beam 3ft below the grating and his right hand being trapped between his body and the deck edge steelwork.
Specific Equipment:	Scaffold boards
Lessons Learnt:	All boards must be secured with lashings and tubes. All temporary fixes must be fully risk assessed. Joinery work

should not be undertaken by scaffolders.

Task Description: *No details available.*

Recommendations: Ensure temporary deck openings are adequately secured and guarded.

Contact Details: None available

561: High Pressure Injection Injury

Summary: Hydraulic engineer suffered high pressure injection injury to hand

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Drilling unit

Activity Type: Maintenance

Description: An experienced Hydraulic Engineer suffered a high pressure injection injury to his hand when working with a bolt tensioner jack operating at 2265 Bar. A leak developed between the cross over fitting and hose fitting, as the hydraulic engineer moved his hands close to the area of the leak his hand came in contact with a jet of hydraulic fluid. The jet of fluid penetrated the glove being worn at the time and punctured the skin of the right index finger. At the time of the injury no significant injury was noted and the man continued to work and completed his normal shift. The following morning noticeable changes to the wound site were evident and the injury was reported to the medic. The Hydraulic Engineer was medivaced from the rig and underwent surgery the same day. The finger was opened and the wound left exposed (for 7 days) to ensure all contamination was removed prior to closing the wound.

Specific Equipment: *No details available.*

Lessons Learnt: A failure to appreciate the consequences of a high pressure injection injury led to a delay in treatment which could have had a significant effect on the outcome.

Personnel must be aware of the requirement to report all injuries to the medic to ensure prompt treatment and maintain optimum prognosis.

Task Description: *No details available.*

Recommendations: Ensure personnel are aware of the potential consequences of injection injuries. Absolute requirement for adequate risk assessment when working on high pressure equipment

Contact Details: Dave Thomson H.S.& E. Co-ordinator
davek.thomson@stena.com

562: UNSECURED DOORS DANGER

Summary:	The task was to adjust the pressure settings on a HP jetting unit.
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	*Any Location Type
Activity Type:	*Any Activity Type
Description:	Whilst commencing the process known as a `Build Change` on a HP jetting unit a gust of wind blew the right hand door of the unit closed. The IP had his back to the door with his right leg raised inside the unit. The door struck the IP`s left leg between the knee and the ankle, the IP sustained severe bruising to his leg. A decision was made to medivac IP to shore as a precautionary measure. Weather at the time of the incident was said to be calm, with a gust of wind unexpectedly blowing the door shut.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	Environmental conditions at the workface, such as the wind, can have an direct impact on the task being undertaken. Consider the effects that the weather may have on the task when you are conducting the task risk assessment
Task Description:	<i>No details available.</i>
Recommendations:	.Unit doors to be signed "Secure Doors before commencing work on this machine" A system for locking

doors while in open position to be explored

Contact Details: Donald Garden at RBGLtd. donald.garden@rbgltd.com
01224 722888

563: Willans T25 Harness - Manufacturing Fault

Summary: A new willans harness T25 (CE 0120) serial number 14045 manufactured in 2001 was just placed into service. As a result of a visual inspection of the buckle, it was noticed that there was a manufacturing fault.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Drilling unit

Activity Type: Drilling, workover

Description: A new willans harness T25 (CE 0120) serial number 14045 manufactured in 2001 was just placed into service. As a result of a visual inspection of the buckle, it was noticed that there was a manufacturing fault. The Harness was immediately removed from service.

Specific Equipment: *No details available.*

Lessons Learnt: New equipment purchased might not necessarily be fit for purpose

Task Description: *No details available.*

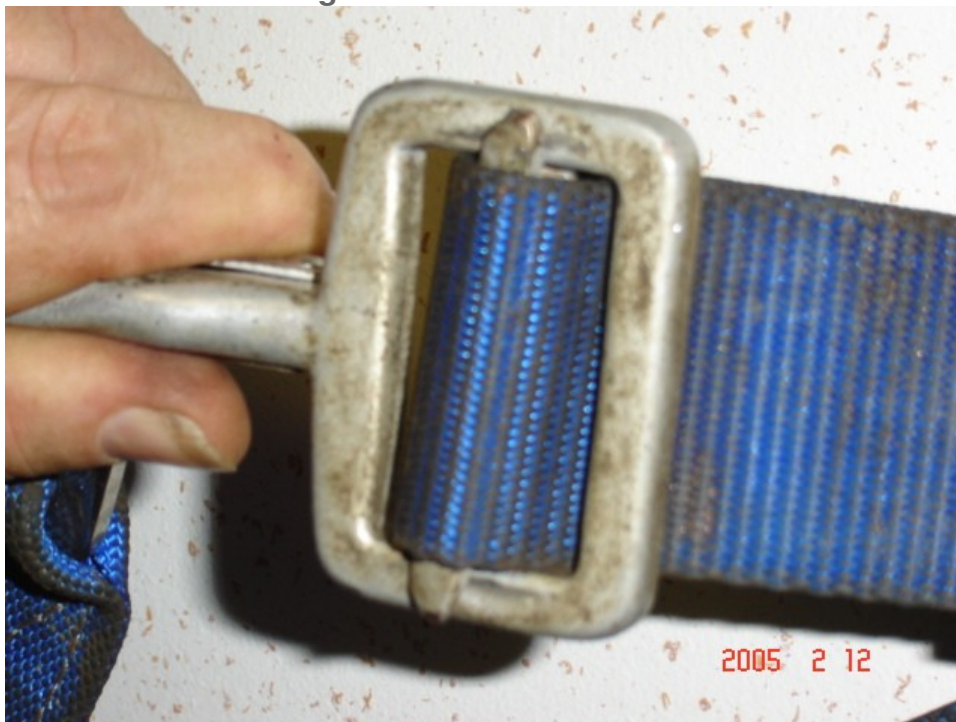
Recommendations: 1) Visually inspect all harnesses prior to use, including new harnesses. 2) Specifically check the Willans T25 Harnesses on your installation, focusing in on the buckle arrangement.

Contact Details: richard.mearns@gsfdrill.com

Incorrect buckle arrangement



Correct buckle arrangement



564: Burnt Out Ex e Flourescent Luminaire

Summary: In 2004 a severely damaged light fitting was reported. On investigation, the light fitting was found to have suffered from excessive heat degradation.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Fixed Installation

Activity Type: *Any Activity Type

Description: In 2004 a severely damaged light fitting was reported. On investigation, the light fitting was found to have suffered from excessive heat degradation (as shown below).

The circuit was immediately isolated and removed from service and a new fitting was installed as a replacement.

The circuit protection device was tested for correct functionality. A visual and thermal survey was then carried out on similar equipment throughout the platform.

The failure was analysed by the manufacturer and by the operator.

Specific Equipment: *No details available.*

Lessons Learnt:

1. After exhaustive investigation it is now clear that Flourescent Lamps will undergo various stages of End-Of-Life (EOL) before they start flickering and eventually deactivate and fail to strike. This affects all makes of luminaire.
2. Such stages will result in overheating and exhibit visual symptoms of discoloration signifying loss of

emitter material and Mercury.

3. The luminaires in hazardous areas are certified to Ex e. However, some have old copper-iron ballasts which will not prevent EOL overheating problems. The rest have electronic ballasts which may prevent some late EOL effects e.g. deactivated lamps, but may not prevent early EOL effects.

Task Description: *No details available.*

- Recommendations:
1. The International Standard needs to be revised to incorporate suitable type testing
 2. Testing to proceed with BASEEFA and PTB to confirm new test procedures and suitability of luminaires on the market.
 3. For existing installations, all luminaires to be bulk-relamped before estimated End-Of-Life.
 4. Further visual checks to identify **discolouration** (this will be primarily a blue, red or yellow glow at lamp end, or blackening), **flickering** and finally **deactivation**.

Contact Details: *No details available.*

Heat Degraded Luminaire



565: Pipe Rack System (PRS 3i) Wire rope failure

Summary:	Whilst making up bottom hole assembly, a stand of 9 1/2" collars was being lifted by the pipe racking system (PRS 3i) from the set back area to the rotary table. The collars were 3" above deck when the collars suddenly dropped back onto the set back area. The top arm of the PRS slid down the collars 60 ft and collided with the bottom arm 10 ft off the deck. Note: there was no potential for injury.
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	Drilling unit
Activity Type:	Drilling, workover
Description:	Whilst making up bottom hole assembly, a stand of 9 1/2" collars was being lifted by the pipe racking system (PRS 3i) from the set back area to the rotary table. The collars were 3" above deck when the collars suddenly dropped back onto the set back area. The top racking arm of the PRS slid down the collars 60 ft and collided with the bottom racking arm 10 ft off the deck. Note: there was no potential for injury.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	The specification of the in-service wire rope met manufacturer's recommendations. The wire rope inspection regime set up by the manufacturer consisted of visual inspections with replacement "as required". A maintenance regime was in place as per manufacturer's recommendations. Immediate cause of the incident was - failure of the upper arm hoist wires, due to wire rope

fatigue failure.

Task Description: *No details available.*

Recommendations: 1) An initial annual change out of wire rope in the hoisting system for the PRS 3i to determine the degradation of wire rope over an annual basis. Subsequent replacement cycle for wire rope to be determined based on external analysis. 2) Periodic 6-monthly inspection of wire rope to be completed by an independent competent party. 3) Consider how the learnings from this incident could apply to your installation, particularly with respect to equipment maintenance cycles covering wire rope.

Contact Details: richard.mearns@gsfdrill.com

566: Gas meter performance when used in close proximity to radios/walkie-talkies

Summary: An issue was raised concerning the effect of radios/walkie-talkies on certain types of gas meters.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: *Any Location Type

Activity Type: *Any Activity Type

Description: An issue was raised concerning the effect of radios/walkie-talkies on certain types of gas meters. When placed in close proximity to a gas meter, the gas meter alarm may be triggered due to the radio field strength. The likelihood of this increases exponentially the closer the radio gets to the gas meter, with the field strength increasing dramatically when the antenna is within 10cms of the gas meter.

Specific Equipment: *No details available.*

Lessons Learnt:

- If hand held radio/walkie-talkies are worn or carried too close to a gas meter, it may cause the gas meter to function incorrectly.
- If the work location is within a shielded area, the effect of the radio/walkie-talkie on any gas meters will be multiplied, as any radio signals will be reflected of the internal walls.

Task Description: *No details available.*

Recommendations: >

- To prevent any interference, radios/walkie-talkies should be worn on the opposite side of the body to any gas meters being carried.
- Leg sentries should be instructed to verbally communicate the above information to all work parties that are allowed access into any areas where a gas meter may be required.

Contact Details: *No details available.*

567: 4.16kv vacuum contactor failed to open

Summary: During an emergency shut down a hazardous area extract fan failed to trip

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Fixed Installation

Activity Type: Production operations

Description: The 4.16kV switchboard had to be isolated to stop the fan and allow the GEC HMC 1072 contactor to be racked out and removed from the cubicle. On investigation it was discovered that the stop pad had broken into two pieces and one of the pieces had become wedged in the operating mechanism, this prevented the contactor from opening. The stop pad is a tapered plastic disc approximately 39mm in diameter which acts as the end stop for movement of the armature plate. A survey of 32 HMC 1072 contactors on the same platform revealed 21 stop pads which were either cracked or broken and a further 4 which were missing. The contactors had been in service for approximately 22 years.

Specific Equipment: *No details available.*

Lessons Learnt: *No details available.*

Task Description: *No details available.*

Recommendations: Consider checking condition of HMC 1072 stop pads.

Contact Details: John Mackay; e-mail jmackay@marathonoil.com; Tel:

01224 803916

Broken Stop Pad



Damaged Insulator



Good Insulator



568: Dangerous freestanding heaters

Summary:	Freestanding heaters in the main switchroom were glowing and starting to give off smoke.
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	Fixed Installation
Activity Type:	Maintenance
Description:	REP noticed that the elements on one of the 2 freestanding heaters in the Switchroom was glowing and starting to give off smoke. He switched the heater off at the isolator. Smoke indication was detected at 08.36 in the CCR. The heater was removed from the location to a safe area. Indication cleared and no executive actions were initiated.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	These heaters were not formally maintained, however the equipment was due to be added to a the maintenance schedule but never happened due to recent personnel changes.
Task Description:	<i>No details available.</i>
Recommendations:	(1)The Switchroom is a control / work station for the Solar Turbines and the Power Management system. The Electrical Switchroom heating has been reviewed with a view to installing a dedicated heating system. No action has resulted from this review. Engineering query to be raised to allow a formal review. (2)All protection systems supplying heaters to be tested and visual inspections on

remaining heaters to be completed. (3) Ensure temporary heaters used onboard at the moment are added to a maintenance schedule.

Contact Details: Offshore SEQA Advisor&

569: Dropped scaffold tube

Summary:	Scaffold tube fell to deck from approx 4-5 metres
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	Fixed Installation
Activity Type:	Construction, hook-up, commissioning
Description:	Two men where removing a 13' ledger scaffold tube from the outside of the scaffold in preparation for installing a longer tube, Both clips had been released and opened, one team member slid the tube along one of the clips in preparation for lowering it to the deck when it jammed or jumped out of the clip causing it to overbalance, The team member was unable to hold onto the tube as it was damp or greasy. The tube dropped approx 4 mtrs and fell across the wellbay trolley below.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	(1)The importance of obeying safety signs and barriers (2)Use of appropriate gloves for the task must be considered prior to work commencing , conditions were wet . Gloves being worn did not offer any grip (3)The following important safeguards were followed; cold work permit 19033, task specific manual handling assessment, Task risk assessment, Toolbox talk risk identification card (TRIC) (4)A formal toolbox talk had taken place before commencing work but the team failed to consider the weather & wet working conditions.
Task Description:	<i>No details available.</i>

Recommendations: (1) Review gloves being used and conduct a trial using a different type of glove, (ARCO number 14G2709 Showa 541 Dyneema Plus PU gloves) This trial shall last for a period of 2 months. If successful these gloves will be standard issue for scaffolders. (2) Closer inspection of scaffolding materials prior to use (TRA updated to reflect this action) (3) Improve dry storage of Scaffold materials

Contact Details: SEQA Advisor - 01224 327122



570; Use of Netting as Extensions to Vertical Back-Scratcher Ladders

Summary: An issue has been raised regarding the use of netting as an extension to the back-scratcher on vertical ladders. On a number of locations, nets were installed as extensions where the back-scratcher did not reach the level of the handrail.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: *Any Location Type

Activity Type: Lifting, crane, rigging, deck operations

Description: An issue has been raised regarding the use of netting as an extension to the back-scratcher on vertical ladders. On a number of locations, nets were installed as extensions where the back-scratcher did not reach the level of the handrail.

Following a recent inspection at one of the locations, it was found a number of these nets had worn through after only a relatively short period of service (circa 2 years). It is not known whether this deterioration had occurred gradually since the nets were installed, or whether it was due to a period of sustained bad weather.

Specific Equipment: *No details available.*

Lessons Learnt:

- This type of netting is NOT 'fit-and-forget'. They do require ongoing maintenance and inspection.
- Any guidance or procedures regarding the ongoing maintenance and inspection do not appear to be well

known or understood.

Task Description: *No details available.*

- Recommendations:
- All locations using netting as an extension to the back-scratcher should check to ensure they are correctly fitted.
 - A procedure for inspection and maintenance of the netting to be implemented, which should include:

A monthly visual check of all netting by installation personnel.

A 6-monthly mandatory inspection.

A 12-monthly inspection, to include a test piece being cut-off and sent for analysis (NOTE: A test piece for this purpose is attached to all these types of netting).

Contact Details: *No details available.*

Tear in Netting - Example 1



Tear in Netting - Example 2



571: Dropped Mousehole

Summary:	Mousehole dropped from rig floor into the sea while running a completion string.
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	Drilling unit
Activity Type:	Drilling, workover
Description:	An incident has recently occurred where a rig lost its mouse-hole. The operation was running lower completion and the 40' mouse-hole had been changed out for the 30' one to accommodate running wash pipe. The drill crew installed a 4' spacer into the mouse hole which proved to be too short. This was removed and a 5' spacer installed and the cover replaced. As the next joint of wash pipe was brought across the floor, the mouse-hole cover was removed. It was at this point, that the absence of the mouse hole was noted. The supporting collar remained in place. The weld holding the collar to the body of the moushole had failed.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	Planned inspections of the mouse hole had not been included in the planned maintenance systems.
Task Description:	<i>No details available.</i>
Recommendations:	1. Mouse-holes will be included as an annual PM task to MPI all welds within the 3rd Party inspection system. 2. Issue lateral learning report to all rigs accordingly with lessons learnt. 3. Review requirement for engineering

standard and inspection standard. 4. Issue an Alert to the wider Industry.

Contact Details: balexander@aberdeen.deepwater.com

572: Cabin Bunk Ladders

Summary: A roustabout in a cabin in the accomodation stepped down onto a chair and twisted his knee.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Drilling unit

Activity Type: Off-duty / recreation activities

Description: A roustabout in a cabin in the accomodation stepped down onto a chair and twisted his knee.

Specific Equipment: *No details available.*

Lessons Learnt: The bunk ladder in place was not used. After a review of the incident it was determined that bunk ladders could be better designed.

Task Description: *No details available.*

Recommendations: Consider having bunk ladders where the top step is large enough to get onto and off while sitting in the bunk and allows for turning around from forward facing and backward facing as required for getting into and out of the bunk. (See diagram 2 - modified bunk ladder)

Contact Details: richard.mearns@gsfdrill.com

573: Removal Of Vessel Manway Door

Summary: An Issue has arisen during the removal of a man-way door from a vessel. The connection between the man-way door and the swinging arm failed causing the door to fall.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Fixed Installation

Activity Type: Maintenance

Description: During the removal of a man-way door from a vessel, the connection between the man-way door and the swinging davit arm (threaded bar/bolt) failed, resulting in the door falling approximately 10 inches onto the landing below.

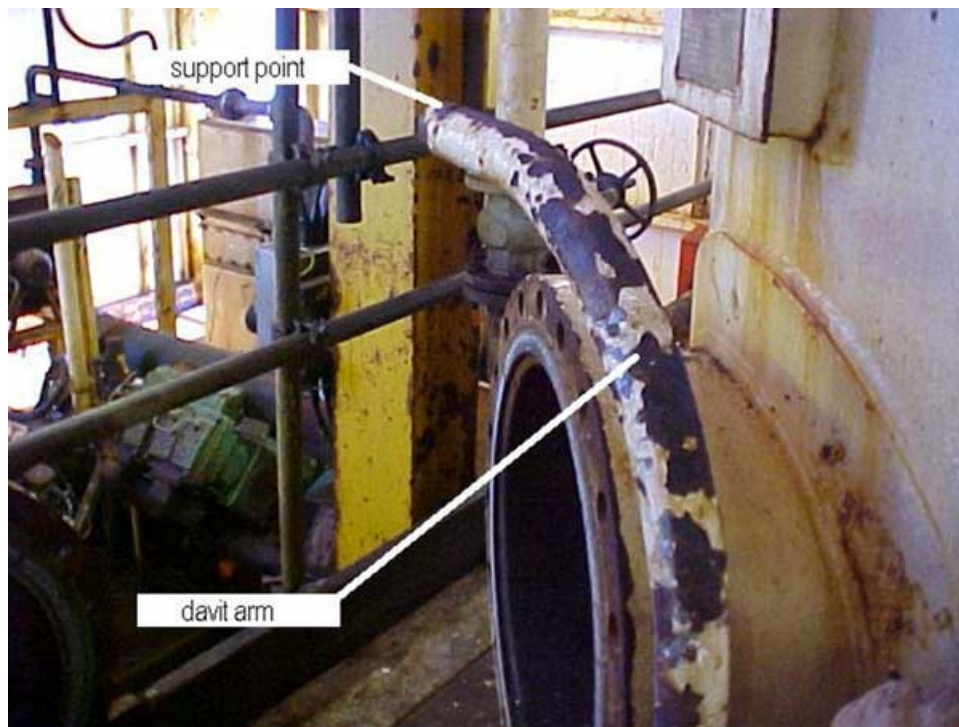
Specific Equipment: *No details available.*

Lessons Learnt: Condition of supporting arrangements must be risk assessed and the hazard realised.

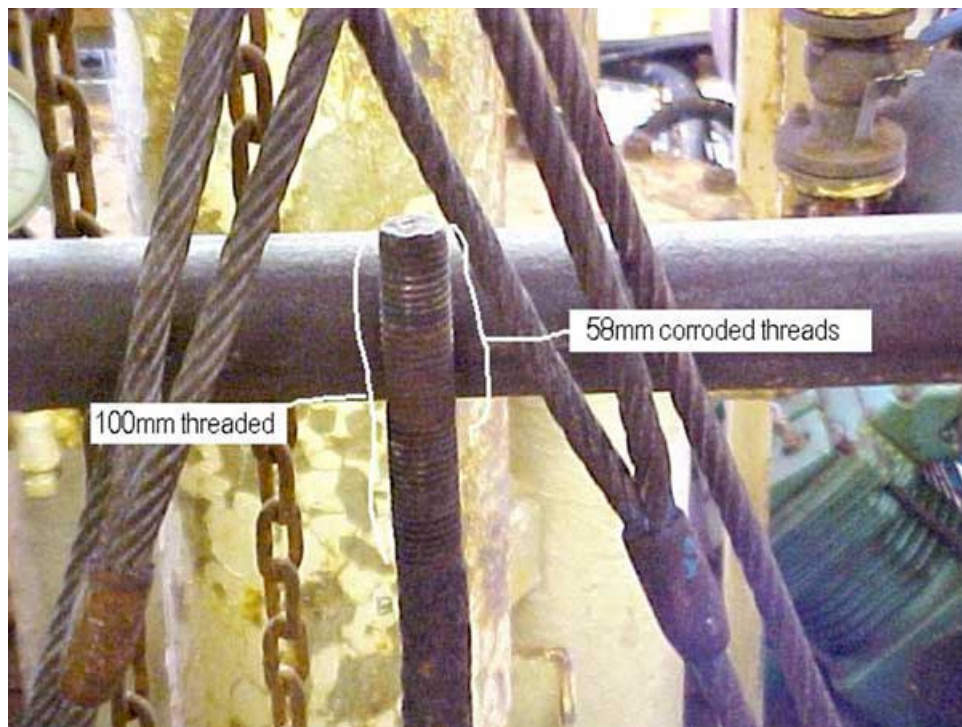
Task Description: *No details available.*

Recommendations: Prior to opening vessels, pay close attention to the condition of the davit support arrangements during man-way removal activities. Secondary rigging arrangements should be installed where there is any doubt on the davit integrity.

Contact Details: Talisman HSE&A Department.







574: Production Flowline 'VITAS' Non Return Valve Failure.

Summary:	Following strip down and inspection, the Production flowline (VITAS) NRV's were found to have failed.
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	Fixed Installation
Activity Type:	Production operations
Description:	A pinhole leak was noted immediately downstream of a Non Return Valve (NRV) on an oil production flowline, and further investigation revealed that there was a highly localised area of erosion on the outlet of the valve. The root cause of this was pinpointed to the NRV and following strip down and inspection of the Non Return Valve (VITAS) it was evident that the sealing disc had detached from the hinge. It is concluded that this is due to the failure of the spot weld between the nut and cotter pin which allowed the nut to back off and ultimately fall off. The sealing disc is a loose fit in the hinge assembly to allow some play to ensure an effective seal in the body seat ring in a reverse flow situation. This loose fit along with the considerable mass of the sealing disc puts significant stress on the spot welds, which are not considered to be robust enough for the service they see. Figure 1 shows the valve internals and figure 2 shows the spot welding on a new NRV. Figure 3 indicates a representative sketch from a radiograph of an in-service NRV and shows that the detached sealing disc obstructs approximately 80% of the valve outlet inner diameter. This severe restriction explains the source of the local high fluid velocities which erode the outlet piping.

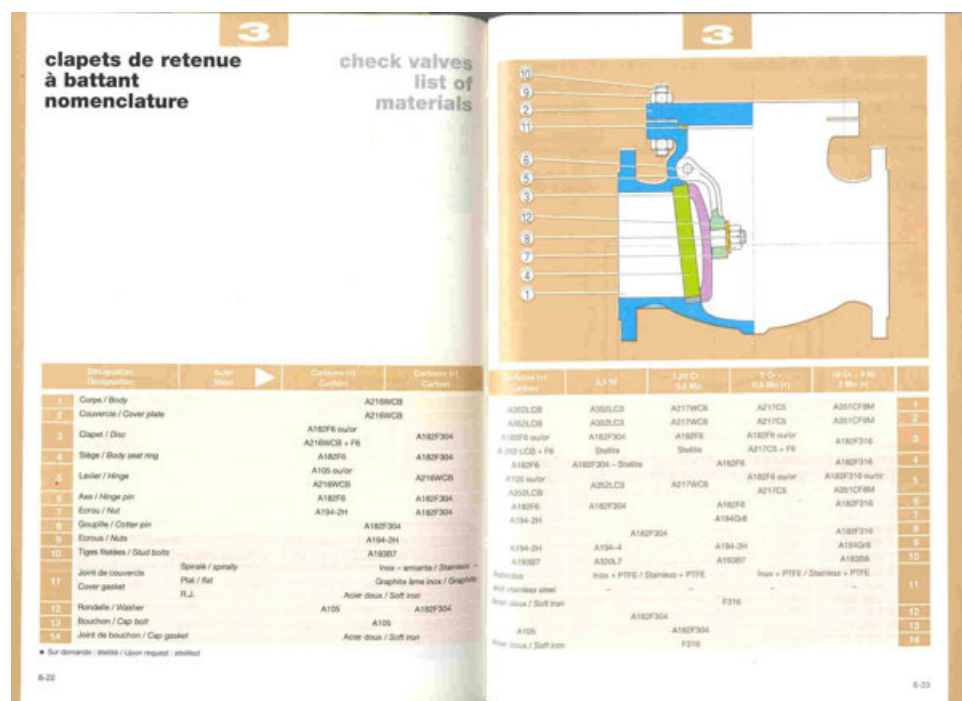
Specific Equipment: *No details available.*

Lessons Learnt: A site survey was completed on all production flowline NRV's and the results show widespread valve failures. From the radiographs it is clear the failure mechanism is the same in all cases with nut failure and little damage to the sealing disc or hinge. In all cases the sealing disc is retained in the valve body with its position causing varying degrees of blockage to valve outlet.

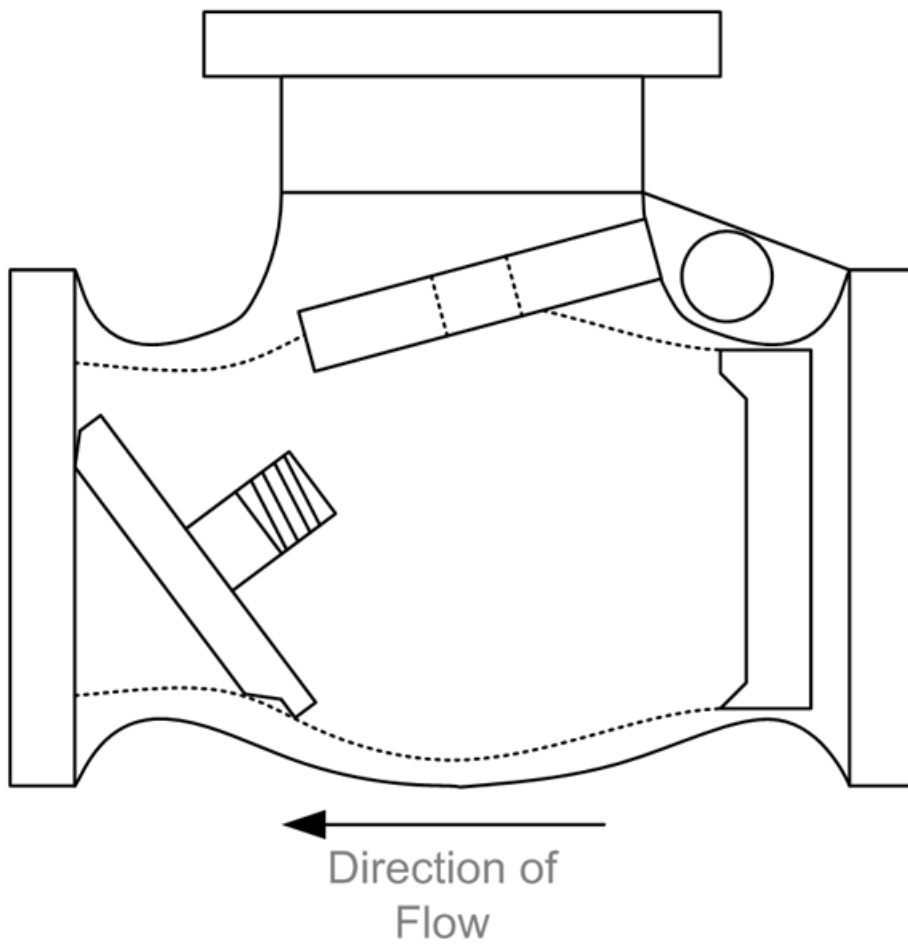
Task Description: *No details available.*

Recommendations: Regular maintenance should be carried out on all NRV's to verify integrity of internals. Radiography can be used to assist with this. Integrity of downstream piping should be also monitored to verify integrity

Contact Details: Talisman HSE&A Department







575: Victaulic clamp removal injury

Summary:	The injured party was removing a 6 inch victaulic clamp when it sprung open and struck him under the brim of his safety helmet.
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	Drilling unit
Activity Type:	Maintenance
Description:	The injured party, a trainee, was removing a 6 inch victaulic clamp (style 78 snap joint) from a section of pipe to check for blockages. After several demonstrations of the process he proceeded to remove a clamp using an adjustable wrench to release the stiff clamp lever. The lever was partially opened when the wrench came up against an obstruction, a skid beam. He removed the wrench and repositioned his body closer to the clamp to engage the wrench from a different angle to enable him to pull it towards himself. As he removed the wrench the clamp suddenly sprung open and struck him below his safety helmet and on his safety glasses. The lever glanced off his safety glasses and struck upwards onto his forehead. He sustained a laceration to his forehead which required four sutures.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	1. The orientation of the clamp on the pipe meant the lever was pointing downwards and had to be pulled up and towards the IP's body to open the clamp. 2. The IP had placed his head in 'line of fire' of the

clamp lever. The IP although familiar with victaulic clamps, did not expect the lever to spring open with the force that it did.

3. Using an adjustable wrench to grip the tip of the clamp lever was not the safest method of release as the wrench could have easily slipped. The manufacturer has recommended that the correct method of releasing the locking handle on the clamp, if not possible by hand alone, is to slide a tool, such as a pry bar, beneath the handle to gain leverage.

Task Description: *No details available.*

- Recommendations:
1. Ensure communication of the correct release method for releasing snap joint victaulic clamps. A purpose built tool has been developed in-house and is currently being trialed.
 2. Confirm clamp orientation that requires the clamp lever to be pushed away from the body position. Communicate this requirement to manufacturing and maintenance.
 3. Incorporate practical instruction to cover the safe use of victaulic clamps which includes the need for safe body position into trainee induction programme.
 4. Awareness campaign of the dangers of placing the body in 'line of fire' of tools and equipment.

Contact Details: Jason Harrower HSE Cementing 01224 795904

Injured party position re-enactment



576: Container Door Fell Off

Summary: On opening container doors, the right hand door fell to the ground narrowly missing the operative.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Supply base, warehouse, workshop, dock

Activity Type: Maintenance

Description: A 10' x 8' container was returned from Offshore. On opening the container doors, the right hand door fell to the ground narrowly missing the operative. The initial cause of the failure was identified as fatigue and fracture of the door hinges (3) on the right hand side of the right hand door. Further inspection of the container revealed a severe indentation on the left hand under structure framing consistent with a collision during transit. The internal contents of the container, mainly chickens were scattered across the floor of the container. These had been secured in a racking system and "locked" into position by means of a securing bar and drop nose toggles. The force of the impact significantly damaged internal welded arms and resulted in the chickens breaking away from their securing.

Specific Equipment: *No details available.*

Lessons Learnt: 1. No evidence could be found that any of the hinges / welds had undergone maintenance / inspection throughout the life of the container. 2. The offshore working environment for containers is very aggressive and all containers should expect an element of rough

handling. Their design and subsequent inspection should be such to ensure they should be able to withstand such treatment.

Task Description: *No details available.*

Recommendations: The welds on the door hinges of all similar design Containers should be inspected for cracking

Contact Details: Contact Bob Thompson, DSG HES Advisor,
ChevronTexaco on 01224-334000 or
bob.thompson@chevrontexaco.com

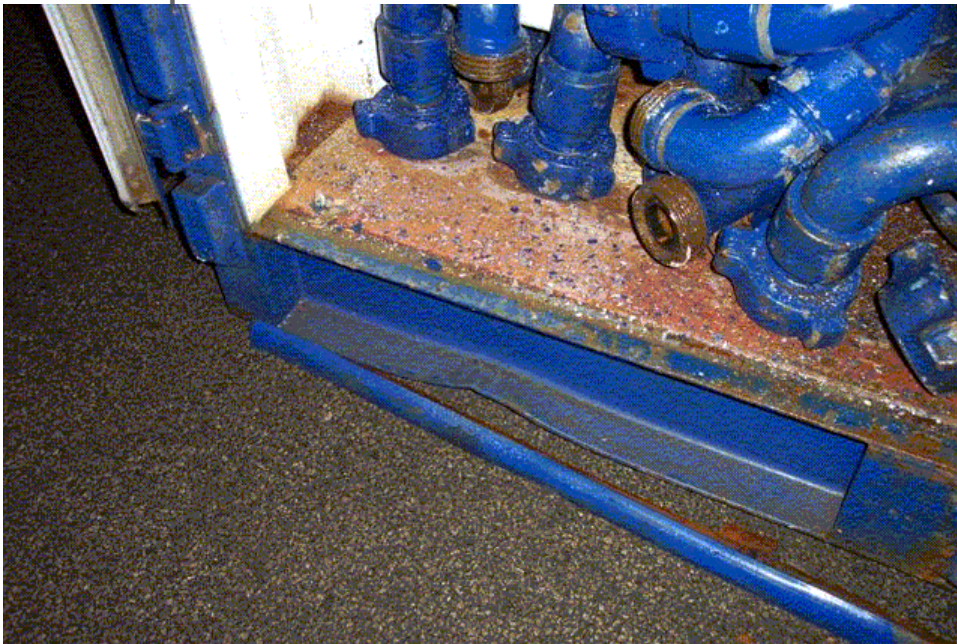
Container Door



Site of one of the Failed Welds



Point of Impact



577: Dropped Object - Retaining Ring

Summary: Dropped Object - Retaining Ring

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Fixed Installation

Activity Type: Lifting, crane, rigging, deck operations

Description: Whilst the HP riser was being pulled, the Assistant Rig Manager noticed that a 6.5 ton shackle did not have a retaining ring attached. As he was removing the shackle the floorman appeared on the drill floor with the missing retaining ring stating that it had fallen and struck his left shoulder (Fig.1). No injury was sustained. The weight of the retaining ring was checked and found to be 122 grams (1.25 Lbs). Height of the fall was 16 metres (50 Ft). The lifting arrangement for the HP riser formed part of the newly certified lifting equipment. The lifting equipment had been examined and accepted 4 weeks previously. Corrosion of the break indicated that the ring had been broken for some time before this incident.

Specific Equipment: *No details available.*

Lessons Learnt: *Investigation* As a consequence of this incident the containers in the yard were inspected for similar issues. Only 30% of those inspected had retaining rings fitted. Four were found to be broken (Fig. 2) and a number of others were deformed. Two of these containers had recently been inspected and certified.

Conclusion This incident has identified a shortcoming in

standards regarding the testing and safe use of lifting equipment. The lifting bridles had recently successfully undergone inspection by a competent lifting examiner but damaged retaining rings had not been identified. The retaining rings have been fitted to ensure that the lifting bridles are kept in sets and cannot be easily separated. Whilst these retaining rings are not part of the critical load path and not necessarily part of the current inspection criteria it is not unreasonable to include them in any inspections.

Task Description: *No details available.*

Recommendations: *Recommendations* All similar lifting configurations require to be inspected as soon as is practical and before each use. Where equipment is in unsatisfactory condition they should be removed from service.

DSG Comment This is a classic case of a good intentioned improvement creating a further hazard. Whilst this particular ring was small we have observed other damaged rings of sufficient size to cause a major injury. We are conducting an assessment regarding the suitability of the retaining rings against the risk of them failing. We are also considering alternative methods of securing the shackles using a less hazardous / more robust material. I.e. Ty-Wraps in a figure - 8 configuration.

Contact Details: Contact Bob Thompson, DSG HES Advisor,
ChevronTexaco on 01224-334000 or
bob.thompson@chevrontexaco.com

Fig1



Fig2



578: 16" & 2" Duplex 90 Deg Elbows ASME B16.9 -2001

Summary:	Certified duplex butt welding fittings found undersize on Wall thickness
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	*Any Location Type
Activity Type:	Production operations
Description:	During normal quality assurance checks of fully certified material it has been determined through ultrasonic integrity checks and subsequent mechanical testing that a number of these fittings have been supplied below minimum wall thickness and therefore out of specification. The fittings identified are not confined to a single size or schedule, however they are outwith the tolerance of 87.5% of the nominal wall thickness from the ASME B16.9 – 2001 Table 2 Tolerances.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	<i>No details available.</i>
Task Description:	<i>No details available.</i>
Recommendations:	These out-of-specification fittings have been rejected and suppliers and manufacturing mills have been notified and appropriate Non-Conformance Reports issued. Aker Kvaerner is currently continuing with 100% inspection of this type of fitting until confidence is restored in the Supply Chain.

Contact Details: Andrew Taylor - Principle HSE Advisor, Aker Kvaerner
Offshore Partner, andrew.taylor@akerkvaerner.com

579: Overheating of Electrical Connections

Summary: Overheating of Electrical Connections

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: *Any Location Type

Activity Type: *Any Activity Type

Description: The platform was experiencing problems with the HVAC system. On investigation it was discovered that some terminals had overheated. *Circumstances:* The termination had been carried out as part of a work scope using recognized work practices and equipment supplied by the manufacturer. *Results:* Overheating of the terminals.

Specific Equipment: *No details available.*

Lessons Learnt: Poor installation, in that there were three conductors crimped together in a design made for one.

Task Description: *No details available.*

Recommendations:

1. Check all others for a similar configuration.
2. Carry out remedial work if any connections are found with a similar fault.
3. Ensure all connections are tight.
4. It is recommended that one conductor is terminated into one crimp unless designed otherwise.

Contact Details: John.Ryan@conocophillips.com Tel: 01224 777832

580: Overheating of Electrical Connections

Summary: Overheating of the terminals

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Fixed Installation

Activity Type: Maintenance

Description: The platform was experiencing problems with the HVAC system. On investigation it was discovered that some terminals had overheated.

Specific Equipment: *No details available.*

Lessons Learnt: The termination had been carried out as part of a work scope using recognized work practices and equipment supplied by the manufacturer. *Findings:* Poor installation, in that there were three conductors crimped together in a design made for one.

Task Description: *No details available.*

Recommendations:

- Check all others for a similar configuration.
- Carry out remedial work if any connections are found with a similar fault.
- Ensure all connections are tight.
- It is recommended that one conductor is terminated into one crimp unless designed otherwise.

Contact Details: John.Ryan@conocophillips.com Tel: 01224 777832

581: Overheating of Electrical Connections

Summary: Overheating of the terminals

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Fixed Installation

Activity Type: Maintenance

Description: The platform was experiencing problems with the HVAC system. On investigation it was discovered that some terminals had overheated.

Specific Equipment: *No details available.*

Lessons Learnt: The termination had been carried out as part of a work scope using recognized work practices and equipment supplied by the manufacturer. *Findings:* Poor installation, in that there were three conductors crimped together in a design made for one.

Task Description: *No details available.*

Recommendations:

- Check all others for a similar configuration.
- Carry out remedial work if any connections are found with a similar fault.
- Ensure all connections are tight.
- It is recommended that one conductor is terminated into one crimp unless designed otherwise.

Contact Details: John.Ryan@conocophillips.com Tel: 01224 777832

582: Cengar Saw Blade Shattered

Summary: An air driven Cengar saw was being utilised to facilitate a hot bolting operation

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Fixed Installation

Activity Type: Modification of plant/structures

Description: An air driven Cengar saw was being utilised to facilitate a hot bolting operation. As a bolt was being cut, the saw blade caught an adjacent bolt, snagged and shattered into four pieces.

Specific Equipment: *No details available.*

Lessons Learnt: Relevant parties informed, both off and onshore, and measures taken to ensure no similar blades are on location. *Results:*The pieces were not propelled around the worksite and no injuries resulted. *Findings:*The wrong blades had been ordered and fitted.

Task Description: *No details available.*

Recommendations: Ensure no non-shatterproof blades are available to be used with Cengar saws on ConocoPhillips assets.
Implement manufacturers recommendations that only shatterproof, bi-metal blades are sourced and used.
Inform other NSBU teams of the incident and its findings.

Contact Details: John.Ryan@conocophillips.com Tel: 01224 777832

583: Rota-Broach Magnetic Drill

Summary: Whilst trying to position a Rota-Broach magnetic drill onto the vertical surface of a structural beam, the drill fell from its intended position.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Any Location Type

Activity Type: Any Activity Type

Description: Whilst trying to position a Rota-Broach magnetic drill onto the vertical surface of a structural beam, the drill fell from its intended position. As the drill fell the air supply valve handle struck against either the beam or a scaffold board, opening the valve and energising the drill. The rotating drill bit contacted the arm of the operator and became entangled in the material of his coveralls which tightened onto his arm. The operator eventually closed the air isolation valve and released himself from the drill.

Specific Equipment: Rota-Broach magnetic drill

Lessons Learnt: •The air supply to this type of drill must be isolated at source until the drill is fixed securely into position. •A second person should assist in the setting up and positioning of the tool.

Task Description: *No details available.*

Recommendations: •The air supply to this type of drill must be isolated at source until the drill is fixed securely into position. •A second person should assist in the setting up and positioning of the tool.

Contact Details: Gerry Wyber at Total E&P UK PLC on 01224 297861 or gerry.wyber@total.com

Air Supply Isolation Valve



584: Single joint elevator (Near Miss)

Summary: Whilst picking up 3 ½" (Hydril PH6) tubing and running into the hole with single joint elevators (Blohm & Voss single joint elevator type S.P. dressed for 3 ½" upset pipe), the joint came free from the elevators and fell approximately 10 feet into the mousehole. The single joint elevators were found to still be in the closed position with the pin secured. The single joint elevators were supplied to the installation by a third party service company on behalf of the customer for running the drill stem test (DST) tubing.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Drilling unit

Activity Type: Drilling, workover

Description: Whilst picking up 3 ½" (Hydril PH6) tubing and running into the hole with single joint elevators (Blohm & Voss single joint elevator type S.P. dressed for 3 ½" upset pipe), the joint came free from the elevators and fell approximately 10 feet into the mousehole. The single joint elevators were found to still be in the closed position with the pin secured. The single joint elevators were supplied to the installation by a third party service company on behalf of the customer for running the drill stem test (DST) tubing.

Specific Equipment: *No details available.*

Lessons Learnt: The single joint elevators were dressed with "B&V" blocks and hard stamped 3 ½" machined to order at 12 degrees.

It was noted that the internal diameter (ID) of the single joint elevator was 4" at the smallest point. In conclusion the blocks are almost 3/8" too small resulting in only minimal contact with the upset of the 3 1/2" (Hydril PH6) tubing, and were incorrectly stamped. This near miss highlights the requirement to physically check (e.g. using calipers, go – no go gauges etc.) the dimensions of all handling equipment as part of the job risk assessment process. The stamp on the single joint elevators cannot be used to guarantee that they are the correct size.

Task Description: *No details available.*

Recommendations: All lifting handling equipment should undergo the above physical check without relying on markings or colour coding to confirm dimensions.

Contact Details: richard.mearns@gsfdrill.com

Incorrect inserts in single joint elevator



585: Castrol Brayco Micronic SV/200 & SVA

Summary: Nose bleeds occurring while working with the Brayco Micronic SV/200 & SVA oils or immediately after finishing work, the problem has been occurring both on and offshore.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: *Any Location Type

Activity Type: *Any Activity Type

Description: Some of our service engineers have experienced nose bleeding during the last few months, this has occurred while they have been working with the Brayco Micronic SV/200 or immediately after finishing work, the problem has been occurring both on and offshore. Other side effects include headache & Dizziness after working with the same hydraulic oil.

Specific Equipment: *No details available.*

Lessons Learnt: *No details available.*

Task Description: *No details available.*

Recommendations: we are speaking with Castrol at the moment regarding the problem, the recommendation is to ensure that a suitable mask is being worn by all persons using Brayco Micronic oil, 3M 4000 type rated A2/P3 whilst working with the oil until a suitable replacement oil can be found.

Contact Details: *No details available.*

586: Near Miss

Summary: Butane lighter found in laundry

Incident consequences
(potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: *Any Location Type

Activity Type: Catering / hotel services

Description: Whilst removing newly laundered clothes from a tumble dryer, the laundry steward found a damaged butane lighter within personal clothing. Butane is a flammable gas which could have ignited in the tumble dryer.

Specific Equipment: *No details available.*

Lessons Learnt: *No details available.*

Task Description: *No details available.*

Recommendations: Helicopter operator advised and asked to heighten their security checks. A strong reminder given to all offshore personnel not to carry flammable material offshore.

Contact Details: Apache North Sea Ltd

587: Crane contact with the Derrick

Summary:	While lifting an umbilical hose on to a landing platform on the side of the derrick, the crane boom came in to contact with a floodlight. The light fitting, weighing 21 kg, fell 27 meters. No one was injured. Learning from a previous, similar incident, had not been adequate.
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	Drilling unit
Activity Type:	Lifting, crane, rigging, deck operations
Description:	While lifting an umbilical hose on to a landing platform on the side of the derrick, the crane boom came in to contact with a floodlight. The light fitting, weighing 21 kg, fell 27 meters. No one was injured. There was no Slinger for the job and the Banksman was focussing on securing the umbilical hose. The Banksman and the Crane Driver were on their first visit to the installation. The landing area had been modified in 2000 for the purpose of storing completion equipment. In 2004 the company experienced a similar incident with a crane contacting a walkway on the Derrick.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	The transfer of experience is essential if the same mistakes are not to be made twice. Management of Change is vital when modifying any part of a rig. Managing Green Hats needs to be a focus area when there are many of these onboard at one time. Following the North Sea Lifting Rules would have reduced the

likelihood of this incident occurring.

Task Description: *No details available.*

Recommendations: Verify that the North Sea Lifting Rules are understood by Green Hats and all deck hands. Set criteria for crew composition with regards to numbers of Green Hats. When modifying an area of an installation, ensure a HAZID and risk management process has been carried out.

Contact Details: John Skeggs, QHSE Manager. jsk@odfjelldrilling.com
office 01224 856061

588: Bleeder Plug Blow out under pressure

Incident Date: *Date of incident not available.*

Summary: Whilst tearing down a 7 1/16" 5K wedge gate valve, the bottom grease fitting was blown out, hitting the employee and causing a large pressure cut on his right forearm, the plug became embedded in a bathroom door 20ft away from the work site.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: *Any Location Type

Activity Type: *Any Activity Type

Description: An employee was tearing down a 7 1/16" 5K wedge gate valve returned from field. Whilst removing the bottom grease fitting using a 12" adjustable wrench, the fitting was blown out of the valve due to trapped pressure. When the pressure was released from the valve the employee received a large pressure cut on his right forearm. The employee made his way from the scene of the incident to the first aid post, he was then transferred to Oklahoma University trauma center. Initial medical evaluation determined muscle, tendon and nerve damage to his right forearm. The Grease valve became embedded in a door some 20ft away from the work site. Factors contributing to the incident included:

- Pressure trapped in the valve,
- 6 bolts were loosened on the valve bonnet by an unknown person before the valve was returned to the beach,
- The employee believed that the valve had

previously been worked on in the field and that pressure had been relieved.

Specific
Equipment: *No details available.*

Lessons Learnt: *No details available.*

Task Description: *No details available.*

Recommendations: Equipment coming in from any field location to be repaired must be checked for trapped pressure, regardless of appearance. Local work instructions to detail exact procedures to perform steps for verification. Pressure warning tags to be place on any valve that cannot be opened or closed manually. Tag will be designed for this purpose. A more comprehensive JSA will be written to document the process required to check for and relieve pressure and the break down (disassembly) of valves.

Contact Details: Colin Esslemont

Valve Image showing lower port



plug impact on door



Door impact Image 2



Injury (1)



Injury (2)



589: Threading Machine Incident

Summary:	Hand trapped while cleaning residual oil from rotating pipe on pipe threading machine
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	Fixed Installation
Activity Type:	*Any Activity Type
Description:	Two personnel were cutting a two metre length of pipe on a pipe threading machine. One person was operating the machine; the second (IP) was cleaning off residual oil whilst also supporting the rotating pipework. The rag which he was using to clean off the residual oil twisted in the rotating pipe and trapped his hand. His workmate stopped the machine using the foot operated emergency stop and his hand was released. Injury was a slight cut and bruised finger and he returned to work immediately.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	No pipe support was used for the work although stands were available in the workshop. Oil was being wiped from the pipework whilst the pipe was rotating. The IP did not recognise the potential it was perceived as a mundane low risk task which had been ongoing for some time. The activity was not specifically covered within the risk assessment process.
Task Description:	<i>No details available.</i>
Recommendations:	See lessons Learnt

Contact Details: *No details available.*

Threading Machine Incident

Threading Machine - Electrically driven, high torque, slow (53-50RPM) and powerful.



590: Gas Release from Caisson

Summary:	A gas leak occurred from a source within a multi-riser caisson. Pressure increased within the caisson, resulting in caisson seal failure and a subsequent large gas release. The cause of the leak was corrosion.
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	Fixed Installation
Activity Type:	*Any Activity Type
Description:	: A 4" service line in use as a gas lift riser developed a leak in the section contained within a multi-riser "dry" caisson. The pressure within the caisson increased slowly until the seal around the adjacent water injection line, at the head of the caisson, blew out. This resulted in a gas release below the platform as the gas vented. Inspection revealed that external corrosion of the carbon steel service line which was caused, (on the balance of probability), by the presence of a small amount of liquid within the caisson led to the loss of containment. The incident was terminated by closure of the SSIV installed in close proximity to the platform, in the gas lift line. The consequence was mitigated by the closure of the SSIV thus limiting the size of the release to ~1% of the pipeline inventory. On the night of the incident the wind direction was unfavourable and blew the release from the source location at the North end of the platform towards the platform HVAC inlets which are located below the platform at the South. As a result, gas and air were drawn into the HVAC inlets feeding the hazardous, safe and accommodation modules. In accordance with design,

automatic shutdown of each systems inlets occurred when confirmed high gas levels were measured in each system. This resulted in systems shutting down at different times during a known gas release situation.

Specific
Equipment: *No details available.*

Lessons Learnt: Systems for integrity monitoring of lines within caissons require review. Caissons designed to be operated dry should be confirmed to be dry. The presence and closure of the SSIV on the gas lift line played a critical role in limiting the volume of gas released. The ingress of gas into HVAC inlets is a significant event. The separate shut down of the independent HVAC systems added significantly to the complexity of the management of the incident.

Task Description: *No details available.*

Recommendations: It is recommended that all operators review systems in place for monitoring condition of risers within closed caissons. It is recommended that all operators review any dry caissons to ensure that they are dry. It is recommended that the response of HVAC inlet systems to gas detection should be reviewed. This review should include the level at which shutdown is initiated, what voting logic is appropriate and whether, where different HVAC systems exist with inlets in similar areas, the systems should be treated together rather than as independent systems.

Contact Details: Florence McGowan, Tel: 01224 803025, e-mail
FMcGowan@MarathonOil.com

591: Crane Swing Control Valve failure

Summary: During crane operations the pilot valve controlling clock wise swing stuck in open position necessitating activation of 'All Stop' button.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Drilling unit

Activity Type: Lifting, crane, rigging, deck operations

Description: During routine operations, the crane operator had picked a cuttings skip off of the supply vessel and was slewing clockwise to the rig pipe deck. While placing the skip in position the crane operator attempted to slew anti-clockwise and as soon as he activated the control lever the crane slewed clockwise. The skip came to rest against a stairway handrail before the 'ALL STOP' button was activated. Crane Type - National OS-435 Pedestal Crane. Equipment Failed - Swing Control Valve.

Specific Equipment: *No details available.*

Lessons Learnt: On investigation, after stripping down the swing control valve which is air operated, it was found that the clockwise operating pilot valve was stuck in the 'open' position which caused the crane to move when the crane operator had activated the control level.

Task Description: *No details available.*

Recommendations: Following discussion with manufacturer and industry experts it was agreed that a recommendation be made that the valves should be overhauled every 2 years or

2000 hours. (This is not highlighted in existing manuals).

Contact Details: davek.thomson@stena.com

592: Uncontrolled movement of a joint of casing

Summary:	Whilst running 10" casing an operator received back injuries after being struck by a joint of casing that moved across the rig floor in an uncontrolled manner. Valve failure in the monkey tail guiding it in, together with the operator standing in a danger zone caused the incident.
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	Drilling unit
Activity Type:	Drilling, workover
Description:	A joint of 10" casing was being lifted from the catwalk and guided in to the centre of the rig floor by a Hydralift type T1781 monkey tail. A valve failure in the monkey tail caused the joint to come free. The joint hit the casing joint in the slips, then hit the tong and finally hit the operator who was standing on a small platform by the tong. He fell off and received bruising to his back.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	Ensure good maintenance of all equipment that handles tubulars. Reducing the likelihood of anyone being struck by casing is the key to preventing similar incidents.
Task Description:	<i>No details available.</i>
Recommendations:	Review maintenance frequency and adequacy of monkey tail equipment. Do not allow anyone in the danger zone of the rig floor when a joint of casing is being brought in and until it is centered over the joint prior to stabbing.

Contact Details: John Skeggs, QHSE Manager jsk@odfjelldrilling.com

593: Nitrogen Generation Package Fire

Summary:	Nitrogen generation system ignited with smoke and sparks emitting from the top of the membrane cell.
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	Floating production/storage unit
Activity Type:	Production operations
Description:	A fault was reported in the Nitrogen package causing the unit to shutdown. An Operator was sent to investigate the cause, on arrival at the skid the operator reported seeing smoke and sparks emitting from the top membrane cell (small horizontal vessels- 4 units in total). CCR was informed to sound GPA and shutdown the process plant. Internal membrane material starting emitting from a small hole that appeared at the top of the vessel (subsequently found to be a seal failure). The membrane material caught fire resulting in a small flame (12 inches approx) and emission of air/smoke.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	Short Term - Rotate the heater 90deg to minimise risk of oil accumulation. Check that the correct filters are installed and that the filter seal is correctly fitted. Issue an operations guide for nitrogen skid.
Task Description:	<i>No details available.</i>
Recommendations:	idRemedial actions to prevent reoccurrence Long term - Review of the maintenance strategy and PMRs. Review of the heater design for wet application. Consider the

installation of low point drains. Consider the heater orientation. Consider design of filter drain valves. Consider automating the change over of drain valves. Vendor and Operator to issue alert bulletins.

Contact Details: Boyd Angus, EH&S Adviser Amerada Hess UK Ltd Tel:- (01224) 843713 e-mail:- boyd.angus@hess.com

594: Stacking of Mud Skips for Storage and Transport

Summary:	Delivery of off-hired mud skips received which had been loaded in a manner which utilised incompatible stacking details.
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	Onshore office, support base, heliport
Activity Type:	Land transport
Description:	On Thursday 5 May 2005, a delivery of off-hire mud skips was received at Conserve Oilfield Services Limited's Hillview Base in Aberdeen. The Conserve employees arranging the offloading from the transport identified that the stacking philosophy used was incorrect in that unit types not designed to be stacked together were stacked for transport. Although the overall dimensions and characteristics etc of these units types are broadly similar across the fleet, there are variations between different generations of units which lead to their incompatibility for stacking etc. Although the units were secured for transit using straps, the potential for excessive movement existed. Conserve Oilfield Services therefore want to highlight the stacking features of this type of unit to all customers and operators in order to ensure correct usage and minimise incident potential.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	Clear guidelines on the risks associates with stacking incompatible unit types to be provided to all direct and

indirect operators of the rental units.

Task Description: *No details available.*

Recommendations: Operators to ensure that any stacking guide feature of containers, baskets, skips, tanks etc are compatible with the units to be stacked. Stacking details can differ between supplier unit types and within families of units from individual suppliers

Contact Details: Mark Murphy, HSEQ Manager
mark.murphy@conserveplc.co.uk) Pam Thom,
Operations Director (pam.thom@conserveplc.co.uk)

Incompatible units MC584 & MC494 stacked



8 out of 10 units on load stacked incorrectly



595: Gas Rack Incident

Summary: Whilst attempting to unload a gas rack, which was stowed side by side on the bed of a truck, the forklift dislodged the second gas rack which toppled off the trailer.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Supply base, warehouse, workshop, dock

Activity Type: Lifting, crane, rigging, deck operations

Description: Whilst attempting to unload a gas rack, which was stowed side by side on the bed of a truck, the forklift dislodged the second gas rack which toppled off the trailer. Fortunately controls in place at the base location strictly prohibited personnel to be in area of danger when handling materials. These controls, in this case, greatly limited the risk of severe or fatal injury.

Specific Equipment: *No details available.*

Lessons Learnt: IDENTIFIED HAZARDS: - Significant risk of serious injury or fatality - Risk of asset damage - Risk of environmental incident - Risk of fire/explosion or toxic release dependent on product and/or cylinder/valve

Task Description: *No details available.*

Recommendations: RECOMMENDED CONTROLS: - Ensure controls in place at all sites to insist on personnel remaining clear of risk areas during cargo handling operations - Do not operate equipment and Stop the Job if anyone enters or refuses to vacate the identified risk areas - Wherever and whenever possible resist stowing gas racks side by side

on trailer beds - If at all possible handle any items stacked in this way with a crane - Communicate details of this incident and control measures to all personnel

Contact Details: Albert Pumfrett ASCO - Director HSEQ Europe



596: Ultra Violet fire detector in an offshore installation process area made ineffective by a scaffold.

Summary: Scaffolding had been constructed obstructing fixed safety systems

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Any Location Type

Activity Type: Any Activity Type

Description: A scaffold was erected in a location that obstructed an ultra violet fire detector that protected a process area on an offshore installation. The detector was positioned above the area lighting and was not visible to the scaffolders. Note: in attached photograph, worksite is artificially illuminated by camera flash. The potential for obstruction of safety systems was identified on the Permit to Work Risk Assessment and on scaffolding check sheet however if ownership was not clearly defined.

Specific Equipment: Scaffolding, Fire detector

Lessons Learnt: Procedures should provide for documentary evidence that a person familiar with the local safety systems has been consulted when planning erection of a scaffold and during the pre-use inspection of a scaffold. 2) Area inspection checklists should include reminders to confirm that safety systems are not obstructed

Task Description: *No details available.*

Recommendations: 1) Procedures should provide for documentary evidence that a person familiar with the local safety systems has

been consulted when planning erection of a scaffold and during the pre-use inspection of a scaffold. Installation drawings should be consulted for this purpose. 2) Area inspection checklists should include reminders to confirm that safety systems are not obstructed.

Contact Details: None available



597: Shard of Metal Lacerates Floorman's Neck

Summary:	While attempting to break 4 3/4" non magnetic pipe connection, a sharp shard of metal was projected 12' across the drill floor where it lacerated a floorman's neck and became embedded in the muscle.
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	Fixed Installation
Activity Type:	Drilling, workover
Description:	While drilling 6" hole the drill string became differentially stuck. During recovery operations torque was worked into the string. On the 9th May the bottom hole assembly was being removed from the well and broken out using the iron roughneck. An over torqued connection was encountered at the PBL (circulating tool). Shortly afterwards over torqued connections were encountered at the 4 3/4" non magnetic pipe. While attempting to break one of these connections the dies in the iron roughneck (Varco IR 3200 Gateless) slipped and a sharp shard of metal (2cm long and 2-3mm wide) was projected 12' across the drill floor where it lacerated a floorman's neck and became embedded in the muscle. The IP was sent onshore where the shard of metal was successfully removed.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	Minimise the number of people on the drill floor when using the iron roughneck. No one to stand in front of the iron roughneck when it is being used to make or break a

connection. Re-emphasising the use of barriers to control drill floor access. Increased focus on maintaining the dies in clean sound condition.

Task Description: *No details available.*

Recommendations: The PUWER and Risk Assessments for iron roughnecks should be reviewed by the people who use the equipment and updated as required. This review should include consideration of installing guards and / or other safety devices, in consultation with the manufacturer. The Drilling procedures for the iron roughneck should be reviewed and updated as required. This incident and it's findings should be communicated to others who may not be aware of this hazard so that they can take appropriate action.

Contact Details: HSEQ Department - KCADEUTAG 01224-299600

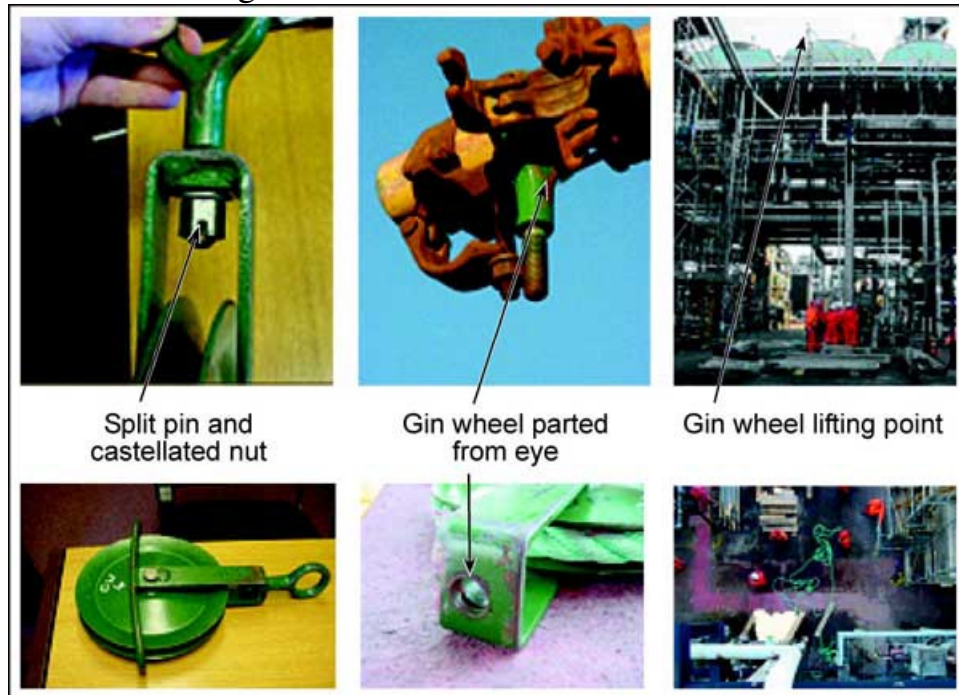
598: Failure of “Ring Type” Gin Wheel

Summary:	While lifting scaffold boards to a fin fan gantry, the castellated nut that secures the eye to the gin wheel frame and which is secured by a split pin, came off.
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	*Any Location Type
Activity Type:	Lifting, crane, rigging, deck operations
Description:	While lifting scaffold boards to a fin fan gantry, the castellated nut that secures the eye to the gin wheel frame and which is secured by a split pin, came off. The gin wheel was subsequently no longer secured and became disconnected from the assembly, falling approximately 30ft to the ground, missing personnel below hauling on the rope.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	The focus of the subsequent investigation is on the split pin, which should prevent the castellated nut from unscrewing itself and coming off. However, the split pin has not been found so it is unknown whether it had not been fitted, been fitted incorrectly, or had simply fallen out for some reason.
Task Description:	<i>No details available.</i>
Recommendations:	Inspect same/similar design gin wheels and confirm that an appropriate split pin is fitted through the castellated nut/eye spindle, and is in a suitable condition to prevent

the nut from unscrewing/falling off.

Contact Details: *No details available.*

Gin Wheel Images and Location



599: Lifting Operations

Summary: An offshore lifting operation involving a lift of varying lengths of scaffold tube had the potential to be Dropped Object incident.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Fixed Installation

Activity Type: Lifting, crane, rigging, deck operations

Description: A bundle of scaffold material was slung and ready to be lifted from the cellar deck to the production level, when the load was lifted to about waist height it was observed that not all the scaffold tubes were contained within the lifting slings. The lift was lowered to the deck and the 3ft and 5ft lengths of scaffold tube were removed from the load leaving only the 8ft, 10ft and 12ft lengths of scaffold tube, once this was done the lift was completed safely.

Specific Equipment: *No details available.*

Lessons Learnt: Bundling of scaffold tubes for lifting/transportation should be assembeled in lengths of simmalr size. Had the lift gone ahead there was the possibility of a "Dropped Object" incident.

Task Description: *No details available.*

Recommendations: Scaffold tubes should be bundled together in accordance with the following guide lines: Tube lengths of: 5ft, 6ft & 7ft. Tube lengths of: 8ft, 9ft, 10ft & 11ft. Tube lengths of: 12ft, 13ft 14ft 15ft and 16ft.

Contact Details: donald.garden@rbgltd.com

600: Dropped Object

Summary:	Dropped object during coil tubing operations.
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	Drilling unit
Activity Type:	Lifting, crane, rigging, deck operations
Description:	While rigging down surface wire line equipment using a Coil Tubing Lifting Frame (CTLF) tugger winch, a crossover extension joint weighing 300 pounds fell 30 feet to the drill floor. The XO extension was being lifted by a 3T sling with both eyes shackled to the XO and the bight of the sling in the winch hook. While raising the crossover extension joint, it momentarily snagged on an adjacent connector . When the crossover extension joint came free, it suddenly released upward due to the stored energy in the lifting sling from the over pull. The snagging and consequent freeing of the XO was instantaneous. The lifting sling slacked off, twisted and the sling rolled out of the hook assembly.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	That sling roll-out can occur on any form of powered hoist. The key factor is the speed with which a powered hoist can apply tension if the load becomes snagged, even momentarily. That spring loaded latches are not suitable in such circumstances.
Task Description:	<i>No details available.</i>

Recommendations: The CTLF operator have subsequently changed out the hook type in use and have replaced these with positive locking hooks. TO requirement worldwide is that cranes and powered hoists change all hooks in use to positive locking type hooks.

Contact Details: balexander@aberdeen.deepwater.com

601: Steel Banding

Summary: Injured party was removing metal banding securing a crate and received a laceration to the back of his hand.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: *Any Location Type

Activity Type: Office / warehouse activities

Description: The injured party was tasked with opening a crate which had been received from overseas. When cutting the steel banding on the crate, which was under tension, the banding sprang away and struck the back of the IP's hand causing a laceration. This task had been undertaken many times without incident.

Specific Equipment: *No details available.*

Lessons Learnt: It was not recognised by the IP that tension in the banding would be released on cutting it. The IP was not wearing the correct hand protection for this operation and kevlar gloves were available. The use of metal snips to cut the banding does not control the release of tension in the banding. In conducting a post incident tool box talk it was revealed that a specific tool is available to control the release of steel banding.

Task Description: *No details available.*

Recommendations: Source specific steel band cutting tools and introduce into all freight operations. Continue to request plastic banding be applied whenever possible although securing arrangements are often dictated by the freight source

country. Ensure personnel handling steel or plastic bands have the correct hand protection. Ensure banding tension awareness is promulgated.

Contact Details: Mark Gilmour HSEQ Halliburton 01224 727200

Steel band securing around crate post incident



Previous method used tin snips. There was no control over the band once cut. At the time of the incident the IP had only one glove on as illustrated



New tool keeps hands well clear and grips the banding



The band is kept under control throughout the cutting operation



602: Liquids and gases under pressure released from 10 inch flange during bolt removal to install equipment, then again a few days later from a 2 inch flange downstream of ESV

Summary: Near miss

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Floating production/storage unit

Activity Type: Maintenance

Description: A pipe fitter was breaking a 10" flange downstream of an isolation valve, using a windy gun. After releasing the torque on the 4th nut, liquids and gases under pressure were released from the line. The pipe fitter immediately put down the windy gun and was assisted in re-tightening the bolts by a spanner before informing his supervisor. On August 26th, a mechanical supervisor was about to break into a flanged joint downstream of an ESV using the same technique, equipment and permit as the pipe fitter earlier. Being aware of those events he notifies the Well Tech and the Day Assistant prior to slackening the studs. When he released the studs liquids and gases were again released before re-tightening. The OIM was informed and the permit was revoked. This incident has been classified as a HIPO because the sudden significant hydrocarbon release had the potential to cause a fatal accident.

Specific Equipment: *No details available.*

Lessons Learnt: *No details available.*

Task Description: *No details available.*

Recommendations: Review permit to work for valves; Revise arrangements and procedures for verifying depressurisation of systems; Issue cross industry safety alert via SADIE (operator responsibility).

Contact Details: *No details available.*

603: Dropped Object: Steel shim (weight 16.22kg) fell through deck openings into the sea

Summary: Near miss

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Floating production/storage unit

Activity Type: Maintenance

Description: The welding habitat floor and roof were removed for the transfer of the riser from its welding location to its storage location on the installation support frame. The riser was rasied 2 inches and all securing restraints removed. On completion of this the, dead weight support frame was pulled clear of the 10 inch riser toward its stowed position by the lifting equipment. The rigging superintendant who was positioned on the main deck was given the all clear to lift the riser by personnel on the spider deck, ESD platform and the cellar deck levels of the platform. Due to the length and weight of the riser and the complexity of the operation personnel remained at each of the locations to guide and inform the rigging superindendent of any potential hazards and points of impact or entrapment. During the operation to move the riser it collided with the welding location frame and dislodged one of the shims inserted in the frame. The shim (weighing 16.22kg) fell striking the steel work above the habitat and narrowly missed the work platform at the spider deck level before being carried by the wind into the sea. This has been classed as a HIPO because the following witness statement confirms that the path of the falling object was in close proximity to personnel "The first indication of the

incident was the sound of the falling plate striking steelwork above the habitat out of my vision. The plate then came into vision below the habitat and was falling towards the work platform at spider deck level until it was caught by the wind and was deflected into the sea SE of the work platform. Other than the plate striking steelwork there was no prior indication of anything being untoward".

Specific Equipment: 10 inch NB BTM and the middle 10 inch NB MID sections.

Lessons Learnt: *No details available.*

Task Description: *No details available.*

Recommendations: Training for rigging and lifting personnel revised. Safety alert distributed within company.

Contact Details: *No details available.*

604: Top drive component fell to drill floor

Summary:	Property damage
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	Fixed Installation
Activity Type:	Production operations
Description:	While making up a stand of drillpipe (to the Top drive), one half of the Top drive actuator rod clevis (connecting the actuator piston to the link tilt) fell to the rig floor from a height of ± 95 ft (Top drive above monkey board). The secured half which dropped to the rig floor weighed 600g. The other half of the clevis remained attached to the link tilt crank assembly. It is not known at which point the clevis split into two halves. No one was injured during the incident. After reviewing the nature of the dropped object and the height from which it fell (metal casting weighing 06kg) it was obvious that the object had the potential to cause serious personal injury if not even a fatality.
Specific Equipment:	Top drive.
Lessons Learnt:	<i>No details available.</i>
Task Description:	<i>No details available.</i>
Recommendations:	Manufacturer to issue product bulletin/ alert with respect to the failure of the clevis assembly with guidance on actions required to replace assembly. Full inspection of the Top Drive Unit be performed by manufacturer at the first available opportunity prior to / during running of the 7" Liner string (to be conducted prior to entering open hole

and or rotating). A full set of material tests to be performed on the failed component to examine the metallurgy and quality of the casting and to attempt to determine the failure mode(s) encountered including the following:- corrosion, likely load causing failure, signs of impact damage, ageing of crack surface etc. This work should be conducted by a Third Party.

Contact Details: *No details available.*

605: Clevis pin fell from top drive to drill floor

Summary:	Property damage
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	Floating production/storage unit
Activity Type:	Drilling, workover
Description:	Drilling crew were pulling the liner clean up string out of hole. At 00.05 hrs when the top drive was some 70 ft from the drill floor, travelling up the derrick, the crew were aware of an object falling to the drill floor. A clevis pin weighing approx 400g was found near to the "V" Door, 3m from the well. The Clevis Pin is part of the Link Tilt / Bailes assembly where the hydraulic rams of the Link Tilt connect to the Baile Arms. The Clevis pin is retained in place by a split pin, this was missing from the Clevis pin that had fallen to the Drill floor. The split pin, which was found some time later, had been sheared, allowing it to fall out.
Specific Equipment:	Top Drive link tilt assembly.
Lessons Learnt:	<i>No details available.</i>
Task Description:	<i>No details available.</i>
Recommendations:	Senior Tool Pusher to re iterate to the drill crews that any Task Risk Assessment or Toolbox talk need to be reviewed if physical conditions or other elements of the task change. Special Investigation team was set up.

Manufacturer to consider engineering design of the existing Clevis pin / split pin retainer set up as used at present. Still ongoing. New design to be tested and installed on Fulmar when available, including full commissioning and crew training.

Contact Details: *No details available.*

606: Dropped Object: Container fell into the sea while still on crane rope (2.4 tonne)

Summary:	Property damage
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	Support vessel eg Supply, Standby
Activity Type:	Marine activity, shuttle offloading
Description:	A crane was lifting a small container (6ft in length, 2.4 tonnes) from the standby /supply vessel on to the main deck. The crane was using the auxiliary winch to lift the load. At approximately 50ft above sea level the container suddenly dropped to the sea whilst still attached to the crane rope. The container delivered a glancing blow to the port quarter of the standby / supply vessel causing some minor damage. The platform crew other than those persons directly involved in the incident were restricted to the platform. Once in the sea the container began to sink whilst still attached to the crane. Recovery of the container was not possible and it was necessary to cut the crane rope. Within 15 minutes the container had disappeared below the surface of the water. The crane was returned to its rest and the container position, tide etc reported to the coast-guard.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	<i>No details available.</i>
Task Description:	<i>No details available.</i>

Recommendations: Develop a robust risk based proactive maintenance programme with competent people to implement it successfully. Carry out an equipment tagging exercise on the cranes to ensure all critical components are identified at a level that permits the correct assignment of PM Routines, Corrective Work Orders, Failure Coding and History recording at job close out.

Contact Details: *No details available.*

607: Dropped Object: Dropped hinge plate from Varco Elevators (2.5kg)

Summary: Property damage

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Drilling unit

Activity Type: Drilling, workover

Description: A 2.5 Kg hinge plate fell from the base of the elevators onto the drill floor during a tripping operation. The object dropped from a height of approximately 2 feet but could equally have fallen 90 feet during a different part of the elevators' cycle. Two floormen were working in the danger area. The incident was therefore classed as a high potential incident (HiPo).

Specific Equipment: Varco 350 ton 5.1/2" air operated elevators.

Lessons Learnt: *No details available.*

Task Description: *No details available.*

Recommendations: Operator to adopt a procedure for controlling rental and portable equipment supplied by contractors on all rigs. Supplier to conduct Safety and Technical audits of all suppliers of safety critical items and to develop an assurance plan for the inspection of 3rd party suppliers. Undertake formal checks relating to all tools currently on all sites and undertake appropriate regular inspection and recertification of equipment.

Contact Details: *No details available.*

608: Dropped Object: Dropped Object weighing approx 445kg on to drill floor

Summary: Minor property damage

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Fixed Installation

Activity Type: Drilling, workover

Description: Operation running in hole with 4.1/8" drill collars in preparation for laying them out. On latching the 20th stand of drill collars and prior to picking-up the stand, the bottom single parted at the lower connection. This allowed the single, weighing approximately 445kgs and measuring 28ft, to fall across the drill floor. This had the potential to cause fatalities on the drill floor.

Specific Equipment: Stand of 4 1/8" Drill collars.

Lessons Learnt: *No details available.*

Task Description: *No details available.*

Recommendations: Establish a federal team to provide ongoing assurance that operator's HSE and QA expectations are delivered by contractors. A variety of assurance tools should be used including audit where appropriate. Require contractors to provide assurance to the operator to demonstrate how they comply with the inspection criteria of the Federal Contract.

Contact Details: *No details available.*

609: Dropped Object: Joint Slipped through elevators while running in hole (2.7 tonne)

Summary: Minor property damage

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Fixed Installation

Activity Type: Drilling, workover

Description: The drill crew picked up a 20' joint of 19 1/2" conductor on the draw works. The joint was held by a Merlin elevator at the pin end and tailed by the crane at the bottom end. The 11th joint (a crossover 19-1/2 to 18" joint) slipped through the elevator when it was almost vertical. The joint weighing 2.7T fell a height of 20ft and landed on the drill floor. No one was injured but three members of the drill crew were in close proximity to the path of the joint as it fell. This incident was reportable to the HSE as OIR9b Failure of lifting equipment.

Specific Equipment: Merlin Elevator

Lessons Learnt: *No details available.*

Task Description: *No details available.*

Recommendations: Establish a federal team to provide ongoing assurance that the owners HSE and QA expectations are delivered by contractors. Develop a process to review and risk assess all 3rd party procedures used to support the drilling programme prior to mobilisation. Define the extent of change permitted within a drilling programme before it

must be resubmitted for authorisation.

Contact Details: *No details available.*

610: Dropped Object: Bolt fell 30m from set of 5" elevators (450g)

Summary: Minor property damage

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Drilling unit

Activity Type: Drilling, workover

Description: During an operation to trip out of the well, two floor men were moving to pick up the drilling slips from their stowed position at the edge of the rotary table to set them around the pipe when a bolt, approximately 30cm long weighing 450gm, fell 30m from the 5" elevators and struck the slips. The elevators were directly over persons working on the rig floor and the bolt narrowly missed persons performing their normal duties.

Specific Equipment: Varco 5" air operated elevators.

Lessons Learnt: *No details available.*

Task Description: *No details available.*

Recommendations: Perform a Task Risk Assessment to determine that work can continue on the rig floor using the same model elevators. Investigate the control (in particular the maintenance) of this equipment by the vendor and their licensed agents.

Contact Details: *No details available.*

611: Dropped Object: Hang off line securing bracket fell from derrick

Summary: Minor property damage

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Drilling unit

Activity Type: Drilling, workover

Description: After routine slipping and cutting of the drilling line, the travelling block hang off line was stowed in four retaining clamps on dolly track. After hoisting the travelling block twice to set the Crown-O-Matic safety device, the blocks were hoisted to pick up a stand of pipe. A securing bracket for stowing the travelling block 'hang off' penant within the drilling derrick of the rig was broken off at the hinge weld, causing the bracket (1.4kg) to fall 80 feet to the drill floor. At the time of the incident the crew on the drill floor were standing clear of the blocks and were not in the immediate vicinity of the falling bracket. The path of the bracket, however, was not vertical, hitting various structural members as it fell. There was a possibility of anyone on the floor being hit by this object.

Specific Equipment: Hang off penant on drill derrick

Lessons Learnt: *No details available.*

Task Description: *No details available.*

Recommendations: Establish process for checking and confirming that the hang off pennant is securely stowed and the is Derrick clear before recommencement of travelling assembly

operations. Amend the drill line slipping & cutting procedure to reflect the specific 714 slipping & cutting facilities and task, including the process for stowing the hang off pennant. Conduct a rig audit to identify other equipment within the Derrick which is inappropriately designed, lacks quality control, and has potential to come into contact with moving parts or become a dropped object.

Contact Details: *No details available.*

612: Deliberate discharge of 5 tonnes of butane

Summary: Minor environmental impact

Incident consequences
(potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Onshore terminal

Activity Type: Production operations

Description: A quantity of butane believed to be circa. 5.0 te was deliberately discharged from a butane dump tank via two 3" valves on the base of the vessel. The discharge was carried out by the operators under instruction from the terminal supervisor. The product was allowed to run from the bunded area into a LPG separator pit. The LPG pit contained approximately 1m depth of water when the discharge occurred and on contact with the butane, the surface of the water froze. The result was an initial rapid evolution of butane gas. The decision was made to allow the butane to evaporate naturally from the pit tank. The cooling effect of the ice meant that a significant volume of butane remained in solution in the pit until the early hours of the following day.

Specific Equipment: Butane dump tank

Lessons Learnt: *No details available.*

Task Description: *No details available.*

Recommendations: Improve the working culture at the terminal emphasising that routine draining and venting is unacceptable. Further investigations should be undertaken to identify other

sources of bad practise taking place at the rail terminal.

Contact Details: No contact details available

613: Helideck crewmember nearly hit by landing helicopter

Summary: Near miss

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Drilling unit

Activity Type: Air transport

Description: A CHC Scotia S76-A helicopter on a routine crew change approached the helideck at speed from the port side. The tail rotor was very low, clearing the helideck netting by 1 to 1 1/2 ft. Once over the helideck the helicopter rapidly rotated some 180 deg anti clockwise sweeping the tail rotor over the fire monitor and fire extinguisher box. The witnesses have reported clearances of a few inches to 2 ft. The tail rotor also came into close proximity to the Bow Leg. The helideck crewmember on the fire monitor, fearing a collision, leapt from the monitor platform. The other members of the helideck crew fled down the port side access stairs, as they also feared a collision between the tail rotor and the helideck netting / fire monitor / fire extinguisher box. This incident clearly had the potential for loss of life and is therefore classed as a HiPo.

Specific Equipment: CHC Scotia S76-A helicopter

Lessons Learnt: *No details available.*

Task Description: *No details available.*

Recommendations: Re-emphasise the importance of following task procedures correctly. Review communication links

between HLO and aircrew.

Contact Details: *No details available.*

614: Electrical shock on vessel in port when live panel opened

Summary: Minor injury

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Support vessel eg Supply, Standby

Activity Type: Maintenance

Description: An electrician received injuries to his left hand while working on the main switchboard of the support vessel. The accident happened while the vessel was in port preparing for work. If the electric shock had been more significant it could have fatally injured the electrician.

Specific Equipment: Switchboard

Lessons Learnt: *No details available.*

Task Description: *No details available.*

Recommendations: Management must take the lead in promoting safety and ensuring that there are clear 'safety rules' and standards which are not compromised. Undertake a comprehensive review of routine tasks to ensure compliance with safety requirements.

Contact Details: *No details available.*

615: Insufficient isolation of antifoulant pipework / near exposure to gas process

Summary: Near miss

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Drilling unit

Activity Type: Maintenance

Description: A temporary 'Williams' pump for antifoulant injection is connected to the inlet of the LP discharge cooler gas process side which operates at 65 bar pressure. The pump had broken down a few days earlier and was offline. The lab technician was requested to prepare and arrange removal of the pump for vendor to repair it. The lab technician isolated the suction and discharge hose from the pump using the ball valves arrangement on each hose end. He ensured the air supply was isolated and disconnected the air hose from the pump skid. The technician then disconnected the suction hose and proceeded to disconnect the discharge hose. Without thinking, he broke the connection on the downstream side of the valve arrangement and disconnected the hose. This effectively left the isolation valve arrangement on the pump skid, and not on the end of the hose, leaving the hose open-ended and holding on the 2 x NRV's in the line (i.e. near exposure to gas process). The technician was distracted and did not think further about the hoses he had just disconnected. This near exposure to gas process and potential for subsequent ignition had a high potential for a fatality to occur.

Specific
Equipment: Williams' pump.

Lessons Learnt: *No details available.*

Task Description: *No details available.*

Recommendations: Stress at toolbox talks the importance of following SIRPS and ISSOW process.Revalidate Isolation Authority approvals for all operations team members and verfiy the integrity of the assessments.

Contact Details: *No details available.*

616: Discovered potential for gas blow / overpressurisation from suction scrubber

Summary: Near miss

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: FPSO

Activity Type: Maintenance

Description: There is a 2" line from the suction scrubber on HP4 that drains liquids to the water condensate vessel. This operation can only be done manually and the protection against gas blow-by is provided by a low level trip and isolation valve. The design pressure of the HP4 suction scrubber is 240 barg and the water condensate vessel is 3.5 barg and is connected to the LP flare via a 6" line. Because there is no RO in the drain line it is very unlikely that the low level trip would prevent gas blow-by to the water condensate vessel. Additionally, there is no documentation to confirm that the water condensate vessel is adequately protected for gas blow-by from this high pressure source.

Specific Equipment: High pressure suction scrubber

Lessons Learnt: *No details available.*

Task Description: *No details available.*

Recommendations: Identify modifications needed to ensure the water condensate vessel is adequately protected from overpressure by gas blow from the HP4 suction drum. Identify and implement changes in operating procedures

to prevent mal-operation of the draining of liquids from the HP4 suction drum.

Contact Details: *No details available.*

617: Stress related illness

Summary: Stress related illness

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Fixed Installation

Activity Type: Production operations

Description: The individual joined the company in April of 2001, having worked offshore for over 20 years. He was interviewed by team leaders on the platform and offered a position there as a Production Operator. He was placed on one of the four shifts, replacing an individual who had requested a change of shift. Production Operators on this platform work in a team of three individuals. A Chief Operator, who supervises the team, a Production Operator who works within the control room on the control panels, and an Outside Operator who takes the readings, monitors the plant, conducts planned maintenance routines and reacts to plant upsets as directed by the team. Other operators assist as required. He picked up the outdoor operator duties and progressed through his training programme quickly. He was introduced to the control room operations from January and in March this year as part of his continuing development, he began to regularly work night shift as control room operator under the supervision of an experienced operator. From February 2002 his performance declined and his supervisor noticed a difference in him. There were discussions with the immediate supervisor to establish why his performance had declined and what were the underlying causes,

whether occupational or personal. He believed (through his own correspondence and other accounts) that there were interpersonal difficulties with other members of his shift which were affecting his performance and well-being. He wrote to the OIM and his GP to tell them about his difficulties. Actions were taken offshore to assist, culminating in a plan to move him to a different shift pattern. On 21st June 2002 he was signed off work by his GP with depression, on the 5th of July he was signed off for a further 6 weeks absence with stress.

Specific
Equipment: N/A

Lessons Learnt: *No details available.*

Task Description: *No details available.*

Recommendations: Develop and issue simple guidance on where managers can obtain assistance with sensitive issues. Ensure OIMs, Medics and HR support attend appropriate Stress Management training. Communicate findings from the investigation to increase awareness of the potential for stress related illnesses

Contact Details: *No details available.*

618: Lifeboat failed to release on demand

Summary: Failure of safety critical equipment

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Fixed Installation

Activity Type: *Any Activity Type

Description: Identified during routine maintenance on the Platform lifeboat the winch/break mechanism failed to operate as required. This was subsequently freed off and further tested successfully. (this would not have been an option in a real situation) The incident report is raised against another similar platform as during an intervention the mechanical tech tested the winch/break mechanism to see if a similar problem was present. This also failed to operate. Due to the nature of the intervention there was not sufficient time to attempt any remedial works / investigations. The 2nd platform now has a visit restriction imposed until mechanism can be investigated and remedial works completed. For history, this is not the first time this has occurred (23-12-01) the manufacturers appointed agent have already investigated the winch failure earlier this year. Had this failure occurred during an evacuation this would have the potential to delay or prevent safe evacuation from the platform.

Specific Equipment: Lifeboat

Lessons Learnt: *No details available.*

Task Description: *No details available.*

Recommendations: Information from manufacturers inspection to provide input to recommendations to prevent reoccurrence for both platforms

Contact Details: *No details available.*

619: Supply boat collision with platform when engine control lost

Summary: Property damage

Incident consequences
(potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Support vessel eg Supply, Standby

Activity Type: Marine activity, shuttle offloading

Description: A supply vessel had completed bunkering to a platform and had pulled off about 150mtrs. Control mode was changed to auto, with engines astern the Master lost control of the engines from the bridge and one engine only shutdown on emergency stop, second engine responded at third attempt resulting in the vessel coming into contact with the platform. Vessel engines were shutdown and the vessel was moved to safe area for repairs. This had a potential to severely damage the vessel and to impact safety critical systems on both the vessel and the platform. The vessel had recently been acquired and refitted. This was the second trip since refit and was the first trip for the incumbent master.

Specific Equipment: Supply vessel engines.

Lessons Learnt: *No details available.*

Task Description: *No details available.*

Recommendations: Ensure that procedures are in place in the event of loss of bridge control of the engines, which clearly define action to be taken by bridge & engine room. Conduct further testing of the vessels engines under varying scenarios to

ensure, full functionality prior to return to operation. Ensure faulty joystick is made fully functional, prior to vessel sailing.

Contact Details: *No details available*

620: Fatality during crane operations

Summary:	Fatality
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	Drilling unit
Activity Type:	Drilling, workover
Description:	A man was fatally injured while placing 43ft long cargo basket on riser deck after offloading from supply boat. The ERC was contacted and the site of the accident was quarantined. Drilling operations were shut down and pulled by to the casing shoe awaiting the investigation team arrival. This can be described as a HiPo which was realised.
Specific Equipment:	43ft cargo basket.
Lessons Learnt:	<i>No details available.</i>
Task Description:	<i>No details available.</i>
Recommendations:	Ensure company in charge takes action to establish and reinforce a culture of intolerance of unsafe behaviours Confirm the adequacy of guidelines for deck management and ensure roles and responsibilities of banksmen are defined and reinforced
Contact Details:	<i>No details available.</i>

621: Dropped Object Potential: Crane Brake failure, paying out while in the rest position

Summary:	Property damage
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	Fixed Installation
Activity Type:	Production operations
Description:	On Thursday the 21st of February the Drilling Package pedestal crane (CDFB01100) on an offshore installation suffered a critical mechanical failure of the main hoist static brake system. The consequence of the failure resulted in the uncontrolled descent of the main hoist hook block to the sea. Although no one was injured and no secondary damage was sustained, the incident has been categorised as a High Potential Failure (HiPo). This was due to the fact that the static brake is designed to provide a protective device function, which must be available during all crane-lifting operations. The purpose of the protective device is to prevent a major hazard occurring should the hoist motor drive mechanism failure occur when a load is suspended from the crane i.e. splines on the motor drive mechanism.
Specific Equipment:	2nd Generation type crane, which utilises pressurised hydraulic oil to drive and control the main crane functions
Lessons Learnt:	<i>No details available.</i>
Task Description:	<i>No details available.</i>
Recommendations:	Develop a robust risk based proactive maintenance programme with competent people to implement it

successfully. Carry out an equipment tagging exercise on the cranes to ensure all critical components are identified at a level that permits the correct assignment of PM Routines, Corrective Work Orders, Failure Coding and History recording at job close out.

Contact Details: *No details available.*

622: Dropped Object Potential: Exhaust stack bolts found loose in bad weather resulting in shutdown

Summary:	Near miss
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	Fixed Installation
Activity Type:	Production operations
Description:	On Friday 8th Feb 'B' train exhaust stack was observed to have excessive movement in winds of 35 knts and above. As a result the platform was shutdown and depressured. The immediate inspection of dead weight support guide bolts indicated that they were loose and that the excessive movement of the stack was occurring within the dynamic restraint structure. The dead weight support guide bolts were then tightened which reduced the movement to some degree. Due to high winds access was hampered to the dynamic restraint and the lagging around it, as the installation was outside the limits for erection of the required scaffold. When weather conditions allowed, scaffold was erected to access dynamic restraint on B train. If the exhaust stack had fallen, it would have had the potential for significant loss of life and is therefore considered to be a HiPo.
Specific Equipment:	Gas turbine exhaust stack.
Lessons Learnt:	<i>No details available.</i>
Task Description:	<i>No details available.</i>

Recommendations: 1. Ensure that structural bolting is designed, installed and maintained to reflect in service dynamic loads. 2. Accelerate the programme of enhanced inspection for all exhaust stacks on platforms. 3. Devise a technical integrity improvement plan which addresses maintenance requirements.

Contact Details: No contact details available

623: Electric shock from temporary workshop

Summary: Minor injury

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Fixed Installation

Activity Type: Maintenance

Description: After having supplied electrical power at 3-phase 415-volts to a 'Third Party' laboratory/workshop onboard a platform, a contract employee operator suffered a minor electrical shock when working externally where his body had made contact between the exterior workshop metal casing and the platform handrails. Fortunately the employee was not injured in any way, albeit full medical checks were conducted including ECG tests etc and the results analysed by Occupational Health. This incident had the potential to fatally injure the contractor and is therefore considered to be a HiPo.

Specific Equipment: 3 phase, 415 volts electrical power

Lessons Learnt: *No details available.*

Task Description: *No details available.*

Recommendations: Carry out safety briefing with all persons working on electrical systems to enforce the need to correctly document isolations. Organise a review of electrical competency to ensure personnel have the required levels of competency for the tasks they currently undertake. Review competency certification along with

competancy assessment process.

Contact Details: *No details available.*

624: Task in progress was running 9 5/8" casing. IP was struck by elevators, forcing him into pipe conveyor on drillfloor

Summary: Lost time

Incident consequences
(potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Fixed Installation

Activity Type: Drilling, workover

Description: At the time of the incident the rig was in the process of running 9 5/8" casing, the first joint after making up the shoetrack had just been run and was sitting in the flush mounted slips. One of the roughnecks had a couple of attempts at trying to unlatch the side door elevators, this was proving difficult, so one of the BJ hands had a go, at this point the IP moved around to the front of the elevators to shake the bails in an attempt to free off the elevators so they could be unlatched. While he was doing this the elevators unlatched and whipped out towards him striking him in the groin area, lifting him upwards and backwards striking his back against the next joint of casing sitting on the conveyor. After striking his back the IP fell to the rig floor, the Driller then called the platform medic and TP. Unbeknown to the personnel on the rig floor, the link tilt had been activated whilst the elevators were still latched on the casing. This had the effect of allowing the system to build up maximum pressure whilst the link tilt was held stationary. Once the elevators were unlatched this released the stored energy, resulting in the elevators moving at high speed away from the rotary table and towards the conveyor.

Specific Equipment: Link Tilt and Elevators

Lessons Learnt: *No details available.*

Task Description: *No details available.*

Recommendations: Review with Varco the operating parameters for the link tilt system and review the elevator design. Issue an immediate alert warning other operations that the link tilt has not to be used for the purpose of freeing stuck elevators. Consider installing a warning system to alert personnel when the link tilt is energised and assess the practicality and benefits of the same.

Contact Details: *No details available.*

625; Dropped Object: Pin connection failed on a stand of 4 1/8" drill collars resulting in a joint of collars falling to the drill floor

Summary: Equipment damage

Incident consequences
(potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Fixed Installation

Activity Type: Drilling, workover

Description: Operation was to run in hole with 4 1/8" drill collars to enable them to be laid out on pipedeck. On stand no. 20 the driller ran up with the top drive to pick up the treble stand from the bridge racking arm. The stand was guided into the elevators by the Derrickman using the racking arm and the elevators latched around the stand by the Assistant Derrickman on monkey board. Once the man on the monkey board had retreated to the back of the monkey board the racking arm was released. It appears that when the stand was released from the racking arm a pin end connection failed causing a single joint to fall to the drill floor, leaving a double stand left suspended in the elevators. Toolpusher was immediately informed and the drill floor was barriered off.

Specific Equipment: Weatherford Drill Collars, Top Drive and Elevators

Lessons Learnt: *No details available.*

Task Description: *No details available.*

Recommendations: A review is to be carried out on the existing Inspection regime. Tests to be carried out on the drill collar to

determine reason for failure.

Contact Details: *No details available.*

626: During rigging operations to remove a course filter lid, a chain block, (one of three blocks being used), failed as the lid was about to be lifted

Summary: Near miss

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Fixed Installation

Activity Type: Maintenance

Description: Whilst the deck crew rigger was performing a non-routine rigging operation to remove a coarse filter lid, the one tonne chain block in use failed. The brake on the chain block was not operating correctly allowing the chain (load bearing) to "pay-out" and the load to fall to the deck, out of control. The weight of the suspended load, the speed of its decent and the close proximity of the rigger to the load resulted in this incident being classified as a HIPO.

Specific Equipment: *No details available.*

Lessons Learnt: *No details available.*

Task Description: *No details available.*

Recommendations: Full audit of lifting equipment sub-contractor carried out - need for light load test to validate effectiveness of braking system. Training of riggers revised to emphasise the importance of inspection and light load testing before use, if possible. Safety alert distributed to all projects.

Contact Details: *No details available.*

627: Dropped Object: A Joint (#11 of conductor string) of 18 –19 ...½” diameter slipped through elevators from approximately 20 ft to the drill floor

Summary: Near miss

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Fixed Installation

Activity Type: Drilling, workover

Description: At 11.00am A pre-shift brief was initially held to discuss the running of the 18 “- 19 ½” conductor string, this was carried out in conjunction with the oil states representative. Once crew were satisfied with the operation. The task then proceeded as per dog D035. Three joints of 18” conductor were run in hole since shift changeover , joint 10 was in hole when operation was suspended due to a crew change chopper. While the chopper was on deck the 19 ½” side door elevators were laid to one side, and replaced with 18” – 19 ½” D.I.F elevators (Serial No M 18-3 assumed specific to joint 11). The operation then recommenced once the chopper had departed, and joint eleven was then picked up and landed horizontally to the rig floor. Once the conductor was on the rig floor, the joint was then lowered to allow the drill crew to attach the joint to the bales with shackles. Once this had been completed the joint was then picked up with the blocks and tailed in with the crane. As the joint reached a vertical position, the joint then slipped through the elevator, all crew were warned and were well clear as the conductor landed on to the drill floor. The Toolpusher and Company Representative was informed and

operation suspended pending investigation.

Specific
Equipment: Merlin Elevators

Lessons Learnt: *No details available.*

Task Description: *No details available.*

Recommendations: Review management of change process. Ensure thorough risk assessments and checks are carried out prior to commencing any operation. Review process used for selection and mobilisation of 3rd party contractors.

Contact Details: *No details available.*

628: Dropped Object: Joint of 9 5/8 casing slid down V door ramp uncontrolled

Summary: Near miss

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Fixed Installation

Activity Type: Drilling, workover

Description: Whilst recovering 9 5/8" casing from the well, a joint (length 30', weight 900 kg) was lowered down the V door ramp and the pin end rested on the catwalk pipe stop. The single joint elevators on the travelling block were removed in order to attach the single joint elevators located on the rig floor air tugger to the casing. At that moment the joint was unrestrained. Whilst the single joint elevators were being changed over a sling was attached to the pin end to enable lifting over the pipe stop. The crane was then hooked on to the sling to enable the casing to be lifted over the pipe stop. [Note: After the single joint elevators are changed over the sling/crane is normally disconnected and the casing lowered to the catwalk by use of single joint elevators attached to the rig floor tugger.] At this time the banksman was in view of the crane driver. The crane driver, without having received a signal, either by radio or hand to do so, picked up the slack on the sling and inadvertently lifted the joint up over the pipe stop. The joint of casing then slid down the V door ramp uncontrolled, the pin end lifted and continued to travel towards the end of the catwalk, where it cleared the end of the catwalk hitting a vertical beam approx 2.5m above deck level. An employee was working at a position

at the rear end of the pipe deck/catwalk area only 1.5m away from where the casing swung past in the direction of travel. It was perceived by those involved in the task that the barrier was in place for the benefit of non-drilling personnel/visitors and not for drilling personnel working in the area. The joint came to rest on the catwalk, with the pin end extending past the pipe stop at the end of the catwalk. It is noted that the length of the joint of casing was longer than the length of the catwalk. Note 1. The first 2 joints of casing were successfully laid down. A platform shutdown occurred, which suspended operations for approx 2 hours before recommencing the task of laying down. The incident occurred on the first joint of casing to be laid out after the shutdown. Note 2. Radio was the method of communications agreed at the TBT held with the pipe deck personnel. Once the task had commenced, and due to there being line of sight between the crane driver and the banksman hand signals were adopted. Note 3. It is noted that the Debrief section of the TRIC was not completed correctly as there was no reference made to the incident having occurred whilst carrying out the task.

Specific Equipment: Platform Crane; 9 5/8" Casing.

Lessons Learnt: *No details available.*

Task Description: *No details available.*

Recommendations: Lifting plan to be documented as per the requirements of the existing procedures. When the lifting plan is being compiled there is a need to ensure the requirements identified in the revised Work Guideline and associated Risk Assessment are taken into account.

Contact Details: *No details available*

629: Major crack on thread of 3½” XT Lift Cap (WUK 6030)

Summary: Near miss

Incident consequences
(potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Fixed Installation

Activity Type: Drilling, workover

Description: Commenced the planned pick-up of 72 x 3 ½”XT Drillpipe. Lifting from Catwalk into Mousehole with Lift Cap and Rigfloor Tugger. After placing the 12th joint in the Mousehole it was noticed the Lift Cap was sitting askew. On removal from the box of the joint a major crack was found on the root of the thread of the Lift Cap extending 270 degs. of the circumference. Lift Cap immediately removed from service, T/P informed and TOFS called.

Specific Equipment: 3 1/2" XT Lifting Cap

Lessons Learnt: *No details available.*

Task Description: *No details available.*

Recommendations: 3rd Party Inspection procedures to be reviewed. Pre-use inspection of equipment is to be enforced.

Contact Details: *No details available.*

630: Drill pipe sprang back striking operator during test plug

Summary: Lost time

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Fixed Installation

Activity Type: Drilling, workover

Description: A test plug was being run on a stand of 5" drill pipe to carry out a pressure test on a newly installed annular preventer. The assembly was being measured by the IP as it went through the rotary. During this operation the driller was aware of juddering followed by the assembly dropping through the annular. It is assumed that as a result of this resistance the Top Drive caught up with the top of the stand causing the pipe to bow, then spring back striking the IP who was thrown against the iron roughneck before falling to the floor rendering him unconscious. It is also assumed that after clearing the annular preventer, the stand hung up on the upper BOP rams causing the pipe to recoil contacting but not injuring a roustabout who was going to the assistance of the IP.

Specific Equipment: Top Drive; 5" drill pipe

Lessons Learnt: *No details available.*

Task Description: *No details available.*

Recommendations: A review is to be undertaken of the adequacy and provision of the risk assessment training delivered to personnel to meet procedural requirements. A training programme on 'stored energy' is to be developed for

A/D's and Drillers taking into account recent incident examples. DOG's in respect of this and any other relevant operation are to be reviewed and amended to reflect the following learning from this incident:- Potential hazards of running test plugs- Indicators of potential hang ups / restrictions when running equipment through the rotary table, including: Juddering, Stand/string deviating off centre of rotary; Gap between top drive and top of stand/test string; Changes in the rate of descent- The importance of 'safe' handovers- Ensuring sufficient weight is put onto test strings

Contact Details: *No details available.*

631: Mixing hopper lid fell from vehicle, hitting following car

Summary: Road traffic accident

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Onshore office, support base, heliport

Activity Type: *Any Activity Type

Description: Whilst transporting Drilling Equipment to a site. A loose item (mixing hopper lid approx size 20" Sq Aluminium plate) fell from the trailer and hit a passing car. The item contacted the bonnet of the car and went underneath. The driver of the car pulled up in front of the articulated truck and forced it to stop. This resulted in following vehicles having to stop and a collision (rear end shunt) between two cars. Traffic police attended scene of the incident.

Specific Equipment: *No details available.*

Lessons Learnt: *No details available.*

Task Description: *No details available.*

Recommendations: Implement a checklist for accurately describing, securing and checking each load leaving the site, identifying any potential loose/light items, liquids, height restrictions etc. Call in all drivers, inform them of recent incidents and particular loose item hazards they may encounter during operations. Security to implement a process for Security guards to check vehicles leaving and arriving at the site, checking for loose loads and checking that the checklist is

completed.

Contact Details: *No details available.*

632: Dropped Object from Comms Tower (5mm by 900mm)

Summary: Minor equipment damage

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Fixed Installation

Activity Type: Production operations

Description: At approximately 23:45 hours on 20th May 2002 the night Radio Operator and Steward heard a series of loud noises from the radio room roof / accommodation top area. On investigation they found a piece of 5mm pipe, 900mm long lying on the portside accommodation top deck. The pipe was laying around 2m from the port heli-admin access doorway, the route between the main accommodation and the temporary living quarters (TLQ). Daylight investigation of the incident scene identified the pipe as a redundant support pole on the navigation light mast. The group's assessment of the worst probable outcome was a major head injury or a fatality based on the walkway being a route used by a number of people for a short journey.

Specific Equipment: *No details available.*

Lessons Learnt: *No details available.*

Task Description: *No details available.*

Recommendations: All unsafe conditions / defects must be recorded and closed out on an action tracking system. Reinforce the message that people must not assume that someone else has reported an unsafe condition unless they can confirm

it has been recorded. Establish a risk - based programme of inspection for welds, fixtures and fittings around the rig and plan to remove.

Contact Details: *No details available.*

633: Dropped object - battery pack fell 15 metres during crane operations

Summary: Near miss

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Fixed Installation

Activity Type: Drilling, workover

Description: During crane operations the crane whip line struck a battery pack on the back of a light fitting, resulting in the battery pack (3kgs) braking from it's mountings and falling 15mtrs to the pipe deck. At the time of the incident the deck crew were moving a container into position at the corner of the pipe deck next to the north cage and paint locker when the roustabout involved with the lift heard something beside the container. It was found to be a battery pack from a light fitting which was 3.2kg in weight. On later investigation the battery pack was found to be from a light fitting located on the level above at 16.2mtrs. A northeasterly wind of ~ 34knots was blowing. The logical conclusion in light of information currently available was that the crane whip line had dislodged the battery pack. Although, this could not be fully substantiated.

Specific Equipment: Platform Crane; Light Fitting.

Lessons Learnt: *No details available.*

Task Description: *No details available.*

Recommendations: Request a review of the positioning of the lighting from Client with view to moving them inboard. Further investigation of how Client record, track and close out actions following incidents in light of these light fittings being previously highlighted for modification. A follow-up letter to be sent to Client requesting an explanation of the operation of their action tracking system. Request information from Client relating to the planned inspection / maintenance on the platform light fittings and eliminate or otherwise the condition of the light fitting in the investigation.

Contact Details: *No details available.*

634: Dropped object - bolt and actuator roller fell to rig floor from monkey board level

Summary: Near miss

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Fixed Installation

Activity Type: Drilling, workover

Description: Whilst breaking out a stand from the top drive, a bolt and an actuator roller fell to the rig floor from monkey board level. The bolt fell and landed on the pipe rack mat beside the breakout tong area. The Floorman in the area alerted the driller and whilst in the process of clearing the area, the IBCP actuator roller fell to the rig floor and landed beside the dead man anchor / V door ~ 10ft from the rotary centre. Roller weighed ~ 3lbs, 7" x 1 ½ ". The derrickman checked the actuator shell for any other potential dropped objects, the stand was racked back and the top drive was taken down for inspection. Only one of the two bolts was found and there was no evidence of the bolts having been wired. The bolt threads were in good condition. Of the three actuators on the TD, only one had wired bolts.

Specific Equipment: Top Drive Actuators

Lessons Learnt: *No details available.*

Task Description: *No details available.*

Recommendations: Weekly checks to be amended to include the wiring of the bolts and attachment of the jarring checklist. To present

again the 'Strategy for Eliminating Dropped Objects within Drilling Derricks' package at all crew safety meetings.

635: Wire rope fell into the sea while still on crane rope (2.4 tonne)

Summary: Property damage

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Support vessel eg Supply, Standby

Activity Type: Drilling, workover

Description: The bend protector on the 11 inch riser being installed by a service vessel onto an FPSO slipped on the riser. In order to recover from this situation the riser was to be laid down on the sea bed. During this operation the wire rope on the VSL A&R winch on the service vessel that was carrying the riser parted resulting in the riser falling to the sea bed. The riser came to rest in the safety zone between the west production and gas lift risers designated as the safe lay down zone.

Specific Equipment: CASAR Powerlift 66mm diameter multi-strand rotation resitant wire

Lessons Learnt: *No details available.*

Task Description: *No details available.*

Recommendations: Investigate the feasibility of fitting a recording device to the systems to record relevant data during operation to enable accurate monitoring of rope fatigue life. Implement a revised examination and maintenance programme for non-man riding wires in this type of application. Carry out a design review of the VLS design and operation with a view to improving the fatigue life of the A&R winch rope.

Contact Details: *No details available.*

634: Failure of Drawworks Braking System, damaging top drive and drill collars

Summary: Equipment damage

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Fixed Installation

Activity Type: Drilling, workover

Description: The drawworks brake system released when preparing to remove the last stand of drill string. The travelling block lowered 4 metres, causing damage to the Top Drive and bowing of the stand of drill collars. The emergency brake was applied to prevent further movement. The potential energy stored in the drill collars presented a hazard to personnel on the drill floor.

Specific Equipment: Not specified

Lessons Learnt: *No details available.*

Task Description: *No details available.*

Recommendations: Reinforce the management of change processes associated with the review, risk assessment, communication and enforcement of changes to operating procedures and instructions for drilling operations. Reinforce intolerance to instructions not being followed whilst also reinforcing the refusal to work process should there be any concerns with any procedure or instruction. Reinforce the management processes in the drilling operation with regard to levels of investigation and

recognition of incident potential.

Contact Details: *No details available.*

635: NPT nipple failed catastrophically on a 2" 1502 crossover during pressure test to 5000psi

Summary:	Property damage
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	Onshore terminal
Activity Type:	Drilling, workover
Description:	The nipple was ejected from the system set up with approx 2,500 psi energy behind it. A nearby wind wall had a hole in it from the impact from the flying nipple. The consequences of human intervention could have resulted in a fatality.
Specific Equipment:	2" 1502 cross over
Lessons Learnt:	<i>No details available.</i>
Task Description:	<i>No details available.</i>
Recommendations:	Review procedure with regard to ensuring all lines are cleared prior to commencement of any pressure tests. Ensure that tool-box talk addresses the fact that there should be no 'Walking the Line' during the test. External assessment of supplier of pressure rated nipples should be conducted to identify reasons for failure below threshold.
Contact Details:	<i>No details available.</i>

636: Hose with 2" coupling flailing about the deck in uncontrolled manner

Summary: Near miss

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Support vessel eg Supply, Standby

Activity Type: Marine activity, shuttle offloading

Description: A compressor was started without checking that all hoses were properly connected. This resulted in a pressurised hose complete with metal coupling lashing about the deck uncontrolled.

Specific Equipment: *No details available.*

Lessons Learnt: *No details available.*

Task Description: *No details available.*

Recommendations: Incident highlighted at ALL departmental and operations meetings to raise awareness. Audit/Inspection checklists to capture the learnings from this incident. Maintenance department to review starting process with consideration given to implementation of a failsafe system.

Contact Details: *No details available.*

637: Dropped Object: Racking arm fell from monkey board level to drill floor

Summary: Dropped object

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Drilling unit

Activity Type: Drilling, workover

Description: Racking arm (650 kg) fell from monkey board level to drill floor (100ft - approx) as a result of failure of main and secondary breaking device. This narrowly missing 3 roughnecks standing below.

Specific Equipment: *No details available.*

Lessons Learnt: *No details available.*

Task Description: *No details available.*

Recommendations: Add racking arms to drill rig structural integrity checks.

Contact Details: *No details available.*

638: Helicopter fuel cap missing leading to fuel spillage during flight and landing

Summary:	Near miss
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	Fixed Installation
Activity Type:	Air transport
Description:	Helicopter landed on the Alba after leaving the Britannia. Rear fuel cap was not in place, Helicopter was discharging fuel from fill point between Britannia and Alba.
Specific Equipment:	Failure of deck crew to replace fuel cap
Lessons Learnt:	<i>No details available.</i>
Task Description:	<i>No details available.</i>
Recommendations:	Complete refresher training of helideck refueling crew. Issue report via CAA anonymous reporting database.
Contact Details:	<i>No details available.</i>

639: Dropped Object: BOP dropped to seabed

Summary: Dropped BOP to seabed

Incident consequences
(potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Drilling unit

Activity Type: Drilling, workover

Description: The BOP/LMRP was suspended from 405 feet of riser and operation was halted due to adverse conditions. Failure of the running tool during WOW resulted in the whole assembly dropping to the seabed. The ESD was functional and the template was closed in. Subsequent inspection revealed no damage to subsea equipment.

Specific Equipment: *No details available.*

Lessons Learnt: *No details available.*

Task Description: *No details available.*

Recommendations: Reinforce WOW procedures

Contact Details: *No details available.*

640: Dropped Object - dropped BOP and wireline lubricator

Summary:	Dropped object
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	Drilling unit
Activity Type:	Drilling, workover
Description:	Whilst repositioning the wireline lubricator & BOP, the wireline tools bottomed out in the lubricator, parting the wireline and allowing the tools to drop to the rig floor. The equip was being re-positioned by the drill crew without the knowledge or assistance of the wireline crew. 35 foot drop.
Specific Equipment:	Rig floor communications
Lessons Learnt:	<i>No details available.</i>
Task Description:	<i>No details available.</i>
Recommendations:	Review communications procedures for movement of equipment on rig floor
Contact Details:	<i>No details available.</i>

641: Overpressure of Low Pressure System

Summary: Equipment damage

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Fixed Installation

Activity Type: Production operations

Description: Following an intrusive maintenance operation a reciprocating gas export compressor was being leak tested with nitrogen and helium mix. Following the successful test the equipment was depressurised to flare using a manual vent valve. Due to the failure to ensure positive isolation of the low pressure end of the compressor (the LP manual vent valves were open (and tagged as controlled open at the time of the incident), the LP suction drum and low pressure cylinders and volume bottles of the compressor became exposed to the high test pressure during the blowdown. This caused a rupture of the LP suction drum outlet joint and a release of nitrogen/helium that depleted the immediate area of breathable air.

Specific Equipment: Failure of permit system

Lessons Learnt: *No details available.*

Task Description: *No details available.*

Recommendations: Reinforce isolation practices. Provide refresher training for permit managers. Clearly identify in the field all HP/LP interfaces and add interface management into isolation

procedures.

Contact Details: *No details available.*

642: Insulator Partially drilled through process pipe

Summary:	Damage to plant
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	Fixed Installation
Activity Type:	Maintenance
Description:	A pressurised habitat, consisting of a wooden framework lined with sheet metal that has its joints sealed with silicon to enable it to be pressurised, was being fabricated and erected in an area with several pipes in the immediate vicinity. During assembly of the habitat, the insulator who was carrying out the task inadvertently drilled through some of the habitat in an area with a process pipe directly behind it. The insulator noticed ""resistance"" to the drill, checked the reason why and realised that the pipe had been partially penetrated. The insulator stopped work and advised the Area Operator of the incident. As a result of this, the pipe was checked by the Inspection Technician and a report issued. The pipe was deemed to be safe to continue in service, but it was recommended that a section be replaced during a planned shutdown. No loss of containment occurred at any stage. No persons were injured at any stage.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	<i>No details available.</i>
Task Description:	<i>No details available.</i>

Recommendations: Increase awareness of location of habitats with respect to local pipework.

Contact Details: *No details available.*

643: Dropped Object - object falls from drilling derrick

Summary: Dropped object

Incident consequences
(potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: *Any Location Type

Activity Type: *Any Activity Type

Description: Whilst running in the hole the slips were set and the drilling stand was latched and made up in the TDS. An object fell from the derrick and landed near the setback area and rolled underneath the sub rack.

Specific Equipment: *No details available.*

Lessons Learnt: *No details available.*

Task Description: *No details available.*

Recommendations: Re-inforce use of loose object register. Improve housekeeping on derrick.

644: Dropped object - container door opened during lift

Summary: Near miss

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Fixed Installation

Activity Type: Drilling, workover

Description: Cargo was being offloaded from the supply vessel for a drilling operation which was about to start. The lifts were almost completed when the container was being landed on the pipe deck. At approx 5.0 m above the deck the container door swung open. The deck crew were clear of the area under the container and no equipment fell from the open door although two tools did slide some way out of their storage racks. The container was then landed and checked. The door that had opened was found to have a bent locking plate which did not adequately secure the opening handle. The tools that slid forward may have struck the door during transport or lifting and, due to the door locking plate being almost ineffective, the weight forced the door to open and severed the tie wrap. It was also noted that the tie wrap securing the door catch was of a far lighter type than that normally used and only one of the two doors was tie wrapped.

Specific Equipment: *No details available.*

Lessons Learnt: *No details available.*

Task Description: *No details available.*

Recommendations: Review container locking and security standards. Add examination of container locking plates to pre load out check lists. Standardise tie wrap for locking with a wrap of adequate strength.

Contact Details: *No details available.*

645: Dropped object - scaffold clip falls onto west stairway

Summary: Dropped object

Incident consequences
(potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Fixed Installation

Activity Type: Maintenance

Description: A Scaffold Clip was dropped during the destruction of a temporary scaffold on the upper deck. The clip landed on the west stairway three steps ahead of an operator (fall of 15 metres).

Specific Equipment: *No details available.*

Lessons Learnt: *No details available.*

Task Description: *No details available.*

Recommendations: Change order of work on scaffold destructs. Fit grating over west stairway to protect from future dropped objects.

Contact Details: *No details available.*

646: Dropped object - failure of crane winch leading to dropped container

Summary: Crane failure

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Drilling unit

Activity Type: Drilling, workover

Description: During lifting operations the crane winch failed catastrophically allowing a container and load to fall to the pie deck in the vicinity of the deck crew.

Specific Equipment: *No details available.*

Lessons Learnt: *No details available.*

Task Description: *No details available.*

Recommendations: Do not change management systems in the middle of a job. Thoroughly survey all purchased assets prior to them being put to work.

Contact Details: *No details available.*

647: Failure of needle gun end cap

Summary: Equipment damage

Incident consequences
(potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Fixed Installation

Activity Type: Maintenance

Description: Prior to using a needle gun at the start of his shift, the operator visually checked the it. It appeared to be undamaged and in good working order, so he commenced work with it. After some 30 - 40 minutes of use, he noticed that there was an increase in the amount of water vapour being vented from the needle gun. He put this down to the quality of the rig air supply and continued to work with it. A few minutes later, the gun ceased to work although air was still passing through it when the trigger was depressed. On inspection he noticed that the end cap and internal working parts were missing. He and the Firewatcher located the missing components and calculated that when the end cap separated, it and the internal components had hit the deck above them before falling to the ground. The components were eventually found spread over an area of some 2 metres. Most of the time while operating the needle gun, the end was either pointing towards the operator's face or chest.

Specific Equipment: *No details available.*

Lessons Learnt: *No details available.*

Task Description: *No details available.*

Recommendations: Improve pre-use checks on air / water powered tools. Upgrade generic risk assessments for power tool use.

Contact Details: *No details available.*

648: Crate lid fall onto laydown area

Summary: Dropped object

Incident consequences
(potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: FPSO

Activity Type: Maintenance

Description: A team of two rope access men had been instructed to inspect an exhaust line which runs vertically up the end of the accommodation aft housing. They rigged up rope access from the top of the accommodation block down to the forward laydown area. They were preparing to commence work, and one man had started to ascend from the laydown area with the other attending, when an incoming helicopter passed overhead to land on the helideck. One of the men had started to climb and was approx 2 feet off the ground. The helicopter flight was just passing overhead to land on the helideck. As he looked up, he saw a door like object falling down towards him and his colleague. He shouted a warning to him and took shelter under the bull bars of the laydown area. His colleague looked up when he heard the warning, and saw the object land on deck about 1 metre away. Both men made the site safe, and proceeded straight to the control room and reported the incident to the Asset Supervisor who stopped the work, and went to the site to inspect the area with the Deck Op and OIM. On the fwd landing area they found a wooden packing case lid, approx 3.8m x 1.2m constructed of 18mm pine and estimated weighing 50 kg, lying with one end on the deck and the other on the laydown handrail. There was no apparent damage to

the lid or the laydown area. An inspection of the top of the accommodation roof (which is located 16m above) revealed an open top crate, from which the lid had obviously originated. It had been placed there the day before (15/4/02) as preparation for a forthcoming job . The crate had been offloaded from the supply vessel on the morning of 15/4/02 onto the forward laydown area. It had been moved from there to above the incident site about 1730 that day. The crate was not opened while it was on the laydown area and there is no evidence to suggest that this had changed when it was moved. One helicopter flight had landed on the helideck about 3 hours previously to the incident. Inspection of the crate's securing arrangement showed that it appeared 14 nails were used to secure lid to the crate. Seven nails had been hammered in but had missed the crate body and were therefore doing nothing. Three nails were located in the body of the crate but so close to the edge that the wood had splintered. The nails at the aft end of the crate were bent aft towards the laydown area.

Specific Equipment: *No details available.*

Lessons Learnt: *No details available.*

Task Description: *No details available.*

Recommendations: Perform specific risk assesment on laydown areas under helicopter flight paths on the facility. Secure all crate lids with ratchet straps.Place laydown areas adjacent to helicopter operations into the jurisdiction of HLO.

Contact Details: *No details available.*

649: Failure of temporary seawater lift pump priming fitting

Summary: Equipment damage

Incident consequences
(potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Fixed Installation

Activity Type: Production operations

Description: Prior to start up of 'A' seawater lift pump, it required to be primed using firewater. (The normal priming method using the drillers' seawater lift pump was not available.) This operation, which had been done in the past using the same type of temporary platform fabricated fitting, was set up. The seawater lift pump was primed for several hours. The priming water was shut off and. due to problems in the past, the area was cleared and the CCR informed. It was clear to start the pump. Upon start up, the fitting split at the welds and blew off. On investigation, the priming isolation valve was found not to have been fully shut. This caused pressure in excess of its rated pressure to be applied to the fitting. No personnel were injured. However the fitting crossed a populated module at around head height and impacted on hydrocarbon gas containing small bore pipework (which did not fail).

Specific Equipment: Platform fabricated temporary fitting had not been designed.

Lessons Learnt: *No details available.*

Task Description: *No details available.*

Recommendations: Ensure that all fittings, especially site fabricated ones, have their design and construction validated prior to

use. In general only use standard fittings.

Contact Details: *No details available.*

650: Hook up of Chicksan on B Annulus with single valve isolation

Summary: Near miss

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Fixed Installation

Activity Type: Well services / intervention

Description: Well was handed over to well engineering with B annulus pressure reading 0psi. Well services also checked the pressure and read 0. The single B annulus 2 1/16" 5000psi gate valve was inflow tested before removing the instrumentation flange and no fluid was seen. A 2 1/16"-5000psi-2" 1502 Weco union flange, a 2" Lo-Torq valve were installed. Before installing a gauge on the opposite side, the 1/2" NPT plug was removed with the 2 1/16" Gate valve closed. A 1/2" NPT x Hanifan fitting was installed along with a 1/4" high pressure hose and gauge with a bleeder port. The valve was then opened and the pressure of 1150psi was recorded.

Specific Equipment: *No details available.*

Lessons Learnt: *No details available.*

Task Description: *No details available.*

Recommendations: The new 2" Lo-torq valve assembly has been tested OK to 5000psi for 15 minutes, but will need to be removed to install a permanent 2 1/16" - 5K outer gate valve with pressure in the B annulus. A deviation from the standard has been raised to allow the removal of the temporary

arrangement and to install a 2nd barrier.

Contact Details: *No details available.*

651: Casing joint fell to drill floor from Eagle Light

Summary: Property damage

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Drilling unit

Activity Type: Drilling, workover

Description: Whilst running 10" casing, a joint of casing was stabbed by the eagle light, into the box end of the casing string, which was sitting in the flush mounted slips. The driller lowered the 500T elevators over the newly picked up joint. The eagle light was removed in preparation for picking up the next joint from the catwalk. As the eagle light was being removed, the newly installed casing joint lifted out of the joint sitting in the rotary and fell to the drill floor. The pin end of the casing joint landed on the rotary table and the joint wavered in this position for a few seconds before falling across the casing tong and coming to rest. All drill floor personnel exited the scene when the joint first dropped and no one was injured by the falling object. One crewman did receive a very minor graze to his shin, which was caused by brushing his leg against an object as he exited the area. On examination by the Medic, no injury could be identified.

Specific Equipment: Pipe Racking System (PRS)

Lessons Learnt: *No details available.*

Task Description: *No details available.*

Recommendations: Assess situation and develop plan for reinstating drill floor into a safe area. Plan to include inspection for possible dropped objects, before personnel re-enter drill floor. Generate Risk Assessment and Lift Plan for removal of dropped casing joint. Inspect casing tong and other drill floor equipment for possible damage, caused by falling joint. Function test Eagle Light by repeatedly picking up and laying out tubular. Run electronic log during function test.

Contact Details: *No details available.*

652: Gas LEL reading found to be high (107%) in vessel mud tank

Summary: Evacuation

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Support vessel eg Supply, Standby

Activity Type: Marine activity, shuttle offloading

Description: Supply Vessel backloaded 200 bbls of TEG/EGMBE from platform into 3 Starboard OBM tank on 07/09/02 and discharged in Aberdeen, on completion of discharge the vessel was moved to Seabase to tank clean. Chief Officer took oxygen reading and found to be low (17.8%) and informed the Master and Tank Cleaning chargehand, an LEL reading was asked for and was found to be high (107%) the tank lid was closed and client informed. At 1930 non-essential personnel were evacuated from the vessel and the vessel was put to sea to fill no 3 tank with seawater so as to reduce the LEL to 0%. The tank was filled to 98% reducing the LEL reading to 0% whereby the Harbour allowed the vessel to return to Seabase.

Specific Equipment: *No details available.*

Lessons Learnt: *No details available.*

Task Description: *No details available.*

Recommendations: It is the responsibility of the shipper to confirm the nature of backload cargo prior to backload. Locations to conduct analysis of backload prior to pumping. Carry out emergency response exercise using a similar scenario to

test areas which looked weak during the incident. Expand the chemical management system to give more guidance on cocktails and compatibility of chemicals.

Contact Details: *No details available.*

653: Electrical flash from drilling switchboard resulting in electrical flash burns to rig electrician

Summary: Injury

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Fixed Installation

Activity Type: Maintenance

Description: Whilst the rig electrician was replacing a fuse as part of a fan damper de-isolation, the fuse shorted across two phases of the 440volt busbar due to a failure of the insulating barrier between the phases. This resulted in the rig electrician sustaining flash injuries to his left hand and arm and face. The IP was treated on the platform and then medivac'd to ARI.

Specific Equipment: Electrical equipment

Lessons Learnt: *No details available.*

Task Description: *No details available.*

Recommendations: Source Operations and Maintenance Manuals for electrical switchboard. Ensure copies exist in both offshore and onshore technical libraries. If manuals cannot be sourced, Technical Authority to identify switchboard competent suppliers and compile a suitable maintenance strategy/spare parts list/technical operating procedures, etc. All personnel designated as competent to authorise or carry out isolations under the PTW system should have attended formal risk assessment training. Review tenure of personnel onboard platform and

take action to move long standing personnel to other locations for their own personal learning as well as to deliver new ways of working.

Contact Details: *No details available.*

654: Roughneck was pulled off the monkey board when the TDS going down caught his fall arrestor line

Summary: Property damage

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Drilling unit

Activity Type: Drilling, workover

Description: While racking back drillpipe in the derrick a roughneck was sent up to assist pulling back stands. The IP was wearing a TBXO full body harness and was hooked up to an inertia reel hanging on the starboard side of the crown. After a stand was racked back the traveling block assembly was lowered down. The inertia reel cable got caught by the blocks and the IP was pulled from the monkey board into the derrick and landed on the compensator hoses. The blocks were stopped immediately by the driller. The IP climbed back up onto the monkey board and came down to see the rig medic. The inertia reel is normally only used as a secondary fall protection for manriding operations above monkey board level. It is not properly positioned to serve as fall protection for work on the monkey board during tripping operations.

Specific Equipment: Fall Arrest inertia reel cable

Lessons Learnt: *No details available.*

Task Description: *No details available.*

Recommendations: Ensure all drillers understand and apply the 1 stand per finger policy. Install additional inertia reels and securing points in suitable locations to allow additional personnel on the monkey board. Review secondary fall protection inspection criteria to comply with manufacturers instructions.

Contact Details: *No details available.*

655: Azimuth thrusters stopped during bell run (3 x divers) resulting vessel drifting

Summary: Financial impact

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Support vessel eg Supply, Standby

Activity Type: Modification of plant/structures

Description: At the time of the incident, the vessel was working on DP alongside the East face of the platform with the port side presented to the jacket and with 25 to 30 ks. of wind on the stern. The diving bell was positioned at -129m. A three men bell run was in progress and working divers had entered the jacket for the purpose of installing a bell mouth assembly on a modified conductor. The divers were working in the zone between -120 m and -140m (bottom). Both azimuth thrusters stopped at 10.07 Hrs eliminating the vessel's station keeping capability and causing the vessel to drift to the NW (ahead). Heading control continued to be available by virtue of the bowthrusters. Azimuth thruster No. 1 re-started within one minutes but stopped once again apparently as a direct result of the re-starting of No. 2 which also shut down immediately. This cycle of re-starting and subsequent failure of Nos. 1 & 2 azimuth thrusters re-occurred a second time before No. 1 was finally restarted with No. 2 initiated. The vessel position then stabilised to 40m from the original working location. An emergency diver recovery was initiated immediately following the first failure, and both divers had returned to the clump weight by the time seven minutes had elapsed. The bell was

recovered to deck with all divers well. Finally, the vessel recovered both bell clump weight and departed from the platform 500m zone.

Specific
Equipment: Azimuth thrusters

Lessons Learnt: *No details available.*

Task Description: *No details available.*

Recommendations: Reconfigure the IMAC 33 cards to bring about a suitable segregation of critical consumers (thrusters and transformers) to remove the single card failure mode affecting systems on both sides of the switchboard. Carry out suitable briefings of all personnel on the vessel to ensure that an understanding of the incident and the corrective actions are fully disseminated. Carry out a review of other vessels, vessel management systems (power management/Integrated Control Systems) to ensure that similar failure mechanisms are not present.

Contact Details: *No details available.*

656: Total power failure – Blackout

Summary:	Property damage
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	Support vessel eg Supply, Standby
Activity Type:	*Any Activity Type
Description:	At 02:50 with both 3 man dive bells deployed during subsea change over of dive teams. ROV being fouled on subsea rigging. Diver 2 from STBD bell preparing to provide assistance to ROV. At 02:55 failure of procontic power management system resulting in the generators coming off line and failure to switch over to backup system. Vessel suffered a total loss of power blackout - drifting off without power recovery of subsea systems continued. Stbd bell diver 2 recovered to bell with fouled umbilical. Umbilical cut to allow recovery of bell at 04:25 vessel taut wires recovered and vessel moved outside 500m zone at 04:40.
Specific Equipment:	Marine equipment
Lessons Learnt:	<i>No details available.</i>
Task Description:	<i>No details available.</i>
Recommendations:	Investigation into vessel power management system, repair/replacement to suit.
Contact Details:	<i>No details available.</i>

657: Dropped Object using an angle clamp.

Summary:	Personnel were manoeuvring a new 5m section of 6" pipework into position above a walkway when the angle clamp being used slipped off the beam that it was attached to and fell onto the grating.
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	Fixed Installation
Activity Type:	Lifting, crane, rigging, deck operations
Description:	A rigging team were manoeuvring a 5M section of 6" pipe into position, using a chain block attached to an angle clamp. The angle clamp slipped from the beam, to which it was attached, causing both the clamp and the chain block to fall to the grating. A Rigger, new to offshore work, sustained a minor injury from a glancing blow. No damage to equipment occurred and no injuries were sustained by any other personnel in the vicinity.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	The angle clamp being used was not designed for the task, given the width of the beam to which it was located. The angle clamp was not being controlled via the Rigging Supervisor and the wrong size of angle clamp was chosen for the task, although a beam clamp had been originally considered but discarded due to a cable tray obstructing the proper use of the beam clamp. A re-assessment of the task should have been conducted at this point. Inadequate supervision of inexperienced member of the work party who was assumed to be fully

competent by others.

Task Description: *No details available.*

Recommendations: Angle clamps and other specific specialised items of lifting equipment to be retained under control and issued only on the authority of the Rigging Supervisor. Contract companies to be responsible for ensuring that all inexperienced personnel being sent to offshore installations are identified prior to deployment and ensure that this requirement is communicated to all Contractors and Vendors. All personnel new to the offshore industry and/or inexperienced in the tasks they are sent offshore to fulfil must be identified to their Supervisors and only initially employed under close supervision. Departments to establish a record keeping and tracking system of such personnel.

Contact Details: Talisman Energy H&S Department. (01224) 352500

658: Failure of 'Snakeskin' (Pulling Sock) while reeving new drill floor winch wire

Summary: A new drill floor winch wire was being reeved using a 'snakeskin' (Pulling Sock) to connect the new and old winch wires.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: *Any Location Type

Activity Type: *Any Activity Type

Description: A new drill floor winch wire was being reeved using a 'snakeskin' (Pulling Sock) to connect the new and old winch wires.

The progress of the snakeskin as the new wire was pulled from the drum was continually monitored. However as the snakeskin passed the monkey board sheave it made contact with a derrick cross member beam, causing the old wire to part from the snakeskin, with the result that both ends of the winch wire fell to the drill floor. All personnel involved in the operation retreated to safe areas when the snakeskin parted.

The end of the old wire fell approx 20 metres to the drill floor and the end of the new wire unreeved itself back through the crown sheave and fell approx 50 metres back to the drill floor.

Specific Equipment: *No details available.*

Lessons Learnt: *No details available.*

Task Description: *No details available.*

- Recommendations:
- When using a snakeskin ensure that the path of the wire is clear from obstructions and there are no areas where the wire could snag against equipment or structure.
 - The use of the snakeskin should be in strict compliance with the manufacturers user instructions, which should be supplied with the snakeskin. Particular attention to be given to the manufacturers recommendations on securing the end of the snakeskin to the wire.
 - The manufacturer or supplier of the snakeskin should confirm its suitability, or otherwise, for using it in vertical lifts.
 - The snakeskin should be supplied with a Certificate of Conformity (CoC) from the manufacturer.
 - All non-essential personnel should be kept away from the area during the reeving operation.

Contact Details: *No details available.*



659: Plate drops 30 feet.

Summary:	While lifting off a generator cover plate to install the heat exchanger, the lifting points fitted to the equipment came free.
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	Fixed Installation
Activity Type:	Lifting, crane, rigging, deck operations
Description:	While lifting off a generator cover plate to install the heat exchanger, the lifting points fitted to the equipment came free. These points were fitted to the equipment when received. They consist of an eye bolt fitted to a self crimping nut. There were 4 of them attached to the plate. The plate was lifted off by the crane and was being removed from the module when the eyebolts came loose and the plate dropped 30 feet to the pipe deck below. No-one was injured and no damage to any equipment other than the plate
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	Tensile strength tests on the rivet joints used on the plate show that the appearance of a broken joint indicate that a much higher force than the weight of the plate caused damage to the joints.
Task Description:	<i>No details available.</i>
Recommendations:	Design of the plate has been changed from a riveted connection to a welded connection

Contact Details: toni.hutcheson@apachecorp.com

660: Swivel Failure

Summary:	Single joint elevator swivel failed whilst single joint elevators were positioned in place below the coupling of a joint that was to be laid out. Single joint elevator travelled down the length of the joint of casing and came to rest on the coupling of the joint being held within the rotary table. No injury to personnel
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	*Any Location Type
Activity Type:	*Any Activity Type
Description:	13 3/8" casing running operations were ongoing with around forty joints having been picked-up, made-up and run in the hole. Casing string was then noticed to be 'hanging-up' in the well head area, and a decision was taken to pull back and lay out six or seven joints in order to remove a solid body stabiliser from the casing string. Toolbox talk was held and crew(s) started to pull casing. Several joints were broken out, picked up & laid out with no problems. Next joint was broken out, and the single joint elevators were positioned in place below the coupling and the weight of the joint was taken prior to rotation. Before the power tong was positioned on the pipe the swivel that was attached to the single joint elevator slings failed. The single joint elevator travelled down the length of the joint of casing and came to rest on the coupling of the joint being held within the rotary table. SWIVEL DETAILS: Swivel with dimensions generally as per Crosby G-402 and marked 'Crosby' On inspection of the swivel components there was evidence of corrosion

and thread damage to the threadforms of both the swivel nut and swivel shank.

- Thread damage: Evidence of 'rounding' of the crests of the swivel nut and swivel shank threadforms. Believed to have been caused by a combination of lateral movement of the component parts of the swivel and corrosion whilst in service. Corrosion along with the thread damage meant that there was not the correct interface between the thread forms of the swivel nut and swivel shank.

Specific *No details available.*

Equipment:

Lessons Learnt: *No details available.*

Task Description: *No details available.*

- Recommendations:
- Visually inspect all similar swivels for evidence of corrosion and thread damage.
 - Ensure regular load testing & inspection of all single joint elevator swivels.
 - Set an upper age limit for all single joint elevator slings and swivel sets.

Contact Details: *No details available.*

661: Offshore Container Padeye failure

Summary: A recent incident occurred where a padeye weld on a 10ft half-height container failed and the padeye was torn from the container.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Support vessel eg Supply, Standby

Activity Type: Lifting, crane, rigging, deck operations

Description: A recent incident occurred where a padeye weld on a 10ft half-height container failed and the padeye was torn from the container. The container was about to be lifted from the supply boat, but when the crane took the strain of the load, the padeye tore off prior to it leaving the deck. Nobody was injured. The container had been proof load tested, visual and MPI inspected at the correct intervals and was not overloaded at the time of failure. Initial indications seems to be that there was an inherent defect in the body of the original weld that seems to have propagated to the surface since it's last MPI inspection in February 2005, resulting in failure.

Specific Equipment: *No details available.*

Lessons Learnt: Although containers are regularly inspected according to specific standards prior to shipping offshore it is important that they are also visually inspected during loading and fitting of sling assemblies and shackles for impact damage and sufficient welding etc.

Task Description: *No details available.*

Recommendations: 1) The container owner is recalling all TS5*** series containers for inspection and repair/remanufacture. 2) Should a company find that they are currently using a container with this series of identification numbers, it should be return to the owner in an 'unloaded condition' at the earliest opportunity for inspection/evaluation.

Contact Details: Mr Pratt 01224 724500 and Mr Thatcher 01224 248200

662: Flashback causing acetylene hose rupture

Summary:	Two platers were working in the Platform Fabrication Shop. When one of the platers tried to ignite the cutting torch he was using, a flash back occurred. As a result of the flash back the acetylene hose ruptured immediately upstream of the flashback arrestor fitted to the acetylene regulator which was in turn fitted to the acetylene bottle.
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	*Any Location Type
Activity Type:	Onshore fabrication, repair
Description:	Two platers were working in the Platform Fabrication Shop. When one of the platers tried to ignite the cutting torch he was using, a flash back occurred. As a result of the flash back the acetylene hose ruptured immediately upstream of the flashback arrestor fitted to the acetylene regulator which was in turn fitted to the acetylene bottle. The acetylene bottle was located outside the fabrication shop. The platers immediately went to inspect the oxygen and acetylene bottles and found flames coming from the ruptured hose. One of the platers turned off the valve on the acetylene bottle and the flames were extinguished. No one was injured and the only damage was to the acetylene hose which was both ruptured and had sustained fire damage. On examination it was found that the cutting torch did not have Non Return Valves fitted and the flashback arrestors were not of the reset type. If it was not for the quick thinking of the persons involved this could have been a much more serious incident.

Specific *No details available.*
Equipment:

Lessons Learnt: *No details available.*

Task Description: *No details available.*

Recommendations: Please check all equipment used by your personnel and ensure that it is up to the specification required by your project.

Contact Details: David Milne, AMEC SHEQ Advisor

This picture shows a cutting torch of the same type as involved in the incident without NRV's and the hoses on the right show NRV's fitted.



These show the burst hose and the flashback arrestor fitted to the bottle



663: Dropped Object

Summary: Protection Sleeve for a fishing tool Falls 33' onto Rig floor

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Fixed Installation

Activity Type: Catering / hotel services

Description: Total Dunbar Platform, 18/07/05. A 9 5/8" Trackmaster Whipstock assembly was lifted from the deck to the drill floor. From the V door the whip was attached to a tugger and the assembly was manoeuvred onto the rig floor using the tugger and the crane. When the assembly was lifted at an angle of 45 degrees the packer protection sleeve slid off the end of the assembly where it fell 33' to the main deck. As it fell to the deck it collided with a handrail, then onto a container before striking some casing before coming to rest on the rig floor. Fortunately there were no injuries received and only minor damage observed on the hand rail.

Specific Equipment: *No details available.*

Lessons Learnt: The direct cause has been identified to the failure of the protection sleeve securing mechanism. The underlying cause is the actual design of the securing method of the protection sleeve.

Task Description: *No details available.*

Recommendations: The use of steel protection sleeves are no longer acceptable. all protection sleeves across the Smith Services range are to be scrapped and replaced with an

alternative protection method (Rubber/Matting)

Contact Details: A Heads Op's Man 01224 334709&

664: Failure of frame

Summary:	Chemical container frame fails and drops during lifting operations
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	Fixed Installation
Activity Type:	Lifting, crane, rigging, deck operations
Description:	Moving chemical containers from a 10ft open top half height on the main deck to East side level 1 of platform. The lift was under the control of the banksman who was co-ordinating the lift from level 1 with his assistant. The banksman stopped the lift approximately 40ft from the landing area so as to give further instructions to the crane operator. At that moment the frame holding the chemical drum failed. Liquid cascaded from the plastic container and the whole load fell striking a container on the landing area and narrowly missing the banksman No injuries were incurred to any personnel.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	1) There are no certified lifting points on the tanks 2) The chosen lifting points used to sling the load proved to be inadequate and not fit for purpose.. 3) Loading at onshore base is done by forklift resulting in items being hard up against the side thus making it impossible to pass slings underneath while it is in the half/height.
Task Description:	<i>No details available.</i>

Recommendations: The correct lifting frame is available but was not supplied.
These will now be a standard requirement

Contact Details: toni.hutcheson@apachecorp.com

Dropped Container



Available Lifting Frame



665: Vent Depressurisation onto Scaffold

Summary: A scaffold access platform had been constructed underneath a depressurisation vent on the underside of the platform. When the vent released pressurised air from a base oil storage leg, personnel working adjacent to the vent were propelled across the scaffold until colliding with a handrail three metres distant.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Fixed Installation

Activity Type: Construction, hook-up, commissioning

Description: A platform base oil storage leg was depressurised by the Central Control Room to allow loading from a supply vessel. Depressurisation is achieved through an 8" line directed below the main deck to atmosphere.

On this occasion, a scaffold access platform had been erected on the underside of the platform. The scaffold passed under the open end of the vent pipe which not only allowed personnel to be in the vicinity of the vent outlet, but also partially obstructed the vent's discharge path.

The resulting air blast from the vent pipe impinged on two workers in the immediate vicinity and propelled them across the scaffold unit until colliding with a handrail approximately three metres distant. A third worker was affected to a lesser extent.

<>

Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	Ensure risks associated with having personnel working in close proximity to pressurised equipment are adequately understood and controlled. Supervisors need to have a full understanding of the locations of all workfronts under their control and the numbers of associated personnel working at each location. Scaffold inspectors need to consider the environment around each scaffold and whether the scaffold impacts on operational fittings as well as emergency equipment. Risk assessments need to be sufficiently robust to thoroughly identify and control all hazards.
Task Description:	<i>No details available.</i>
Recommendations:	Review operating practices to ensure that storage legs are kept depressurised whenever workers are in the vicinity. Evaluate measures to reduce the rate of depressurisation of storage legs. Review PTW system to increase awareness of locations of work fronts and improve communication between involved personnel. Review and improve instructions for scaffold inspection and acceptance. Review hazard identification and risk assessment process involved in workpack generation.
Contact Details:	Stuart Stronach, SHE Co-ordinator, Britannia Operator Ltd

The position of the platform vent, the scaffold that had been erected below it and the handrails along the edge of the scaffold.



666: Fall from step ladder

Summary: Electrician had climbed to fourth step on eight step ladder to inspect work area. He has no recollection of how he misplaced his footing but fell injuring himself.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Fixed Installation

Activity Type: Inspection/testing

Description: Electricians were engaged in removing redundant cable from a motor control centre (MCC) unit and blanking the holes that were created. The cables had been removed by the previous shift and this left the blank plugs to be inserted. The work was carried out from an eight step ladder, with the injured party (IP) working from the fourth step. The IP climbed the step ladder with the intention of inspecting the work area before fitting the blanks. The IP has no recollection of how he misplaced his footing during the descent but he fell suffering a sprained wrist, contusions to his back, headache and nausea, and numbness in hands. The work area was behind panels and therefore not much wider than the step ladders and was dry, clean and free from tripping hazards. The step ladder and the IP's safety boots were in good condition and the step ladder was locked in the working position by the locking arms. In 2003/2004 67 people died and nearly 400 suffered a serious injury as a result of a fall from height in the workplace. Falls from height are the most common cause of fatal injury and the second most common cause of major injury to employees, accounting for around 15% of all such injuries. (www.hse.gov.uk/falls)

Specific
Equipment: *No details available.*

Lessons Learnt: Toolbox talks should emphasise risk of working at height eg step ladders. Workforce need to be mindful of colleagues safety and STOP the work to reassess the hazards if necessary. Step ladders should be steadied at all times by a colleague.

Task Description: *No details available.*

Recommendations: One free hand should be holding the step ladder. Three point contact should be maintained at all times. Colleague should be supporting the step ladder and can be used as a guide for descent. Use non-conductive step ladders for electrical work. Employees need to be reminded in the safe use of ladders and step ladders.

Contact Details: *No details available.*

667: Booster Pump 'Stop' and 'Emergency Stop' Button Failure

Summary:	During routine maintenance, both the 'Stop' and 'Emergency Stop' buttons failed to stop a condensate booster pump. Investigation revealed a Tufnol spacer in the contactor had failed in a repeat of an incident from December 2004.
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	Fixed Installation
Activity Type:	Maintenance
Description:	The REP attempted to stop the condensate booster pump 'A' for mechanical seal checks using the local 'Stop' button. It failed to stop. At the CCR console, the pump showed a fail to stop, with a tripped indication. The pump was verified as continuing to run visually. At the switchboard, the REP attempted to stop the drive with the panel-mounted 'Emergency Stop' button, but this had no effect. The REP then forced open the cubicle isolator on load to shut down the pump.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	The contactor was removed and stripped and it was found that a Tufnol spacer in the contactor had failed. The mode of failure was exactly the same as had happened previously in December 2004. On that occasion, the contactor which failed was a SCHIELE DL90N-22. On this occasion, it was a SCHIELE DL65N-22.

Task Description: *No details available.*

Recommendations: An inspection of all similar contactors was carried out.

All DL42/DL65/DL90 type contactors are to be replaced.

The suitability of the tufnol components are to be assessed and the design service life discussed with manufacturer. Maintenance regime will then be amended as appropriate.

Contact Details: Stuart Stronach, SHE Co-ordinator, Britannia Operator Ltd

668: Riding Turns on Davit Winch

Summary:	During maintenance on a Fast Rescue Craft (FRC), davit riding turns were allowed to form on the winch drum. During the next launch of the FRC, the boat suddenly dropped 1-2' causing injury to a crew member.
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	Support vessel eg Supply, Standby
Activity Type:	Sea transport
Description:	A Fast Rescue Craft was lowered onto the quay so that a seized sheave could be freed. The wire was spooled partially onto the winch drum without weight and riding/loose turns were allowed to form. On completion, the FRC was hoisted onto the davit trapping the riding turns. After leaving port, the FRC was being launched with Coxswain and Boatman on board. As it was lowered, it suddenly dropped approximately 1-2'. The Coxswain, who was crouching on the starboard side of the FRC, was balancing himself by using a straight arm against the deck. The result of the drop was that the Coxswain's arm was dislocated. The vessel was delayed until the replacement joined.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	All ship's personnel must be aware of the dangers of riding/loose turns on winch drums. FRC crew must brace themselves against the unexpected and adopt a posture which gives them most protection against injury.

Task Description: *No details available.*

Recommendations: The Master must ensure that new Coxswains/Boatmen are made aware of any launching procedures specific to their vessel. The Chief Officer must ensure that wires are spooled onto winch drums in such a way that riding turns do not occur. The Coxswain must inspect the davit and FRC on departure from port and prior to the first launch.

Contact Details: Elaine Olson, Secretary, Marine Safety Forum

669: Man Overboard from Fast Rescue Craft

Summary:	Whilst collecting mailbags from a crane hook of an installation, the Fast Rescue Craft (FRC) engines failed. The resulting motion of the FRC caused a crew member and the mail to fall overboard.
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	Support vessel eg Supply, Standby
Activity Type:	Sea transport
Description:	During March, a standby vessel in the North Sea launched a Fast Rescue Craft for a mail run. This is common practice; however, on this occasion there was only a crew of two in the FRC. On arrival at the installation, a large bundle of papers was lowered on the crane hook. The weather at the time was well within working parameters. One of the crewmen was cutting the rope to the crane hook when both FRC engines stalled. As the FRC lurched in the sea, the crewman and bags of mail were knocked overboard. The other crewman immediately restarted the engines and retrieved both the man and the mailbags with some difficulty. The crewman was unhurt. During the incident, the FRC radio jammed on permanent transmit preventing proper communication with the standby vessel. The incident was caused by both engines stalling at a crucial moment. There were four mailbags looped over the crane hook which filled up the limited space on the FRC.
Specific Equipment:	<i>No details available.</i>

Lessons Learnt: Always have a minimum crew of three on an FRC. Limit the weight and size of lift lowered to FRC's.

Task Description: *No details available.*

Recommendations: Coxwains to be aware of the idiosyncrasies of the different types of FRC engines and take account of this when manoeuvring close to personnel/installations. The FRC must never be launched without a minimum of three crew. There should always be at least two radios in the FRC. Non-essential FRC runs must be abandoned if communication or engine problems occur. Maintenance and cleaning schedules on FRC radios are to be increased. Crane lifts to FRC's to be limited in weight and size to take account of the FRC motion and space restriction

Contact Details: Elaine Olson, Secretary, Marine Safety Forum

670: Fast Rescue Craft Fire

Summary: Whilst an Emergency Response and Rescue Vessel was on location, one of its Fast Rescue Craft (FRC) caught fire in the davits.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Support vessel eg Supply, Standby

Activity Type: Sea transport

Description: On an Emergency Response and Rescue Vessel, white smoke was seen coming from the port side of the main deck and, upon investigation, it was discovered that the port FRC was on fire. Due to the intensity of the fire, the webbing lifting strops which suspend the FRC from the davit had burnt through and the FRC fell into the sea, consequently extinguishing the fire. The crew were able to recover the FRC from the sea and returned to port where the company requested attendance of the local fire brigade Fire Investigation Officer to assist in the incident investigation and examine the FRC to determine the likely cause of fire. The vessel crew had filled the hull and deck fuel tanks of the FRC with petrol the previous day. Company procedure is to wash down the FRC after fuelling to ensure there is no trace of petrol remaining in the FRC. However, in this case some traces of petrol had been left on the FRC. The vessel had recently experienced problems with sparks being present within the exhaust gases from the funnels. This had been an ongoing problem for a number of months with many different solutions being tried, culminating on the day of sailing for this trip with spark arrestors being fitted to both

funnels. The Vessel Superintendent and Chief Engineer had, at that port visit, also agreed that the vessel's engines should be run at 680 rpm to ensure that the exhausts are always hot enough and prevent a build-up of carbon in the funnels. However, this information had not been properly communicated to the Master and Mate on board at the time such that the main engines were being run at 600 rpm during the voyage resulting in low exhaust temperatures and presumably contributing to a carbon build-up. The Fire Investigator concluded that the most probable cause of the fire was accelerant lying in the bottom of the boat (petrol) which was ignited by an outside ignition source being, most likely, a spark from the funnel.

Specific
Equipment: *No details available.*

Lessons Learnt: Ensure FRC's are fully washed down with soapy water after re-fuelling and all free traces of combustible material are removed.

Task Description: *No details available.*

Recommendations: Excessive sparks from the funnel were a critical factor. All engines have to be operated at a speed where they are considered to be efficient in the combustion cycle which for this vessel is 680 rpm. Spark arrestors had already been fitted to the funnels. Investigation is underway to determine if any modification can be made to the funnels to ensure sparks are carried clear and do not land in the vicinity of the FRC's. It is essential to ensure that all fuel on board is free from any contamination that could adversely affect efficient combustion. Any tank suspected of contamination shall be isolated to ensure fuel cannot be transferred to or from it.

Contact Details: Elaine Olson, Secretary, Marine Safety Forum

671: Load chain anchor pin became detached on chainblock.

Summary:	A load chain anchor pin became detached on a 1 tonne chainblock.
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	*Any Location Type
Activity Type:	Lifting, crane, rigging, deck operations
Description:	A load chain anchor pin became detached on a 1 tonne chainblock. It had previously been inspected by a Lifting Gear Surveyor as part of site 6 monthly routine inspection of portable lifting gear and had been used only once since the last inspection. The block was correctly colour coded and certification was in order. Following the incident a visual check was carried out by a qualified Rigger on all chainblocks held at the location. No other chainblocks were found to be defective.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	• All users to be fully aware of the importance of checking all lifting gear before use. • The colour coding tag alone should never be taken as an indication that the equipment is fit for use at the time it is required to carry out a lift, especially in the case of equipment that may deteriorate or be damaged in use.

Task Description: *No details available.*

- Recommendations:
- All persons using lifting equipment should be competent to do so.
 - Visual inspection of lifting equipment should be undertaken before use.

Contact Details: *No details available.*

Faulty Chain Anchor Point



672: Loss of Breathing Air Supply

Summary:	Loss of breathing air supply to abseiler whilst working in platform leg.
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	Fixed Installation
Activity Type:	*Any Activity Type
Description:	Whilst carrying out rope access work in the utility shaft of an offshore platform using breathing apparatus (comprising a line-fed normal breathing air cascade system), the hose became kinked causing a loss of primary air supply to the wearer. Due to the non-availability of his secondary air supply (a stand-alone 10 minute escape set) the wearer had no option but to remove his mask to breathe. The secondary system was unavailable because the valve on the set was already set to 'on' and the cylinder contents had been exhausted. The affected party was successfully recovered without harm. He was not at imminent risk of harm, the use of BA was precautionary and the environment was protected by HVAC and monitored continuously by the F&G system.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	1. Industry standard kink resistant hoses can kink and cut-off the primary air supply to a line fed BA set very easily if the hose set up is wrong. 2. Inexperienced users of line fed BA will not naturally apply the discipline and rigour in equipment set up, self-checks and buddy checks that divers would use.

If abseilers or other trades are to be deployed using line fed BA it is essential that the procedures are clear, training is comprehensive and controls are in place to make sure the pre-deployment checks are completed correctly.

3. For this sort of work, combining rope access and BA use, it is essential that diving technical authorities are involved in the equipment selection and development of procedures and training.
4. Risk assessments may omit appropriate consideration of the hazards inherent in the use of the air system and consequently teams require coaching during risk assessment and toolbox talks when line fed BA is to be used
5. An effective hose management system is required, including a suitable means of hose storage and deployment, e.g. hose reel. It is essential that a clear system of communication between the wearer of the BA and the person tending the hose is established and tested before work begins. The work site must be kept clear to assist with hose handling and deployment.

Task Description: *No details available.*

- Recommendations:
1. Apply lessons learnt.
 2. Ensure that Rope Access procedures and risk assessments include specific precautions to follow in respect of umbilical air hose management and BA checks in the event of the combined use of rope access techniques and breathing apparatus.

Contact Details: *No details available.*

673: Hand Caught in Free Rotating HVAC Fan Pulley

Summary: Injury to thumb due to entrapment in pulley while inspecting HVAC supply fan.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Fixed Installation

Activity Type: Maintenance

Description: Routine maintenance inspection of HVAC supply fans was to be completed as per schedule. Inspection of one supply fan had been completed without incident and, in preparation for inspection, the second fan was electrically isolated and the guards removed from the drive belts. At this time the technician observed that the fan and pulley had started to rotate due to a "Windmill Effect" caused by air being passed through the air duct. The technician recognised this as a hazard and decided to stop work to identify the best way in which to prevent rotation of the fan. However, whilst preparing to leave the site, the glove on one of the technicians' hand caught in the drive belt, pulling his hand in between the belt and pulley, resulting in a minor injury to his thumb.

Specific Equipment: *No details available.*

Lessons Learnt:

- Windmilling' of fan blades must be considered as part of task risk assessment.
- Personnel to be reminded of the potential for loose clothing and gloves to become entrapped by rotating machine parts.

Task Description: *No details available.*

- Recommendations:
- Insert into Maintenance Instruction PM – ‘Windmilling’ to be identified and prevention methods taken prior to removal of guards.
 - Check fans are stationary before and after guard removal and secure during work task.
 - If possible close inlet damper prior to maintenance.
 - Include the possibility of freewheeling of rotating machinery into Task Risk Assessments.
 - Increase personal awareness regarding rotating machinery and risk of trapping loose clothing.

Contact Details: Johnstone Lee at Total E&P UK PLC on 01224 297392.

674: Failure of Helideck Perimeter Netting

Summary:	A serious incident occurred on an offshore fixed installation, resulting in a helideck crew member falling through the helideck perimeter netting to a deck 20 feet below.
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	Any Location Type
Activity Type:	Any Activity Type
Description:	A serious incident occurred on an offshore fixed installation, resulting in a helideck crew member falling through the helideck perimeter netting to a deck 20 feet below. As a result of the incident the crew member suffered a fractured elbow, although clearly the potential consequences could have been far more serious. The netting was made from polypropylene rope and the incident occurred because the netting failed to support the crew member's weight. As a consequence of the incident the following immediate interim controls were put in place: All Platforms, Rigs etc., operated or contracted to the operator were requested to carry out drop test's on the Helideck perimeter netting. A visual check of the perimeter netting was requested to be carried out by the HLO and any defects reported and addressed before carrying out the drop tests. Prior to testing of the perimeter netting Tool Box Talks and Risk Assessments must be carried out. CAP 437 Chapter 3, Paragraph 9, states the net should be strong enough to withstand and contain, without damage, a 100kg* weight being dropped from a height of 1 metre. Where possible the weight

should be on as small an area as possible (point impact) i.e. simulating someone stepping on the net. (NOTE: The test weight in CAP 437 has been increased to 100kg in the latest revision of CAP 437 issued August 2005. It was previously 75kg.) Where practicable, no person should be allowed within 1 metre of the helideck perimeter where bounded by perimeter netting. Where for whatever reason such a restriction is not practical, a suitable risk assessment should be carried out before permitting access into this area.

Specific Equipment: Heli-deck edge safety netting

Lessons Learnt: *No details available.*

Task Description: *No details available.*

Recommendations: CAP 437 9 Safety Net 9.1 Safety nets for personnel protection should be installed around the landing area except where adequate structural protection against falls exists. The netting used should be of a flexible nature and be manufactured from non-flammable material, with the inboard edge fastened level with, or just below, the edge of the helicopter landing deck. The net itself should extend 1.5 metres in the horizontal plane and be arranged so that the outboard edge is slightly above the level of the landing area, but by not more than 0.25 metres, so that it has an upward and outward slope of at least 10°. The net should be strong enough to withstand and contain, without damage, a 100 kg weight being dropped from a height of 1 metre. 9.2 A safety net designed to meet these criteria should not act as a trampoline giving a 'bounce' effect. Where lateral or longitudinal centre bars are provided to strengthen the net structure they should be arranged and constructed to avoid causing serious injury to persons falling on to them. The ideal design should produce a 'hammock' effect which should securely contain a body falling, rolling or jumping into it, without serious injury. When considering

the securing of the net to the structure and the materials used, care should be taken that each segment will meet adequacy of purpose considerations. Polypropylene deteriorates over time; various wire meshes have been shown to be suitable if properly installed.

Contact Details: None available

675: Cement Head Side Entry Outlet Failure

Summary:	An incident occurred on the 10th August whilst landing a 7" liner assembly, which resulted in damage to a cement head side outlet and uncontrolled release of Oil Base Mud which was contained on the drill floor. No persons were injured.
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	Fixed Installation
Activity Type:	Drilling, workover
Description:	1. Third Party rep instructed Driller to lower string quickly to confirm/ensure liner hanger was fully set. 2. Driller engaged Elmagco brake whilst releasing chain from main brake. The tugger holding the hose connected to the side outlet was not lowered as the cement head came down quicker than intended. 3. String immediately dropped causing the cement head flange bolts to come under tension as the hose remained supported by the tugger resulting in the bolts shearing. 4. Chain and tugger restrained hose. 5. No injuries. 6. OBM spill contained mainly on rig floor but within platform
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	1. Drillers first trip in new position. 2 ½ yrs experience as Assistant Driller, his inexperience with not handling high weight loads meant he was not aware of the need to allow the Elmagco brake sufficient time to engage prior to releasing the main brake. 2. Mentor (Experienced Assistant Rig Manager) assigned to Driller due to new

promotion. 3. Several Senior Personnel in Driller's Shack due to inability to pull liner off bottom. 4. The effectiveness of the Mentor may have been reduced due to presence of personnel.

Task Description: *No details available.*

Recommendations: Training Immediate action 1. Ensure all personnel operating the drawworks understand the operation of the Elmagco Brake and Implications of high loads on the Hand Brake. Follow up actions 2. Review the training and development manuals for Assistant Driller and Driller level competency portfolio to include specific questions relating to the above. 3. Clearly define and communicate the Purpose and Responsibilities of the Mentor. Rig Up 4. Review rig-up configuration to reduce potential to overload outlet flange. Issue a Sadie Alert

Contact Details: Ray Taylor Drilling Superintendent 01224 401632

676: Corrosion on Lifeboat Davits

Summary: A routine inspection of lifeboats on an offshore installation revealed extensive corrosion to the Davits (lifeboat holding equipment). The corrosion was discovered on the inner side of the beams local to the top sheave.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: *Any Location Type

Activity Type: *Any Activity Type

Description: A routine inspection of lifeboats on an offshore installation revealed extensive corrosion to the Davits (lifeboat holding equipment). The corrosion was discovered on the inner side of the beams local to the top sheave.

Further examination revealed more scale that had previously been painted over. Thorough NDT (Non-Destructive Testing) was carried out on all structures to assess integrity as a consequence of which the davits along with lifeboat were deemed unfit for use.

The davits affected were an older type ('A' frame) of davit, fabricated using two 'C' type steel beams back-to-back.

Specific Equipment: *No details available.*

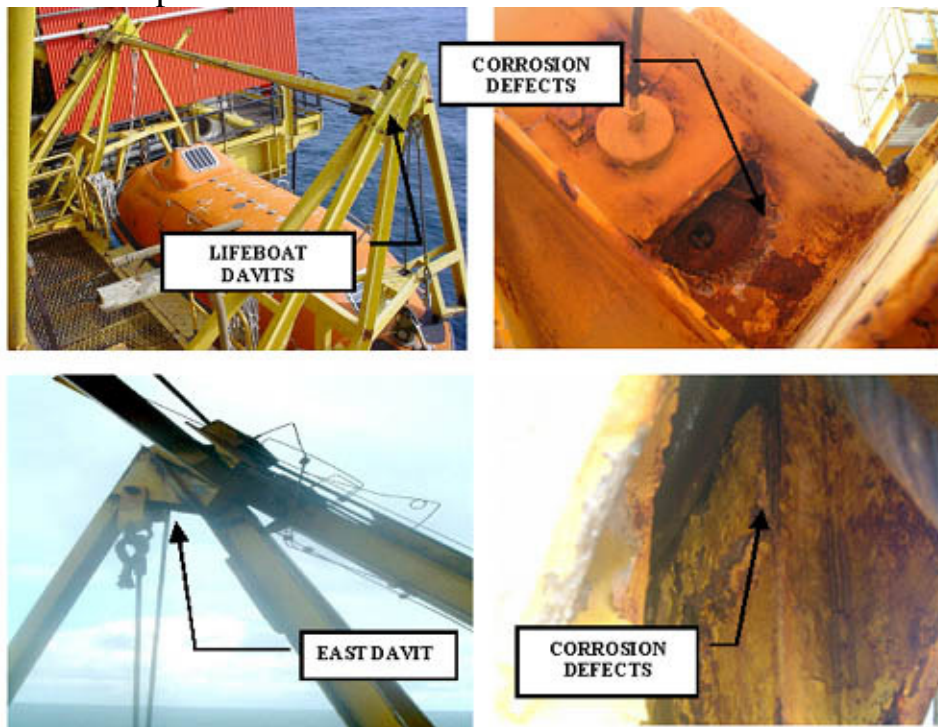
Lessons Learnt: 'A' frame davits are prone to structural corrosion especially behind the top pulley/sheave, due to possible retention of water.

Task Description: *No details available.*

- Recommendations:
- Conduct routine visual examinations of all 'A' frame type davits.
 - Include the above visual examinations in the annual lifeboat maintenance routines.
 - Although the new design for davits (box type structure) is not prone to similar types of corrosion, they should also undergo a periodic structural examination.

Contact Details: *No details available.*

Corrosion points on Lifeboat Davits



667: Fire Extinguisher Fatality

Summary:	A young woman received fatal head injuries and another employee received a compound fracture after being struck by a 3.5kg aluminium CO2 extinguisher propelled by an uncontrolled discharge of gas.
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	Supply base, warehouse, workshop, dock
Activity Type:	Maintenance
Description:	The hand piece of an extinguisher was being replaced with a hand piece from an out of service 3.5kg extinguisher. The partly disassembled CO2 extinguisher was left in an upright position from which it fell, landing on the exposed valve spindle causing the extinguisher to vent. The extinguisher spun on the ground hitting an employee on the ankle causing a compound fracture. The extinguisher was deflected upwards and forwards for some 11.5 metres striking the young woman on the head, resulting in her death. The extinguisher continued on it's trajectory, punching a hole in perspex panneling at the top of the wall to land outside.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	Fire extinguishers are excellent pieces of equipment and have saved many lives, however they have the potential to be extremely dangerous if handled in the wrong manner
Task Description:	<i>No details available.</i>

Recommendations: r- No employee maintains or carries out repairs to extinguishers unless they are competent and trained to do so. - Out of service extinguishers are discharged in the appropriate way, prior to being stored for parts. - The emptying, disposal and storage of out of service extinguishers is carried out in consultation with the suppliers and service agents and to their instruction

Contact Details: Step Change Support Team

668: Hook Block Rope Guard: Potential Dropped Object

Summary:	The method of securing rope guards to a hook block requires a suitable locking mechanism to prevent them falling from the block
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	*Any Location Type
Activity Type:	Lifting, crane, rigging, deck operations
Description:	A recent report from a client showed that the method of retaining rope guards to hook blocks may fail and lead to the possibility of the rope guard falling from the block. In this particular case a whipline was in close proximity to the main block especially at high boom angles. The securing clip, designed for ease of removal had become detached, possibly by contact with the whipline and was found on the deck. The rope guard pin was then loose and could have fallen out.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	In some cases, the ease of removal of clips results in inadvertent loss by unplanned contact with other ropes or objects. If this is possible, then a more secure method of retention is required. This however lessens the ease of removal of the rope guards and requires replacement of components every time the rope guard is removed for reeving of the block. Regular pre-use inspection of lifting equipment must be carefully carried out by competent personnel.

Task Description: *No details available.*

Recommendations: Consider if there is a possibility of the retaining clips being accidentally removed from the hook block. If so devise a more secure locking method such as split pins or nyloc nut. Remember that these pins or nuts must now be replaced every time the rope guard is removed and that the job will take longer to complete and may require additional tools. Ensure that the pre-use inspection checks the condition of the rope guard retention mechanism and that the inspection is completed by a competent person. Any corroded, damaged pins or missing must be replaced and the reason for loss understood

Contact Details: Howard Dunn HSEQ Manager, Sparrows Offshore Services Ltd. 01224 704868

669: Dropped Elevator Die Holder

Summary:	During drill floor maintenance activities the flush joint elevator was moved from the horizontal to the vertical position at which time one of the die holders fell 70 feet to the drill floor. It was subsequently determined that the die holder had been incorrectly installed.
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	Drilling unit
Activity Type:	Drilling, workover
Description:	A mechanic was called to the drill floor to investigate an hydraulic leak in the pipe racking system. In order to move the machine outside its predetermined pattern the operator selected "Special Tool Mode". This mode allows the PRS to be used as a drill floor crane. When this mode is selected the flush joint elevator used to pick up single joints of tubing turns through 90 degrees to a vertical pick up position. At this moment, one of the die holders fell from the elevator to the drill floor 70 feet below. The weight of the die holder was 3.6 Kg. There were 2 people on the drill floor at the time. No one was injured.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	Two persons had replaced the die holders during the preceding night shift. One of the persons was experienced in this operation and the other had only changed die holders once before. The die block is held in position by two pin bolts, inserted from underneath the jaw, that pass through two small blocks on the back of the

die holder. The two bolts had missed the small blocks so that the holder was held in place only by its close fit in the recess. The die holder came loose when the elevator turned through 90 degrees.

Task Description: *No details available.*

Recommendations: Procedures should be put in place to ensure that die holders are installed correctly before use. This should include post fitting checks. Die holders should only be changed by competent persons. They should be familiar with the correct securing arrangements and be able to recognise an incorrectly installed holder. The equipment manufacturer has issued a product alert on this issue.

Contact Details: Nigel.taylor@maerskcon.co.uk

Die Holder installed



Die Holder



670: Dropped Tubing Stand

Summary:	When the bottom of the casing stand was 4 feet above the drill floor it dropped free of the elevators striking and damaging equipment and cutting the air supply hose on the way down before finally coming to rest on the drill floor close to the rotary table in a vertical position, with the top end resting against the derrick beams.
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	Drilling unit
Activity Type:	Drilling, workover
Description:	The operation comprised of the moving of stands of 5 ½" casing from the derrick to well centre and running them in the hole. The first stand of 5½" tubing was transferred over from the derrick to well centre using the Pipe Racking System (PRS) with the bottom of the casing stand suspended 7 feet above the drill floor. The casing elevators were lowered over the top box end of the stand which was 131.4 feet above the drill floor and positioned for elevator closure by the driller using the derrick camera as a visual aid. The personnel involved were the duty Driller, the casing operator and three Floorhands. On confirmation by the driller that the elevators were in position for closing the casing operator functioned the elevator close mechanism. He then visually observed that the gap between the elevator slips and the joint of casing was closed indicating that the they were set and advised the driller accordingly. The casing operator was positioned on the drill floor. The Driller advised the PRS operator to disconnect from the stand. Once the PRS was

disconnected the Driller retracted the stand / top drive away from well centre using the manual operator and at the same time began to lower the stand closer to the rig floor. When the bottom of the casing stand was 4 feet above the drill floor it dropped free of the elevators striking and damaging equipment and cutting the air supply hose on the way down before finally coming to rest on the drill floor close to the rotary table in a vertical position, with the top end resting against the derrick beams. The nearest person was positioned at a distance of 2 to 3 feet from the lower end of the stand which bounced before coming too rest. No one was injured.

Specific
Equipment: *No details available.*

Lessons Learnt: The main conclusion of the investigation is that the casing elevators were partialy set on the lower side of the box connector. Due to the elevators not being completely level, the lower side of the elevator slips gripped on the lower rim of the box connection and managed to temporary support the weight of the stand. Once the PRS had been removed the retraction system was actuated using the manual operator, this created a jerking retract motion which dislodged the stand from the casing elevators causing it to fall free to the drill floor

Task Description: *No details available.*

Recommendations: 1. Ensure that elevators do not close on the box end. 2. Inspect elevators to ensure that elevator segments close without restriction. 3. Ensure all SJA's take into account changes to workscope 4. Where human intervention is required to remove protectors, tubing to be lowered to a safe low height above the drill floor before approach by personnel to minimise potential injury. 5. Casing box collars to be clear of top of casing elevator body by at least 2 inches. 6. Install piping location indicators on elevators. Note: this type of system is installed on some 500 t and 750 t casing elevators and the manufacturer

has already commenced with the design of a similar system for the 200 t casing elevators.

Contact Details: Nigel.taylor@maerskcon.co.uk

671: Barton Differential Pressure Gauges

Summary: Solution for failures to bolting, caused primarily by chloride attack leading to stress corrosion cracking. This issue is detailed in HSE Alert 3/2004 and other SADIE reports. Barton have contacted operating companies directly regarding this issue but have found that this information may not have disseminated down in all cases.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Any Location Type

Activity Type: Maintenance

Description: HSE Safety Alert 3/2004 Further to the issue detailed by HSE Safety Alert SN3/2004 for the Barton model 227C differential pressure indicator, Barton Instrument Systems makes the following statement. The marine environment is very hostile to many metals including some commonly used stainless steels. The continuous exposure to salt spray may lead to surface (rust) as well as internal corrosion. This is particularly a concern where internal corrosion and stress work together to weaken a metal component through the mechanisms of stress corrosion cracking (SCC) and/or hydrogen embrittlement processes (typically hydrogen induced stress corrosion cracking (HISCC)). Pressure retaining bolts are particularly vulnerable to this type of attack as they are often exposed to the environment and are under the stresses of the joint (pre-torque as well as the load from the internal line pressure). Barton has long been a leader in supplying field instrumentation, especially for use in harsh environments. After much research and testing we have

concluded that the bolt materials which will provide improved service for these demanding requirements is Precipitation Hardened Grade 660 Stainless Steel (UNS S66286) per ASTM A453 (Superalloy A286) for units rated at 500, 1500 and 3000 psi only, for 6000 psi rated units Carpenter Alloy MP35N, instead of the previous 17-4 PH material. The material is recommended for use in corrosive environments by recognized corrosion engineering organisations. Barton is concerned with the safety and reliability of products bearing our name. We recommend that existing Model 224 and 224C instruments which have been in service in these environments be upgraded with bolts manufactured from this material. The bolts may be purchased individually from Barton under the following part numbers: 0220-1112J 660 SS Socket Head Screw, 1/4-28 X 2.5 inch £13.50 ea Application: 500 and 1500 psi versions of the 224C DPU; 4 are required Note: Proper bolt torque is 16-18 foot-pounds with the threads lubricated. 0220-1111J 660 SS Socket Head Screw, 3/8-24 X 2.5 inch £22.72 ea Application: 3000 psi version of the 224/224C DPU; 4 are required Note: Proper bolt torque is 34-36 foot-pounds with the threads lubricated. 0220-1109J MP35N Socket Head Screw 3/8-24 X 2.5 inch £53.25 ea Application: 6000 psi version of the 224/224C DPU, 4 are required. Note: Proper bolt torque is 50-52 foot-pounds with the threads and the surface under the bolt head lubricated.

PROCEDURE FOR BOLT REPLACEMENT (Before carrying out this procedure please ensure that the instrument is isolated from process pressure and vented to atmosphere) It is possible to replace the bolts 1 at a time without replacing the pressure housing o rings seals.

A. Clean surface debris from bolting area of unit. B. Remove any 1 bolt. C. Ensure debris does not enter holes in either side of the unit. D. Lubricate the bolt threads E. Replace first bolt and torque to approx 80% of final value. F. Remove diagonally opposing bolt and replace in the same manner. G. Continue and replace

remaining 2 bolts. H. Finally re-torque all bolts to final value in diagonally opposing sequence. NOTE! If for any reason more than 1 bolt is removed at a time or the housings are removed completely the housing o ring seals must be replaced. (2 x 0001-0039R @ £1.79 each) In addition to the model 227C the following instrument models are also affected. All instruments using 224, 224C DP actuator including: Differential Pressure Indicators 227A, 227AS, 227CS Pneumatic Transmitter 273A, 273C Differential Pressure Indicating Switches 288A, 288AS, 288C, 288CS, 290A, 290D Differential Pressure Blind Switch 322, 322C Differential Pressure Pneumatic Controller 335A 12" Chart Recorder 344E & 344ES Stewart Buchanan DP gauges using Barton model 224, 224C DP actuator Please be advised that as from the 1st January 2005 the Grade 660 or MP35N bolt will be fitted as standard to all new and repaired product having stainless steel housings on the Differential Pressure unit. Yours Sincerely P.R. Stender QA Manager Rev 1 (21/09/05)

Specific Equipment: *No details available.*

Lessons Learnt: *No details available.*

Task Description: *No details available.*

Recommendations: No recommendations

Contact Details: Mr.Paul Stender - QA Manager&

672: Supply Vessel Contact with Rig

Summary: A vessel was in a position 15 metres from the platform leg, heading into wind and weather. After nine minutes, the distance had decreased to 7-8 metres and, to increase the distance, the navigating officer took the vessel ahead to clear the leg. The stern then swung towards the leg and contact was made.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Fixed Installation

Activity Type: Sea transport

Description: When the vessel set up in Poscon, 150 metres west of the platform, the navigating officer transferred from manual at the forward console to manual at the aft console to settle the vessel on required heading and then into Poscon at the aft console. However, he forgot to set the rudders to amidships; the two rudders were set 15 to 20 degrees to starboard. He then took the vessel alongside the platform for cargo operations. On arrival at the platform, he pressed the cancel rudder button on the Poscon console, still failing to notice that the rudders were set to starboard. The action of the SSW swell on the bow and with the rudders set as they were, while maintaining position under the crane using ahead movements on the main engines, caused the vessel to slowly close in on the platform and when he pushed the vessel ahead to move away from installation, the rudders caused the stern to swing towards the platform and contact was made.

Specific
Equipment: *No details available.*

Lessons Learnt: Failing to put rudders amidships upon completion of manoeuvring at aft console. Failure to cancel rudders from Poscon at 150 metres and perform environmental tests with vessel as would be set up alongside. Failure to spend sufficient time on the environmental checks. Failure to notice when at the platform, that rudders were not amidships prior to deselecting them.

Task Description: *No details available.*

Recommendations: New signs have been posted on the Poscon and steering positions on the bridge fore and aft consoles. 'CAUTION: RUDDERS TO ALWAYS BE SET TO AMIDSHIPS WHEN CHANGING FROM MANUAL CONTROL TO POSCON CONTROL'. Ensure that the environmental test is conducted to reflect the position in which the vessel will be set up when alongside and at a distance of not less than 50 metres. A safety meeting for all navigating officers was held. The accident was discussed, together with the content, regarding working at offshore locations of the SMS manual. The following was raised: 'WE MUST ALWAYS USE POSITIVE THRUST (WITH THE AZIMUTH) AWAY FROM PLATFORM, TO GET BEST ESCAPE ROUTE'. Following suggestions have been raised: Reposition the rudder indicator or place a secondary indicator closer to the driving officer. An alarm if Poscon is selected without the rudders being set amidships. We would like to refer to the UKOOA guidelines and want to highlight the importance of spending sufficient time on the environmental tests. REMEMBER THE FOLLOWING: Ensure that the environmental test is conducted to reflect the position in which the vessel will be set up when alongside and at a distance of not less than 50 metres. Allow 10 minutes to observe that the test results satisfy the officers so that the operation will be carried out in a safe manner.

Contact Details: *No details available.*

673: Discharging Damaged Deck Cargo

Summary: During the discharge of a basket to an offshore installation, the guide of a stacking point lug on the basket caught against a power pack unit door. This caused the unit to tip approximately 45° onto another container and during this movement the door was damaged.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Fixed Installation

Activity Type: Sea transport

Description: During the discharge of a basket to an offshore installation, the guide of a stacking point lug on the basket caught against a power pack unit door. This caused the unit to tip approximately 45° onto another container and during this movement the door was damaged. The cargo operations were suspended and a Deck Officer attended the deck for investigation. A toolbox talk was conducted between the vessel deck crew. The unit was then righted and inspected from a safe distance. Based on what the Deck Officer could see at the time from the safe haven, the decision to discharge to the installation was made. Upon closer inspection, it was found that the door was hanging by one damaged hinge and was considered a potential dropped object.

Specific Equipment: *No details available.*

Lessons Learnt: If cargo is damaged either during transit or discharge / backload, the following advice must be adhered to: cargo operations must be suspended and all party

communications established with regard to the damaged cargo; a toolbox talk and risk assessment must take place with all persons involved in the task at hand; all cargo must be made safe for a detailed inspection – upright and unhooked from the installation crane; cargo must be given a thorough inspection on the vessel deck by a Deck Officer and sketches or photograph taken of the damage. Note: While gathering information, do not place yourself in danger; information regarding damage must be passed to installation.

Task Description: *No details available.*

Recommendations: Ask Installation for instructions / intentions with regard to the damaged cargo (secure and discharge / round trip or secure). Record these instructions. Nothing in these instructions relieves the ship's Master or his delegate the right to stop the job if he / she feels instructions may be unsafe to crew, vessel or cargo.

Contact Details: *No details available.*

674: Choke Assembly Failure

Summary: Mechanical failure of a choke valve/actuator assembly during manual operations resulting in injuries to operator

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Fixed Installation

Activity Type: Production operations

Description: The platform was bringing on wells after a major maintenance shutdown when an operator was asked to manually open the choke valve using the hand-jack on the actuator. After “cracking” open the valve, radio contact with the operator was lost and the IP was found with head and abdominal injuries having been hit by the actuator as it was ejected from the choke/actuator assembly (Cameron Willis CC60 Choke and Rotork IQ20 actuator). The failure mechanism of the choke system is described below with reference to the diagrams of the component parts in figure 1.0. Prior to the incident, the production choke[1] was closed with wellhead pressure (220 bars) upstream and production manifold pressure (23 bars) downstream. The well was lined up to the production manifold[2] (i.e. all valves were open on the following diagram with the exception of the Test Manifold Isolation Valve[3] which was closed). 3 out of the 4 piston balance ports[4] were in the choke’s plug where it appears blocked due to calcium carbonate scale with the 4th partially blocked. As the choke was cracked open, the upstream pressure built up downstream due to the Production Manifold Non Return Valve[5] also being it appears blocked with calcium carbonate scale. This

pressure build-up combined with the blocked balance ports, resulted in a high axial force being transmitted up the choke valve stem[6]. Downstream pressure was acting against the entire surface area of the choke's plug[7] instead of the much smaller surface area of the valve stem cross section[8] as would have been the case had the balance ports not been blocked. The high axial force along the choke valve stem[6] was transferred into the threads between the drive bushing and drive bushing lock nut. Due to the excessive force, these threads failed allowing the now free moving drive bushing to transfer axial load into the centre column of the actuator. The load was then transferred to the 4 M8 capscrews[9] which failed due to the excess load and ejected the actuator[10].

Specific Equipment: Choke valve actuator assembly

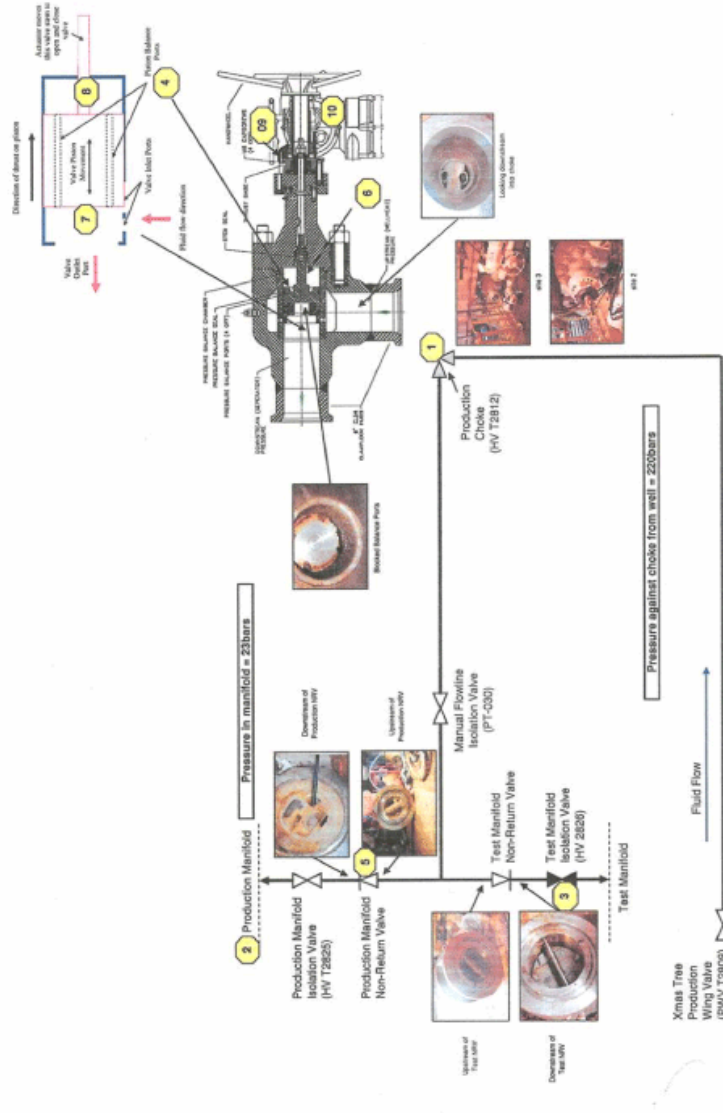
Lessons Learnt: *No details available.*

Task Description: *No details available.*

Recommendations: Well scale treatments should also address the effects of scale in the downstream pipework and fittings

Contact Details: None available

SAFETY FLASH



Figures:1.0 Choke Assembly Failure Diagram

675: FAILURE OF BUNK GRAB HANDLE

Summary: Grab handle failed as person was climbing into upper bunk. This resulted in him falling heavily and injuring his back.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: *Any Location Type

Activity Type: Onshore fabrication, repair

Description: The Injured Party was climbing into the upper bunk of his cabin. The grab handle he was using to heave himself up suddenly gave way without warning. This caused him to fall backwards heavily and resulted in severe bruising to his back. The cabins had been refurbished shortly before the accident occurred.

Specific Equipment: *No details available.*

Lessons Learnt: It was fairly obvious that the handle itself, and the fixing devices, were insufficiently robust. On examination it was discovered that the head of the screw that secured the grab handle bracket to the wall was only slightly larger than the screw fixing hole in the bracket. Furthermore, the bracket was found to be manufactured from relatively thin material. Even after such a short time in service the bracket was stressed enough to be pulled over the head of the fixing screw

Task Description: *No details available.*

Recommendations: .The physical characteristics of offshore personnel obviously differ widely. It is reasonable to assume

therefore that grab handles such as the one described in this report will eventually be used by someone robustly built. Consequently such safeguards as grab handles must be designed with this in mind and be manufactured and secured to withstand heavy usage

Contact Details: Austin Hardman Senior Safety Advisor (Operations) Kerr-McGee North Sea U.K. Ltd.

676: Pressure Distribution Valve Failure

Summary:	During routine equipment testing, of a double headed cutter and HPU, a failure of a pressure distribution valve occurred.
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	*Any Location Type
Activity Type:	*Any Activity Type
Description:	Whilst carrying out routine testing, of a double headed cutter and HPU, a failure of a pressure distribution valve occurred, due to a crack in the casing. The failure resulted in a spout of hydraulic fluid being released under pressure 100 Bar, although no injuries were sustained on this occasion, the potential existed for a fragment to act as a projectile at high velocity. Pre-use inspections did not identify any abnormalities or visual defects with the valve and no pressure drop observed. At the time of the failure a pressure of 100 Bar was being applied to the operating systems, it was during this operation that the valve failed. The valve was replaced and the HPU checked for further signs of damage and re-run of the tests carried out in stages, up to its optimum operating pressure. All operatives were kept at a safe distance from the HPU and all gaurding in place.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	<i>No details available.</i>
Task Description:	<i>No details available.</i>

Recommendations: Valves of same or similar type are to be inspected for signs of fatigue. Where necessary the valves replaced. Valves to be subjected to routine NDT inspection.

Contact Details: *No details available.*



677: SPONTANEOUS COMBUSTION OF TUMBLE DRIED ARTICLES

Summary:	Recently laundered oven cloths found smouldering after being stacked in galley.
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	*Any Location Type
Activity Type:	Catering / hotel services
Description:	A steward sensed a burning smell when working in the galley. After checking obvious sources he contacted the control room for assistance. Two electrical technicians were dispatched to the galley to investigate. They isolated power supplies to the various appliances but despite the fact that the extractor system was working the smell persisted. They then observed smoke emanating from a stack of recently laundered oven cloths. These were quickly transferred to the galley sink and doused with water.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	The ignition of articles that have been tumble dried and stacked immediately after being removed from the dryer is not an uncommon occurrence. The HSE has published an article on fire safety in launderettes. Although aimed primarily at the laundry and dry cleaning industry, a considerable amount of the advice it contains is applicable to offshore laundry facilities. The article can be accessed via the HSE website.

Task Description: *No details available.*

Recommendations: Laundry personnel to be reminded of the need to separate tumble dried articles and allow them to cool before folding and stacking.

Contact Details: Austin Hardman (Senior Safety Advisor Operations) Kerr-McGee North Sea U.K. Ltd.

678: Management of Change

Summary:	Derrickman lifted off monkey board when harness loop catches link tilt nut.
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	Drilling unit
Activity Type:	Drilling, workover
Description:	While running pipe in the hole, the derrickman was leaning out with a stand of pipe when a loop on his safety harness got caught by a nut on the link tilt. This caused him to be lifted off the monkey board. The driller witnessed this happen, stopped the blocks and lowered the man back down. The man was not injured, nor was the harness damaged.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	The loop on the harness was created to allow ease of adjustment of the shoulder straps when wet. The original design was a straight pull tab. This was found to be difficult to grip when wet therefore the manufacturer changed the design to a loop on our behalf. A key lesson learned is that regardless of how minor a change may appear to be initially it can have the potential for tremendous negative outcome if not recognised and assessed. The harness in question was a safety harness with an inertia reel attached to a "D" ring in the back.
Task Description:	<i>No details available.</i>

Recommendations: 1. Initial action was that the safety harnesses in use had all loops blinded by the use of tape. 2. Manufacturer contacted to discontinue manufacturing the harnesses with a loop attachment. 3. Overall risk assesment of the process involved during RIH and POH relative to the derrickman.

Contact Details: balexander@aberdeen.deepwater.com

Link tilt showing nut.



Linktilt with loop caught on nut



679: Finger injury from Magnetic Drill

Summary:	Whilst using a magnetic drill, operator sustained finger injury whilst removing swarf by hand
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	Fixed Installation
Activity Type:	Maintenance
Description:	Whilst using a magnetic drill on steel framework, the operator released the power switch to survey the drilled hole. The operator used his hand to remove swarf away from the hole when the still rotating drill bit and attached swarf latched onto the operator's glove and proceeded to rip the right hand middle finger portion of the glove off and lacerated the operator's middle finger
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	The drill had no drill bit guard attached to it as the guard was not found in the drill box. The operator was using his hand to wipe away the swarf when there are brushes available for this activity. The operator completed an unsafe act by approaching the hole with his gloved hand whilst the drill bit was still in motion. The operator was wearing non-company issued gloves that were not appropriate for the work activity - not the gloves that were issued to him by the company for the tasks to be completed for that particular project.
Task Description:	<i>No details available.</i>
Recommendations:	All equipment must be inspected before being issued to operators to ensure that all guards are present and

inspection/services are up to date.

Only brushes may be used to wipe away swarf from the drilled hole once the drill has been switched off and the drill bit stops rotating.

All personnel to go through refresher awareness training on the safe use of tools and on the main safety principles that must be applied in the use of powered hand tools (in accordance with the Provision and Use of Work Equipment Regulations 1998 (PUWER)).

The use of power tools and their safe operation must be covered as part of the pre task risk assessment and tool box briefing before the work activity commences.

Contact Details: *No details available.*

Protective gloves worn



Magnetic drill used in incident



680: Incompatable elevators and lifting nubbin

Summary: Incompatable lifting nubbin and elevators resulted in sheared elavator bolts. No injuries or dropped objects

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Drilling unit

Activity Type: Drilling, workover

Description: Whilst singling in 2 7/8" tubing, after 30 joints, two bolts on the MYT elevators were observed to be sheared. On closer inspection it was observed that the lifting nubbin was transferring force horizontally to the bolts which resulted in them shearing.

Specific Equipment: *No details available.*

Lessons Learnt: 1. The onsite pre job inspection did not pick up any obvious incompatability between the lifting nubbin and the elevators. 2. Pre load out checks were not effective in ensuring the compatability of handling equipment.

Task Description: *No details available.*

Recommendations: 1. Ensure that handling equipment is, where possible provided by one company. 2. Ensure that sufficient information is provided to the worksite to confirm the suitability and compatability of all handling equipment.

Contact Details: Andy Goodacre HSEQ Engineer 0044 1224 401600

Damaged elevators



681: Occupational Illness

Summary:	Respiratory illness caused by inhaling fumes from burning serial numbers on to thread protectors and stabbing guides using a soldering iron.
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	Onshore office, support base, heliport
Activity Type:	Drilling, workover
Description:	This incident involved a yard worker experiencing respiratory illness which, in the opinion of the Company's Occupational Physician, was caused by inhalation of toxic fumes resulting in a total of twelve days of sickness absence. For a total of approximately 5 days over two periods, the IP had been working on a task to mark identification onto the surfaces of Tubing Guides and Thread Protectors by melting the surfaces with a hot soldering iron. In melting the surfaces, fumes were emitted and were inhaled by the IP resulting in periods of illness and absence from work. An Occupational Physician examination confirmed that the fume inhalation was the cause of the IP's episodes of respiratory illness and long term effects were unlikely.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	Use the correct tool for the job
Task Description:	<i>No details available.</i>
Recommendations:	.Use a mechanical device to engrave serial numbers on

rubber products rather than burning them in

Contact Details: QHSE Manager Odfjell Drilling 01224 856000

682: Back loading a Blow Out Preventor (BOP) to Supply Boat

Summary: A BOP secured within a lifting frame was being back loaded from the platform to the supply boat.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Fixed Installation

Activity Type: Lifting, crane, rigging, deck operations

Description: After landing the load on the vessel, the crane operator attempted to lower the bridle over the outside of the frame, this was not achieved, due to the length of the bridle arrangement. The bridle then had to be lowered into the frame to allow disconnection. The lifting bridle subsequently became entangled with the equipment within the frame. Due to a swell, the vessel dipped and the load transferred back onto the crane and the load started to tip over. The crane driver then lowered off and managed to lower the load back onto the vessel.

Specific Equipment: *No details available.*

Lessons Learnt: If any of the deck crew had been in the vicinity of the load at the time possible injury could have occurred. Lifting slings should have been long enough to allow connection and disconnection from the load from outside the lifting frame. The lifting frame design which has lifting points on the inside should be modified to allow access without having to enter the frame.

Task Description: *No details available.*

Recommendations: Modifications to be made to this type of frame to allow easier and safer access during lifting operations. QA/QC departments to review verification procedures for equipment mobilisation.

Contact Details: Vicki Riach - 01224 205209

683: Helicopter / Newspaper Incident.

Summary: Newspapers being carried by passengers disembarking helicopter in Aberdeen were blown into the air causing helicopters to shutdown.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Onshore office, support base, heliport

Activity Type: Air transport

Description: Passengers were disembarking from a helicopter upon arrival at Aberdeen Heliport when a member of the ground crew, and pilots of another helicopter nearby, observed that newspapers were being blown about in the air. The newspapers were from the disembarking passengers. The Helicopter and an adjacent parked helicopter were shutdown to enable inspection of the rotor blades and engine compartments. Normal flying resumed after full inspections were completed, although this did cause a delay to flight schedules.

Specific Equipment: *No details available.*

Lessons Learnt: The newspapers were not secured correctly and were sucked up by the motion of the rotor blades. Personnel were failing to comply with clearly laid down procedures when carrying items of reading material during helicopter travel to and from Installations.

Task Description: *No details available.*

Recommendations: Information about the incident to be effectively circulated and included during safety meetings in all departments.

The initial flight inductions clearly state the procedure in regarding stowage of reading materials during flight transitions and this is to be further highlighted during pre flight briefs.

Contact Details: Talisman Health and Safety Department. Tel:- (01224) 352500

684: Bray Butterfly Valve Failure

Summary: A near miss incident occurred when a 4" Bray Butterfly Valve failed during a routine maintenance inspection

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: *Any Location Type

Activity Type: Maintenance

Description: The valve was installed in a sea water pipeline. When the valve handle was operated, the valve stem and handle were forcibly ejected from the valve body and landed some 10 metres away from the valve location. The employee operating the valve was not injured.

Specific Equipment: *No details available.*

Lessons Learnt: Examination of the failed valve showed that a retaining circlip that is normally fitted at the top of the valve stem was missing. There was evidence that this circlip had been missing for some time. The rubber seal normally present inside of the valve body was also found to be severely degraded and completely missing from the normal sealing areas around the gate and the valve stem. The combination of the missing circlip and missing rubber seal around the valve stem allowed the stem to be ejected when subjected to pressure after the valve was opened. The line pressure was approximately 10 bar (145 psi)

Task Description: *No details available.*

Recommendations: Conduct inspection of all Bray Butterfly Valves for

properly installed circlips as indicated in the diagrams

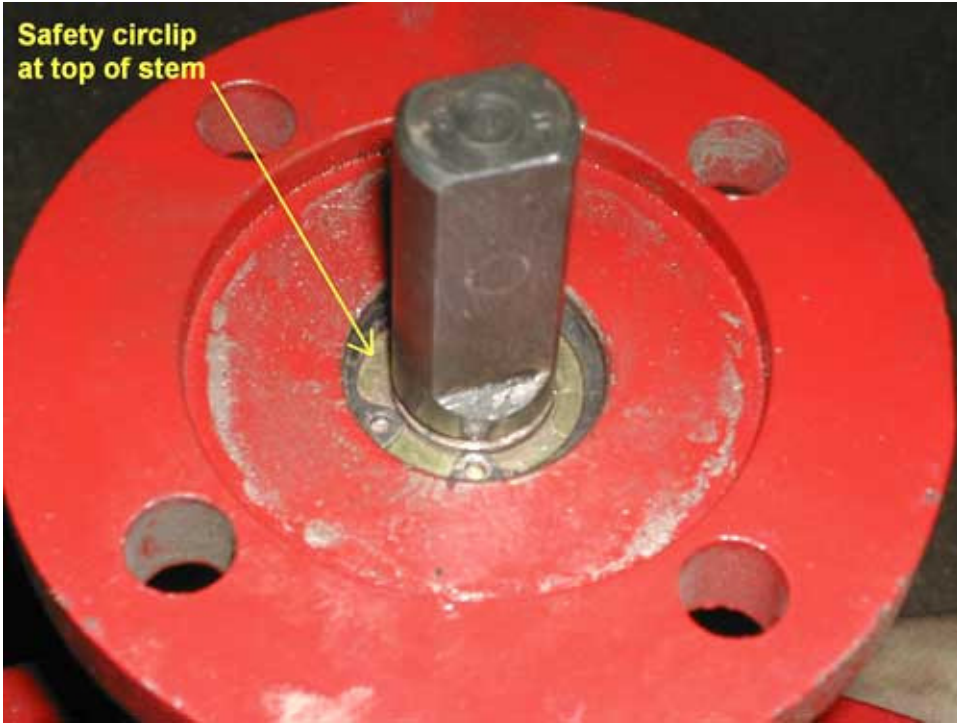
Contact Details: Scott Mitchell HSE Advisor 01224 795244

The damaged Bray Butterfly Valve



Correctly assembled valve with circlip installed

Safety circlip
at top of stem



Intact Functional Valve



Component parts of damaged valve



685: Lifting beam stops

Summary:	An incident involving a trolley coming off a lifting beam has highlighted a problem with the use of adjustable girder trolleys on gantry cranes and overhead lifting beams.
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	Fixed Installation
Activity Type:	Lifting, crane, rigging, deck operations
Description:	An incident involving a trolley coming off a lifting beam has highlighted a problem with the use of adjustable girder trolleys on gantry cranes and overhead lifting beams. In some locations on the platform it was discovered that the stops on the ends of the beams were not as wide as the beam itself. Therefore in some configurations the trolley can roll off the end of the beam with potentially serious consequences. This is shown in the photograph below. Note that there are some other beams and gantry crane configurations where the wheels of small trolleys can pass underneath and beyond the stops.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	The potential for beam trolleys to come off the end of the lifting beams was not recognised during the planning of lifts.
Task Description:	<i>No details available.</i>

Recommendations: 1. Check beam and trolley arrangements at your site to see if the trolley can be rolled past the end stops and, if so, take action to correct this (eg change out the end stops for full-width/height ones) 2. LOLER Reps should confirm that the adequacy of the end stops has been checked during the preparation of new and existing (eh routine) lifting plans that involve the use of beam trolleys. 3. Site competent persons should not use adjustable beam trolleys from rigging lofts unless they have confirmed that they are to be used on beams with suitable end stops. 4. Any adjustable beam trolleys that are already installed should be checked by the site competent person

Contact Details: Colin McIntosh, tel 01224 835005



686: Oxygen deficiency in confined space

Summary: Whilst fault finding on a normally unmanned installation two Technicians entered an enclosure and were exposed to an oxygen deficient atmosphere which induced respiratory problems in them.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Fixed Installation

Activity Type: Maintenance

Description: Whilst fault finding on a normally unmanned installation two Technicians entered an enclosure and were exposed to an oxygen deficient atmosphere which induced respiratory problems in them. Part of a control system on the installation includes a fusible loop charged with nitrogen. The nitrogen pressure had decayed and a team was mobilised to investigate. The fault was traced to a pressure relief valve (PSV) on the nitrogen system. The relief path from this valve is directly into the enclosure. Whilst fault finding, two Technicians entered an enclosure and were exposed to an oxygen deficient atmosphere which induced respiratory problems in them. After immediate first aid, both were taken back to the ETAP platform to receive further medical attention and have since made a full recovery.

Specific Equipment: *No details available.*

Lessons Learnt: 1. PSVs in nitrogen pressured loops should not vented inside an enclosures. 2. All site enclosures should be assessed for their potential to become oxygen deficient

due to nitrogen leakage.

Task Description: *No details available.*

Recommendations: 1. Ensure that PSVs in nitrogen pressured loops vent outside of enclosures 2. Identify all enclosures where there is a potential for nitrogen build up/oxygen deficiency and clearly label these as confined spaces 3. Identify locations where oxygen can be displaced by inert gases and take remedial action

Contact Details: Colin McIntosh, tel 01224 835005



687: Lifeboat davit brake failure

Summary:	During routine maintenance the brake shaft of a lifeboat winch braking mechanism lock nut threads were found to be damaged. One of the lock nuts was lying within the cover of the brake mechanism, the other nut was still in place but the threads on both the shafts and the nuts were stretched and damaged. Due to this the brake disc mechanism had no reaction point to provide secure engagement.
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	Floating production/storage unit
Activity Type:	Maintenance
Description:	During routine maintenance the brake shaft thread & retaining / lock nuts threads were found to be damaged. One of the lock nuts was lying within the cover of the brake mechanism, the other nut was still in place but the threads on both the shafts and the nuts were stretched and damaged. Due to this the brake disc mechanism had no reaction point to provide secure engagement. At the time the boat was secure in the davits and in no danger of dropping to the sea and, similarly, had the nuts failed while lowering the boat it's decent would have been controlled by the separate centrifugal brake assembly. Maintenance records indicate that the lock nuts on two boat winches had previously slackened off and been re-tightened. On inspection, a recently installed davit was found to have a modified and improved type of locking arrangement. The modified arrangement is being fitted to the installation's davits.

Specific *No details available.*

Equipment:

Lessons Learnt: The inspection & maintenance programme needs to be robust enough to pick up this type of defect.

Task Description: *No details available.*

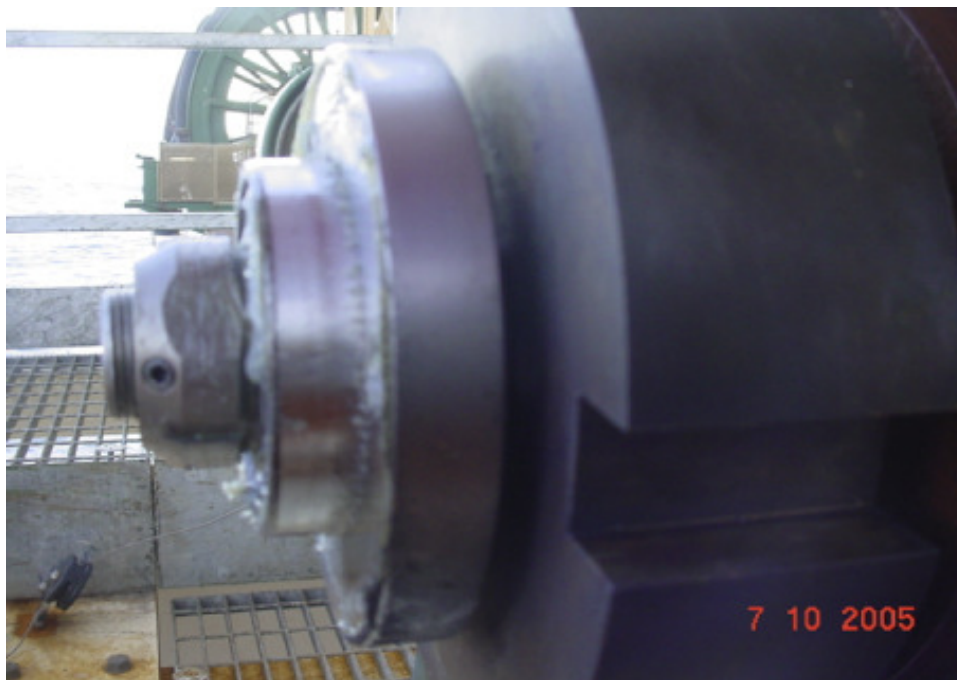
Recommendations: Inspect all Davit International 18 kNm winches for this problem and repair/modify as appropriate

Contact Details: Colin McIntosh, tel 01224 835005

Original locknut



Revised locknut design



Overview



688: ASEP Hydraulic Mast Toppled

Summary: ASEP hydraulic mast toppled whilst laying down wireline lubricator.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Fixed Installation

Activity Type: Well services / intervention

Description: Wireline operation on Well. Well was closed in and no breach of integrity occurred. ASEP K Lift Wireline Mast unit in use. Whilst laying down the lubricator, after completion of well maintenance operations, the mast started twisting and toppled towards the deck. The extended mast came to rest against the crossbeams of the BOP deck roof structure, travelling a distance of approx 10 - 15 feet. One outrigger had been manually depinned and the outrigger leg moved manually by approximately 6". This was to aid the laydown of the wireline lubricator. This action reduced the stability of the structure allowing the mast to topple. There was no injury to personnel.

Specific Equipment: *No details available.*

Lessons Learnt: Mast leg had been moved. Procedure and operation of ASEP mast not followed. Roles and responsibilities within wireline team not clearly defined. Risk/hazard awareness of crew inadequate.

Task Description: *No details available.*

Recommendations: Review training and mast operation procedures including Task Risk Assessment. Apply short term solution to lock off leg whilst mast deployed, and investigate long term interlock to outrigger legs.

Contact Details: Johnstone Lee at Total E&P UK PLC, tel no. 01224 297392 or johnstone.lee@total.com

Photo of Mast



689: Working with Tubulars - Lost Time Injury

Summary:	Whilst a PSV was carrying out backloading operations from a rig in the central north sea, an able seaman suffered a broken leg (LTI) when a bundle of 3/8" tubulars rolled onto his leg.
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	Support vessel eg Supply, Standby
Activity Type:	Lifting, crane, rigging, deck operations
Description:	At the time, 0615, the weather conditions were moderate, wind speed 20-25 knots and significant wave height of 2-3 metres. Although it was still dark, the general visibility with the vessel and rig's lighting was adequate for safe backloading operations. It was agreed that the bundles of 13 3/8" tubulars were to be landed on the port side forward of the PSV's deck. However, an open-top basket was already located in this area adjacent to the port side safe haven which created an area of shadow and partial line of sight obscurity for the rig crane operator to place the bundles into. The first bundle of three (3) tubulars was landed successfully onto the rope/hawsers that were in place on the deck. The second bundle of two (2) tubulars was then landed and both AB's judged that it had stabilised and approached the slings to release to crane hook. Unfortunately, this bundle had not stabilised on the deck but was 'leaning' against the first bundle with one tubular uppermost. As the vessel rolled with the sea's motion, this bundle moved, trapping one of the AB's legs and he was unable to pull away. His colleague immediately radioed the crane operator and vessel bridge

informing them of the problem. The crane operator raised the load and the trapped AB was pulled clear. An RAF helicopter was called to Medivac the AB to the nearest hospital.

Specific
Equipment:

Lifting operations

Lessons Learnt: 1. The rig crane operator's line of sight of the deck landing area may have been partially obscured by the presence of the open-top basket and high-sided safe haven and artificial lighting. This may have prevented him from concluding that the tubulars had been stabilised securely on the deck. 2. The second bundle of two (2) tubulars was outwith the UKOOA 'Guidelines for the Safe Packing and Handling of Cargo to and from Offshore Locations' Appendix 3 Drilling Tubulars 3.1.3 and 3.1.11. This guideline recommends that tubulars should be slung in uneven numbers where practicable and even numbers of tubulars should be lifted as singles. This would help to reduce the movement after landing. 3. Installations and supply vessels should be aware of the UKOOA 'Guidelines for the Safe Packing and Handling of Cargo to and from offshore Locations' Issue 3-2005 Appendix 3 Drilling Tubulars 3.1.3 and 3.1.6. and adopt these practices. Vessel masters should also be aware that these UKOOA Guidelines empower masters to refuse loads that are outwith these guidelines. Should it be impractical to land 'odd' (3 or 5) bundles of tubulars, they should be landed as singles. 4. The second bundle of tubulars had not been allowed to 'settle' correctly before being approached by the deck crew. Confirmation that the load had 'settled' should have been confirmed and any doubts should have required that the load be relifted and settled before being approached by the deck crew. 5. The design of this particular vessel's bridge is such that visibility of the forward main deck area is restricted. Therefore, the bridge watch should endeavour to keep a close watch on the operation to oversee the loading and

discharging of tubulars, particularly in poor light, congested deck or poor weather conditions. 6. Good communication to be established and maintained at all times between the vessel and installation crane operators. This is also important if visibility by the crane operator is reduced for whatever reason. The bridge watch should endeavour to keep a close watch on the operation to oversee the loading and discharge of tubulars, particularly in poor light, congested deck or poor weather conditions. 7. The pre-job meeting/tool box talk should stress the importance of maintaining concentration at all times and the risks associated.

Task Description: *No details available.*

Recommendations: All personnel to be aware of and be guided by UKOOA 'Guidelines for the Safe Packing and Handling of Cargo to and from Offshore Locations' Appendix 3 Drilling Tubulars 3.1.3 and 3.1.11. This guideline recommends that tubulars should be slung in uneven numbers where practicable and even numbers of tubulars should be lifted as singles. This would help to reduce the movement after landing. Good communication should be established and maintained at all times between the vessel and installation crane operators. This is also important if visibility by the crane operator is reduced for whatever reason. The bridge watch should endeavour to keep a close watch on the operation to oversee the loading and discharge of tubulars, particularly in poor light, congested deck or poor weather conditions. The pre-job meeting/tool box talk should stress the importance of maintaining concentration at all times and the risks associated.

Contact Details: None available

690: Loose flow straightener

Summary: A flow straightener came loose in a section of 20" crude pipework and travelled 20 feet downstream, coming to rest against an orifice plate. Movement of the straightener then eroded the bottom of the pipe down to 4mm (from an original thickness of 15mm).

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Onshore terminal

Activity Type: Production operations

Description: A flow straightener came loose in a section of 20" crude pipework and travelled 20 feet downstream, coming to rest against an orifice plate. Movement of the straightener then eroded the bottom of the pipe down to 4mm (from an original thickness of 15mm). During a plant trip the pressure in the pipework increased, and although it was still within the design limit, the weakened section failed realising 11 barrels of crude in to a banded area. The flow straightener had only been tack welded to the carrier flange and its failure had not been foreseen.

Specific Equipment: *No details available.*

Lessons Learnt: Components fitted into pipework should be inspected to verify their integrity.

Task Description: *No details available.*

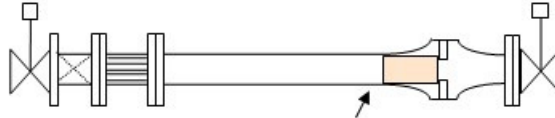
Recommendations: Implement an appropriate inspection regime for flow straighteners.

Contact Details: Colin McIntosh, tel 01224 835005

19 tubes x 3.5" O.D x 30" long



19 tubes x 3.5" O.D x 30" long
Tack welded to flange carrier



Leak

Stainless steel tube assembly
Carbon steel piping

691: Well glass fitting failures

Summary:	A number of well glasses used in safety lamps and installed in potentially explosive areas have failed over recent years. The mode of failure is a shattering of the well glass, in situ, which represents a risk of a dropped object and/or an electrical integrity threat from an exposed hot surface.
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	Fixed Installation
Activity Type:	Maintenance
Description:	A number of well glasses (which comply with, IEC 60079, DIN/EN 50014 and 50018 as well as BS 889-toughened well glass specifications) used in safety lamps and installed in potentially explosive areas have failed over recent years. The mode of failure is a shattering of the well glass, in situ, which represents a risk of a dropped object and/or an electrical integrity threat from an exposed hot surface. Investigations into the individual incidents have been inconclusive in establishing the root cause associated with these failures. However in all cases light fittings have been installed in relatively exposed areas of the installations. Investigations/discussions with the manufactures (Victor and Chalmit) have not identified a high incidence of failures with other users (including those out with UKOOA). This has been confirmed in a lack of user reports together with the monitoring of spares purchased (conducted by each manufacturer). Of the responses received from other UKOOA operators none have

confirmed their experience of this type of failure. The glass in fittings manufactured prior to the year 2000 used a cement to fix the glass to the body of the fitting which could cause a stress point having dissimilar expansion/contraction characteristics and result in cracked/damaged glass. Fittings manufactured post 2000 have the glass bowl fitted using a silicone material which allows for expansion/contraction.

Specific Equipment: *No details available.*

Lessons Learnt: *No details available.*

Task Description: *No details available.*

Recommendations: Undertake a close inspection of all well glass type fittings on your installation to assess condition and replace as necessary.

Contact Details: Colin McIntosh, tel 01224 835005

Typical failed fitting



New Fitting



692: Pipe plug ejected from pipeline

Summary:	A 30" expandable pipe plug was ejected from a pipeline into a habitat
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	Onshore terminal
Activity Type:	Modification of plant/structures
Description:	A 30" expandable pipe plug was ejected from a pipeline into a habitat (built to allow hot work/cutting of the pipe) due to a pressure build up from the nitrogen purge behind the plug. No one was injured by this incident. The nitrogen purge behind the plug was controlled using a needle valve downstream of a 1" gate valve from the 7 bar supply. The nitrogen purge was not controlled with a regulator and neither was a gauge fitted to monitor the pressure. When the plug was ejected the nitrogen in the 30" pipe was released. Observers reported that the habitat 'inflated'. An oxygen meter inside the habitat showed that the oxygen content went down to 17.4% immediately after the ejection of the plug.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	Nitrogen purge pressure should be effectively controlled in operations involving pipe plugs.
Task Description:	<i>No details available.</i>
Recommendations:	1. Verify that nitrogen purge systems in use with pipe plugs will not cause the ejection of the plugs. 2. All personnel directly involved with activities involving bottled

nitrogen should be trained in its hazards.

Contact Details: Colin McIntosh, tel 01224 835005



693: Valve chain guard failure

Summary: A Technician was pulling on a chain to operate an overhead valve when the 5 kg chain guide assembly fell, landing on the ground 8 feet away from the Technician. The Technician found the chain valve securing collar lying on the ground although it is not clear if this collar was in place before the valve was operated.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Onshore terminal

Activity Type: Production operations

Description: A Technician was pulling on a chain to operate an overhead valve when the 5 kg chain guide assembly fell, landing on the ground 8 feet away from the Technician. The Technician found the chain valve securing collar lying on the ground although it is not clear if this collar was in place before the valve was operated. A securing collar which is fixed in place by two 1/16" diameter split pins had become corroded and had sheared during valve operation, enabling the chain guide assembly to come free from the valve and fall to ground.

Specific Equipment: *No details available.*

Lessons Learnt: Securing arrangements on chain operated valves need to be included in the inspection schedule.

Task Description: *No details available.*

Recommendations: Consider changing out the split pins, securing the collars,

with 1/8" diameter set screws.

Contact Details: Colin McIntosh, tel 01224 835005

694: Loose stand results in fatality.

Summary: A derrick-man was killed by a loose stand of pipe that had fallen into the path of the Top Drive System while pulling out of hole.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Drilling unit

Activity Type: Drilling, workover

Description: In the hours prior to the incident the rig had set and cemented 7 inch liner. At approximately 02:35 hrs on 13th November 2005, an incident occurred at the monkey board level of Jack Up drilling rig, resulting in a fatality to the Derrick-man. While pulling out of the hole to retrieve the casing hanger running tool, the Derrick-man (at the monkey board level) lost control of a stand of pipe. The loose stand fell into the path of the Top Drive System (TDS) as it was being lowered. The TDS made contact with the top of the pipe, compressing the pipe end and causing it to bow under the weight of the TDS before coming free and whipping back into the gap between the monkey board and the finger board, where it struck the Derrickman. A joint investigation team identified the following three immediate causes. 1) The Derrick-man lost control of pipe which falls back out of the gap between the monkey board and the finger board and ends up under the TDS. 2) The Driller's view of the monkey board is obstructed when the TDS is passing the monkey board. (Both the direct view and the view from the derrick camera). 3) The lowered TDS contacted the top of the fallen stand, which bowed under the weight of

the TDS and then released the stored energy and whipped back through the gap between the monkey board and the finger board striking the Derrick-man.

Specific
Equipment: *No details available.*

Lessons Learnt:

- Teamwork was insufficient to compensate for the obstructed view of the monkey board.
- Reliance solely on the inadequately placed camera to establish if it is clear to lower the TDS.
- The length of pull back chain and design of the hook may have contributed to the incident. (Under review)
- Communication between the Driller and Derrick-man is inadequate.
- Following the incident the rig's command and control structure was impaired as the rig-based management team all became involved in the response.

Task Description: *No details available.*

Recommendations:

- Re-write tripping procedure ensuring that the Driller is able to see the Derrick-man during all critical activities and that the Driller will be in a position to stop the travelling equipment the moment he observes anything of concern.
- Relocate the camera to a vantage point allowing the monkey board operations to be observed regardless of the TDS position.
- Install an improved camera system.
- Expedite training of all personnel in this area, in particular supervisors.
- Review and revise the Job Risk Assessment format as necessary to enhance 'user friendliness' and clarify accountability.
- Review incident with all rig personnel to highlight awareness.
- Derrick-men to be trained in emergency action for dropped stands.
- Investigate the feasibility of installing non-return gate system on the monkey board.

Contact Details: jason.wilson@globalsantafe.com or 01224 654589

695: Potential for Dropped Object

Summary:	Previously unidentified potential dropped object associated with bulk hoses as a result of corrosion.
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	Drilling unit
Activity Type:	Marine activity, shuttle offloading
Description:	Prior to passing down a mud hose to the supply vessel and during the testing of the bulk hose assembly it was discovered that the handle used to assist with connection of the Avery Hardol to the ships connection point had become detached from the body of the Avery Hardol. . Closer inspection revealed severe corrosion on the connection point between the handle and the body of the Avery Hardoll but due to the rubber protection washers would have made it almost impossible to detect.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	Proceeding on the assumption that because of the handle coating, which was in good order, that there would be no defects as a result of corrosion.
Task Description:	<i>No details available.</i>
Recommendations:	Check all existing coupling handles. Ensure that a check of coupling handle is included in the checklist used prior to shipping the hose to the supply vessel. Inform other users of this event. Photographs are available.

Contact Details: balexander@aberdeen.deepwater.com 01224 427926
07836 752 868

696: HP Water Jetting Incident

Summary: Hot Jetting Activities in confined area around the production vessels and pipe work, resulting in the operator slipping and puncturing his foot with the water jet. He sustained a First Aid category injury, although there was potential for a much more serious outcome to this event.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: *Any Location Type

Activity Type: Maintenance

Description: The operation was to wash down an area to remove all oils and grease from the previous works. The area was heavily congested with pipe work, spools etc. The Hot Jet unit operates on a dry shut system at an operating pressure in the range 3500 to 4000 PSI. This means the HP line is constantly pressurised resulting in a sudden jerking motion when the trigger is operated. The operator was changing position, when he slipped. Due to the confined area he was working in, he had the lance pointed downwards with no intention to operate the trigger during the manoeuvre. However, in trying to maintain his balance he accidentally operated the lance trigger, puncturing his foot with the water jet.

Specific Equipment: *No details available.*

Lessons Learnt: 1. Consideration must be given to the additional risks involved, when operating high pressure water jetting equipment in confined areas. Particular attention is

required relative to the operator's position, stance and stability considering the forces introduced on activation of the lance. 2. The IP was not wearing the correct PPE. The IP was wearing conventional Wellington boots as opposed to metatarsal boots as stated in the Water Jetting Association Code of Practice for the use of High Pressure Water Jetting equipment.

Task Description: *No details available.*

Recommendations: 1. Fitting a safety catch onto the Hot Jet Gun for application when the lance is not in use and thus preventing accidental operation of the trigger. 2. Further training to the operators to emphasise the requirement to wear the correct PPE while carrying out any HP Water Jetting Operations

Contact Details: *No details available.*

697: Drawworks Hydraulic Braking Systems

Summary:	Problems within Hydraulic Braking System led to an uncontrolled descent of the blocks. No personnel were injured as a result of this incident.
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	Fixed Installation
Activity Type:	Drilling, workover
Description:	Due to a recent incident offshore involving the uncontrolled descent of the blocks on a disc-brake system, this alert has been issued to highlight the potential for problems within drawworks hydraulic braking systems. During the investigation it was discovered that the drain line from the emergency brake had been disconnected. It was not clear how this occurred. The drain line had been fitted with a quick disconnect fitting which incorporated an internal check valve that came on when the fitting was disconnected. Because the fitting had an internal check valve the pressure from the brake could not be released and so did not allow the emergency brake to come on.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	If a straight fitting had been used on the drain line and it had been disconnected for any reason, the pressure would have been released and this would have brought the brake on and prevented the incident from happening.
Task Description:	<i>No details available.</i>

Recommendations: It has been decided, with approval from the original equipment manufacturer that the quick disconnect type couplings on the drain line to the high pressure unit system are to be removed and replaced with open/straight type fittings.

Contact Details: Gavin.Sutherland@uk.kcadeutag.com

Open/straight type fitting



Quick disconnect type couplings



698: Dropped Objects from Loadouts

Summary: To highlight potential dangers of dropped objects during the mobilisation of equipment from SLB facilities

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: *Any Location Type

Activity Type: *Any Activity Type

Description: Recently during equipment mobilisations we have experienced one dropped object and two potential dropped objects, which were not detected before leaving the Schlumberger bases. The dropped object was a grinding disc, which was discovered during the offshore installation of a flare boom. Fortunately no one was injured when the grinding disc fell from the boom. The first potential dropped object event was metal studs, gaskets and nuts which had been left on top of a surge tank in the base. They were discovered when the equipment arrived offshore. The second potential dropped object was a flogging spanner, which had been left on a separator when it was shipped from another location to Aberdeen. The spanner was discovered during inspection in Aberdeen and fortunately did not result in a dropped object.

Specific Equipment: *No details available.*

Lessons Learnt: Potential dangers of dropped objects

Task Description: *No details available.*

Recommendations: All locations to post this safety alert on communication notice boards. All locations to discuss the incidents with all relevant personnel during toolbox talks. All locations to review and update where required the loadout safety check lists All locations to include dropped objects prevention at the next safety meeting.

Contact Details: Mr Tony Gunn Service Quality Coach Schlumberger Tel 01224 728000

699: Cargo Selection - Cherry Picking

Summary: The practice of cherry picking of cargo is examined.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Support vessel eg Supply, Standby

Activity Type: Lifting, crane, rigging, deck operations

Description: Recently, an issue arose where the crew on a term supply vessel felt they were being pressured into assisting with the 'cherry picking' of cargo while working alongside an offshore installation. Despite feeling pressured, the deck crew still took the decision to climb on top of the containers. This is not an acceptable method of discharging deck cargo.

Specific Equipment: *No details available.*

Lessons Learnt: *No details available.*

Task Description: *No details available.*

Recommendations: The best practice when discharging cargo from a stow is to work fully across the front, discharge all lifts, then move on to the next line of cargo. Priority lifts should be placed on the outer edges of the stow. When the stow is smaller and does not span the breadth of the vessel's cargo deck, it is recommended that cargo is discharged from the crash barrier to the centre, then forward to aft. The advantages of this method are: the deck crew are visible at all times; there is less chance of being caught if cargo shifts, allowing easy access/exits for the crew member; there is no requirement to enter between gaps in cargo;

there is less movement in stows; and cargo is easier to secure if operations are ceased.

Contact Details: *No details available.*

700: Incorrect Use of Hand Grinder

Summary:	The following is highlighted to all users of handheld grinders.
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	*Any Location Type
Activity Type:	*Any Activity Type
Description:	Personal injury has been experienced due to the incorrect use of a grinder, specifically an inappropriately sized grinding disk.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	The picture shows the used grinder with the oversized disk. Hand grinders produce higher revolutions than the bigger two-handed grinders due to compensation for smaller el-motor. This causes an oversized disk to rotate faster than it is designed for and can easily be torn up as shown in the picture. Always check that the maximum revolution on a grinder never exceeds the revolution on the disk. Both can be identified on grinder and dis
Task Description:	<i>No details available.</i>
Recommendations:	k. Never disconnect the protection shield on the grinder in order to mount an oversized cutting/grinding disk. All types of grinder disks, if incorrectly used, throw loose pieces into the air and will be thrown in the rotation direction of the grinder/disk. The protection shield should

always be mounted in such a manner that they cover the user. However, on most of the handheld grinders the shield can only be mounted in one position. Golden rules: 1. Never use a cutting disk for grinding or a grinding disk for cutting. 2. When using a grinder, always make sure that rotation direction of the disk is pointing away from your body. 3. Always wear proper PPE. 4. When using el-tools, be aware of wetn

Contact Details: Magnar Gjerde, QA Manager, Farstad



701: Failure of a High Pressure Fitting

Summary: A member has reported an incident wherein a half inch HP fitting failed at 200 bar. Whilst no damage was sustained other than to the fitting and the whip check and no injury was sustained, the incident is believed to have had the potential for more serious consequences and was investigated as a high potential event.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Specialist vessel eg diving, construction, survey

Activity Type: Maintenance

Description: A dive vessel had been heading for port after completing a phase of work. Both diving bells had been surfaced to allow access for maintenance work. The gas from the bells had been reclaimed into storage in the gas hold of the vessel. The dirty reclaim tubes were full after this exercise, so it was decided to clean this gas for use later as a dive mix. The on-shift life support supervisor (LSS) entered the gas hold to set up the gas supplies for cleaning, which included putting the dirty gas tubes on-line to the cleaner at a supply pressure of 200 bar gauge. Having opened the supply to the cleaner, he was walking towards it when he heard a loud bang and a continuous rush of gas. On turning round, he could see that the supply hose from the dirty gas had blown off and gas was venting into the gas hold from the tubes. He closed off the dirty reclaim tubes and isolated the escaping gas. On examination, it was noted that the Comex spin fitting that connected the gas whip to the supply manifold had blown off. The whip was undamaged. There was clear evidence

of the track the female connection had made across the male connection as it parted. On examination of the fitting to ascertain the cause of the failure, it was noted that the gas whip fitting had blown off the supply connection. Since there was no clear way of establishing if the other spin-fit fittings could be subjected to the same failure and since new fittings of the same type were not immediately available, the only safe course of action was to temporarily replace all the Comex spin-fit connections on the gas supply lines with JIC fittings. During the shift handover meetings immediately after the incident, all personnel were reminded to check that HP fittings and whip check cords were in good condition and correctly aligned. It was concluded that the failure was likely caused by worn threads and daily use exerted on a 20-year old fitting that had been subjected to stretch as a normal part of daily use. It is believed the whip check cord failed due to the kinetic energy generated as the fitting blew, coupled with the fact that the whip check was not fully extended against the whip and had some slack in it. Corrosion may also have been a contributory cause of the failure.

Specific
Equipment: *No details available.*

Lessons Learnt: The root causes were identified as being that: there had been no planned maintenance/inspection routine for checking wear on the Comex spin-fit fittings; there had been uncertainty regarding how best to position whip check cords on the gas manifolds and how they should be rated to ensure they could cope with the energy that may be exerted upon them

Task Description: *No details available.*

Recommendations: . Wear on the male/female thread of the Comex spin-fitting had been allowed to occur over a protracted period unchecked by any formal planned maintenance or inspection routines; Suitable replacement spin-fit fittings

have been sourced and fitted on the gas manifolds in the gas hold and in saturation control. Planned maintenance instructions covering the inspection of the HP whips were revised to include inspection and testing of spin-fit connectors; It proposes that high pressure fittings which are subject to wear be changed out every five years; Increased awareness is required on how to fit whip checks correctly and more information is required on what size whip check to use on what application, i.e. diameter of hose and pressure within the hose both affect the amount of stored energy that could be release

Contact Details: *No details available.*

702: Lifting Fatality

Summary:	An accident during lifting operations in port resulted in a fatality.
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	Supply base, warehouse, workshop, dock
Activity Type:	Lifting, crane, rigging, deck operations
Description:	A member has reported a fatality during crane operations. The accident occurred alongside in port during the hours of darkness. A vessel was engaged in lifting operations involving the use of a mobile crane (positioned on the quayside) to remove a deck mounted generator and to load a replacement. The experienced lifting crew had been trained in crane operations and had worked together before. The generator was located on the port side of the aft deck of the vessel. Nevertheless, because of the presence of potentially fragile bulwark-mounted survey equipment on the port side of the vessel, she came alongside starboard side-to. This meant that the crane operator had to extend the crane boom to 18m to complete the lift. The deck mounted generator was successfully lifted off the vessel and placed on the quay. The replacement generator was then connected to the crane and the second lift commenced. The two generator housings, whilst slightly different in dimensions, were considerably different in weight, but this was not detected. The first generator weighed 3.6T, whereas the replacement unit weighed 4.9T. The safe working load of the crane at 18m boom extension was between 2.35T and 2.85T. Both lifts exceeded the safe working load of

the crane. Whilst attempting to position the replacement generator, the crane was required to 'jib-out'. As a result of the combined boom extension and excessive load, the mobile crane's outriggers lifted off the quayside. This compromised the stability of the crane, causing the load to move unexpectedly downwards and across the deck simultaneously at considerable speed. The two tagline operators were unable to control this sudden movement. One crane worker was unable to get clear in time and was struck by the load, suffering severe crush injuries to his right leg and torso. He was transferred immediately to hospital but was pronounced dead on arrival.

Specific
Equipment: *No details available.*

Lessons Learnt: The company conducted an investigation into the accident, which reported the following causes: Failure to adhere to specific areas of the safety management system, in particular vessel mobilisation procedure, management of change procedure, risk assessment and supply chain management. The mobile crane had been working with a load over and above its safe working limits. Company safety rules had not been followed. There was also no lift plan, no documented toolbox talk, no identification/verification of the load weight and a lack of basic safety awareness

Task Description: *No details available.*

Recommendations: . Safety management system procedures should be followed at all times. Efficient and effective supply chain management is particularly important for safety-critical suppliers. Ensure lifting procedures are up to date and followed, including lifting risk assessment, lift plans, lifting toolbox talks, lifting checklists and management of change procedures. Re-assess roles and responsibilities of supervisory staff at mobilizations and during lifting operations. Identify through audit specialist lifting companies and establish an 'approved vendors list' for

safety-critical supplier

Contact Details: *No details available.*

Accident Scene 1



Accident Scene 3



Accident Scene 2



703: Dropped Object during pipelay operations

Summary:	Non-injury incident with high potential when piggyback block dropped to the deck during a routine lifting operation.
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	Specialist vessel eg diving, construction, survey
Activity Type:	Lifting, crane, rigging, deck operations
Description:	During Pipelay operations an incident occurred where a piggyback block being lifted to a work platform left the load and dropped to the vessel deck striking a member of the crew. The method of rigging was to thread a soft strop through multiple piggyback blocks, however this lead to the potential for the weight of the blocks themselves to act to open the slits in the block. During one of a series of lifts, a block left the load and fell to the vessel deck striking but not injuring a member of the crew. Investigations revealed that the block either left the load whilst being pulled into the work platform or whilst the strop was being detached and unthreaded on the work platform.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	The method of setting up the blocks for lifting did not fully mitigate the risk of a block freeing itself from the rigging through the slot in the block. The method used to detach the strop from the blocks once the load was inboard of the cherrypicker crane platform, also lead to the potential for the strop to become snagged on the blocks that had

just been lifted. This could potentially have caused one or more of the blocks to be pulled clear of the platform and fall to the deck. A failure in communications lead to the person struck being under the load, from his position the Banksman could not see if the load had been safely landed.

Task Description: *No details available.*

Recommendations: Piggyback blocks should be rigged so the slit in the block is on the outside of the load and the rigging pulls tight on the solid side of the block. Alternatively the use of a cargo net for this operation should be considered. When removing the strop, rigged blocks should be in the horizontal position on the work platform to ensure blocks cannot be knocked or thrown off the platform as the strop is removed. A formal communications protocol should be established which makes clear when the load has been safely landed. Risk assessments and procedures for the task should be reviewed to ensure that this hazard is captured.

Contact Details: *No details available.*

704: Synthetic Rope Parting

Summary: During operations, knot in synthetic rope parted and a section of synthetic rope around the capstan whipped and caught Rigger on the back/leg who sustained a fracture to the upper leg / pelvis region.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Specialist vessel eg diving, construction, survey

Activity Type: Maintenance

Description: Personnel were spooling new wire onto a winch which was to be used during vessel thruster maintenance at a later date. A synthetic rope around a capstan was being used to maintain tension on the new wire whilst it was being spooled. The rope was made up of two separate ropes knotted together. During the operation, the knot in the synthetic rope parted and the section of synthetic rope around the capstan whipped and caught a Rigger on the back / leg. The Rigger sustained a fracture to the upper leg / pelvis region.

Specific Equipment: *No details available.*

Lessons Learnt: Investigation Findings: •The accident took place during a shift change and the supervisors did not stop the job to allow a proper hand over meeting. • There was a lack of planning, supervision and safety awareness prior the work commencing which failed to identify that the two parts, knotted rope being used would be a hazard to the operators whilst under tension. •There was a relatively narrow working area around the capstan which forced the

work party to work in close proximity to the equipment.

Task Description: *No details available.*

Recommendations: Corrective Actions: •Rope that is being used for this type of operation must be singular, without knots and have adequate length for the task. •All work must be properly planned and risk assessed prior to work commencing. Location of persons involved in the task should be considered. •Comprehensive shift handover to the oncoming shift must be completed.

Contact Details: stephen_kirby@nexeninc.com



ACCIDENT SCENE



1- Person feeding the rope; 2- Injured Person position

705: Hand Grinder

Summary:	Fitter suffered injuries after freeing grinder that became stuck during operation.
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	Onshore construction/rig repair yard
Activity Type:	Any Activity Type
Description:	Fitter was cutting a piece of structural support with a hand grinder. During the cut, the disc became trapped in the cut. With the power still applied to the grinder, the Fitter freed the trapped disc. As a result of freeing the disc, the grinder (casing and cutting disc) rose rapidly, striking the Fitter in the face. Fitter suffered a deep cut to his chin, lost two teeth, and suffered superficial cuts and bruises to the neck. The Fitter was wearing safety glasses and gloves at the time of the incident.
Specific Equipment:	Hand grinder
Lessons Learnt:	Investigation Findings: •Fitter was utilising incorrect equipment for the task. A gas-cutter should have been used for cutting the steelwork. •Fitter was utilising incorrect PPE. Use of hand grinder requires “double protection”, i.e. safety glasses and full face visor. Had a visor been worn, injuries sustained may not have been as severe.
Task Description:	<i>No details available.</i>
Recommendations:	Ensure Adequate risk assessment is carried out and that all risk reduction measures are in place prior to

commencing work.

Contact Details: stephen_kirby@nexeninc.com



706: Dropped Object - CCTV Camera

Summary: A CCTV camera located on the Douglas Accommodation Platform De-aerator tower became detached from its mounting and fell some 40 feet to the deck below. The camera (weight 30kg), mounted directly over the access to a breathing apparatus rack (a high traffic area) had potential for a fatality.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Fixed Installation

Activity Type: Production operations

Description: At some date between 2nd and 25th March 2005, a CCTV camera located on the Douglas Accommodation Platform De-aerator tower became detached from its mounting and fell 40 feet to the DA main deck below. The camera is mounted directly over the access to the breathing apparatus rack – an area visited several times a day by personnel crossing the returning to the Douglas Production Platform and – a high traffic area. The camera housing manufactured by 'Coex', type FECH/1 certified explosion proof to Eexd II BT5. The camera and housing weigh 30 kg. It is attached to a pan and tilt gearbox (made by the same manufacturer) by 3 off 6mm Allen screws, (these screws failed due to fatigue). No person was injured and the incident was not observed. At approximately 46 metres above LAT (sea level) the camera is in an exposed location and subject to high winds. Subsequent examination of the fracture surfaces has confirmed the fracture appearance of the Allen screws is consistent with low stress high cycle fatigue - a

result of excessive vibration. Review of previous platform incidents revealed a previous incident (with another camera of the same type) that occurred during its 'manual positioning' by an operator (the gearbox was out of service). The same 3 off 6mm Allen screws had failed. This camera was mounted on a pedestal at shoulder height. The manufacturer 'COEX' has since changed this design detail.

Specific Equipment: *No details available.*

Lessons Learnt: Fatigue and dropped object potential must be considered and verified as robust at the design stage.

Task Description: *No details available.*

Recommendations: These recommendations relate to type FECH/1 cameras and gearboxes made by COEX, certified explosion proof to Eexd II BT5:- 1. Remove the pan and tilt gearboxes and fix cameras in position where possible. 2. Complete a dropped object risk assessment. Fit secondary fall restraints to prevent cameras and gearboxes falling should the bolts fail. 3. Inspect the condition of the 3 off 6 mm Allen screw that connect the camera and the gearbox to the pan and tilt at regular intervals. (The manufacturer recommends 6 monthly). NB: The camera manufacturer is "COEX" based at Brigg, North Lincolnshire

Contact Details: Petpoa.dashe.superintendent@bhpbilliton.com

7 Fall Path of Camera DA-TD-403-01



Camera was positioned here looking towards DD. Weight 30kg. Height Approx 40 feet. See Pictures 1, 2, 3.

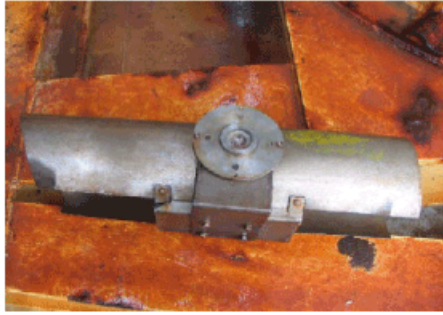
Hits pipework here. See Pictures 4, 5.

Hits Handrails here and here. See Pictures 6, 7, 8

Comes to rest here on the deck
Picture 9

The BA rack ~ the heaviest traffic area on the Douglas complex. All persons crossing to the Douglas Deck kit up and test their BA before crossing the DA bridge

(Note: De-aerator Tower is not bent – image stitching is poor)



Pict 10. The cowling above



Pict. 11 The Ex Camera body



Pict 12. 30 kg camera is supported 3 off 6 mm bolts.



Figure 2

Conclusions and recommendations

- All three screws failed by fatigue.
- The fracture appearance was indicative of low stress high cycle fatigue caused by the application of cyclic stress due to vibration.

707: Grinding incident

Summary: A colleague received a deep cut injury to his neck and side of the head whilst using a 7" grinder to dress steel plate.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: *Any Location Type

Activity Type: Construction, hook-up, commissioning

Description: A colleague received a deep cut injury to his neck and side of the head whilst using a 7" grinder to dress steel plate. As he positioned himself to carry out his task, the draw strings from his Jacket Hood became entangled in the rotating spindle of the grinder; this resulted in the grinder being drawn towards his head and neck. It happened so quickly that he had no to think or react to protect himself. Potentially this incident could have been catastrophic to both our colleague and his family.

Specific Equipment: *No details available.*

Lessons Learnt: Clothing can present entanglement hazards whilst working with rotating equipment such as drills and grinders. Keep all potential entanglement sources secure at all times or remove from danger zone. Eg - draw string for hoods, cuffs, hi vis vests, loose clothing, lanyards and belts etc

Task Description: *No details available.*

Recommendations: Always ensure that a risk assessment has been conducted for all work, identifying all possible hazards

including potential entanglement. Remember "What if?"
thinking safety will keep you safe. Don't forget PPE

Contact Details: lloyd.connor@amec.com

Entangled Grinder



708: Dropped Object

Summary: As a corroded joint of tubing was being retrieved through the rotary, the collar became dislodged and fell 25ft to the drill floor. One person was on the floor at the time.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Fixed Installation

Activity Type: Drilling, workover

Description: The task in progress was retrieving 7" tubing from well SW31. After pulling approx 20 joints it was apparent that the condition of the tubing was deteriorating due to heavy corrosion. SW31 was a water injector completed in 1993 and it had been anticipated that sections of the tubing would be corroded. The decision was taken to leave the hand slips in the rotary, allowing them to "ride" the tubing. If the tubing were to part the slips would set and prevent the loss of the string in the well. One man was positioned on the drill floor to act as a sentry and prevent the slips from being lifted out of the rotary. Two corroded joints were successfully retrieved. As the third joint was being retrieved the tubing coupling dislodged and fell approximately 25ft to the drill floor.

Specific Equipment: *No details available.*

Lessons Learnt: The potential for the coupling to become a dropped object was not considered a risk. This type of failure had never been experienced previously The duration that the tubing was in-situ and well conditions resulted in heavy

corrosion of certain tubing joints

Task Description: *No details available.*

Recommendations: On this occasion, the handling equipment being utilised (BVC slip type elevators and hand slips) was the correct equipment for the task. If information on the condition of the tubulars to be retrieved indicates corrosion then review the handling equipment load-out list to ensure various handling equipment options are supplied to mitigate the risk of this occurrence happening on your installation Corroded tubing resulted in a dropped object that was not previously considered a risk. Continually assess changes at the worksite and promote open-ended discussion that may reveal a previously unrecognised hazard. Remember, existing safe systems of work may need to be modified or new ones created to capture any significant learning As a result of this incident and the subsequent investigation it identified the potential for a dropped object to penetrate the Driller's doghouse. Is your Driller still at risk from dropped objects in the confines of his doghouse?

Contact Details: Ali Brain HSE Co-ordinator 01224 - 299600

709: Fuel Leak

Summary:	An Oiler discovered a fuel spill while making routine rounds from a leaking gauge.
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	Specialist vessel eg diving, construction, survey
Activity Type:	Seismic/survey operations
Description:	At approximately 03:30 after working on the bilge pump, the Oiler made a walk-through inspection of the entire engine compartment. By his account, he noticed white smoke rising from the forward generator. He stated "I grabbed a fire extinguisher and slowly approached the generator". After noticing that there was no fire he walked around the generator to find the source of the smoke. He found that one of the fuel pressure gauges was spraying fuel into the air, landing on the exhaust manifold. He added that he tied a rag around the gauge to stop the spray, and then notified the Chief Engineer. Approximately 03:35 the Engineer arrived, called the bridge and then commenced to change generators. While in the process the fuel pressure dropped below operating standards and shut down the generator. Within three to four seconds the other generator was up and running. The Oiler stood fire watch until the generator was cool enough to properly clean the fuel.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	Solely based on our finding we determine the root cause of this incident to be directly a result in the use of

additional equipment beyond original design coupled with gauges that are of inferior quality. This is supported by the inconsistency of spare gauges inspected by this team. This investigation confirms that the gauges used were not fit to purpose or design. A critical factor in determining root cause was the lack of ability to view gauge specifications, standards or manufactures recommended use. Physical inspection revealed poor craftsmanship and inconsistency with product. Procedures capable of insuring the right quality of critical spar parts needs to be implemented together with a maintenance and track system. Although the outcome was favorable and there was no injury or significant loss to property, it does not indicate best practices were followed. We conclude that the general alarm should sound following the discovery of smoke from any unconfirmed source.

Task Description: *No details available.*

Recommendations: **Short term: -Find a suitable replacement gauge, one that is supported by documentation and manufacture specifications. -Given what this team uncovered through this investigation, we cannot endorse actions taken even though they resulted in a favorable outcome. In this case as with any shipboard emergency the general alarm should have been sounded. This philosophy should be conveyed to crew via safety meetings, drills and training. -Remove added fuel line on cat generators. Medium term: - Update fire plan or install additional smoke detectors in machine space to meet a recognized industry standard (SOLAS). -Add gauge maintenance and inspection per manufacture specifications to the ship's "Vessel Inspection Program". Long term: - Implementation of an electronic maintenance system, subject to random inspection of managing office ashore. -If a secondary gauge is in use it shall be housed in the original caterpillar gauge housing. - Installing an audible alarm to the engine room fire**

system located on the bridge. -Replacing present intercom system. -Conduct physical inspection and/or test to identify modified equipment done by prior ship's owner.

Contact Details: dgarcia@fairfield.com

710: SKYJACK SJM3219 SCISSOR LIFT - ALERT WITHDRAWN

Summary: Skyjack Scissor Lift - This alert has been withdrawn. We believe the incident was not genuine.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: *Any Location Type

Activity Type: Lifting, crane, rigging, deck operations

Description: *No details available.*

Specific Equipment: *No details available.*

Lessons Learnt: *No details available.*

Task Description: *No details available.*

Recommendations:

Contact Details: *No details available.*

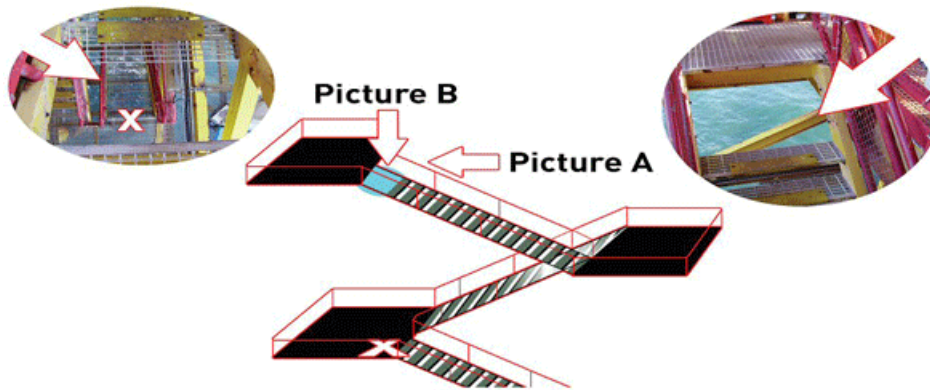
711: Clipper Fatality

Summary:	•Occurred November 2005. •The deceased was the performing authority for the work of replacing stair treads at the site of the incident. •He fell through an opening created by the removal of two stair treads. •Nobody saw the incident. •Incident investigated by Police and HSE
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	Fixed Installation
Activity Type:	Modification of plant/structures
Description:	The IP was replacing the stair treads on the Clipper platform,when he fell through the gap left by the removal of 2 stair treads. The work pack specified the removal of one stair tread at a time.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	•Use this event to reinforce messages about reassessing any changes to method of work. •Conduct a detailed risk assessment review to ensure the safety of future stair tread replacement activities. •Review the Integrated Safe System of Work (ISSOW) which is the PTW system to incorporate drop downs to stimulate thinking around single person working and prompts to address new working at height regulations.
Task Description:	<i>No details available.</i>

Recommendations: Managers to communicate the learning to their teams as a means of reinforcing the need for reassessment of controls when any aspect of the work changes from that stated on the permit. Review application of PTW systems. Review the ISSOW system to incorporate drop downs to stimulate thinking around single person working and prompts to address new working at height regulations. Review work pack instructions to ensure clear guidance is given with regard to the inherent risk of the task being performed

Contact Details: mick.oconnor@aja-isc.com

Diagram to show the location of the work activity



712: Tool String Ejected from Wire Line Riser resulting in Injury to Wire Line Operator and damage to equipment

Summary: Injury and Property Damage

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Fixed Installation

Activity Type: Well services / intervention

Description: An incident occurred during a wireline operation on a fixed installation. It appears that a hydrate had formed in the tubing, and at some stage during depressurisation, had moved up into the riser. Believing the pressure to be relieved, the wireline crew proceeded to break out the lubricator. The lubricator had been disconnected and the riser was open to atmosphere when the hydrate “let go” ejecting the tool string under considerable force and sending it 57 feet into the derrick where it punctured the top drive support structure. A Wire line Operator working from a ladder by the riser received relatively minor injuries. No other injuries were sustained even though the tool string broke up on impact and pieces fell back to the drill floor. One large piece of tool string lodged on the derrick structure above the dog house (see photograph).

Specific Equipment: Wireline Riser, Wireline Lubricator, Wireline Tool String

Lessons Learnt: *No details available.*

Task Description: *No details available.*

Recommendations: Recommendations: - be aware of the potential for hydrate formation and take steps to eliminate or minimise that

potential, and to manage hydrates when they are encountered - ensure a robust capability for monitoring well conditions and in particular for indicating that pressure has been relieved from a system to the extent necessary - ensure a reliable means of bleeding a system before any attempt is made to breach the pressure envelope - always be alert to changes in operating conditions or deviations from the well programme. Response to such change or to abnormal conditions should be to stand back, involve the right people and re-assess our approach to the operation.

Contact Details: Mike Adams (Well Services Team Leader)

Rig Floor



Tool String lodged in Derrick



Damage to Top Drive #1



Damage to Top Drive #2



713: Coil Tubing Lift Frame Cable Failure

Summary:	CTLF sling failed when raising injector head.
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	Drilling unit
Activity Type:	*Any Activity Type
Description:	During a CT rig up offshore Mexico a CT lifting frame cable was damaged during initial CT rig up and 7 metres of cable had to be cut hence removing the original manufactured lifting eye, four bull dog clamps were installed to create a new lifting eye. The operation involved lifting a HR 580 injector with a combined weight of 12,850 lbs resulting the cable parted at the first bull dog clamp on the top of the cable. After investigating all involved personnel and an evaluation made by a senior supervisor on board, the conclusion was incorrect clamping device was installed for this type of application hence no safe working load was identified after the lifting device was modified or repaired in the field.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	<i>No details available.</i>
Task Description:	<i>No details available.</i>
Recommendations:	1. No field repairs to be undertaken of lifting slings. 2. Make Personnel aware of restrictions upon any field repairs being carried out on equipment that these must be done by qualified and certified personnel. 3. Ensure that CTLF winch is visible to winch operator as cable

damaged was caused by poor spooling. 4. In future Coil Tubing crew will be sent out with Coil Tubing lift frame to ensure shortest possible rig up.

Contact Details: Ken Wood, Schlumberger Sales Engineer Well Services,
Westhill 01224 404541

714: Fire in tumble dryer

Summary: Due to a loose vent pipe inside an Electrolux dryer, fluff had built up around electrical contacts and had started to smoulder

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Fixed Installation

Activity Type: Catering / hotel services

Description: Two personnel were passing the laundry and noticed a strong smell of burning coming from one of the tumble dryers. The laundry was immediately isolated and closed off. The investigation found that a vent pipe had loosened off, which caused a build up of fluff/lint etc. This then built up around the electrical contacts causing the lint to start to ignite.

Specific Equipment: *No details available.*

Lessons Learnt: The pipe was not part of the maintenance routine and not recognised as a risk.

Task Description: *No details available.*

Recommendations: Include the vent pipe as part of regular maintenance routines for all tumble dryers. Check dryers and secure pipe.

Contact Details: murray-neill@aramark.co.uk

715: Dropped Object Incident

Summary: A dropped object incident occurred on the Noble Ton van Langeveld. No persons were injured or damage to environment or asset or was sustained.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Drilling unit

Activity Type: Lifting, crane, rigging, deck operations

Description: Crane operations were completed. The whip line was lowered to the deck to remove the pennant (crane boom at 20 degree position, boom tip 130 ft above deck). One of the deckcrew plus crane operator observed something landing on the deck. It was observed that the dropped object had fallen from the crane boom tip. Crane operations were suspended at this point and a full inspection was carried out on the crane boom. The dropped object being a protection bar belonging to boom tip main block sheaves (bar weighing 2.1 kg, measuring 0.8 mtr in length). Further investigation revealed that the same assembly on the port crane was also very weak.

Specific Equipment: *No details available.*

Lessons Learnt: 1. Regular contact (rubbing) occurs between the wire of the main block and protector bracket when the main block swings. The effect of this rubbing action is amplified as the boom becomes more vertical. 2. The inadequate access available to visually check and inspect the boom tip cluster.

Task Description: *No details available.*

Recommendations: 1. Replace the protection bar which will be additionally secured with a safety sling. 2. Protection bar to be replaced annually. This to be controlled via NMS2. 3. Add to the weekly crane check list to physically check the security of all protection bars. 4. Discuss this incident at all safety meetings to ensure all crews are informed. 5. We will utilise accommodation and heli-deck for future inspections of the sheave clusters to gain effective access to boom tip. This will also be relayed to all crews.

Contact Details: Steve Coghill Drilling Superintendent 01224 401 629

The Dropped Object



Parted bracket and bar



Bracket in place on sheaves



716: Half Height Containers Potential Dropped Object

Summary: A serious "potential dropped object" situation has recently developed from the use of the newer 10' x 8' half heights with removable side doors

These containers are not designed for scrap use, but for convenience offshore, have been. The units have doors fitted with small lugs to prevent the bottom of the door sitting flush on the container bed, these lugs were introduced to eliminate serious corrosion problems. The lugs leave about a 1 cm gap under the door as seen in picture A below.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: *Any Location Type

Activity Type: *Any Activity Type

Description: On several occasions recently these containers have arrived from various offshore locations with small items of scrap inside that could slide out during transportation, these have included grinding disks and pieces of metal. If this practice continues, it is only a matter of time until the potential dropped object becomes a dropped object which would put both installation and ship deck crew, cargo handlers and the general public in danger, as they are transported by road to disposal sites.

Specific Equipment: *No details available.*

Lessons Learnt: *No details available.*

Task Description: *No details available.*

Recommendations: - Half heights with side doors are not designed to carry scrap and under normal circumstances should not be used for scrap. - If used, small items should be bagged / boxed prior to placing in the unit. - Place 1" foam rubber strip under door, the weight of the door compresses the rubber sealing the gap and holding it firmly in position (prevents it from being another "potential dropped object". - Unfortunately this would be by the nature of the use of these containers be a "one trip" solution, and the strip disposed of at the scrap reception facility. It can not be made a permanent feature, as the corrosion problem due to trapped water would be re-introduced.

Contact Details: *No details available.*



717: Safe Haven Doorways Potential Snagging

Summary: Over recent months there have been a number of reported incidents / near misses related to cargo snagging in vessel "Safe Haven" doorways. This is due to the increased number and size of these apertures on more recent vessels.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: *Any Location Type

Activity Type: *Any Activity Type

Description: Identified Hazards: - Damage to vessel equipment within the "Safe Havens". - Excessive stress on and leading to failure of lifting equipment. -Tipping of cargo containers leading to spillage of contents. -Sudden release and erratic movement of cargo containers. -Injury to crew

Specific Equipment: *No details available.*

Lessons Learnt: *No details available.*

Task Description: *No details available.*

Recommendations: A MSF workgroup has been set up to review the design of these and possible modifications are under consideration. In the meantime:- - Consideration of location of "Safe Haven" apertures and dimensions must be taken into account when planning deck cargo layout. - Whereever possible deck cargo items liable to snagging issues should be kept well clear of "Safe Haven" apertures. - Items that are identified as snag hazards should not be positioned where the snagging point is

within the bounds of the "Safe Haven" aperture. - Any personnel identifying the potential for snagging when positioning deck cargo should immediately notify the master, mate or member of the vessel crew in charge of the deck loading plan (The final decision on positioning of deck lifts will remain with the Master or his nominated representative) - The risk of snagging in "Safe Haven" apertures should be included in toolbox talks to all staff involved in vessel cargo loading operations.

Contact Details: *No details available*



718: Deck Hand Caught by Crane Hook

Summary:	The crane driver gave slack to the deck hand but a combination of the boat not holding station and the sea swell, caused the safety pennant hook to rise and catch the deck hands overall
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	Fixed Installation
Activity Type:	Lifting, crane, rigging, deck operations
Description:	The crane driver had just lowered a chemical tank to the supply boat and the deck hand on the boat had unhooked the tank. The crane driver gave slack to the deck hand but a combination of the boat not holding station and the sea swell, caused the safety pennant hook to rise and catch the deck hands overall, lifting the person about 12” into the air. As soon as this happened the crane driver lowered the hook to give out more slack. The deck hand stayed on his feet when he landed and unhooked himself with help from the other deck hand. The crane driver immediately called the boat captain and asked if the deck hand was ok. There was no injury to the deck hand and operations continued.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	The crane hook was fully operational. There were two men on deck at the time of the incident. The pockets of his coverall were closed (with a zip) at the time of the incident. The Captain was driving the vessel at the time

but didn't see the deck hand being caught by the hook.

Task Description: *No details available.*

Recommendations: Owners reviewing design of coveralls pockets. Reinforce importance that one work party member keep the pennant free from the other that is unhooking a lift.
Reported to Marine Safety Foru

Contact Details: *No details available.*





719: Fatality Cause by Burns and Inhalation

Summary: After completing the running and cementing of surface casing, the driller along with a loader operator and two floormen decided to mount the flow line in the substructure. Once the flow line was placed in the substructure with the loader, they connected it to the winch line. At this time, the driller was organizing the work while standing on the base of the substructure. While waiting for the floorman to return with the tail rope, the driller lost his balance, falling into the well cellar feet first, and catching the edge of the cellar with his upper arms. The cellar contained cement which had calcium chloride added as an accelerant, creating heat and a high pH. He received burns to 40 percent of his body and was in intensive care unit receiving treatment for 20 days prior to passing away from complications.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Fixed Installation

Activity Type: Modification of plant/structures

Description: -The activity was not planned for at that time, and a JSA (Job Safety Analysis) was not completed prior to starting this activity. - The cellar grating was not in place prior to starting this activity. - The cellar area was not marked off as a restricted area prior to, during, or after the completion of the cement job. -The addition of two sacks of calcium chloride poured on top of the wet cement in the cellar had a chemical reaction generating high levels of heat. - The casing cement had an alkalinity up to 13 pH.

Specific
Equipment: *No details available.*

Lessons Learnt: *No details available.*

Task Description: *No details available.*

Recommendations: - The event should be presented and discussed with all rig personnel. - All activities should be planned and adequately communicated to all crew members, following the established procedures in relation to JSAs for all jobs. - The cellar grating should be maintained in place at all possible times and preferably from the start of the move on to location. If it cannot be installed, the area should be marked off and maintained as a restricted area (open cellar). - All third-party contractors working on company rigs should clearly discuss any chemicals and any inherent risks related to them with company personnel, making reference to the MSDS (Material Safety Data Sheets). - They should also ensure that there is an emphasis on the correct PPE (Personal Protective Equipment) to be used and the basic first aid required in case of contact with dangerous substances.

Contact Details: R.J. (Rob) Wilman Vice-President, HS&E Ensign Energy Services Inc. Phone: +1 (403) 260-6258 Email: Robert.Wilman@ensignenergy.com

720: Failure of "FURI" Knife Sharpening Tool

Summary:	When sharpening a knife, the sharpening tool collapsed causing the knife to cut the IP's knuckle on his left hand index finger.
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	Floating production/storage unit
Activity Type:	Catering / hotel services
Description:	While using the "FURI" knife sharpener to hone his knife, the IP received a laceration to the knuckle of his index finger, left hand. During normal operation, when drawing the knife through the sharpening fingers of the tool, the equipment failed. The sharpening fingers and guard separated from the handle leaving the IP's hand exposed resulting in the injury.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	<i>No details available.</i>
Task Description:	<i>No details available.</i>
Recommendations:	Remove all "FURI" Tech Edge Sharpening systems from use.
Contact Details:	ESS HSEQ Department

721: Parting of Fuel Hose Whilst Alongside Installation

Summary:	A supply vessel's fuel hose became overstretched whilst discharging fuel alongside an installation resulting in a slight spillage.
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	Support vessel eg Supply, Standby
Activity Type:	Marine activity, shuttle offloading
Description:	A supply vessel was operating alongside an installation discharging fuel. The master and a 2nd officer were on the bridge. The supply vessel was positioned slightly astern of the installation. Because of some swell, the pitch on the propulsion propellers was kept ahead to keep the vessel in position. The master's attention was diverted from navigating the vessel whilst assisting the 2nd officer to tune in the VHF radio to receive a gale warning. This short period of inattention resulted in the vessel moving too far ahead. The fuel hose was observed by the bridge watch to be stretched to its limit and pumping operations were halted immediately. This kept the spillage to a minimum as the hose parted; the spillage was contained and absorbed by the use of a spill kit. The master resumed full control of the vessel and repositioned the vessel outside the 500-metre zone to reassess the situation.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	A lack of focus by the master as to his prime duty of safely navigating/manoeuvring the vessel whilst in the

500-metre zone. Possible high stress/workload levels induced by having to manoeuvre and discharge fuel whilst alongside installation and concern about a possible deteriorating weather condition which would have made the operation even more difficult.

Task Description: *No details available.*

Recommendations: All masters and bridge watch-keeping crew are to be made aware that a minimum of one person is to be constantly alert as to the vessel's safe operation and navigation, especially when in the 500-metere zone. Company management are to revise the current 'Bridge Management System' to include that communication and interaction between the two officers on the bridge is clearly defined.

Contact Details: *No details available.*

722: Potential Collision

Summary:	Two vessels nearly collided whilst manoeuvring in Aberdeen Harbour. Although minor damage was incurred to the quayside, there was the potential for much more serious consequences had avoiding action not been taken.
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	Support vessel eg Supply, Standby
Activity Type:	Marine activity, shuttle offloading
Description:	Background: Aberdeen Harbour Vessel Traffic Services (VTS) had granted permission for Vessel A to move to North Maitland quay for tank cleaning. Whilst mooring port side to the quayside, the vessel was advised that her owners had instructed loading bunkers. The vessel responded that the bunker connection was on the starboard side. At this time, Vessel B was alongside North Torry with moorings released, holding station alongside using thrusters and waiting for clearance to sail from Harbour VTS. Vessel A decided to turn round to be starboard side to the North Maitland Quay in order to take bunkers. Simultaneously, Vessel B was given clearance by Harbour VTS to depart North Torry and proceed to sea. Sequence of Events: Vessel B began moving off North Torry and Vessel A began moving off North Maitland Quay towards the river with the intention of turning around to berth starboard side to North Maitland quay. There was no request from Vessel A to VTS for permission to undertake this manoeuvre as the vessel master considered that he had not completed the move to

North Maitland and had not informed VTS that they had done so. Vessel A started turning into the river, with her bow upriver, turning her stern to starboard towards Vessel B. At the same time Vessel B's intention was to turn his bow into the river which would require her stern to swing to port towards Vessel A. Vessel B became aware that Vessel A was moving off North Maitland and took action to avoid Vessel A. Due to the river current she started closing the North Torry quay. Vessel B was severely hampered at a crucial stage of her manoeuvre. Risk of contact with Vessel A existed and, as a result of her taking action to avoid Vessel A, and the fact that she was being set down by the river current, Vessel B made contact with the fenders on the knuckle of North Torry resulting in damage to the fenders. There was insufficient space to allow both vessels to complete their intended manoeuvres at the same time and contact between the vessels would have been highly probable without the action taken by Vessel B. Vessel A returned to Maitland Quay without swinging. Vessel B went alongside the Torry Quay with VTS approval to check for damage. Vessel B later reported to VTS that there was no damage to the vessel and that she was ready to proceed to sea.

Specific
Equipment:

No details available.

Lessons Learnt:

Immediate cause was failure to follow port procedures. Aberdeen Harbour VTS procedures require that all vessels must receive "traffic clearance" from Aberdeen VTS before carrying out any manoeuvre. The master of Vessel A did not communicate effectively with Harbour VTS and assumed that a) although moorings were ashore with the vessel port side to North Maitland, he had not completed his manoeuvre as he had not reported to VTS that he was 'all fast', and b) following discussions with linesmen, he was clear to recover his moorings and continue manoeuvring to turn his vessel to lie starboard

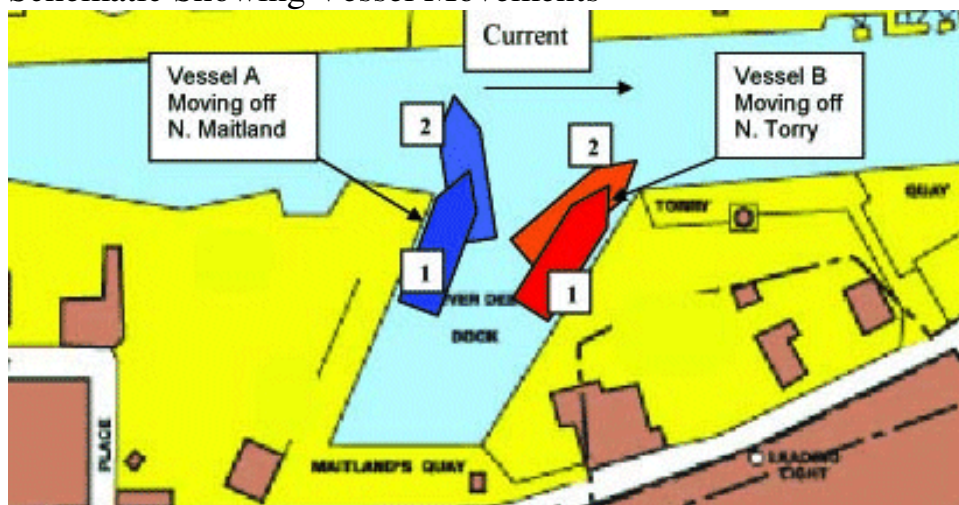
side to North Maitland.

Task Description: *No details available.*

Recommendations: The vessel master should always a) pay due regard to port VTS procedures, particularly with regard to obtaining authorisation for vessel movements (note that linesmen have no authority to permit the commencement of vessel movements); b) report their status to port VTS following an authorised vessel movement, particularly when any changes to the manoeuvre are required, and c) ensure they have sufficient space to manoeuvre and that proximate movements of other vessels will not conflict prior to commencing any mov

Contact Details: *No details available.*

Schematic Showing Vessel Movements



723: Struck by Falling Object

Summary:	A tower crane window fell from a height of 40 metres to the ground below striking a foreman on the head.
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	Onshore construction/rig repair yard
Activity Type:	Lifting, crane, rigging, deck operations
Description:	A tower crane operator at the beginning of his shift opened the cabin window to begin lifting operations. The window frame parted from the mounting brackets and fell down to the ground approximately 40 metres below. A foreman who was standing below the crane outside the 15-metre barricade area was struck on the head and neck by the falling steel frame and glass. Workers nearby heard a loud crash and found the foreman lying on the ground beside shattered glass and a twisted steel window frame. The foreman's hardhat was lying close by. Inspection of the incident site revealed that the window had struck the hardhat, which probably saved this person's life. The injured party was still conscious when his co-workers arrived and he was told to keep still while the paramedics arrived. The paramedics immobilized the foreman's neck and he was taken to hospital for treatment. Initial indications are the injured party has a fractured skull and three fractured vertebrae in his upper neck although he is able to move his limbs. Further tests and an MRI will be done to determine if surgery is required. All lifting operations at site were suspended and equipment was inspected for potential falling object prior to work resuming. Incident events were communicated to

the affected workforce and an alert was immediately sent out the other operations at site. An incident investigation team made up of project, contractor, and sub-contractor management and HSE professionals was established and the investigation is underway.

Specific
Equipment: *No details available.*

Lessons Learnt: Some dropped objects, due to their design and shape, may not fall exactly vertically. Barriers should take account of this.

Task Description: *No details available.*

Recommendations: Identify potential for falling object at worksites even when barriers are in place. Communicate the effectiveness of PPE in this even

Contact Details: No details available.

724: NEAR MISS

Summary: During crane operations on deck the bottom window of the aft crane cabin was blown out by a strong surge of wind.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Specialist vessel eg diving, construction, survey

Activity Type: Lifting, crane, rigging, deck operations

Description: During crane operations on deck the bottom window of the aft crane cabin was blown out by a strong surge of wind. The glass panel dropped approx 15 feet smashing onto one of the deck compressors then landing on the main deck. There were no personnel in the vicinity at the time. The subsequent investigation showed that the rubber window seal was corroded. An inspection of the existing windows has been carried out and they were considered to be safe.

Specific Equipment: *No details available.*

Lessons Learnt: Maintenance and inspection of crane windows should be carried out at regular intervals

Task Description: *No details available.*

Recommendations: Inspect all the windows and rubber seals on the crane, as they could be in similar condition. Replace all the rubber seals if required. Replace the temporary Perspex window with a glass one, as per original design of the seals and because Perspex can become opaque masking the operator's view. Carry out regular inspections and

maintenance

Contact Details: QHSE Department, Sonsub Ltd, Tern Place, Bridge of Don, Aberdeen, Scotland, AB23 8JX.

Window pain fell inboard side of lower cab, landed and smashed on top of compressor unit (approx 15 feet drop)



Picture of perished rubber window seal



725: H2S EXPOSURE FROM REACTION OF ACID WITH IRON SULFIDE SCALE

Summary: A worker was exposed to H₂S gas while performing a hydrochloric acid treatment on a produced water injection well

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: *Any Location Type

Activity Type: Well services / intervention

Description: The worker was positioned on top of the rig tank, adding neutralizing agent to the fluids returning from the acidized well. He was exposed to vapours from the tank, felt dizzy, and began descending the stairs from the rig tank. It is believed that he lost consciousness while descending the stairs, falling to the ground at the base of the tank. He immediately regained consciousness and with assistance was transported to the local Medical Center. He was checked out and returned to work the next day. Readings taken at the rig tank shortly after the incident indicated concentrations of 30 ppm H₂S. During a re-enactment of the incident, readings of up to 80 ppm H₂S were generated when the neutralizing agent was being added. What Went Wrong The Hydrochloric Acid reacted with Iron Sulfide scale in the well bore/rig tank creating H₂S gas. The potential hazard of H₂S was not anticipated by the workers or the job planner, therefore adequate mitigation steps were not in place to protect the workers from H₂S exposure. Isolated, similar concentrations of H₂S have been noted in past acid jobs, but not effectively communicated.

Specific Equipment: *No details available.*

Lessons Learnt: *No details available.*

Task Description: *No details available.*

Recommendations: - Ensure well files and program templates indicate that pumping HCL may create or release H₂S. - Inform all contractors and well site supervisors of the requirement to monitor for H₂S and flammability (LEL) when flowing back to an open tank. - Ensure workers at site are equipped with personal monitoring devices when required. - Use a Job Safety Analysis (JSA) before this type of work to review the specific issues relating to the chemicals being used, reactions taking place (and byproducts), potential exposure concentrations, and procedures for that site. - Modify the practice of flowing back live acid into an open tank. - Modify the practice of adding neutralizer so workers are not exposed to vapours/gasses from the tank. - Ensure company and contractor acidizing procedures include the potential hazard of H₂S as a byproduct

Contact Details: *No details available.*

726: Handling Pennant Wire Resulted in Cut Hand

Summary: A Supply Vessel was discharging cargo alongside a MODU. The main block was being used in conjunction with a heavy lift pennant line. During the operation the Deckhand, in his normal course of operation, handled the pennant line to disconnect / attach the hook. In carrying out this activity he sustained deep cuts to his left hand and thumb. The vessel ceased operations and returned to harbour to get the IP to hospital. Following medical treatment the IP was discharged from hospital but will be unfit for work for an extended period. This has been classified as a Days Away From Work Case (DAFWC).

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Drilling unit

Activity Type: Lifting, crane, rigging, deck operations

Description: Investigation The crane wire termination is a standard aluminium ferrule which is widely used in the industry. Investigations revealed that there were a number of wires protruding from the top of the heavy lift pennant ferrule. The wire tail has to be present to ensure full wire penetration and although they can be trimmed it is very difficult and carries a high risk of cutting the standing part of the wire. The IP was wearing standard PVC gloves with elastic cuffs which keep the hands dry, warm and allows full mobility but it has the lowest rating for protection against tearing and puncture. Gloves are given ratings for various hazards e.g. Abrasion, Blade Cut, Tear and Puncture.

Specific
Equipment: *No details available.*

Lessons Learnt: From evidence it is clear that the IP's hand came into contact with the wires that were protruding the ferrule. Despite the IP wearing gloves, they were not of a satisfactory rating for the job; the wires were sharp enough to penetrate his glove and cause the deep cuts. The condition of the wires protruding the ferrule created a clear hazard to personnel. Following discussions with operators it has been noted this condition is common.

Task Description: *No details available.*

Recommendations: • It is recommended that all operators inspect their lifting equipment for similar type of deficiencies. In the long term these types of terminations require to be re-assessed, consideration should be given to terminations that do not create such hazards. • A recommended solution is to utilise crane pennants for offloading / backloading supply vessels which are fitted with a Flemish or 'Super Loop' type of termination (pictured). The sleeve has a tapered top which encompasses the wire ends. It is suggested that they would only be required on crane pennants and not normal wire slings. • It is further recommended that Companies ensure that operatives wear the most suitable glove for the task.

Contact Details: *No details available.*

727: Overpressured pulsation damper

Summary: A low pressure pulsation damper was over pressured with nitrogen causing it to mechanically fail, and resulting in severe injury to one person.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Fixed Installation

Activity Type: Maintenance

Description: Two Technicians were performing a regular corrective maintenance procedure recharging pulsation dampers on a chemical pump skid with nitrogen from a portable high pressure (~ 230 bar) nitrogen cylinder. The portable nitrogen cylinder was connected through a proper regulator and pressure gauge to the LP Damper. High pressure nitrogen was applied to the LP Damper until it mechanically failed. There are two pulsation dampers installed on the skid; a high pressure damper (~ 130 bar) and a low pressure damper (~ 2 bar). These are located in close proximity to each other. The information necessary to confirm the identity and safe working pressure was available on the job plan, the P&ID and the damper itself. The Technicians did not check the safe working pressure of the damper they were working on. The injured party was struck by debris from the failed damper. The explosion severed his left hand, he lost tips of two fingers on his right hand and his face was peppered with dirt fragments.

Specific Equipment: *No details available.*

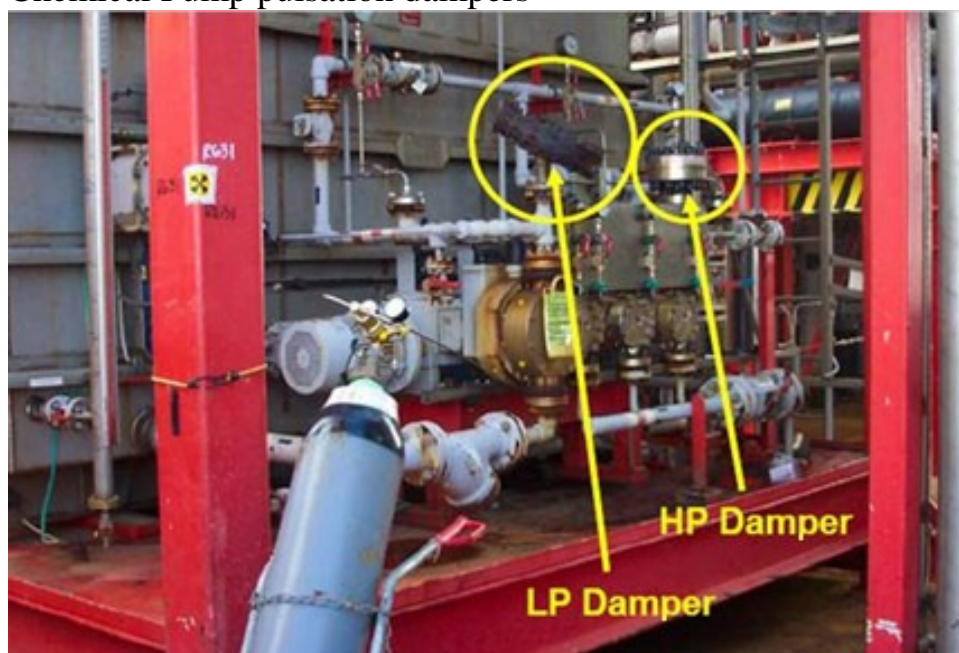
Lessons Learnt: Mobile high pressure nitrogen bottles can introduce HP/LP interfaces whenever they are connected to process plant.

Task Description: *No details available.*

Recommendations: 1. Identify engineering solutions to provide pressure relief on the nitrogen supply side of pulsation dampers. 2. Review, and strengthen, practices for the safe use of high pressure gas bottles. 3. Clearly label accumulators with tag number and maximum working pressure and, where pressure gauges are fitted, ensure they are suitably ranged for the duty. 4. Identify other systems requiring charging of occasional connection of bottled gases to process systems, and consider the application of the above actions

Contact Details: Colin McIntosh, tel 01224 835005

Chemical Pump pulsation dampers



728: Uncontrolled Descent of Blocks

Summary: Oil contamination of drawworks brake discs & pads, contribute to uncontrolled descent of blocks. There was no injury to personnel.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Drilling unit

Activity Type: Drilling, workover

Description: The operation involved the running of a long combined string of 9-5/8 - 10-3/4 casing, and as the weight increased to approx 1007 kips it was necessary to change out the flush mounted casing slips and replace them with a set of surface mounted 750ton spider slips. This equipment was successfully changed out, during which time the emergency brake had been applied and the blocks remained in a stationary position for approximately 20 minutes. Immediately upon recommencement of the operation, the blocks and suspended casing string were seen to descend at a far greater speed than was anticipated, and only came to a complete stop after the elevators had made contact with the slips, causing damage to both sets of equipment. Personnel working on the rig floor had sufficient time to retreat to an area of safety, and no injuries occurred.

Specific Equipment: *No details available.*

Lessons Learnt: The investigation failed to determine exactly what triggered the blocks to move, however the ability of the braking system to adequately hold the load once it began

to descend may have been compromised due to the following factors: Oil contamination of the brake discs and pads, due to leaking calliper hose. Incorrect brake pads installed on callipers – Emergency pads fitted to service callipers & service pads fitted to emergency callipers. During the period when the blocks were stationary, the slips had not been set, thus relying solely on the braking system. It is not thought that the Elmagco brake had been energised. There was no brake operating sequence procedure. The drawworks were being run at the operational upper limits for the first time in several years. The rig up procedures immediately before the running of such a heavy casing string did not include a thorough drawworks brake inspection. No brake lever restraining device was in place. There was no procedure in place to control the recommencement of operations at this critical stage, and there was no senior supervisor present.

Task Description: *No details available.*

Recommendations: Develop procedure for the Drillers brake operations sequence. Restraining chain fitted to hold the brake lever down when not in use. Brake pad installation procedure developed and captured within the maintenance PM program. Pre use inspection and maintenance procedure implemented prior to commencing any operation of 800 kips or above.

Contact Details: russ.brown@globalsantafe.com

729: Risk posed by Eaton 160A and 200/250A FCS Switches / Fuse switches pre 1st Jan 1996

Summary: Eaton Electrical (previously MEM & MEM Santon) have advised that there is a potential safety issue involving MEM Santon 160A and 200/250A FCS switches / fuse switches manufactured prior to 1996. There is the potential for these switches to indicate OFF yet remain ON allowing access to parts that are possibly live leading to a risk of personal injury or death.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: *Any Location Type

Activity Type: *Any Activity Type

Description: Eaton Electrical (previously MEM & MEM Santon) have advised that there is a potential safety issue involving MEM Santon 160A and 200/250A FCS switches / fuse switches manufactured prior to 1996. There is the potential for these switches to indicate OFF yet remain ON allowing access to parts that are possibly live leading to a risk of personal injury or death.

Specific Equipment: *No details available.*

Lessons Learnt: N/A

Task Description: *No details available.*

Recommendations: It is Eaton's strong recommendation that any such switches that are still in service should be replaced as soon as possible. Further given the nature of the risk of the operational failure of these switches - namely the

possibility of the switch remaining live when in the off position - it is strongly recommended that any replacement be undertaken by a suitably qualified person and that the details of this safety alert are communicated to the person prior to the work commencing. It is imperative that warning notices are affixed to the units pending replacement.

Contact Details: Eric Abbott 0207 539 1059

###B5 At risk switches with this format label have the last two characters (circled above) of A8, A9, B0, B1, B2, B3, B4 or B5. Where # can be any number. Products labelled B6 and above are not affected by this concern.	5B#### At risk switches with this format label have the first two characters (circled above) of 8A, 9A, 0B, 1B, 2B, 3B, 4B or 5B. Where # can be any number. Products labelled 6B and above are not affected by this concern.

Figure 1: Two example date label formats used on non-mechanism end plate of at risk product.



Figure 2: At risk configuration

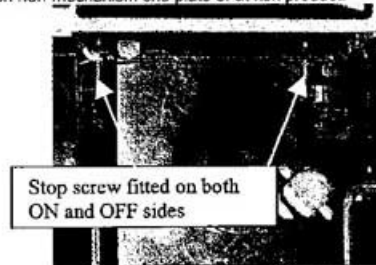


Figure 3: Not at risk configuration

730: Test Tool Failure

Summary:	Test tool failed while pressure testing BOPs to 15K. The tool was ejected from the BOP. No personnel were injured.
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	Drilling unit
Activity Type:	Inspection/testing
Description:	The rig was in the process of pressure testing to 15K against the 9 5/8 casing rams using a test tool they had commissioned for the task. As the test pressure was reached, the tool failed. Failure is attributable to a combination of the external pressure exerted on the tool along with the vertical force applied on the surface area of the 9 5/8 mandrel and incorrect tool material specifications. The test tool exited the BOP storage area through an open hatch, drifted slightly from the hatch and then penetrated the deck, where it was deflected back into the BOP. See attached picture of the failed tool.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	The tool was not fit for purpose in the pressure range required because full function specifications had not been supplied during the design process. The company's procedure on engineering input and approval for such items had not been adhered to. It was also concluded that the procedure lacked clarity on when engineering input should be requested.

Task Description: *No details available.*

Recommendations: The relevant procedures are to be amended to remove any uncertainty regarding when approvals are required. Procedures to be amended to ensure that full functional specifications are included at the design stage.

Contact Details: balexander@aberdeen.deepwater.com 01224 427926

Failed tool



731: Dropped Stand

Summary: Stand of BHA dropped from derrick goes overboard of the rig.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Drilling unit

Activity Type: Drilling, workover

Description: During tripping out of the hole a stand comprising of two 3 1/2" drill pipe a 4 1/2" accelerator X-over and 5" drill pipe pup joint fell out of the derrick. The accelerator, x-over and pup joint were on the top of the stand. This is contrary to company procedures on what can be racked in the derrick and the configurations allowed. When the elevators were unlatched while racking the stand back, the stand bowed allowing the derrickman's pullback chain to slide off the stand. The stand then fell across the derrick, over the windwalls, across the main deck and ended in the sea.

Specific Equipment: *No details available.*

Lessons Learnt: *No details available.*

Task Description: *No details available.*

Recommendations: Accountability process. Further investigations required regarding why procedures are not being followed and determine what changes can be made to make procedures in general more accessible.

Contact Details: *No details available.*

732: Close proximity to running helicopter tail rotor

Summary: Helideck crew member came within close proximity to tail rotor whilst rotors running refuelling turnaround on deck.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Drilling unit

Activity Type: Air transport

Description: While RRRF (rotors running refuelling) turnaround on deck, an HDA (helideck assistant) was noticed walking round the rear of the helicopter within 12-18 inches of the tail rotor. He then picked up the refuelling hose which was lying in the safety netting and moved it directly abeam the tailrotor. He was then signalled to put it down, which he did and then walked back round the tailrotor and spoke to the HLO. The HDA then ducked under the tailcone close to the tailrotor and started to pick up the refuelling hose end again. Pilot then escorted him off the helideck signalling him not to come back on deck. The Pilot discussed the incident with the HLO on site. The Pilot discussed the issue with the OIM.

Specific Equipment: *No details available.*

Lessons Learnt: After an investigation by the offshore operator, the following points were emphasised to the helideck crews:

1. The areas in which safe approaches may be made to the aircraft.
2. The dangers of the tail rotor are real and life threatening, and the tail rotor area must be kept clear of at all times.
3. The HLO must take firm control of the whole operation, he must supervise and not become

involved in hands-on tasks. 4. The helideck crew must be controlled firmly at all times and be knowledgeable about the ongoing operation.

Task Description: *No details available.*

Recommendations: 1. When the wind is below 15 knots the Pilot can alter the landing heading of the helicopter by up to 30 degrees to allow easier access to refuelling points or disembarking stairways. This is for the HLO to request prior to landing. He is to ensure all are kept clear of the tail rotor. 2. Emphasise to all helideck crews that they must be mindful of their training and that all helideck operations must be strictly supervised at all times.

Contact Details: *No details available.*

733: Falling Object

Summary:	A 10t tugger wire caught a bolt clamp on the topdrive when the topdrive was approximately 15 meters above the drill floor on its way down. The bolt was sheared off and was found outside the welding shop on the main deck.
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	Drilling unit
Activity Type:	Drilling, workover
Description:	The incident occurred on a MOU during a completion phase. A 10t tugger wire caught a bolt clamp on the topdrive when the topdrive was approximately 15 meters above the drill floor on its way down. The bolt was sheared off and was found outside the welding shop on the main deck. The 10t tugger, that was temporarily installed, was in the parked position. The bolt weighed 2 kg and fell from 28 m above the pipedeck. The bolts are used when transporting the Topdrive and for maintenance purposes.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	The bolts had previously been removed but were re-installed during onshore refurbishment. The tugger and sheave were mounted temporarily for the completion phase. The established Management of Change process in place had not been used adequately to identify the risk of the tugger wire engaging the bolt.

Task Description: *No details available.*

Recommendations: The bolts were removed to prevent the likelihood of the event occurring again.

Contact Details: QHSE Manager 01224 856000

734: Worker Struck by Excavator

Summary:	A worker was fatally injured when he was struck by the bucket of an excavator.
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	Onshore construction/rig repair yard
Activity Type:	Construction, hook-up, commissioning
Description:	A worker was fatally injured when he was struck by the bucket of an excavator. The worker and the excavator operator were working a night shift, initially disconnecting pipe near the exit hole of a horizontal drill operation. The operator then moved the excavator into a new position away from the exit hole in order to dig a shallow trench that was needed to access the far end of the exiting pipe. The worker on the ground subsequently left his position near the exit hole area without advising the excavator operator or verifying that the excavator operator was aware of his change in position. The operator did not expect or anticipate that the worker had moved. The excavator operator brought the bucket downwards to dig the shallow trench. At the same time, the worker appeared to have suddenly reached for a pry-bar located on the ground, thereby placing himself in the path of the bucket. The excavator operator was unable to stop the motion of the bucket before contact was made with the worker.
Specific	<i>No details available.</i>

Equipment:

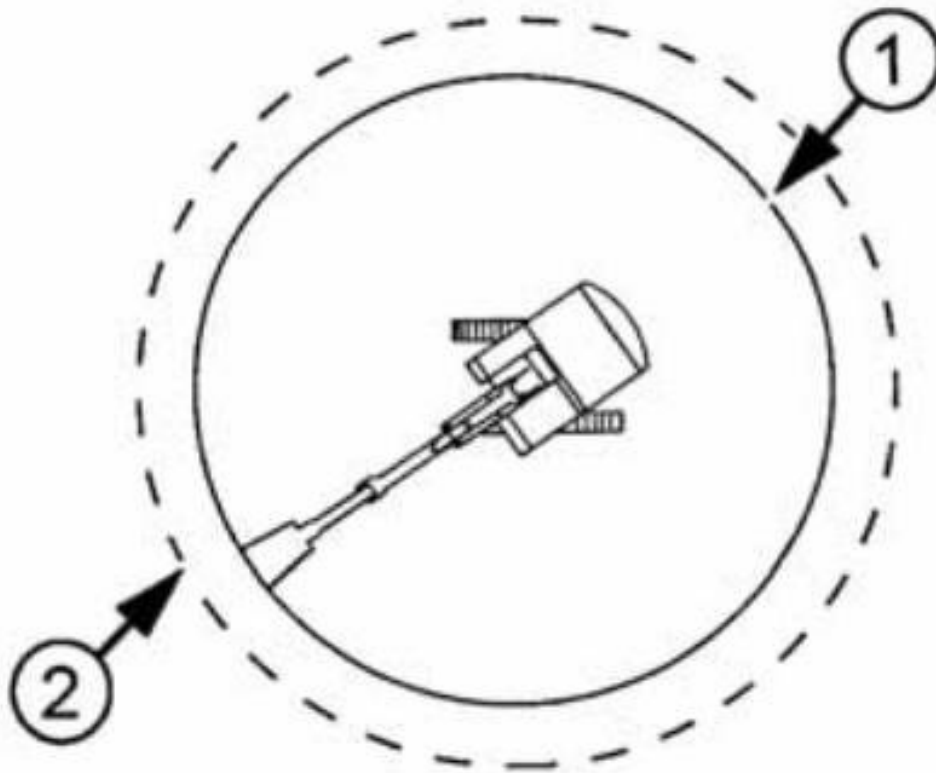
Lessons Learnt: Potential Contributing Factors: The worker moved into the bucket radius (i.e., "bite zone") without verifying that the operator was aware of his change in position. The excavator operator failed to visually verify the position of the worker before digging. Work was conducted at night. The area was well lit by four flood lamps. Momentarily looking directly into flood lights may have interfered with the operator's vision. The weather condition was blowing snow. This may have downgraded visibility for the operator.

Task Description: *No details available.*

Recommendations: Do not assume the excavator operator sees you - even if he is looking right at you! You could be standing in a shadow or he might be temporarily blinded from looking into lights. Stay out of the "bite zone" until excavator operator acknowledges your presence! Do not suddenly reach into the "bite zone" to save equipment - a pry-bar can be replaced, but you can't! Excavator operators must pause and visually confirm the area is free of workers before digging. Task lighting for night work should be arranged to ensure that it does not create deep shadows or glare for the operator.

Contact Details: Jerry Shannon HSE Manager The Crossing Company Inc. Email: jshannon@thecrossingcompany.com

1. Danger Zone. 2. Added Safety Zone



735: Hand Injury whilst pulling out of the hole

Summary:	IP trapped hand between Automatic Slips and Base of Elevators whilst pulling out of the hole
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	Drilling unit
Activity Type:	Drilling, workover
Description:	Whilst tripping out of the hole with 5" drill pipe the IP was placing a manual pipe wiper around the stump in the rotary table. At the same time the Assistant Driller proceeded to pick up on the string whilst releasing the Varco Automatic slips. As the slips released the top plate of the slips came into contact with the base of the elevators. This action resulted in the IPs right hand being caught between the top plate of the slips and the base of the elevators.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	1. Initial planning of the task needs to be detailed & reviewed by all members of the work party. 2. Changes in the work activity or plan need to be identified as a TOFS situation and this should encourage a review by the crew carrying out the task. 3. No task can be accepted as routine. We must question the actions and activities that we have carried out as general practice over the years. 4. The distance between the slips and elevators can lead to a potential pinch point. 5. Question all industry practices such as wiping the pipe to see if we can remove the

activity

Task Description: *No details available.*

Recommendations: 1. Commence a programme of 'Dynamic Risk Assessment'. This involves planning the task around taking a step back to review the task at set times as a minimum. This allows the team to check what, if anything has changed to the original plan. If there are changes what controls then need to be implemented. 2. Re-emphasise to the need to call Time Out for Safety when work conditions change. 3. Re-visitation of the Step change material with particular regard to Rig Floor hand Safety

Contact Details: Stuart Sutherland, GlobalSantaFe, 01221654541, stuart.sutherland@globalsantafe.com



736: "COMAH" oil/fuel storage sites & others storing hazardous substances in large tanks

Summary: The following Safety Alert is primarily for the attention of those companies operating oil/fuel storage facilities. However, it may also be relevant to other sites storing hazardous substances in large tanks where level gauges are used.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: *Any Location Type

Activity Type: Production operations

Description: The investigation into the fire and explosion at the Buncefield oil terminal depot on 11 December 2005 is continuing. Enquiries into the workings of the high level safety system to prevent tank overfill have indicated that certain aspects of its installation and testing are critical in ensuring that it works properly. Operators of similar establishments are therefore advised to carry out immediate checks where TAV level switches[1] manufactured by Cynergy3 Components Limited and supplied by them, their predecessor companies[2], or others, are fitted to their storage tanks.

Specific Equipment: *No details available.*

Lessons Learnt: Operators should check TAV level switches fitted with change over (double throw) reed switches. These switches are normally used in 'de-energise' mode to maintain alarm/trip circuits in 'normal' status. The switches are tested by using a lever or plate fitted to the

head of the switch, which can be raised to simulate a high level of liquid in the tank. If the switch is working, then alarms and trips connected to the switch should operate. However, it is critical that after carrying out this test that the lever or plate is returned to the correct position and locked into place, using a special padlock supplied by the manufacturer[3], and in accordance with the manufacturers instructions. Failure to do this can lead to the switch being inoperative in normal operating mode even though it gives the appearance of functioning normally when tested. There are a number of this type of switch fitted at tank installations in GB and worldwide. HSE has taken urgent action to bring these details to the attention of operators of similar sites through relevant industry bodies across GB, Europe, the USA, and Canada.

Task Description: *No details available.*

Recommendations: Operators should now: Check immediately whether they have such switches fitted, and if so: Ensure they have all relevant manufacturer's information concerning installation and testing and maintenance, Ensure they have records of correct installation, testing and maintenance, Ensure they are currently installed in accordance with the manufacturer's instructions, with the locking device properly fitted, and Complete these checks as soon as possible. [See checklist on <http://www.hse.gov.uk/comah/alerts/tavchecklist.htm>] Where operators cannot confirm that the switches are working correctly then other temporary measures may be adopted, until the defects can be remedied, to ensure safe operations. For example; close supervision and dipping. The manufacturer/supplier will be contacting known users and installers of these switches to alert them to this issue and will be providing revised instructions on the safe use, setting, cleaning and maintenance of these switches. HSE has served Improvement Notices on Cynergy3 Components Limited requiring it to carry out

this work. 2. HSE inspectors have a wide range of tools and techniques available to ensure that dutyholders comply with health and safety law. These tools and techniques include advice, improvement notices and prosecution. In England and Wales, inspectors' decisions on whether to prosecute for any health and safety offence also take account of the Code for Crown Prosecutors, which require that: o There is sufficient evidence to provide a realistic prospect of conviction; and o The prosecution is in the public interest. 3. HSE issues safety alerts routinely to inform industry of safety risks that could be common to a number of facilities. 4. The Buncefield oil depot is subject to the Control of Major Accident Hazards Regulations 1999 (COMAH). HSE and the Environment Agency are the joint Competent Authority for these regulations. 5. TAV level switches, which is a brand name, are a type of high-level safety system. High-level safety systems are fitted to tanks to sense when liquid reaches its maximum level, providing the operator with a visual and/or audible alarm, should all other alarms and controls fail to prevent this.

Contact Details: Press enquiries Oliver Glackin 020 7717 6016 Out of hours 020 7928 8382 Public enquiries HSE's InfoLine 0845 3450055 Caerphilly Business Park, Caerphilly CF83 3GG HSE information and news rel

737: Elsa Dash Escape Set Failure

Summary: Whilst donning an emergency escape breathing set during a simulated emergency exercise, the mouth piece became detached from the hood rendering the set useless.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Onshore terminal

Activity Type: Production operations

Description: During an emergency exercise at an onshore terminal based on a sour gas release, an individual donned his Sabre Safety Elsa Dash escape set (jacket type) when the mouth piece became detached from the hood rendering the set useless. The ramifications for that individual in a real sour gas release are obvious.

Specific Equipment: *No details available.*

Lessons Learnt: Investigations showed that the mouthpiece to hood fit is not one normally checked under routine maintenance and inspection. This fit is achieved using a 2mm thick plastic locking nut arrangement which may not have been fully tightened, hence the failure.

Task Description: *No details available.*

Recommendations: Operators are advised to check any such escape sets they have in use to ensure that the mouthpiece to hood fit is secure and unlikely to fail in service. Maintenance / Inspection routines should be reviewed to ensure that this

failure mode is considered during inspections.

Contact Details: Mr M McGowan HS&E Manager 01524 864123

738: Gas Bottle Explosion

Summary: A gas bottle exploded in the lifeboat of a vessel during the process of charging it up from the Breathing Apparatus Air Compressor.

Incident consequences (potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Support vessel eg Supply, Standby

Activity Type: Maintenance

Description: The master of an 8-year old vessel was very seriously injured as he was in proximity of the lifeboat when a gas bottle exploded whilst it was being charged up with an air compressor. The bottle was quite old with different numbers/dates on it.

Specific Equipment: Compressed air storage bottles

Lessons Learnt: The incident related to life saving equipment which, by lack of inspection records, indicated the lack of inspections and poor maintenance programmes. Ensure air cylinders or gas bottles are all in good condition. EU guidelines are: visual inspections every two years and passing hydro-test requirements every five years. Cylinder(s) in poor condition should not be moved or depressurized and should be roped off and warning sign(s) clearly displayed.

Task Description: *No details available.*

Recommendations: Ensure all necessary equipment is inspected as per statutory requirements and current records are kept available . Always check validity of certification / condition

prior to re-charging and if unsure of condition or status.
do not carry out the re-charging until clarification is
obtained.

Contact Details: None given

Lifeboat Damage



Gas Cylinder Remains



739: Wearing PPE/'Stop the Job!'

Summary:	An AB removed his safety glasses due to the accumulation of sea spray on them and proceeded to cut off a split pin with a hammer and chisel causing a splinter to hit his right eye.
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	Anchor Handler (handling anchors)
Activity Type:	*Any Activity Type
Description:	At the end of June 2006, a crew member was involved in an accident which could cause him to lose the sight in his right eye. The accident happened during an anchor handling operation. Leading up to the accident, the wind had increased and there was some sea spray on deck which made the sight through his safety glasses difficult. The AB took the safety glasses off just before he was about to cut off the split pin using a hammer and chisel. A splinter hit his right eye and caused a cut to the eye. The injured AB was treated on board before being airlifted to Aberdeen Royal Infirmary. The final outcome of the injury is not known but he may not get full sight back in the injured eye.
Specific Equipment:	Hammer, Steel Chisel, Shackle pin
Lessons Learnt:	Do not remove PPE during a task. Go to a safe area and clean the equipment if necessary or replace with a more suitable type of PPE. Manage change by re-assessment of risk and react accordingly

Task Description: *No details available.*

Recommendations: Safety glasses shall be worn at all times when on deck.
Make sure you have your own personal PPE and that it is clean and in working order

Contact Details: None given



740: Dropped Object from Standard Container

Summary:	Whilst backloading a container, a piece of dunnage dropped from the underside of the container when it was above the supply boat's deck.
Incident consequences (potential or actual):	Injury
Cause of accident or incident:	Moving, flying or falling object
Activity Location:	Support vessel eg Supply, Standby
Activity Type:	Lifting, crane, rigging, deck operations
Description:	The container in question was of a standard size (10' x 8') and the dunnage piece was 2" x 4" and weighed 2.9kg. The container had been shifted from its location on the skid deck to the riser deck where the container crushed the dunnage and it became embedded in the bottom frame of the container.
Specific Equipment:	Containers, Baskets, Chemical tanks
Lessons Learnt:	The platform's deck crew had retreated to their safe area which was in such a position that the bottom of the container was not visible when it was lifted off the deck for swinging outboard over the rail. The vessel's deck crew were correctly positioned in the safe haven and no injuries resulted
Task Description:	Routine Crane and Cargo Handling Operations
Recommendations:	d.Platform/installation deck crews are reminded of the requirement to check the base of all containers for loose objects. PSV deck crews are reminded of the necessity to remain in their safe haven until backloads are safely

landed on the deck of the vesse

Contact Details: none available

741: Seaman Struck by Container

Summary: During backloading operations at a central North Sea installation, a seaman on a PSV was struck by a container which was unexpectedly lifted off the deck while he was preparing to unhook.

Incident
consequences
(potential or
actual): Injury

Cause of accident
or incident: Moving, flying or falling object

Activity Location: Support vessel eg Supply, Standby

Activity Type: Lifting, crane, rigging, deck operations

Description: The vessel had been discharging and backloading during the day in foggy but good conditions, i.e. wind variable x 10 knots, confused swell 1-1.5 metres. The incident occurred at approximately 2145 hours. Excessive noise was reported on the deck caused by the normal installation noises plus the sound of the rig foghorn. The two seamen on watch had observed the rectangular, open, box-type container being fitted into what was considered a suitable position between two larger containers, amidships Bay 12. The crane operator tried to hang the hook over the forward shorter end but the slinging arrangement was too short (no fifth leg) and he then proceeded to hang the hook over the longer side and inboard. This was done and the container was observed by the senior seaman (1) to be settled for a period of at least 25–45 seconds. He then moved forward, signalled his watch-mate (seaman 2) and prepared to unhook. The container suddenly lifted from the deck, twisted around and hit seaman 2, pinning him briefly against the next container, injuring his upper chest and shoulder area. He then proceeded to the bridge for

treatment. The master instructed the crane operator, who stated later that he was unaware of the incident, to cease operations. The injured party was medivaced ashore to Aberdeen Royal Infirmary and was released later the same day.

Specific
Equipment:

No details available.

- Lessons Learnt:
- Communication between the v/l deck and the crane operator was inadequate
 - The position of the injured party did not allow an escape route
 - The sling arrangement (no fifth leg) was not fit for purpose

Task Description: Routine Crane and Cargo Handling Operations

- Recommendations:
- Direct communication between the vessel deck and the crane operator would, in certain conditions, greatly assist in reducing the number of cargo lifting incidents
 - Younger, less experienced seamen need HSE coaching to recognise the dangers of working a 'busy deck' (deck was 80% full)
 - Baskets and containers should always be fitted with suitable slings – in this case a fifth leg may have prevented the incident

Following an investigation of this incident, the root cause identified was that the crane driver could not see the deck crew clearly. The vessel initiative was to introduce hard hat lamps for the deck crew -- the lamps are lightweight LED's and were trialled during the winter months in the North Sea. The main features are:

1. Vessel bridge can clearly see the deck crew
2. Installation crane can clearly see the deck crew
3. Crane driver is aware which way deck crew are looking
4. Crew can see work area in shadows caused by

cargo units

Added benefits are that the lamps can be used in tank inspections, engineering work and blackout scenarios during drills. Since these headlamps have been rolled out, a significant number of crane drivers worldwide have commented that they are a vast improvement in back deck safety.

Contact Details: Step Change in Safety

Hard Hat Lamps



742: Corroded fragments detached from the bottom of container.

Summary:	2 kg of rusted metal fragments became detached from fork slots on a container when it was moved.
Incident consequences (potential or actual):	Injury
Cause of accident or incident:	Moving, flying or falling object
Activity Location:	Any Location Type
Activity Type:	Lifting, crane, rigging, deck operations
Description:	A container was being moved to the pipe deck area when, during the lift, the container bumped a heavy duty handrail. When the load was further elevated, it was noticed that fragments of corroded metal were lying at the lift point. The container was landed without any further incident.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	The container certificate indicated that the last examination was conducted in January 2006. The remaining containers on board were checked for structural integrity. There was undetected build up of corrosion on the base metal over a period of time.
Task Description:	Routine Crane and Cargo Handling Operations
Recommendations:	Expand the inspection regime for containers to include examination of the fork lift slots and the base of containers for corrosion.
Contact Details:	Talisman HSEA Department on &

743: Release of trapped pressure strikes IP causing facial and neck injuries.

Summary: Release of trapped pressure strikes IP causing facial and neck injuries.

Incident
consequences
(potential or
actual): Injury

Cause of accident
or incident: Not Assigned

Activity Location: Any Location Type

Activity Type: Production operations

Description: The Injured Party, together with a colleague was involved in the change out of a 1/2" needle valve for a 1/2" ball valve on the production well 'B' annulus management system pipe work. The system was isolated and the valve to be removed was opened to check for pressure residue within the system. An insignificant amount of pressure was released and stopped almost immediately. Believing the system to be in a safe condition, work was commenced to remove the valve. After 1 1/4 turns, there was a release of trapped pressure which caused the valve to be ejected from the pipe and thrown across the deck. The release of pressure caught the IP on the right hand side of his neck and face, causing a multitude of small lacerations and redness to the skin. As a result of his injuries the IP was subsequently returned to Aberdeen for medical assessment and treatment. It is believed that formation of hydrates within the system caused pressure to be trapped which was released on removal of the valve.

Specific
Equipment: *No details available.*

Lessons Learnt: * The risk of hydrates was not identified.* Risk Assessment for the task did not take into account potential for trapped pressure.* Original annulus management design did not identify problem with use of needles valve in 'dirty service'.* Confirmation of system pressure relied on opening of a single needle valve.* Position of IP during task caused him to be struck by released pressure.

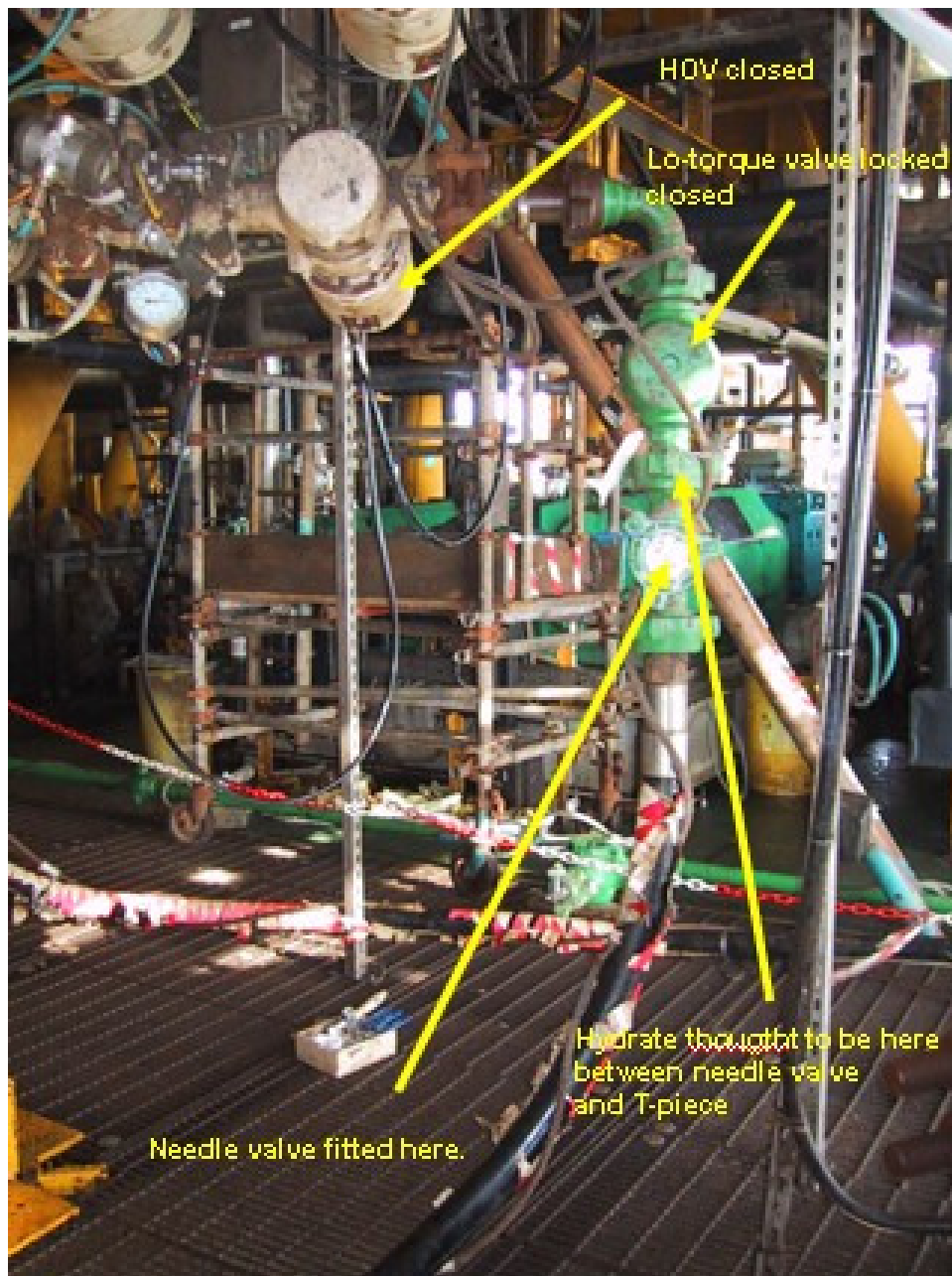
Task Description: Change out of needle valves

Recommendations: * Enhance awareness of hydrate risk.* Review permit controls and risk assessment practices.* Review methodology for checking system pressure prior to commencement of tasks involving breaking containment.* Cease to use needle valves for depressurisation in systems where hydrate build up is possible.* Verify experience, competency and training of all personnel involved with work on pressure systems.* Reinforce good practice when working on pressure systems i.e. positioning of personnel.

Contact Details: johnstone.lee@total.com

For information, arrangement at G5 – showing needle valve in place prior to change-out.





744: Container Doors

Summary: Door locking mechanism found in an unsecured position.

Incident
consequences
(potential or
actual): Injury

Cause of accident
or incident: Not Assigned

Activity Location: Any Location Type

Activity Type: Sea transport

Description: There have been a number of recent incidents both onshore and offshore where container doors have been found to be in an open position or, there has been potential for the door to open because the door locking mechanism was found in an unsecured position. These incidents have occurred despite pre-shipment checks that both container doors are closed and secured with a 10mm wide cable tie. On location the supply vessel crew also verify the container door is closed and secure but, only when the door is visible to the crew on the vessel, and does not expose the deck crew to unnecessary risk. This is not always possible due to surrounding cargo preventing a 360 degree check of the container by the vessel crew. It is suspected that these incidents may be caused by adjacent container units colliding with the container door locking bars as the adjacent container is landed on or, lifted from the deck of the supply vessel. Despite the presence of crash protection around the exposed parts of the container door the following damage is possible: * Significant damage to locking gear due to impact forces. * Retaining catch damaged due to impact or other deforming force. * Handle snagged and pulled up by adjacent lift. A possible consequence of this is the integrity of the container door being compromised.

Specific *No details available.*

Equipment:

Lessons Learnt: A reconstruction of a potential sequence of events has been carried out. In a controlled environment, two container units were positioned "door to door" and a forklift truck manoeuvred one container up and down in an attempt to snag the locking mechanism of the other container. There was no potential to snag observed when the container was lifted in the perpendicular, however when the container was offset and lifted at a slightly tilted angle it was possible to snag the locking mechanism of the adjacent container with the leading edge of the forklift tunnels located at the base of the container being lifted. On closer scrutiny, the crash protection on the container allowed enough clearance for the leading edge of the forklift tunnel to foul the locking mechanism on the adjacent container. It is considered that the factors used in the reconstruction are present in the offshore installation environment and on a supply vessel pitching and rolling on location with the motion of the sea. The same situation could occur onshore where containers are stored in close formation and manoeuvred by forklift. The Container Door is the third level of protection. The first level of cargo security is correct securing techniques applied to any equipment placed in the container. The second level is that a door net is fitted and secured correctly.

Task Description: *No details available.*

Recommendations: 1. In order to reduce the risk of snagging, all containers should be stowed with the container doors on adjacent containers not facing each other. It is recognised that this may not be possible with containers backloaded offshore onto a supply vessel. 2. Supply base operators must be made aware of this danger and instruct the persons unloading supply vessels accordingly. 3. Container suppliers to be made aware of this potential design flaw and carry out modifications to the container design to

prevent the doors being opened by the above event.

Contact Details: derek.latter@total.com





745: 110v coupler plug found melting

Summary: An 110v coupler plug was found melting / smouldering. It was part of a temporary electrical supply cable to a temporary shutdown air compressor.

Incident consequences (potential or actual): Injury

Cause of accident or incident: Electricity, electrical discharge, short circuit or overload

Activity Location: Any Location Type

Activity Type: Maintenance

Description: A back up air compressor was being used when an electrician noticed that a 110v coupler plug was melting / smouldering. It was part of a temporary electrical supply cable to a shutdown air compressor. The seal on the plug had failed and water ingress had occurred. With this type of equipment the maximum potential voltage exposure was 55v, so of little risk to people. It was a potential source of ignition.

Specific Equipment: *No details available.*

Lessons Learnt: Failure Mode ConclusionThe socket outlet end seal (Cap Seal) may have been passing allowing small amounts of water ingress into the main chamber over a period of time.

Task Description: No activity associated with this event.

Recommendations: Change out all 16 amp MCB's in all 110 Volt Dist Boards for a combined MCB and earth leakage protection that is compatible with 110 VAC Centre Tapped to Earth Systems.

Contact Details: Safety Advisor 01224 327122



746: Bungee Cord Incident

Summary: A bungee cord being used to secure a gate snapped free and punctured a workman's eye causing permanent loss of vision.

Incident consequences (potential or actual): Injury

Cause of accident or incident: Moving, flying or falling object

Activity Location: Any Location Type

Activity Type: Any Activity Type

Description: A worker was charged with securing an access gate in the closed position for which a bungee cord was used. The bungee cord was being stretched close to maximum length when one end came free. The free end shot up and hit the worker in the face. At the time, the worker was wearing prescription eye wear and the force from the end of the bungee cord was enough to smash through the lens and punctured his eye. This resulted in the worker permanent losing the use of the injured eye.

Specific Equipment: *No details available.*

Lessons Learnt:

1. Using the correct tool for the right application. Bungee cords have a number of hazards associated with their use. The greatest risk is the potential of stored energy. Where in operations are bungee cords being used and for what application?
2. Home use. The risks involved with bungee cord usage goes beyond the work place. Where in your personal life are you using this type of tie-down and does your family understand the risks and hazards associated with their use?

3. PPE must be worn at all times while performing tasks at the workplace as well as at home. Impact resistant safety glasses may have provided a different outcome to this incident. PPE is designed to provide that last level of protection for hazards that cannot be:

Task Description: No activity associated with this event, consider gate, door or hatch closure systems.

Recommendations: PPE may also be used in conjunction with any of the above control measures. Take a look at your worksite as well as your home use and ensure you are properly addressing the hazards with adequate control measures.

Contact Details: Step Change in Safety

747: Retrieval of Floating Debris

Summary:	Concerns were raised by a company vessel on the subject of the retrieval of floating debris.
Incident consequences (potential or actual):	Not Assigned
Cause of accident or incident:	Other
Activity Location:	Support vessel eg Supply, Standby
Activity Type:	Sea transport
Description:	Retrieval of floating debris from areas around a drilling rig, platform or FPSO, in general terms, is not a problem for the vessels operating as ERRVs in the area. However, on occasion they are asked to retrieve drums which, on approach, have been found to have no markings to indicate content or toxicity. This may be due to the time the drum has been in the water or simply that the label has been removed. In these days of COSHH regulations and risk assessment, it was questioned what action a vessel's crew, whether on board the mother ship or in an FRC, should take should they come across this situation.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	<i>No details available.</i>
Task Description:	Recovery of environmental waste
Recommendations:	The MCA have in place procedures for such occurrences, the reporting line and response to floating debris such as containers and drums. In response to misleading information issued in the previous version of this alert and also by the Marine Safety Forum the following statement is to replace the incorrect alerts published on both web

sites. Recommendations: The issue was raised with the MCA Counter Pollution and Response (CPR) Branch. The advice to seafarers on this issue is that the drum or container should be left to float free and HM Coastguard to be informed of its description, current position and if possible the expected direction and rate of drift. The MCA response is given below:- Within the UK pollution control zone, the MCA are the responsible organisation for monitoring the incident and putting appropriate measures into place to recover the container (if necessary) and minimise or reduce the threat of any pollution arising from them.- All drums and containers must be reported to HM Coastguard irrespective of whether dangerous goods placards are displayed or not.- The MCA will liaise with the owners/shippers/insurers (if they can be identified) to encourage them to retrieve them, if this is not possible and the MCA decide there is a pollution threat the MCA can initiate a recovery process.- The MCA will issue appropriate navigational warnings to shipping

Contact Details: No contact details available.

748: Bow Thruster Failure on a Supply Vess

Summary:	A bow thruster failed on a 1975-built platform supply vessel resulting in mud discharge having to be halted, a mud hose having to be disconnected and the vessel to pull off from a jack-up rig.
Incident consequences (potential or actual):	Other
Cause of accident or incident:	Other
Activity Location:	Support vessel eg Supply, Standby
Activity Type:	Sea transport
Description:	It was found that insufficient air was passing to the bow thruster controls from the vessel's 30 bar to 7 bar Air Reducing Valve. The Chief Engineer established that by increasing the pressure setting on the Air Reducing Valve to the upper limit for the low pressure air system that sufficient air was available to operate the bow thruster safely. This being the case and having tested the bow thruster thoroughly, the vessel completed her discharge at the rig without further incident. After the vessel returned to port, a detailed inspection of the Air Reducing Valve was carried out which established deterioration of the valve spring and diaphragm and some erosion of the valve seat together with a build-up of grit particles in the small air passageways. A replacement Air Reducing Valve was fitted before the vessel returned to service. This Air Reducing Valve was maintained as per the vessel's planned maintenance system to satisfy the requirements of the Classification Society. The valve, together with the other components of the Compressed Air System, had been opened up for inspection and survey some five years previous and found to be in good

order. Since there was no history of problems with this type of valve, more frequent opening up for inspection was not considered necessary, only routine checking of its function.

Specific
Equipment: *No details available.*

Lessons Learnt: *No details available.*

Task Description: Vessel alongside discharging bulk materials

Recommendations: It is highly unlikely that the new valve will fail within the lifetime of this vessel. It is also highly unlikely that a similar failure would occur on newer vessels as they have a duplicated system with warning systems to prevent this type of failure. Due to the age of the vessel, a duplicated system was not a class requirement on her. Vessels with similar configurations to increase the inspection frequencies on any components which may result in single point failures.

Contact Details: Stwp Change in Safety

749: Failure of manual brake release system on platform lifeboats

Summary:	Failure to fully address a change to a lifeboat maintenance routine resulted in part of the lowering mechanism being omitted from system function test.
Incident consequences (potential or actual):	Injury
Cause of accident or incident:	Fall from height
Activity Location:	Any Location Type
Activity Type:	Maintenance
Description:	During routine six monthly lifeboat maintenance work the service engineer noticed that the brake release wire drum would not turn. To establish the cause the drum was dismantled to reveal that its components were heavily rusted. These were cleaned, lubricated and reassembled and when tested the drum operated satisfactorily. Examination of the other boats on the installation revealed the same fault.
Specific Equipment:	TEMPSC Davits
Lessons Learnt:	The root cause of the fault is the result of a change in maintenance policy and routine. Originally the lowering mechanism of the lifeboats was proven by the engineer operating the wire pull release system from within the boat. Due to safety concerns within the industry this practice was stopped and the lowering of the boats was carried out from the winch platform by manually raising the brake release lever. Whilst this proved the disengagement and re-engagement of the brake, it did not exercise the release wire; therefore the deterioration

of the drum's components was not apparent. There seems to have been a lack of appreciation and understanding of the actual purpose and operation of the release system which resulted in it being overlooked as requiring maintenance. The efficiency of the release system would previously have been proven by the full function test, but the use of the brake release lever effectively by passed the release mechanism. Deciding to use the winch brake release lever to lower the boats rather than the wire release system was a significant change to the routine. This event serves to illustrate that even the most innocuous change to a maintenance routine can have potentially serious consequences. This change should have been assessed to establish what impact the change had on the overall operation of the lifeboat launch system. Lifeboat maintenance routines have been amended so they include the brake release system as a separate element ensuring it is inspected and if required, serviced.

Task Description: Planned Maintenance of the lifeboat system

Recommendations: It is recommended that other operators who no longer test the brake release system from within the lifeboat check that the brake release wire drum is included in their lifeboat maintenance routine.

Contact Details: <mailto:ahardman@maerskoil.co.uk>

750: Dropped Object - Scaffold Board

Summary:	Scaffold Board fell 50ft to walkway below.
Incident consequences (potential or actual):	HIPO
Cause of accident or incident:	Moving, flying or falling object
Activity Location:	Any Location Type
Activity Type:	Modification of plant/structures
Description:	Whilst stacking scaffold tubes and boards on a walkway against the handrail, ready for the platform crane to lift, the Scaffolder put one board against handrail to act as a toe board. Bundle of tube, which consisted of approximately 10 tubes between sizes of 4ft-8ft, moved and the toe board dislodged and slipped between walkway kicker plate and lower handrail falling approximately 50ft to the lower deck walkway.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	Take the necessary time to Plan the job.· Disregard the word “routine” - Assess each task on its own merit. · Discuss the job at Toolbox Talk.· Deploy correct number of people.· Do not allow over-enthusiasm to “get the job done” to override “doing the right thing” - use the correct procedure.
Task Description:	De rigging scaffold construction and storage of equipment
Recommendations:	· Counsel Employee/Supervisor relative to procedural deviation; hazards identification; lone working· Scaffolder / Supervisor to attend Time Out For Safety and present incident information to colleagues· Reinforce correct method of stacking scaffolding on walkways—procedural

amendment. • Develop Lesson Learned Communication for discussion at departmental safety meetings. • Post SADIE Alert on Step Change Website.

Contact Details: n/a

photo 11



photo 12



751: Collision in Restricted Visibility

Summary:	A collision occurred between a Scottish trawler and a Norwegian supply vessel. The trawler sank after the collision but there was no loss of life or serious injury.
Incident consequences (potential or actual):	Other
Cause of accident or incident:	Not Assigned
Activity Location:	Support vessel eg Supply, Standby
Activity Type:	Sea transport
Description:	On 4th November 2005 at approximately 0600 hours, a collision occurred between one of two Scottish pair trawlers and a Norwegian supply vessel. The trawler sank after the collision but there was no loss of life or serious injury. There was restricted visibility.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	The MAIB report states that the collision occurred because of the poor lookout being kept on the supply vessel and late action taken by the trawler. Neither the supply vessel nor the trawler took avoiding action under the International Regulations for the Prevention of Collision at Sea, Rule 19, in time to avoid the collision. The trawler skipper said he was used to merchant ships passing or altering course at close range.
Task Description:	Sea going voyage without appropriate look out on duty
Recommendations:	The MCA discourages such near miss incidents from taking place. These should be reported to the nearest Maritime Rescue Co-ordination Centre (MRCC) with as much information as possible (weather conditions,

position, vessels involved, courses, speeds and any action taken). Fishermen should be aware of the contents of MGN 313 (F), KEEPING A SAFE NAVIGATIONAL WATCH ON FISHING VESSELS, particularly Section 4.5. It is not always possible to rely on every give-way vessel to keep clear. It is therefore vital to monitor the movement of ALL traffic. A vessel engaged in fishing does not always have the right of way. In restricted visibility there is no 'stand on' or 'give way' vessel; every vessel must take action if a close quarters situation is developing or risk of collision exists.

Contact Details: <mailto:secretary@marinesafetyforum.co.uk>

752: Trip Hazard of Hole Cover Handles

Summary:	A crew member tripped over man hole cover handles on the deck of a vessel and sustained broken ribs.
Incident consequences (potential or actual):	Injury
Cause of accident or incident:	Slip, trip or fall on same level
Activity Location:	Support vessel eg Supply, Standby
Activity Type:	Any Activity Type
Description:	A crew member tripped over man hole cover handles on the deck of a vessel and sustained broken ribs. Weather conditions were not a factor, the floor surface was uneven and the crew member was inattentive when walking in a restricted space.
Specific Equipment:	Man hole cover
Lessons Learnt:	The need to be aware of ones surroundings at all times
Task Description:	Walking on the same level.
Recommendations:	Immediate action: remove handles and raise the issue at on-board safety meeting. Follow-up action: walk through vessel to identify other potential trip hazards; remove trip hazards where possible; enhance/install trip awareness markings; distribute incident details as a lesson learned.
Contact Details:	mailto:secretary@marinesafetyforum.co.uk



753: Broken Toes

Summary:	During a routine boat transfer in the rescue zone of a standby vessel, a crew member's foot was crushed between the plate of a zone barrier and the deck.
Incident consequences (potential or actual):	Injury
Cause of accident or incident:	Slip, trip or fall on same level
Activity Location:	Support vessel eg Supply, Standby
Activity Type:	Temporary access
Description:	The crew were preparing to carry out a routine boat transfer in the rescue zone when an off duty member of the crew decided he would assist. This person did not have the correct PPE on for working on deck. The IP released the retaining pins of the rescue zone barrier but had not got a hold on the top of the barrier which started to fall away from him. He then grabbed the top rail but was unable to keep his balance and fell with the barrier; however his right foot was caught under the plate on the base of the rail and was crushed between the plate and the deck. As the IP was not wearing his safety boots, he sustained crush injuries to his foot. The seaman was repatriated and has received medical attention for his injuries which included fractures to his toes. He will be off work for some considerable time.
Specific Equipment:	Personal Protective Equipment
Lessons Learnt:	This incident initially raises several issues: working without authority or, one must assume, correct supervision; working without the correct PPE; but perhaps the most worrying of all is why no one intervened when

they saw the unsafe act being carried out. This incident could have been prevented if someone had stopped the job and asked him to leave the area. Why did they not do so?

Task Description: Unauthorised work whilst not wearing the correct PPE

Recommendations: • Take a time out for safety to discuss this incident with all crew members. • Explore the safety culture on your vessel; could this happen to you? And make any changes needed to ensure it could not. • Ask all personnel to make the commitment to look out for each other, help each other to work safely and use the stop work authority whenever it is appropriate to do so.

Contact Details: <mailto:secretary@marinesafetyforum.co.uk>





754: MRV Hose Incident

Summary:	A lack of experience in hose handling and a reluctance to delegate duties led to the parting of a hose following a fuel transfer on an MRV.
Incident consequences (potential or actual):	Other
Cause of accident or incident:	Failure of vessels or pipework
Activity Location:	Support vessel eg Supply, Standby
Activity Type:	Any Activity Type
Description:	The incident involved a vessel which had been operating in the recent past predominantly in the recovery and rescue mode and was now being asked to carry out cargo operations. The master had been specifically asked if he had worked cargo before and if he was happy to perform the necessary deck cargo and hose operations, to which he responded in the affirmative. The master and mate had previously recognised and risk assessed that, although the deck crew had previous cargo experience, they had not been actively involved in such operations within the past couple of years. Therefore the mate, who would normally be present on the bridge, accompanied the crew on deck to watch, communicate and assist. This left the master and second officer on the bridge. The master, on this occasion wanting to ensure there were no communication misunderstandings with the installation or engine room, chose to perform this task in addition to manoeuvring the vessel. Ordinarily this would not be a problem but this particular console layout was less than perfect. To use the engine room talkback involved leaning over the console to speak during which it would be impossible to see through the windows. As this was a

tidal location and the vessel was correctly placed in a 'drift-off' position, the vessel was required to maintain a level of lateral thrust to hold position. Unfortunately, whilst the master was communicating with the engine room twice in quick succession to drain back the hose following completion of the fuel transfer, he momentarily lost focus on maintaining vessel position resulting in the hose rising out of the water before sufficient astern thrust developed from his joystick command. Unbeknownst to the master, the hose had been fitted with a 'weak link' and the hose parted.

Specific
Equipment: *No details available.*

Lessons Learnt: Surprisingly, during the incident investigation it was discovered that although the operation was conducted professionally, the master had never performed hose operations before and had not volunteered this information because it had not specifically been asked for by either the owner or client. It was also ascertained that had the mate been on the bridge as usual, the incident would have been unlikely to occur.

Task Description: Transfer of bulk materials from ship to installation

Recommendations: Actions that are being taken are:• Pre-hire briefings now contain specific questions to ascertain cargo and hose-work experience. • Specific cargo and hose-work experience records are now being maintained. • Ergonomics of the console layout are currently being reviewed on this and similar vessels. Installation data cards are being altered to advise of the presence of weak link couplings. Can you be sure that the answers to your questions are actually what you are looking for? Do not use 'closed' questions or you may not get the whole story! Finally, when conducting risk assessments be extra vigilant and think through all possible angles and connotations, particularly with regard to changes from the norm. Consider every person's workload and ensure that

if it is felt that additional help is required, it should be asked for.

Contact Details: secretary@marinesafetyforum.co.uk

755: Counterfeit Rigging - Failure of Rigging During Subsea Installation

Summary:	This Safety Alert describes a recent offshore incident in which 4 synthetic slings, supporting a Sub-Sea Isolation Valve (SSIV) protection cover weighing approximately 24te, failed while the load was being deployed subsea, resulting in the SSIV protection cover falling to the seabed. Background An SSIV protection cover weighing 24te was to be installed at a subsea location in approximately 35m water depth. The structure was rigged in each corner with a 6m continuous loop synthetic sling with a nominal SWL of 15te - see Photo 1
Incident consequences (potential or actual):	Other
Cause of accident or incident:	Not Assigned
Activity Location:	Specialist vessel eg diving, construction, survey
Activity Type:	Construction, hook-up, commissioning
Description:	The SSIV cover was successfully lifted from the materials barge and lowered into the water. As part of standard risk management protocols, the lift location was deliberately off-set from any subsea structure. Once at depth, the construction vessel would move over the installation location and the cover lowered into final position. The top of the cover was approximately 8m below surface when, as was discovered later, all 4 synthetic slings failed and the cover dropped to the seabed. There were no injuries and the SSIV cover landed partially inverted but otherwise undamaged. Following a thorough review of the circumstances, and Photo 2 SSIV lifted from materials barge appropriate precautions to prevent recurrence, the

SSIV cover was recovered some days later and successfully installed without further incident. What Went Wrong? The synthetic slings were of a single continuous thread design, wrapped in a flexible protective cover. An examination of the broken slings quickly showed all 4 failed in an identical fashion. Further investigation showed the 4 x 6m slings were made from original 2 x 12m slings:

- Stitching on the sling cover unpicked;
- Slings cut in half;
- Ends knotted together;
- Sling cover re-stitched.

Other indications the slings were not originals:

- Uneven stitching of the cover seam;
- Traceability tag used for certification stitched into the sling cover and not as a band around the sling.

The slings were provided by a local Nigerian supplier. A review of certification verified the traceability tags had numbers which matched batch certificates for 12m slings, not 6m slings.

Specific Equipment: *No details available.*

Lessons Learnt: *No details available.*

Task Description: Routine crane and lifting operations

Recommendations: Limit procurement of rigging to a nominated list of approved suppliers. Stringent QC checks for all materials. MOC control procedures for any requirements to deviate from the procurement process.

Contact Details: Wendy Bennett - wendy.bennett@ogp.org.uk

756: Cleaning & Use of Hand Held Blender

Summary: Laceration to thumb from moving blade

Incident consequences
(potential or actual): *No details available.*

Cause of accident or incident: *No details available.*

Activity Location: Any Location Type

Activity Type: Catering / hotel services

Description: The injury occurred while cleaning a large stick type hand blender by putting the blade of the blender under running water. The injured person had run his hand down the shaft of the blender in order to remove oil and food debris from the shaft. The IP's hand slipped due to the oil and his thumb came into contact with the rotating blade causing a deep laceration. It is not known if the blender was still switched on or whether it had been switched off at the handle, however, the blade was still turning when the IP's thumb came into contact with it. The IP was medicated for hospital treatment.

Specific Equipment: Robo Coup hand held blender

Lessons Learnt: It should be noted that even when switched off, the blade of the blender keeps turning for 4 or 5 seconds before coming to a stop. This particular model of blender has a detachable shaft and can be mechanically washed. There was no specific risk assessment work pack in place for the use of the machine.

Task Description: *No details available.*

Recommendations: Review specific risk assessment with regard to isolating before cleaning. Blender must be isolated and allow blade to come to a complete stop before cleaning. If blender has a detachable shaft, then this must be removed for cleaning.

Contact Details: ARAMARK Ltd Neill Murray murray-neill@aramark.co.uk

757: Allergic reaction to common medication

Summary:	Person suffered hyper-sensitive reaction to common medication
Incident consequences (potential or actual):	Other
Cause of accident or incident:	Other
Activity Location:	Any Location Type
Activity Type:	Off-duty / recreation activities
Description:	A platform Instrument Technician reported to the field Medic with a strained back . He felt some pain but not enough to prevent him from working, however he attended the Medic for some pain relief. As part of the examination a full history was taken. The patient had no known history of allergic reaction. There was no condition or current medication that would contra-indicate against the dispensing of a non steroidal anti-inflammatory medication. Although the medication was given to the patient at 16:00, on the advice of the Medic he waited until 19:00 so he could take the medication with food. Only one tablet was taken. At 01:55 the Instrument Technician reported to the Medic with a rare, severe, frightening and life threatening allergic reaction. With advice from the topside Doctor, the the Medic promptly administered through intravenous infusion antihistamine and corticosteroid drugs. These drugs came from the anaphylactic shock tray that had been prepared for just such an occasion. By 03:00 the patient had almost completely recovered. After one days rest he returned to work.
Specific	<i>No details available.</i>

Equipment:

Lessons Learnt: The anaphylactic shocks tray was well prepared and immediately available for administration.

Task Description: No task associated with this occurrence other than administration of medication

Recommendations: All Medics to ensure that anaphylactic shock treatment is available for immediate administration.

Contact Details: Aker Kvaerner- paul.keay@akerkvaerner.com

758: Fall From Forklift Truck Resulted In Fatality

Summary: A contractor fell from the side of a forklift truck to the warehouse floor at the operations base. It is believed he struck his back and head, although no-one witnessed the fall. Later that day he complained about a headache and was admitted to hospital, where he subsequently died on Monday 19th September 2005 as a result of a closed head injury. (The photograph is a reconstruction).

Incident consequences (potential or actual): Fatality

Cause of accident or incident: Fall from height

Activity Location: Supply base, warehouse, workshop, dock

Activity Type: Office / warehouse activities

Description: *No details available.*

Specific Equipment: *No details available.*

Lessons Learnt: Head injuries, especially with (brief) loss of consciousness, should be dealt with seriously. Early evaluation by a medical specialist is strongly advised. You have a higher risk of traumatic brain injury following a blow to the head if you:- are over 55 years old; - are on anti-clotting medications (like aspirin, Coumadin or Plavix); - have bleeding tendencies; - have high alcohol consumption. The fatality rate of traumatic brain injury is between 20-50%! (All age groups). Traumatic brain injury: Any kind of blow to the head or violent shaking e.g. whiplash, can cause a traumatic brain injury. Visual signs of injury can be absent. The brain tissue itself may be injured, the blood vessels can burst and cause bleeding, or a combination of these may occur. Types: Concussion

(a temporary loss of brain function);Contusion (bruising of the brain);Fracture (broken skull bones);Hematoma (blood clots).Symptoms:Headache, fatigue, memory loss, confusion, loss of consciousness, dizziness, ringing in ears, nausea and vomiting.

Task Description: Dismounting from forklift truck after completing operations.

Recommendations: Corrective actions and Recommendations: - Use proper fall protection especially while working from heights; - Wear a seat belt when traveling in a motor vehicle; - Maintain a high level of suspicion with blunt trauma to the head, with or without loss of consciousness; - Do not be fooled by absence of symptoms, immediately post injury, as they tend to develop over hours; - Apply the 3 Point Rule when working at height, always have 3 contact points e.g. 2 feet and one hand or 2 hands and 1 foot in contact with stable supports at all times.

Contact Details: Wendy Bennett - wendy.bennett@ogp.org.uk



759: Seatbelts In Buses: 2 Recent Bus Incidents, 13 Fatalities & 37 Injured

Summary: A drilling company bus in Nigeria collided with a 3rd-party trailer leading to 11 fatalities and 9 seriously injured. The trailer driver had worked over 24 hours without rest, not all passengers used seatbelts, Journey Management was not applied and the Emergency Response Plan was not adequate. A seismic contractor truck conveying 30 staff collided head on with a 3rd-party truck, which was overtaking a minibus at high speed. Two staff in the front seat of the passenger department died, one was seriously injured and 5 had broken jaws, mostly due to striking the low-back seat in front. All passengers used seatbelts, IVMS showed adherence to the speed limit, the driver drove defensively, and emergency response was professional.

Incident consequences (potential or actual): Fatality

Cause of accident or incident: Other

Activity Location: Onshore office, support base, heliport

Activity Type: Land transport

Description:

- Seatbelts save lives! If all the company passengers had worn seatbelts, fatalities/injuries would have been reduced. The 3 pt seatbelts used by driver and front seat passengers in Nigeria probably saved 3 lives.
- Bus seats with 2 pt lap seatbelt facing a low-back seat in front, can result in fatal head injuries and broken jaws.
- Alertness, good rest cycles and accommodation for drivers is vital.
- Journey Management and emergency response need to be in place. Do you use a seatbelt in a bus and intervene if someone else is not?

Specific Equipment: *No details available.*

Lessons Learnt: *No details available.*

Task Description: Transfer of personnel via land transport.

Recommendations: - Buses have 3pt inertia reel seatbelts for driver and front row and 2pt inertia reel seatbelts for all other forward-facing seats. - Fixtures in front of seats to be padded with no sharp edges. - Authorise/ensure drivers check seat belts are worn and tightened! - Seats facing a low-back seat or fixture should only be used if they have a 3 pt inertia reel seatbelt. - Ensure bus drivers have passed a Defensive Driving test with good results. - Ensure drivers have good accommodation to enable sufficient rest.

Contact Details: Wendy Bennett - wendy.bennett@ogp.org.uk



<http://dcwfptest.steel-sci.org/stepchange/discussions.aspx?ID=3761&ThreadID=3761>

760: Cherry Picking

Summary: During cargo operations, an AB was hit in the head with a crane hook

Incident consequences (potential or actual): Injury

Cause of accident or incident: Moving, flying or falling object

Activity Location: Support vessel eg Supply, Standby

Activity Type: Lifting, crane, rigging, deck operations

Description: A vessel was conducting cargo operations at an offshore installation when one of the AB's working on deck was hit on the head by the crane hook. Fortunately, the hook hit the top of the hard hat, knocking it off. The AB was shaken but did not sustain any injury. The work continued after a reassessment and agreement with the crane driver. On this occasion, the vessel had been asked to hook on a container towards the centre of the stow. This meant the AB was working in a confined area on deck. The outcome from this accident could easily have become much more serious.

Specific Equipment: *No details available.*

Lessons Learnt: Cherry picking is a dangerous practice and should not be permitted. Key elements of the dangers of cherry picking are:•Working at height to reach the lifting gear•Walking between cargo units that are not secured from sudden movement•Occasional lack of visibility of individuals to crane driver

Task Description: Routine crane and cargo operations

Recommendations: Steps have been taken onshore to provide necessary actions to improve cargo planning in port and back loading offshore. However, there must be a certain element of policing this issue offshore and that is where the vessels can contribute. Masters must be quite clear that they are empowered to halt any operation they consider to be dangerous or that has an unacceptably high element of risk. Most of the conditions that combine to create this scenario can be avoided by pre-planning and communications. OIMs and installation personnel should take steps to ensure vessel crews are not requested to 'cherry pick' cargo under any circumstances.

Contact Details: <mailto:secretary@marinesafetyforum.co.uk>

761: OXYGEN DISPLACING GASES - INVISIBLE & INSTANT KILLERS

Summary:	On 23rd July 2006 a welder entered a pipe filled with argon to support the welding, became unconscious and suffered brain-death.
Incident consequences (potential or actual):	Fatality
Cause of accident or incident:	Drowned or asphyxiated
Activity Location:	Any Location Type
Activity Type:	Modification of plant/structures
Description:	On 23rd July 2006 a welder entered a pipe filled with argon to support the welding, became unconscious and suffered brain-death. In 2006 two workers collapsed when entering a building with an oxygen deficient atmosphere. An attendant managed to open the door, rescuing both. Other dangerous gases that have killed people are hydrocarbon vapours like butane or propane. These have narcotic effects, leading to death. H2S is another well known killer.
Specific Equipment:	Confined space, inert gases
Lessons Learnt:	The killer, Oxygen displacing gaseses e.g. N2, Argon, CO2 and natural gas, lead to lack of oxygen: 21% O2 is normal;Below 20% is dangerous;Below 10% is lethal.Within 2 breaths, without warning from the body, you lose consciousness. Within a few minutes you will suffer brain damage leading to death.
Task Description:	Entered Confined Space in preparation for the welding process

Recommendations: The need for confined space entry (CSE) should be minimised. If it can't be avoided, HEMP shall be applied and CSE shall be authorised and controlled by Permit to Work. Do not enter confined spaces with possible low oxygen levels (<20%); Entry under conditions 16-20% is only allowed under specific conditions (see box) and with both a BA set and an oxygen monitor; In your team who could be exposed to oxygen deficient atmospheres? When could that happen? And what precautions would you take?

Contact Details: wendy.poore@ogp.org.uk



762: Dangerous Practice During Mooring Operations in Port

Summary: A weighted monkey's fist on the end of a heaving line was thrown ashore with the potential to cause injury or harm.

Incident
consequences
(potential or
actual): Injury

Cause of accident
or incident: Moving, flying or falling object

Activity Location: Specialist vessel eg diving, construction, survey

Activity Type: Any Activity Type

Description: An offshore survey vessel arrived at a port at 0100 hours. The first rope was sent ashore using a heaving line with a monkey's fist on the end. On receiving the heaving line, it was obvious that the monkey's fist was heavily weighted. The monkey's fist was looped onto the end of the heaving line so was confiscated by one of the linesmen. On investigation it was found that the knot was tied around a substantial lump of lead. The rope was wet and weighed in at 800 gms.

Specific
Equipment: Mooring ropes

Lessons Learnt: *No details available.*

Task Description: Preparing to moor the vessel in port.

Recommendations: Below is the relevant extract from the Maritime and Coastguard Agency's Code of Safe Working Practices for Merchant Seamen: 25.3.2 Vessels' heaving lines should be constructed with a 'monkey's fist' at one end. To prevent personal injury, the 'fist' should be made only with rope and should not contain added weighting material.

Contact Details: <mailto:secretary@marinesafetyforum.co.uk>



763: Mixing Equipment

Summary: Whilst cleaning down mixing equipment, IPs arm became entangled in paddle of mixing equipment.

Incident consequences (potential or actual): Injury

Cause of accident or incident: Moving machinery or material being machined

Activity Location: Any Location Type

Activity Type: Maintenance

Description: This alert intended as initial notification. Incident still under investigation.

Specific Equipment: Epoxy Mixing Equipment

Lessons Learnt: To be advised.

Task Description: Cleaning of mixing equipment prior to the isolation of the mixing paddle (agitator)

Recommendations: Initial actions taken all similar types of mixing equipment has been quarantined, and recalled to base.

Contact Details: sarah.glover@salamis.com

764: Fall from Scaffold

Summary: Following completion of tank cleaning operations a scaffolding contractor was dismantling scaffolding within the tank. During this activity, a scaffolder fell from a height of 3 to 4 metres to the base of the tank. Serious injuries sustained included, bruising to shoulder, a head wound requiring 20 stitches and 3 fractured ribs. The operator was at the time standing with one foot on the ladder and one foot on the scaffold structure passing scaffolding up through top hatch

Incident consequences (potential or actual): Injury

Cause of accident or incident: Fall from height

Activity Location: Any Location Type

Activity Type: Temporary access

Description: Following completion of tank cleaning operations a scaffolding contractor was dismantling scaffolding within the tank. During this activity, a scaffolder fell from a height of 3 to 4 metres to the base of the tank. Serious injuries sustained included, bruising to shoulder, a head wound requiring 20 stitches and 3 fractured ribs. The operator was at the time standing with one foot on the ladder and one foot on the scaffold structure passing scaffolding up through top hatch

Specific Equipment: Scaffolding

Lessons Learnt: •Violation of company procedures•Lack of compliance with working at height regulations•Unsafe positioning•Scaffolding damp/slippery•Lack of awareness of risks•Lack of clear definition of Roles &

Responsibilities•No intervention policy/program in place

Task Description: Dismantling of a scaffold structure inside a confined space.

Recommendations: •Improved management of contractors•Re-enforcement of compliance to Company Procedures•Required compliance to Working at Height Regulations•Establishment of clear roles & responsibilities•Training in risk awareness/risk assessment•Training in safety awareness working at height•Establishment of documented Contractor Toolbox Talks•Contractor to re-establish scaffolding standards•Establishment of regular contractor performance review meetings•Review of alternative harness options•Spot audits by Enviroco and contractor management to ensure compliance•Encourage Vessel owners to review tank design on new builds to include consideration ofImproved tank washing systems•Fixed pad eyes to provide anchor points for fall arrest equipment•Possibility of walkways to facilitate tank cleaning•Hatch access at base of tanks•Clear external access to hatches at base of tanks

Contact Details: lorna.mitchell@ascopl.com

<http://dcwfptest.steel-sci.org/stepchange/News/StreamContentPart.aspx?ID=3756>

765: EEBD Emergency Escape Breathing Device, Escape Set, Smoke Hood - Neck Seal Deterioration

Summary: During routine inspection of EEBD devices by Shore Technician it was found that the neck seal had deteriorated to such an extent that the set would not be fit for purpose. The neck seal was the only rubber part of the set so affected and the deterioration was only evident by opening the container. The remainder of the sets on board were inspected and 5 of the 11 were similarly affected. The units are less than 4 years old.

Incident consequences (potential or actual): Injury

Cause of accident or incident: Failure of PPE/RPE

Activity Location: Any Location Type

Activity Type: Maintenance

Description: Neck seal found to be disintegrating.

Specific Equipment: Draeger, model number CF 15 (standard CE 0088 / 0038 EN 1146). Item with initial fault had mask number 00156.

Lessons Learnt: Alert to all company vessels , at the time of writing we have confirmation that other sets are similarly affected.

Task Description: Routine maintenance of PPE

Recommendations: Inspect all simliar units to check integrity of neck seals. Since the release of this alert the manufacturers have advised that the escape sets should be stored in a "cool dry place". Storage in direct heat or hot environments such as galleys, hot workshops and engine rooms could create the conditions which might lead to premature deterioration of the rubber neck band. Siting of the units within these areas must be carefully chosen and consideration of the potential reduction in life expectancy

of the unit taken into account when setting up maintenance and inspection periods.

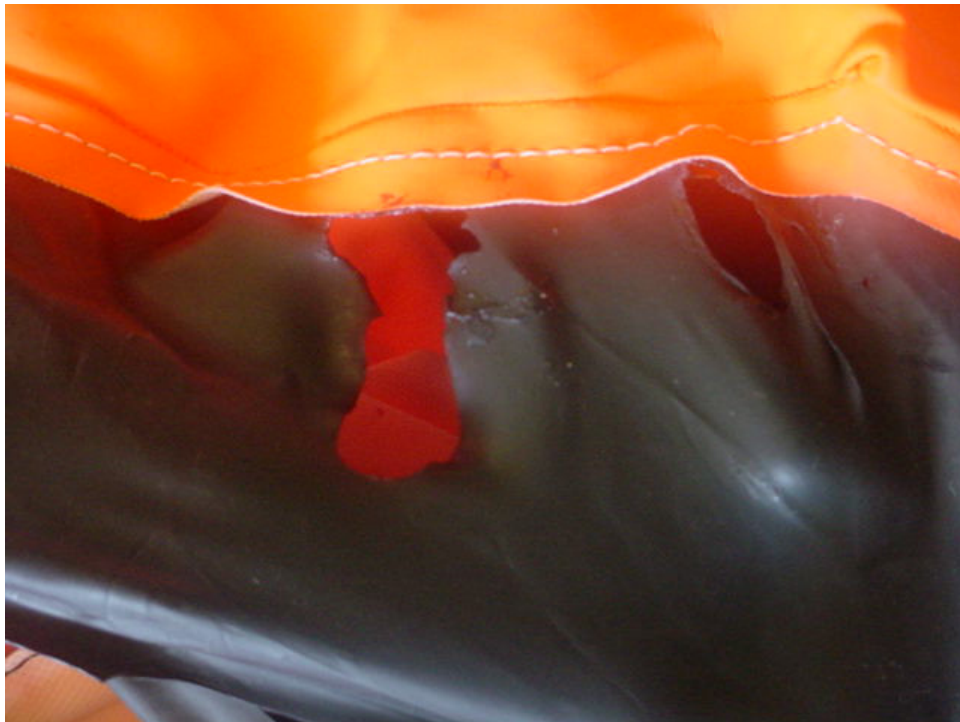
Contact Details: Columbia Shipmanagement Paul Hudson
p.hudson@csmcy.com













766: Fixed Foam System - Mixing Valve Diaphragm damage.

Summary:	Ships crew were working on foam compound pump and debris was observed to have caused damage to the unit. As a precaution the diaphragm valve which controls the foam compound/water mixture ratio was opened up. The valve was choked with debris identified as dried foam compound. The valve diaphragm was split rendering the system useless if required. Notification of two sister vessels fitted with the same equipment revealed another to be affected in the same way. System will now be flushed after each test.
Incident consequences (potential or actual):	Other
Cause of accident or incident:	Other
Activity Location:	Any Location Type
Activity Type:	Inspection/testing
Description:	Fixed foam system mixing valve found choked with dried foam compound debris which had split the diaphragm controller
Specific Equipment:	Standard proportional diaphragm controlled mixing valve
Lessons Learnt:	System to be left with a fresh water "Plug" across the valve after testing to prevent re-occurrence
Task Description:	Unplanned maintenance based on findings of active fire fighting units.
Recommendations:	Inspect diaphragms at earliest opportunity and leave system with freshwater plug after testing.

Contact Details: Columbia Shipmanagement Paul Hudson
p.hudson@csmcy.com



767: Securing Strap Failure

Summary:	An incident occurred on 8th November 2006 which had the potential to cause a fatality. A 6 ton item fell from a vehicle as it reversed into a premises yard entrance. No one was injured and no gas loss occurred.
Incident consequences (potential or actual):	HIPO
Cause of accident or incident:	Moving vehicle or vessel
Activity Location:	Supply base, warehouse, workshop, dock
Activity Type:	Land transport
Description:	A vehicle was reversing into our customers Dyce, Aberdeen premises delivering off hired gas equipment. During the manoeuvre a securing strap failed, allowing a gas pack (approximate weight 6te.) to slide from the vehicle onto the road. In addition, the driver was not in possession of any transport documentation (delivery note, TREM cards etc).
Specific Equipment:	Gas Containing Equipment, transported from Holland via road/ferry to Aberdeen, secured to HGV Vehicle trailer with ratchet straps.
Lessons Learnt:	This incident highlights the importance of checking the condition of securing straps at each point of use. Where damage is identified, securing straps must be immediately condemned and rendered unusable. It was extremely fortunate that no injury to people occurred as a consequence of this incident, and also that an incident did not occur enroute to Aberdeen. All consignments must be accompanied by transport documentation. In the case of this incident, where dangerous goods are being transported, this must include documentation as specified

in Chapter 5.4 of the ADR regulations.

Task Description: Discharging of vehicles in a land based location.

Recommendations: Immediate / Underlying Causes:- This incident was caused by the use of badly worn securing straps. Securing straps to be checked for damage prior to each use. Where damage is identified, straps should be removed from service and destroyed.

Contact Details: Geoff Cutler - Q Tech Solutions Ltd - Mobile Tel. 07990 600453





768: Shut Down Valve Failure

Summary: A recent incident involving the failure of a shut down valve (SDV), and the subsequent failure of two pressure safety valves (PSV), has highlighted issues associated with the selection of SDVs and the need for regular maintenance and testing of SDVs and PSVs. The failure occurred after an electrical supply fault caused an emergency shutdown of a gas processing plant. Upon subsequent start up of the plant and one of the plant's compressors, an SDV passed on closure allowing the gas pressure to build up in a crossover header between high pressure and low pressure pipework systems. Another compressor was then started further increasing the pressure. Two PSVs in the gas line failed to operate at their set pressure and the pressure continued to rise until a rupture disk relieved to flare.

Incident consequences (potential or actual): HIPO

Cause of accident or incident: Failure of vessels or pipework

Activity Location: Any Location Type

Activity Type: Maintenance

Description: The incident investigation found that the SDV failed due to internal damage as a result of the externally actuated valve breaking through an internal stop. The SDV was an actuated ball valve design with stops internal to the valve. Internal inspection of the valve found that the stop slot in the ball was damaged allowing the valve to over travel, and the valve seats had been sheared. Debris from the damaged SDV was found to have lodged in a downstream PSV which contributed to its failure to activate. This PSV also showed signs of corrosion and

had not been stripped down for an extended period due to failure to carry out planned maintenance. Another downstream PSV partially opened, but then re-seated, failing to fully relieve the increasing gas pressure. While this PSV had been previously tested, no records of previous strip downs of the valve were found. In addition, the regular inspection of the SDVs did not include testing to ensure SDVs closed and sealed on actuation

Specific Equipment: *No details available.*

Lessons Learnt: *No details available.*

Task Description: Failure resulting in the inspection of a number of valves.

Recommendations: - Shut down valves (SDV) and their actuators must be properly selected and sized for their intended service. For shut down and isolation service, movement of valves is usually limited by stops on their external actuators - it is not normal practice to have a stop pin or key internal to the valve when it is actuated. Recommended industry practice is for use of external stops for most applications, while positive internal stops are generally only suitable for light duty applications. Existing SDVs should be reviewed to ensure that the combination of actuator and stops is suitable for the service. - Pressure safety valves (PSV) should be regularly inspected and tested in accordance with manufacturer's specifications and relevant Standards. These inspections should include regular stripping down of the valves, where appropriate. - Regular inspection and testing of emergency shut down systems should include testing of the final element (i.e. appropriate closure and sealing of the SDV).

Contact Details: Wendy Poore - wendy.poore@ogp.org.uk

769: Crush Injury To Thumb And Finger

Summary: IP's thumb and index finger crushed during removal of Speedloc clamp segment - resulting in an open fracture to both.

Incident consequences (potential or actual): Injury

Cause of accident or incident: Not Assigned

Activity Location: Any Location Type

Activity Type: Drilling, workover

Description: Task in hand was to nipple down the 13 5/8" BOP stack. The IP was in the process of removing the Speedloc clamp from the riser to the wellhead (Note: It was established that the Speedloc clamp segments were being individually removed. This is not required; the clamp segments only need to be loosened but remain in situ around the supporting ring). The IP was using an air operated wrench to remove the retaining nuts from the Speedloc clamp (Note: this was the second to last segment to be removed). Once slackened the IP positioned his hand below the wrench to prevent the nut from falling. With his hand in this position the Speedloc clamp segment moved, crushing the IP's thumb and index finger (Note: it was established that there is no stored energy behind the clamp segments but any movement from the riser section above could cause the segment to move. The riser is approx 20ft in length and weighs 7t).

Specific Equipment: Speedloc clamp Air operated wrench

Lessons Learnt: It is common practise for the Speedloc clamp segments to be removed individually, requiring the removal of the nut from the retaining ring stud, instead of loosening the nut and leaving the clamp remaining in situ. Lack of risk awareness on the part of the IP in correct hand positioning when using power tools. No reference made to Speedloc clamp operating procedures during task.

Task Description: Individual use of handtools associated with heavy components.

Recommendations: Provide suitable training on the use and application of the Speedloc clamp, to end users. Amend all procedures/risk assessments associated with nipping up/down BOP stack with the following:

- Reference made to the specific section(s) of Rig Manual that detail Speedloc clamp handling procedure.
- Requirement for all personnel handling Speedloc clamp to have received familiarisation training.

Contact Details: Ali Brain - ali.brain@uk.kcadeutag.com

770: FM200 (Fire Extinguishant) Bottle discharged during make up.

Summary: During the task of replacing FM 200 extinguishant cylinders recently refilled by the manufacturers, a technician had difficulty making up the threaded connections to the cylinder/ system. His attempt to abort the operation resulted in an accidental discharge of the extinguishant (162 kg at 25 Barg).

Incident
consequences
(potential or
actual): Injury

Cause of accident
or incident: Other

Activity Location: Any Location Type

Activity Type: Maintenance

Description: A technician was given the task of replacing FM 200 extinguishant cylinders (contents 162 kg at 25 Barg) that had recently been refilled by the manufacturers ~ Macron Safety Systems. He proceeded to replace the first cylinder. The firing solenoid and female knurled adapter were offered up to the male schraeder valve fitting screwed to the bottle. The fitting is designed to be hand tight. A couple of threads were engaged but the fitting was tight and the technician used a small pair of stilsons to provide grip to turn the knurled adapter. He used only light force. As designed, the schraeder valve unseated and pressure started to charge up the firing solenoid. It became apparent however it wasn't going to stop. Concerned that the bottle pressure was going to decay and that the adapter would not fully make up, the technician decided to abort the job and back off the adapter. He was unaware as he backed off the knurled adapter, the bottle schraeder valve fitting itself was

disturbed and unscrewed. The threads had locked together. It backed out from the bottle. There was a bang and the bottle contents discharged out of a 1/4" NPT pilot line port. The technician was wearing full platform PPE (coveralls, helmet, gloves and safety glasses). He was shaken but otherwise unharmed. The enclosure door was open whilst he was completing this operation and there was no asphyxiate effects

Specific
Equipment: FM200 Fire Extinguishant

Lessons Learnt: Investigation focussed on the male and female thread forms of the male and female adapter fitting. It became apparent that there was a thread form mismatch and the threads would never have made up. Further investigation included the manufacturer. The two parts were made approx. 10 years apart. The female adaptor was original equipment; the male fitting was new ~ supplied with the recharged bottle. It is likely the original adaptors would have been subcontracted to a machining company who machined the original male and female adaptor and screwed them together to ensure a positive fit but not to have checked the threads with go/no go gauges.

Task Description: Individual performing maintenance duties of a fire extinguishing system.

Recommendations: It is strongly recommended that these parts are checked for compatibility prior to them being fully assembled on a live system. Even though the parts may have come from the same supplier that there may still be an issue with make up ~ since different sub-suppliers may have supplied different component parts. Dry run assembly wherever possible. When removing any adaptor from any pressurised bottle ensure a spanner is used to prevent any fitting (that is intended to stay put) from being unscrewed from the bottle.

Contact Details: petpoadashesuperintendent@bhpbilliton.com

<http://dcwfptest.steel-sci.org/stepchange/News/StreamContentPart.aspx?ID=3774>

<http://dcwfptest.steel-sci.org/stepchange/News/StreamContentPart.aspx?ID=3775>

771: Multiple Failures of Line of Site Gas Detection.

Summary: Multiple failures of the LOS gas detection were discovered during routine preventative maintenance in October 2005. The failure mode has been attributed to high UV-A from the lamp which causes decomposition reactions from the materials inside the source unit assembly resulting in a deposit on the source window and reduced signal intensity.

Incident consequences (potential or actual): HIPO

Cause of accident or incident: Failure of vessels or pipework

Activity Location: Any Location Type

Activity Type: Maintenance

Description: Multiple failures of the LOS gas detection were discovered during routine preventative maintenance in October 2005. Signal checks, undertaken during planned maintenance confirm the health of the instruments. Deterioration in individual instruments between planned maintenance can remain un-revealed, whereby they fail to operate on demand and the availability of the gas detection system is compromised. Gas Detection is Safety Critical. The detector is the SAFEYE 200 series manufactured by Spectrex. Investigation by the manufacturer has concluded malfunction is due to a reduced signal caused by the gradual formation of a deposit on the internal source window. The manufacturer had recently changed to a high power xenon lamp which emits infrared and ultraviolet energy. The high UV-A causes decomposition reactions from the materials inside the source unit assembly resulting in gradual formation of a deposit on the source window which reduces the signal

intensity. The problem appears to be worse in units with stainless steel housings. Experience shows the deposit reduces the useful service time to about six months. A replacement program has been developed by the manufacturer whereby the lamp units are being replaced with a type that does not emit UV. This lamp had been used prior to the manufacturers use of the xenon lamp.

Specific
Equipment:

Line Of Sight Gas Detection

Lessons Learnt: Another LOS Gas detector failure mode, as yet not understood ~ a high UV-A can cause decomposition reactions from the materials inside the source unit assembly resulting in gradual formation of a deposit on the source window.

Task Description: Routine planned maintenance associated with the fire protection system.

Recommendations: Be aware of this failure mode, check own installations, maintenance history and LOS detectors.

Contact Details: Dave Brady, Senior Control & Instrument Engineer,
Dave.Brady@BHPBilliton.com, Tel No: +44 1352 842205,
Fax No: +44 1352 842311

<http://dcwfptest.steel-sci.org/stepchange/News/StreamContentPart.aspx?ID=3776>

772: Electrocution from Overhead Power Line

Summary:	A self loading truck was being used to load empty wooden crates located on a public road. During the operation, the crane boom came very close (150mm to 200mm) to a 33kV overhead power line.
Incident consequences (potential or actual):	Not Assigned
Cause of accident or incident:	Electricity, electrical discharge, short circuit or overload
Activity Location:	Onshore office, support base, heliport
Activity Type:	Lifting, crane, rigging, deck operations
Description:	A self loading truck was being used to load empty wooden crates located on a public road. During the operation, the crane boom came very close (150mm to 200mm) to a 33kV overhead power line, causing the electricity to arc across from the power line to the crane boom, resulting in the operator being electrocuted. The victim was immediately MEDECATED to Daewoo site retainer clinic nearby, where he was pronounced dead.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	- Lack of awareness of the safety distance required for working near a high voltage power line and the risk of flashover.- No supervision.- No formal or informal JHA.
Task Description:	Loading operations on land transport.
Recommendations:	- Notify all Staff and Contractors that no work is to be performed under a High Voltage Power Line unless it has been de-energised and/or risks formally assessed and managed to LARP.- Place Warning Signs/Stickers in Self Loading Vehicles and Cranes- Approach PHCN to

propose that they identify the Voltage of low-level Overhead Power Lines and placing visible warning signs recommending a clearance distance- Extend the use of PTW to work performed outside the worksite.- Raise Staff awareness of the importance of carrying out a JHA and complying with the resulting requirements- Ensure that Supervisors visit site or understand the scope of work to be done before initiating a PTW to conduct a JHA

Contact Details: Ian Greenwood - ian.greenwood@shell.com

Crane boom position



773: Fatal Incident during installation of a MET Tower

Summary:	As a Meteorology Tower was being raised, it came into contact with a high voltage overhead power line.
Incident consequences (potential or actual):	HIPO
Cause of accident or incident:	Electricity, electrical discharge, short circuit or overload
Activity Location:	Onshore construction/rig repair yard
Activity Type:	Lifting, crane, rigging, deck operations
Description:	A 60 foot Meteorology (MET) Tower was being deployed to be used as part of the sites Emergency Response Plan for modelling of H₂S/SO₂ plumes in the event of unintended release. As the MET Tower was being raised, it came into contact with a high voltage overhead power line. The MET Tower Technician operating the system was fatally injured from electrocution. The MET Tower Technician had deviated from the agreed workplan that specified a location that was distant from any power lines. The Technician elected to deploy the MET Tower in an alternative location where power lines were present overhead.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	- The MET Tower Technician did not comply with the established workplan.- The MET Tower Technician did not recognise the presence of power lines in the alternative location.- The MET Tower became energised as it made contact with an overhead power line.
Task Description:	Positioning of a tower too close to HV lines.

Recommendations: - Basic safe work practices must be continually reinforced and enforced.- Successful unsupervised work depends on good documented communication of the workplan.- All work instructions should include and explicit focus on the hazards that are present.

Contact Details: Ian Greenwood - ian.greenwood@shell.com

MET Tower Being Installed



MET Tower in Contact with Power Lines



774: Crane Rope Installation - hand injury

Summary:	During a rope installation on an offshore pedestal crane, the rope became snagged. The IP received a serious injury to his hand when the rope suddenly released
Incident consequences (potential or actual):	Injury
Cause of accident or incident:	Handling, lifting or carrying
Activity Location:	Any Location Type
Activity Type:	Lifting, crane, rigging, deck operations
Description:	An employee's hand was caught between a sheave and rope guard during a rope installation on an offshore pedestal crane. In the process of drawing a new wire rope through a series of intermediate guide shackles with a softline, the rope sock joining the softline to the wire rope became stuck on two occasions at the third shackle at the A frame. The job was stopped at that point. The injured person then appears to have attempted to free the obstruction by moving the softline manually with his right hand but in doing so, had also placed his left hand around the line further up nearer the first A-frame sheave. The ropesock then came free of the snag at the shackle and the tension in the softline caused the rope to move suddenly drawing the IP's hand in to the sheave and the rope guard. The IP called out and the tension was quickly removed allowing his hand to be freed. He was evacuated from the site by helicopter but despite prompt treatment at Lerwick his index finger had to be removed shortly afterwards.
Specific Equipment:	Pedestal crane, wire rope, nylon rope, shackle, rope sock

Lessons Learnt: A number of failures contributed to this serious incident:
Lack of a documented and detailed procedure for the task in the approved workpack
Incorrect selection of a shackle to guide the rope when there was a sharp change in the rope route
Lack of identification of the snagging hazard during pre-job risk assessment, at toolbox talks and when awarding the permit to work
Lack of awareness of the hazard of stored energy in the softline when the job was stopped and lack of understanding of what would happen when the snag freed
Lack of effective communications to discuss the problem before intervening.
Had there been a detailed procedure that could be talked through step by step during risk assessment then the snagging hazard would have been identified and better equipment selected such as a snatch block or roller guide. Even without the equipment choice available, the issue of snagging and a safe method of freeing it should have been discussed and made clear to the relatively inexperienced IP by the experience supervisor.

Task Description: Installation of wire rope to crane drum

Recommendations: Ensure: Best practice information on rope chageout/installation is made aware to engineers
Site specific work instructions are developed and included in the workpack and subject to senior engineer review and approval
Guide rollers or snatchblocks are available and used when rope makes change in direction
Awareness sessions held for all employees to highlight best practices for this task and for hazard identification and risk assessment

Contact Details: Sparrows Offshore Services Ltd, Howard Dunn HSEQ Manager, howard.dunn@sparrowsoffshore.com



775: HIPO Offshore Lifting Operation

Summary: A steel frame structure weighing approximately 4000kgs was being transferred from a floating accommodation installation to a fixed platform when the lifting arrangement failed resulting in the load being dropped to the deck in close proximity to two deck crew. The deck crew sustained minor injuries whilst moving to avoid the falling object however the potential for serious injury was significant.

Incident consequences (potential or actual): Injury

Cause of accident or incident: Moving, flying or falling object

Activity Location: Any Location Type

Activity Type: Lifting, crane, rigging, deck operations

Description: The steel frame structure was initially lifted from a supply vessel onto the floatel deck using a two leg wire sling transit arrangement. The awkward shape of the frame and it's transit sling arrangement meant that landing it on the deck was difficult. A decision was taken to re-sling the frame using fibre slings to allow the frame to be further lifted onto the fixed installation in a horizontal position and therefore more manageable position. The load was re-slung, lifted and had reached a point over the platform deck where it was being handled into position by the deck crew using tag lines. The load was approximately 5 meters above deck level when the slings parted allowing one end of the load to drop to deck level whilst the other end of the load landed on a container and a gas bottle storage rack. Two deck crew personnel in the immediate area took action to avoid the falling load and sustained minor first aid injuries as a result. Investigation revealed

that the fibre slings were cut as a result of the sharp edges of the frame. The slings were inadequately packed to protect them from the sharp edges of the frame, the packing material used was cardboard.

Specific
Equipment:

Fibre slings

Lessons Learnt: Whilst the factors that contributed to this incident are by no means new or unique it is important for everyone involved in lifting operations to remember that catastrophic failures of lifting equipment can and still do occur. -The importance of risk assessing changes to an activity, in this case the change of the slinging arrangement.- This incident highlights the importance of the selection of appropriate slings for lifting operations and selection of adequate packing material to provide edge protection. Cardboard is not considered an acceptable material for the protection of fibre slings on sharp corners.- The importance of clearly defined laydown areas and avoiding storing hazardous materials in these areas or on recognised slew paths

Task Description: Routine crane and cargo transfer operation

Recommendations: To prevent this incident from recurring the following steps were taking;- An independant review of lifting practises- Review of competence of lifting personnel- Clearly identified laydown areas- Improved control of lifting equipment, in particular fibre slings- Clarified interface arrangements between the floatel and platform deck crews- Removed gas bottle storage from crane slew path- 24 hour Time Out for Safety with all personnel to discuss lifting operations and everyones responsibility to stop the job if they have a concern

Contact Details: emma.coutts@akerkvaerner.com

776: Work in Low Voltage Switchboard - Contact with Live Equipment

Summary: During connection of a new HVAC system to the low voltage switchboard, for which a third party Company had been contracted, one of the engineers made contact with a live busbar and received burns to his hands and face from the resultant flashback.

Incident consequences (potential or actual): Injury

Cause of accident or incident: Electricity, electrical discharge, short circuit or overload

Activity Location: Any Location Type

Activity Type: Construction, hook-up, commissioning

Description: Location of incident The incident took place within the Engine Control Room and occurred at the rear of the 440V Switchboard, which supplies the fire pumps both having been isolated and withdrawn. The cubicle had outgoing motor terminals for the fire pump, which were isolated, but the bus bars located behind some protective Perspex sheeting had not been. There is rubber matting on the floor all the way round the rear of the switchboards. What happened During connection of a new HVAC system to the low voltage switchboard in the Engine Control Room, two persons were involved in an incident where one suffered burns to his hands and face and the other suffered from medical shock. The task was to install new circuit breakers in the low voltage switchboard. The transit was unpacked on the deck at the bottom of the cubicle to allow for cable access to the switchboard. Third Party Engineer was unpacking transit blocks using a hammer and screwdriver when he made contact with a busbar.

Specific Equipment: Rig Type: Mitsubishi MD 602 Switch Board: ABB(NEBB)

Lessons Learnt: - Insufficient isolation of equipment. Perspex not adequate, short of full length of Busbar- Electrical department unaware of bus bars extending below the Perspex protection.- Third Party Contractor Competence Levels assumed adequate-I nadequate Risk Assessment of task and area undertaken

Task Description: During commissioning work the electrician came into contact with 'live' connections.

Recommendations: - Third party competency levels to be supplied to head of department prior to commencement of operation.- Risk Assessment for entering switchboard cubicles to be revised.- Similar equipment to be checked to eliminate similar lack of guarding of busbars.- Insulate any identified exposed bubars

Contact Details: Dave Thomson davek.thomson@stena.com

777: Failure of Anchor Winch Shaft

Summary:	During running of anchors from MODU, failure of main winch shaft resulted in uncontrolled payout of anchor chain, brake system managed to stop chain before complete loss. Significant damage to winch resulted.
Incident consequences (potential or actual):	Other
Cause of accident or incident:	Moving, flying or falling object
Activity Location:	Drilling unit
Activity Type:	Marine activity, shuttle offloading
Description:	Anchor Handler recovered No 7 buoy on deck at 1535 hrs. She attached her work wire to the 400m pennant and at 1553hrs instructed the winch operator on No 7 to pay out 500m of cable, ensuring that the tension did not drop below 80t as per workscope. The winch operator put the winch into Low mechanical and Medium hydraulic and instructed his assistant to put the locking pins in the gears. The scope prior to commencing slacking down was 715m. At 1620hrs the winch driver reported that the cable was running out uncontrollably and that the Anchor Handler should stop running out as he was putting on the brake. Winch operator and Assistant took cover – one in the anchor winch cab and the other moved off the platform aft, underneath the exhaust, well clear of the winch. The brake slowed the release of the cable which eventually came to a halt. The final scope for No 7 was 1145m. The reason for the anchor chain paying out was the failure of the drive shaft. The drive shaft had sheared close to the NDE bearing resulting in the drive gear being loose at this end which in turn caused the bolts in the tension sleeve to shear leaving the drive shaft and gear

free. As the winch was paying out at the time this shaft was bouncing about causing substantial damage to the gear wheel and bearings. There was also damage to the drive gear claw coupling and associated equipment.

Specific Equipment: Rolls Royce (Norwinch) Anchor Winch

Lessons Learnt: High Level of training and experience of Winch Operator precluded further extensive damage taking place.

Task Description: Operation of main anchor winch when critical component failed in situ.

Recommendations: Failed Shaft to be examined by metallurgist to establish cause of fracture PM of winch to be reviewed – possibly increase frequency – have individual item of visual inspection of shaft on PMNDT of Drive Shafts to be carried out at least once per year

Contact Details: Stena Drilling Ltd Dave Thomson
davek.thomson@stena.com





778: Inergen System - failed to function as expected fire was not extinguished

Summary: A fire within the enclosure of a gas turbine was caused as a result of hot air escape from the turbine bleed air line leading to ignition of lube oil and diesel in the base of the skid. The Fire and Gas/Shutdown system tripped the turbine and initiated the Platform GPA, closed the turbine enclosure dampers and initiated Inergen discharge as per the cause and effects design intent. The fixed suppression system (Inergen) was activated during as per the sequence of executive action from the shutdown system and appeared to operate as intended as observed from the main Control Room. Following the alarms clearing in the Control Room the Fire Team entered the Turbine Hall to find it still full of smoke and evidence the fire within the enclosure had not been extinguished. It appeared the Inergen system had failed to fully discharge as per design, and failed to extinguish the fire, which was eventually put out using hand-held CO2 extinguishers. System causes relate to a combination of original design inadequacies and lack of a suitable assurance routine on this safety-critical system, absent/inadequate and a lack of consistent understanding of how the system operated.

Incident
consequences
(potential or
actual):

Other

Cause of accident
or incident:

Fire or explosion

Activity Location:

Any Location Type

Activity Type:

Any Activity Type

Description:

During the investigation it appeared that only 2 (out of a bank of 6) Inergen bottles discharged into the enclosure. Initially it was thought the firing and/or release

mechanisms may have been defective. The system has never been either fully function tested or used in anger previously. Understanding of the functionality of this system was limited. This unit was retro-fitted as a bespoke modification in c.1997 to replace the Halon systems. The design of the system is poor with no apparent evidence of suitability as a safety-critical system. It is complex and descriptions in the supporting documentation were lacking in detail and were ambiguous. Subsequently there was a general lack of knowledge and varied understanding of the system functionality by those expected to operate and maintain the Inergen system. The design relies on a signal from the Fire & Gas system triggering release of nitrogen from a small (70barg) cylinder (Figure 1). The pressure from this cylinder fires off the first cylinder of Inergen (Figure 2) and also holds open a spring loaded valve which diverts all the released Inergen from a main manifold to the relevant turbine enclosure (see Figure 3). The initial release of Inergen from the first cylinder backpressures the release mechanisms on the remaining 5 bottles (Figure 5). The conclusion is that the nitrogen pressure has bled away, causing the spring-return valve to close (the valve has no latch mechanism to keep it open) thereby preventing the full discharge of Inergen. Upon further review of the design of the package the investigation team and platform staff identified several potential single point failure mechanisms. System causes relate to original design inadequacies and lack of a suitable assurance routine on this safety-critical system. Documentation to support the design does not appear to have been subject to HAZOP review or FMEA analysis was not evident and it was unclear whether this had not been carried out or was just missing from the handover of information. Maintenance regime had focussed only on the Nitrogen trigger mechanism and a visual check of the pressure gauges for the Inergen Bottles and did not include a function test.

Specific Equipment: Inergen Fixed Fire Suppression System in a Gas Turbine Enclosure

Lessons Learnt: *No details available.*

Task Description: No activity was taking place at the time of the fire in the turbine chamber

Recommendations: Recommendations1. Ensure all Fire Team members are made aware of this incident and given basic familiarisation with the Inergen package functionality.2. Review maintenance and assurance routines for sufficiency to ensure continued suitability of this safety critical system. Review verification scheme performance standard for appropriateness.

Contact Details: Petrofac Facilities Management Nicola Finlay
nicola.finlay@petrofac.co.uk

Figure 1



Figure 2



Figure 3

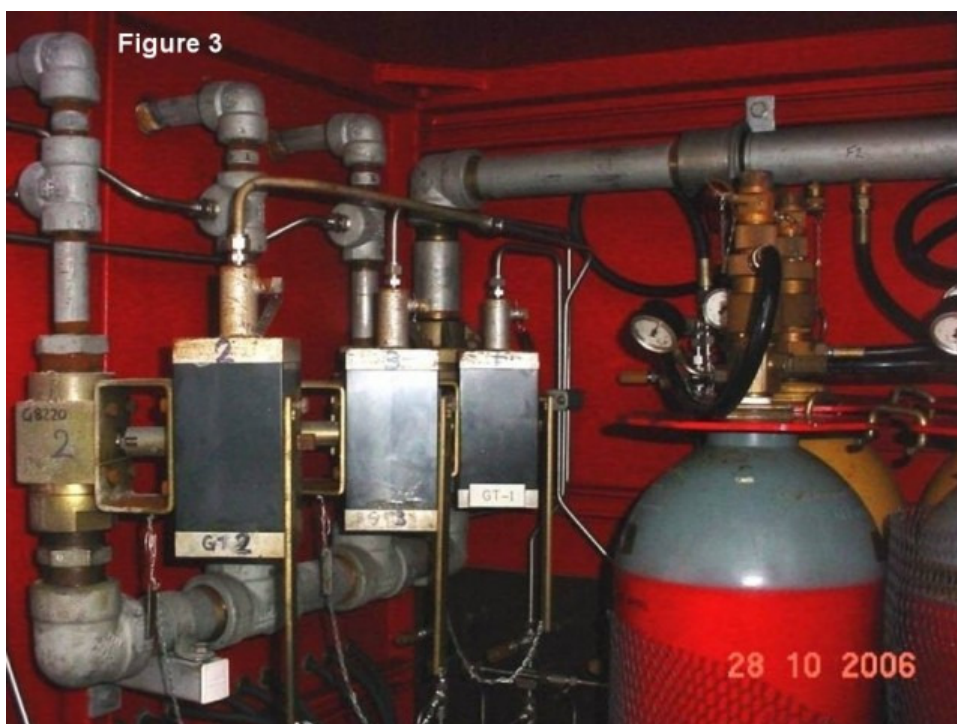


Figure 4



Figure 5

