

### 301: HP Grease Gun Cartridge Holder Failure

Summary: Correct procedure for changing the grease cartridge in the high pressure grease guns.

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

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

Activity Location: Onshore construction/rig repair yard

Activity Type: Maintenance

Description: Two new trainees were changing a grease cartridge in a high-pressure grease gun (used to grease treating equipment). The air had been bled off and the air pressure used to force the piston to the "out" position so that the new cartridge could be fitted. The end of the gun has to be screwed off to allow the cartridge to be positioned; the air pressure had been trapped between the piston and the end cap. The last few threads were not able to hold the cap & it blew off under pressure and hit the near by wall. Had there been any person in its way it could have caused a nasty incident, it also went out with a loud bang on ejection.

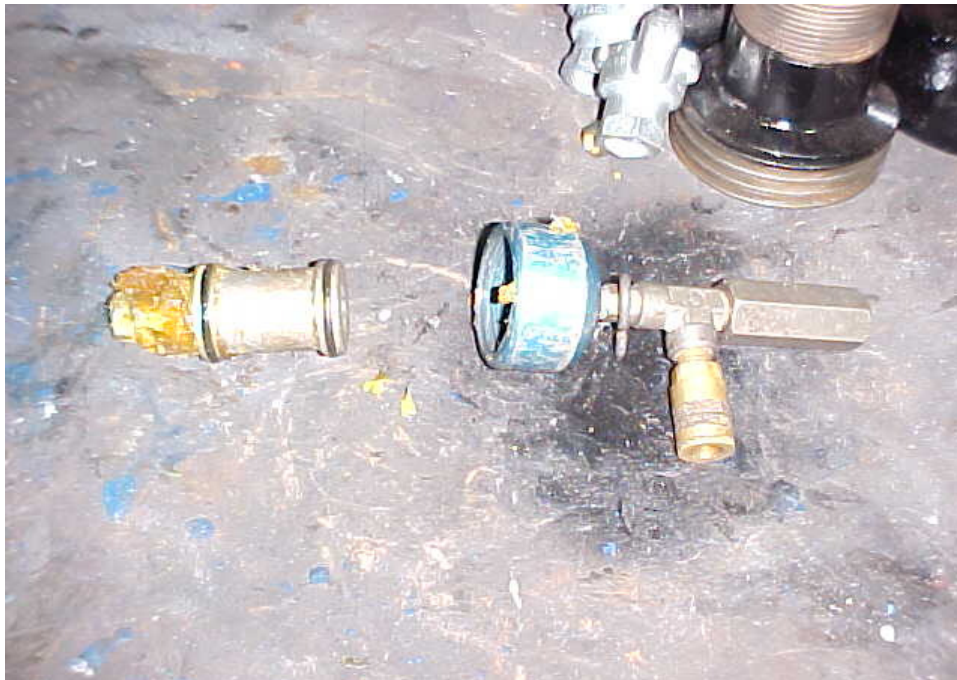
Specific Equipment: *No details available.*

Lessons Learnt: Inadequate procedures and training.

Task Description: *No details available.*

Recommendations: Correct procedures for replenishing the grease gun were sought from FMC, an authorised user list drawn up & all persons on the list made aware and given a copy of the changing procedures.

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### 302: Wireline BOP test rod failed during leak test

Summary:	5/16" metal test rod for use in testing wireline BOP was ejected.
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:	Drilling, workover
Description:	<p>On the 27th January 2003 the GSF Monitor HDJU was positioned alongside the Mungo platform and was in the process of rigging up braided line (inverted ram) BOPs for pressure testing to 4500 psi. The task was being conducted by the specialist contractor Baker Atlas and involved positioning by hand a 5/16" x 5' metal rod across the BOPs. This rod has a 1-1/2" metal donut attached at the bottom to assist with positioning below the bottom ram. When the rod was positioned, the BOP and riser were filled with water/glycol pumped from the rig's cement unit at a pressure of approximately 750psi. Once the fluid had reached the top of the BOP cavity the rams were fully closed. Trapped pressure was to be bled off at the cement unit, however there was a check valve in line with the BOP and cement unit. Due to this check valve the 750 psi of pressure was trapped between the check valve and bottom ram unknown to the wireline crew. Grease was then injected between the BOP rams to complete the test. As the pressure reached approximately 4000-4500 psi a "pop" and "fluid hiss" were heard. The job was stopped and the area secured. On investigating it was determined that the 5/16" test rod had been blown from the BOP. The 1-1/2" metal donut was found inside the riser sheared off</p>

from the rod. The rod could not be found and is believed to have gone over board. No one was injured and no equipment damaged. However, approximately 14 hours were lost while carrying out a preliminary investigation and putting a plan in place to continue safe working.

Specific  
Equipment:

*No details available.*

Lessons Learnt:

1. No clear procedures were in place for the task of testing the wireline BOP. This resulted in a lack of clarity on the most appropriate method of pressure testing the BOP and monitoring & bleeding pressure below the BOP. 2. The design, manufacture, maintenance and inspection of the BOP test rod were inadequate in relation to its use in a wireline BOP test. 3. No specific risk assessment had been conducted for the task. A generic risk assessment for all BOP testing was in use. The hazards associated with pressure and appropriate controls including positioning of people and equipment had not been addressed. 4. In the morning leading up to the incident, line supervision/ communication at the work site was inadequate

Task Description: *No details available.*

Recommendations: 1. BP and contractor well services procedures should be reviewed to ensure that they clearly detail procedures for the testing of braided line (Inverted Ram) BOP's. The procedures should clearly identify the risks of the test rod being blown out of the BOP's and mitigations. The requirement for this type of testing should also be reviewed. 2. Operators and Supervisors involved in the task of testing wireline BOP's should be familiar with the content of these procedures. 3. Assurances should be sought from vendors that test rod's utilised for testing of BOP's are designed, manufactured and maintained appropriately in order to ensure that they are fit for purpose (particularly when exposed to high pressure) 4. Risk assessments relating to wireline BOP testing should

be reviewed to ensure that they adequately identify and control the risks associated with high pressure systems, and the positioning of people and equipment. 5. The roles and responsibilities of work site supervisors should be reinforced, with emphasis on the expectation that involvement in routine operations is of equal importance to that in critical operations and also that adequate supervision of operations is available during crew changes

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### 303: Mismatch of voltage of speakers and power pack

Summary:	There was a mismatch between some portable speakers and the power pack being used, resulting in smoke being seen coming from the cable.
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:	Office / warehouse activities
Description:	<p>Additional portable speakers for connection to a laptop were requested for a presentation. These were provided by Digital business along with a power pack with verbal instructions given on how to connect speakers to laptop and power supply. Whilst preparing for the presentation, a small amount of smoke was observed coming out of the cable end of the power pack. The Power pack was hot to touch and smelled of burning . It was unplugged and removed from room. Further investigation showed root cause: - A mismatch between voltage and power requirements of the speakers and voltage and supply code of the power pack. The Creative CS120 Speakers operate at 6 volts whereas the Altai Powerpack operates at 9 volts -The result was a short circuit of the power pack causing the current resister to overheat. There was a scorch mark on the circuit board and paint came off the resister but there was no deforming of the casing plastic of the powerpack</p> <p>Organiser did not know location of main plug or nearest fire extinguisher. Housekeeping of room was poor, loose papers on floor and untidy extension cables</p>

Specific  
Equipment: *No details available.*

Lessons Learnt: 1. Removal of incompatible power packs 2. Equipment Assurance – clear instructions /control required regarding use of equipment provided by Digital Business 3. Digital Business equipment inspection routines to be reviewed and implemented. 4. Room set -up & preparedness.

Task Description: *No details available.*

Recommendations: s1. Operator to ensure they receive clear instructions in use of equipment. 2. Meeting organisers to familiarise themselves with the room layout, evacuation routes and fire extinguishers. 3. Isolation of power – know how to isolate power (location of main socket) 4. Provision of standard notice to encourage HS behaviours regarding H/K, tidiness of rooms to be provided by POS to the BU'

Contact Details: Originator Liz Wilkinson, HSE Advisor POS, (01224 832586)&

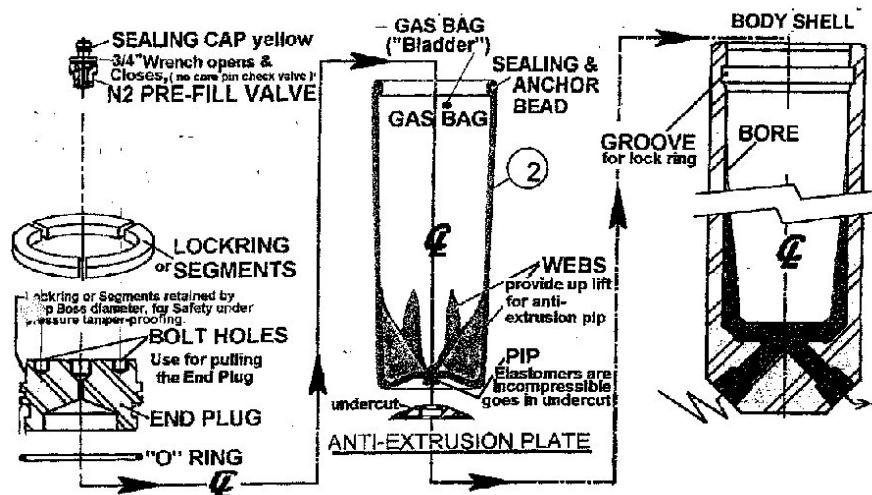
### 304: Liquid Dynamics International (Pulsation Damper)

Summary:	During examination of a seal oil pump discharge damper on East Brae. A technician identified that one out of the three lid retaining collets, (attachment fig1) had dropped out of the retaining groove, on the internal bore of the pulsation damper.
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:	During examination of a seal oil pump discharge damper on East Brae. A technician identified that one out of the three lid retaining collets, (attachment fig1) had dropped out of the retaining groove, on the internal bore of the pulsation damper. The lid had also moved inward from its normal assembled position. This could have resulted in a seal oil system pressure boundary failure, upon next pressurisation. Other damper checks revealed dampers in a similar condition, one of the three lid retaining collets had dropped out of the retaining groove. Lessons learnt. Procedure to inspect integrity of dampers before seal oil system start up. Recommendations. Fit new retaining plates, fixed via bolt holes for pulling of end plug. (fig 1)
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	Procedure to inspect integrity of dampers before seal oil system start up.
Task Description:	<i>No details available.</i>



Recommendations: Fit new retaining plates, fixed via bolt holes for pulling of end plug. (fig 1)

Contact Details: Florence McGowan, Marathon Oil UK Ltd, Marathon House, Rubislaw Hill, Anderson Drive, Aberdeen, AB15 6FZ 01224 803025&



### 305: West Venture Fatal

Summary:

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

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

Activity Location: Drilling unit

Activity Type: Maintenance

Description: Fatal injury. A person fell 22 metres from a scaffolding platform down to drill floor during maintenance at shipyard. Brief Account of Incident As part of planned maintenance, all 8 ram sheaves (dia 2.9 metres, weight 1581 kg each) in the dual ram rig had been removed and inspected. At the time of the accident the deceased was working as a member of a maintenance team on a scaffolding platform appr. 22 metres above the drill floor. The accident occurred when the first ram sheave was to be re-installed on the lifting yoke on the ram rig. The ram sheave had been hoisted to the level of the lifting yoke and was located close to the shaft, where it was to be installed. It was connected to a 5-tonne chain hoist, hanging in a 5- tonne winch wire. The deceased had just attached a chain hoist to one side of the ram sheave in order to use this for guiding it onto the lifting yoke shaft. He was then standing on the scaffolding platform, close to the ram sheave, between the chain hoist and the scaffolding handrail. The ram sheave then experienced an uncontrolled lowering and its weight was transferred to the scaffolding platform. The part of the scaffolding platform, where the deceased was standing, collapsed. At the same time the recently installed guiding chain hoist was tightened due to the weight of the downward moving

ram sheave. The chain hoist pushed the deceased over the side of the scaffolding platform at a spot where the handrail had suffered a collapse. He fell 22 metres down onto the drill floor and suffered fatal injuries. He died in hospital a short time afterwards

What went wrong · Uncontrolled lowering of 5-tonne winch due to possible malfunction or possible unintentional operation · The deceased was standing unsecured on the scaffolding, which collapsed due to excessive weight being applied by the ram sheave. This risk was not identified prior to commencement of the lifting operation · There was another winch attached to the ram sheave. The wire of this winch was too slack to prevent the ram sheave from collapsing the scaffolding platform · Inadequate identification of job hazards while changing the original lifting procedure during an SJA prior to commencement of the job. What went well · Involved personnel were all qualified for the job · Emergency response and follow-up · Site preservation · Co-operation with authorities and involved contractors

Specific Equipment: *No details available.*

Lessons Learnt: *No details available.*

Task Description: *No details available.*

Recommendations: Recommendations · The 5-tonne winch in question is not to be used until it has been tested and found in working order by manufacturer and vendor · Evaluate requirement for safety harness for personnel on scaffolding which may be exposed to loads exceeding the scaffolding's design limits · Ensure that procedures are understood and agreed upon by all involved personnel prior to commencement of jobs

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### 306: Overheating in Ex Torches due to alkaline-type batteries

Summary: An Ex-rated torch was discovered to be overheating. Battery label had torn, within the battery compartment, causing an external short-circuit. Batteries were noted to be alkaline: most torches certified for use in hazardous areas require zinc chloride batteries.

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 handle of an Ex-rated torch was found to be noticeably warm: one of the batteries was leaking and very hot to the touch. Batteries fitted were alkaline type: most torches certified for use in hazardous areas require zinc chloride batteries. This has been the subject of one or more safety alerts by individual operators prior to the advent of STEP / SADIE, and was known by some but not all personnel. Torch and batteries were returned to their suppliers who reported that studs in the battery compartment had perforated the battery label, causing an external short circuit. This is possible with alkaline cells, but not with zinc chloride or zinc carbon cells, which are specified by most Ex torch manufacturers (there are exceptions). Use of alkaline batteries in this equipment invalidates the certification. Many personnel assumed that long-life alkaline batteries were preferable, and had not checked the manufacturer's specification.

Specific Equipment: *No details available.*

Lessons Learnt: Check the specification when replacing batteries in Ex equipment. It is unsafe to assume that batteries can be replaced on a like-for-like basis.

Task Description: *No details available.*

Recommendations: We no longer hold a stock of alkaline batteries in the typical torch size. Electronic ordering system will hold warning comments against other alkaline cells. All employees will be informed of the importance of checking the spec, and of the general rule that Ex equipment requires zinc chloride batteries.

Contact Details: Florence McGowan, Senior Administrative Assistant, Marathon Oil UK Limited, Marathon House, Anderson Drive, Aberdeen, AB15 6FZ, 01224 803025

### 307: Explosion in HV Motor Enclosure

Summary:	An explosion occurred in an ExN motor enclosure during start-up of an HP compressor
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:	During start-up of an HP compressor electric motor an explosive overpressure condition occurred in the motor enclosure. This resulted in deformation and displacement of enclosure panels. No injuries were sustained and the incident did not cause initiation of the platform detection or alarm system. Investigation is still ongoing but indications are that hydrocarbon gas had been introduced into the motor enclosure prior to an extended shutdown and had been ignited when the motor was energised. Gas appears to have been entrained in the Lube Oil system serving the compressor and motor as a result of compressor seal failure. The circumstances of this incident are similar to those addressed in HSE Safety Notice 17/90 (Revised 1995 but now withdrawn).
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	1. The potential for gas evolution within the motor enclosure exists with common oil systems in the event of compressor seal failure 2. HV Motors of type N protection should be ventilated prior to start-up if there is any possibility of a potentially explosive atmosphere within the enclosure. 3. Both of these aspects feature in HSE Safety

Notice 17/90, the validity period of which pre-dates the current Operators tenure of the affected installation.

Task Description: *No details available.*

Recommendations: Operators should satisfy themselves that the risk potential and mitigation measures identified by Safety Notice 17/90 have been appropriately addressed on their installations. This may be particularly relevant where Operatorship has transferred since the Safety Notice was last issued

Contact Details: Talisman Energy (UK) Limited HSE&A Department

### **Damage to HV Motor Enclosure**



### 308: MEGA Heavy lift equipment

Summary:	Fatality during heavy lift operation on a construction site in Vietnam.
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:	One man was killed and nine others were injured at Phu My 3 construction site during the lift of a 300 tonne alternator. The lift, using "Megalift" hydraulic jacks and beams, was nearing completion when the equipment collapsed for unknown reasons. Following preliminary investigation, this Safety Flash is being issued as a precaution against similar incidents, as a follow-up of the first Safety Flash issued on 17 January 2003 on the same subject.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	1. The "Megalift" system may be assembled as shown schematically in Figure 1. 2. In this configuration, the horizontal top plate, which forms part of the connection to the vertical lift cylinders, is connected to the flange on the underside of the transverse lift beam via a "beam clamp" arrangement. 3. If it is configured in this way, the lifting arrangement may be represented by the structural idealization shown in Figure 2. In this case the transverse stability of the system is derived from the moment generated by the difference in vertical reactions (at points R1 and R2 on Figure 2) between the inner and outer



guide rails. However this may be limited as the supports may have no capacity to resist an uplift or tensile load. 4. When the inner and outer guide rails are level, the line of action of the force is between the guide rails, this is shown in Figure 3A. If there are differential levels between the inner and outer guide rails then this may result in the line of action of the force may move outside the base.

Task Description: *No details available.*

Recommendations: 1. A suitably qualified and competent person should check the stability of any lifting arrangement, which incorporates the "Megalift" or similar vertical lift systems. This review should address the following issues; o All possible conditions, which may result in a differential deflection between the inner and outer guide rails at the base, should be considered and their impact on the overall stability of the system fully evaluated. o The permissible out of level tolerance, between the inner and outer guide rails, and the permissible tolerance for the vertical alignment of the lift units, should be derived by calculation for all stages of the operation. o All permissible tolerances should be included in the method statement and clearly communicated to all those involved in the operation. 2. A system which is capable of monitoring the vertical alignment (in two orthogonal planes) of the hydraulic lift cylinders should be devised and used during the operation.

Contact Details: Originator: Jon Hafsmo, Deputy Project Manager  
Vietnam&

### 309: Vehicle Battery Explosion following Hydrogen Ignition

Summary:	A 12 volt vehicle battery exploded during a charging operation, when sparks from an adjacent electrical sawing activity ignited vented hydrogen gas.
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:	Maintenance
Description:	Following routine inspection, a 12 volt vehicle battery was found to be flat. A member of the workforce was allocated to recharge the battery. Custom and practice allowed the battery to be recharged in the welding bay, due to the presence of a local extract fan. The battery was placed on charge using a high performance charging unit, with the extract fan placed above the battery to safely vent hydrogen generated. Some time after, a pipefitter came into the welding bay to cut some flat steel bar with an electric circular disc saw. The pipefitter followed correct work practices by moving the extract fan duct to cover the sawing operation. When the pipefitter started to cut the bar, the sparks produced ignited hydrogen being released from the battery charging operation. The battery case exploded, acid ran onto the bench and floor and pieces of the case were found over 15 feet away. No personnel were injured.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	The pipefitter did not realise that a battery on charge gave off an explosive gas. This hazard had not been

recognised when the battery was first placed on charge, as no warning signs had been posted around the bay. Battery charging operations should be treated with care and personnel made aware of the potential explosive risks, even from sparks in the vicinity.

Task Description: *No details available.*

Recommendations: 1. Need for accountability and ownership of workshop activities. 2. Risk assessments required for workshop areas to eliminate concurrent activities which may combine to form hazardous situations. 3. Battery charging only to be carried out in dedicated risk assessed areas, with an appropriate warning sign in place to warn personnel. 4. Trickle charging to be carried out using appropriate charging equipment. Site management have decided that no vehicle battery charging should take place on site.

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## 310: Sheet Metal Folding Machine Finger Injury

Summary:	Person operating a sheet metal folding machine crushed one finger, the tip of which was subsequently partly removed in hospital.
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:	<p>On the 12th February, at approximately 16:00, an employee from Salamis was working on a sheet metal bending machine. Whilst carrying out this operation it was necessary to hold the machine open by pulling the spider arm towards you with one hand and then adjust the metal with the other. When conducting this activity his hand came off the handle causing the top bed of the machine to come down in a controlled manner. He pulled his finger away, and due to the body's natural movement this caused his other hand to push the spider arm forwards, closing the top bed and catching the tip of his glove and index finger. He suffered a crush to his finger with the loss of pulp tissue. He returned to the beach the following day and attended Aberdeen Royal Infirmary. The tip of his finger was subsequently removed.</p>
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	<p>1. A thicker Kevlar glove was introduced without following the Management of Change process to ascertain their adequacy for all tasks. 2. Although the bending machine was being maintained offshore with monthly checks</p>

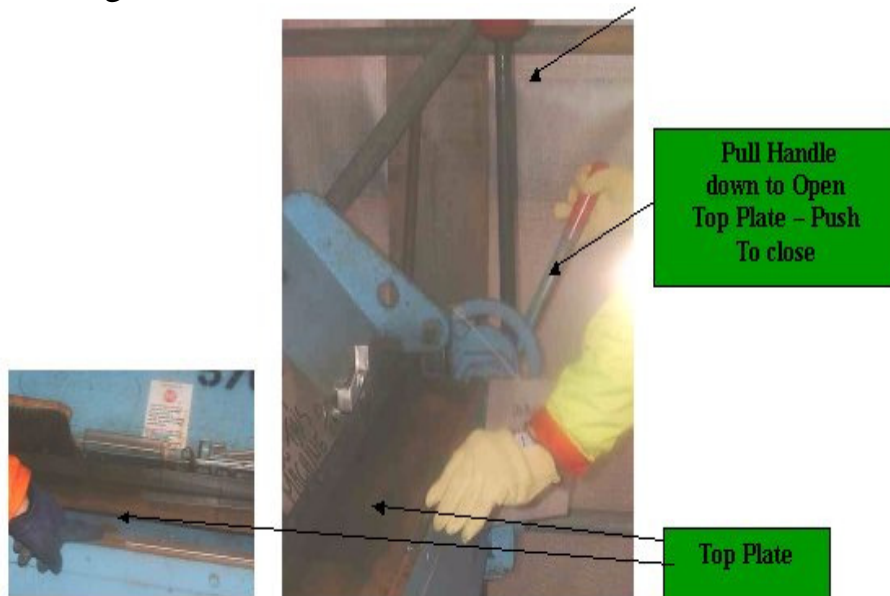
conducted and records kept, there was no procedures/manuals available at site to confirm their adequacy.

Task Description: *No details available.*

Recommendations: 1. After an assessment of current gloves available, a more suitable glove was identified which allowed for improved dexterity and better grip. Other sites to review their gloves for adequacy. 2. The bending machine (Morgan Rushworth Type BP50/16) was brought onshore for inspection and confirmation of serviceability. Other sites to verify that equipment of similar type is operating correctly. 3. Contractor re-fresher training/awareness on safe working of equipment to be conducted. 4. Operator/maintenance checklists to be developed and made available at equipment site

Contact Details: Yvonne McGregor Technical Authority ETAP OIM

## Bending Machine



## 311: Avoiding the Dangers of Mismatching Hammer Unions

Summary: The link below will take you to a bulletin that describes general categories of hammer union connection and component mismatches. The potential for mismatched hammer union connections applies to all manufacturers of hammer union end connections. 'Avoiding the Dangers of Mismatching Hammer Unions

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: *No details available.*

Specific Equipment: *No details available.*

Lessons Learnt: *No details available.*

Task Description: *No details available.*

Recommendations: Ensure that all hammer connections are closely inspected and suitability for use is ascertained prior to use.

Contact Details: None available

## 312: Dropped Object (Near Miss)

Summary: Steel cladding sheet fell 3 metres to the ground whilst erecting a structure at an onshore location.

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 stores building is being built on site, a specialist company was erecting the steel shell in the controlled fenced off construction area. The erection procedure consisted of three erectors, two on mobile cherry pickers (the installers), one banksman plus a crane operator. The steel work was nearing completion and all the heavy structural steel work had been put in place, the job then moved on to the small cladding rails (weight approx 5 kg). The same procedures and single stiff canvas strop was used, the job continued with no problems. The single strop was positioned in the centre of the piece of steel in order to manoeuvre (360 movement) the rail easily into position. The wrong cladding rail was lifted into place, thus the erectors could not get the piece to fit. The weight had been taken off the piece whilst installation was attempted. The erectors realised the problem and the piece was lifted back off the canvas strop did not grip the cladding rail properly (i.e. strop was not tightened again) and during lowering the piece moved to a vertical position and slipped out from the strop loop to the floor below. The piece fell approx 3m to the area below which was completely clear of personnel, as per NS lifting rules and LOLER RA. The banksman was clear and was the only

person on the floor at the time. The two erectors were in their cherry pickers away from the lift. Initial investigation believes the potential was a DAFWC.

Specific  
Equipment: *No details available.*

Lessons Learnt: 1. Area was clear of personnel 2. WCC conditions were adhered to 3. North Sea lifting rules available at site and adhered to 4. Loler assessment completed for lift 5. Initial Trant investigation quick response. 6. Successful onsite investigation by BP/Trant – good discussion on failure/ideas 7. Positive attitude to change/buy in from squad

Task Description: *No details available.*

Recommendations: 1. New methodology for lifting side rails · Lighter and smaller strops. · Two strops (previously one) · Double wrapped around the rail. 2. Agreed individual assessments for lifting each rail size. 3. Share with other Wytch Farm lifting contractors 4. Publish safety circular.

Contact Details: Richard Harding 01929 476409



### 313: Wind Wall - Dropped Object

Summary: Section of Wind Wall weighing approx 50 lbs became dislodged and fell approx 60 ft.

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: A section of wind wall approximately 2.5m x 0.5m, weighing 50lbs became dislodged after being leant against. This section fell approximately 60 ft from GIE level 3 North, landing on walkway GIE level 1 North. There were no injuries or loss of production. Property damage was bent edges to wind-wall section and a dented light fitting which is suspected to have occurred when wind wall section fell.

Specific Equipment: *No details available.*

Lessons Learnt: The bolts holding the clamp in place are considered to be too far from the structural steel to generate sufficient pressure to hold the panels in place.

Task Description: *No details available.*

Recommendations: The existing panel clamps will be repositioned to provide a greater surface bearing area onto the structural steel thus providing a more robust means of securing the mesh panels

Contact Details: MandyMarples@ChevronTecaco.com

### 314: Wearing of Correct PPE During Water Jetting Operations

Summary:	An incident occurred recently where an operative injured his foot during HP water jetting operations.
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:	Painting/sandblasting
Description:	An incident occurred recently where an operative injured his foot during HP water jetting operations because he failed to change into the correct footwear. The operative had been instructed to wash down the upper pipe-work on the closed drains system. Because of this he decided that he did not need to wear his Metatarsal boots. Whilst jetting there was a lot of steam coming of the hot pipe-work so the operative lowered his lance in order to be able to see how the work was progressing. As he lowered the lance the jet went across the top of his foot and he felt a quick, sharp pain. He continued with the task at it was only after he had finished work and was taking a shower that he noticed a rash on his foot, he went to the Medic who confirmed this had been caused by the water jetting.
Specific Equipment:	High pressure water cleaner
Lessons Learnt:	LEARNINGS / RECOMMENDATIONS A detailed risk assessment has been carried out on the PPE requirements for water jetting operations and this clearly identifies the need to wear Metatarsal boots, regardless of where the water jetting is taking place. Supervisors must reinforce the need for the correct PPE at toolbox

talks and operatives must check that they are wearing the correct PPE prior to work commencing. If the lance is moved away from the work surface the trigger should be released to prevent inadvertent damage to surrounding equipment or personnel.

Task Description: *No details available.*

Recommendations: Supervisors must reinforce the need for the correct PPE at toolbox talks and operatives must check that they are wearing the correct PPE prior to work commencing. If the lance is moved away from the work surface the trigger should be released to prevent inadvertent damage to surrounding equipment or personnel.

Contact Details: None available

### 315: Use of Sheet Metal Equipm

Summary: In a recent incident on an offshore platform, a sheet metal worker trapped his finger under the blade of a box and pan folder, resulting in tissue damage to his index finger.

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: In a recent incident on an offshore platform, a sheet metal worker trapped his finger under the blade of a box and pan folder, resulting in tissue damage to his index finger.

Specific Equipment: *No details available.*

Lessons Learnt: KEY FINDINGS The type of gloves used in the operation had been recently changed by the platform. The management of this change was not done effectively. The task being undertaken did not need to have been done – an alternative could have been purchased onshore which would not have placed operative at risk.

Task Description: *No details available.*

Recommendations: LEARNINGS / RECOMMENDATIONS The full impact of changes to be understood and addressed for any variation to a task. Ensure correct gloves for the task in hand are worn at all times. If the PPE is causing problems, STOP and Review with your supervisor. Personal risk assessment. Question whether the job needs to be done and, if so, is there a safer way to do it?

Contact Details: John Boyce Group HSEQ Manager 01224 246000

## 316: NEAR MISS WHILST DISMANTLING SCAFFOLD

Summary:	Background: A scaffold on an offshore installation, that had been in place for a considerable length of time, was being dismantled. As a tubular was being passed down a steel bar shot out of the end, narrowly missing the scaffolder to whom the tubular was being passed. It is not known who put the steel bar into the tubular nor how long it had been there. Sufficient to say the tubulars did not have end caps fitted
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:	Modification of plant/structures
Description:	Background: A scaffold on an offshore installation, that had been in place for a considerable length of time, was being dismantled. As a tubular was being passed down a steel bar shot out of the end, narrowly missing the scaffolder to whom the tubular was being passed. It is not known who put the steel bar into the tubular nor how long it had been there. Sufficient to say the tubulars did not have end caps fitted
Specific Equipment:	Scaffolding
Lessons Learnt:	Remedial Actions: When scaffolds are being erected tubulars sitting in the horizontal plane should have end caps fitted as required by procedure TMS/23/P/02. All erected scaffolds should be checked at their next inspection to ensure that end caps are fitted to horizontal tubulars. If a scaffold is being stripped and end caps have

not been fitted extreme care should be taken with horizontal tubulars lest any foreign object is ejected.

Task Description: *No details available.*

Recommendations: All erected scaffolds should be checked at their next inspection to ensure that end caps are fitted to horizontal tubulars. If a scaffold is being stripped and end caps have not been fitted extreme care should be taken with horizontal tubulars lest any foreign object is ejected.

Contact Details: John Boyce Group HSEQ Manager 01224 246000

### 317: Link Tilt operation

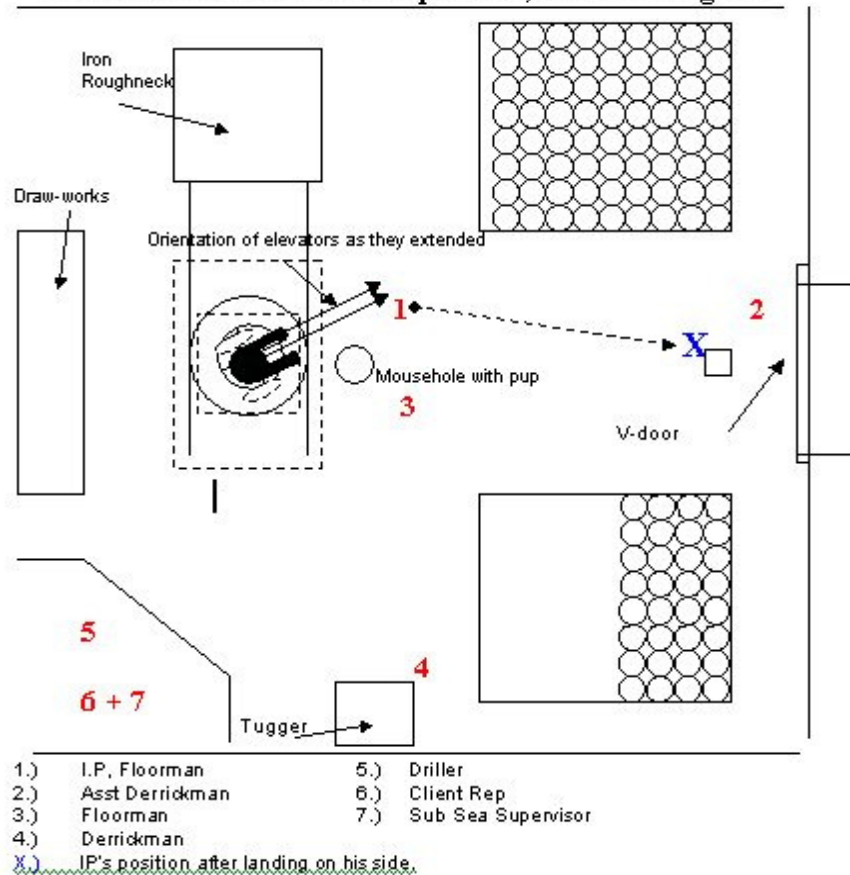
Summary:	Man was injured as a result of inadvertent extension of Link Tilt mechanism
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	Drilling unit
Activity Type:	Drilling, workover
Description:	<p>The exact details of the incident are still being investigated, but the following is an outline of what happened. A 10 foot drill pipe pup joint was being laid out; it was broken and spun out at the rotary and placed in the Mouse Hole (link tilt in intermediate position i.e. not fully extended). A Tugger was attached to the pup via a lifting cap to hold it in position. The IP unlatched the elevators and let them go they fell away from the IP and the pup joint as normal. Almost immediately the Link Tilt “kicked out” rapidly to its fully extended position. The horn of the elevator caught the IP in the groin and he was thrown backwards several feet. See attached diagram. The IP suffered a puncture wound to his upper thigh in the groin area. Operations were suspended and the IP was medevaced from the rig and after treatment released from hospital. He will be off work for a period of time.</p>
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	Incident is subject to ongoing investigation. Update to this section due on completion of investigation.
Task Description:	<i>No details available.</i>



Recommendations: Incident is subject to ongoing investigation. Update to this section due on completion of investigation.

Contact Details: Bob Alexander Senior HS&E Advisor Tel: 01224 427926  
Fax: 01224 410926 Mobile: 07836 752868

### UKD-SA-001-03...Link Tilt Operation; Incident Diagram



## 318: Diving Fatality

Summary: In December 2002 there was a diving fatality in TFE E&P Congo. This notice highlights the main issue concerning this event and also reminds everyone of the main diving rules and regulations within TFE E&P activities.

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

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

Activity Location: \*Any Location Type

Activity Type: Diving, subsea, ROV

Description: The accident happened during the installation of a 20" flexible hose (40m long) between a PLEM and a new buoy in the Djeno field. The water depth was 35 metres. Prior to the installation of the flexible hose a solid wooden plate (10mm thick) was placed across the flange at the bottom end of the hose to protect the O-rings. To install this plate was not part of the original procedure. The flexible was then being pulled down to the PLEM by a cable and winch (located on the buoy body). At about 13m water depth the hose stopped due to the buoyancy forces in the flexible hose which had not flooded due to the sealing effect of the wooden plate. The diver tried to remove the plate with his knife but, due to the high suction forces involved, he broke his knife. The force holding on the wooden plate was approx 2 tonnes. So then he took his broken knife blade and with his hammer he punched the plate. At this stage there was a loss of communication with the diver and there was a fast payout of his umbilical. See attached sketch. The umbilical was recovered to the surface along with the divers soft hood (complete with a front faceplate, oral nasal air supply but

without video camera). Also hooked to this equipment was part of the wooden plate. Diver rescue procedures were then launched. After a little time searching the diver was found. He had massive head injuries. Death was evident.

Specific  
Equipment: *No details available.*

Lessons Learnt: As with most accidents the root causes were human error resulting from lack of awareness of the potential risks. The dive team was made up of personnel who were more used to salvage diving. Was this a factor in that perhaps these types of individuals are inherent "risk takers" more than "offshore" divers? The main root causes were: Lack of adequate supervision and general coordination Lack of respect for specifications, rules and contractor manuals Poor diving plan, not backed up by risk assessment Lack of management of change in respect of operating procedures Lack of any pre-dive safety talk or instructions Poorly designed solution (wooden plate should have had a hole in it to equalise pressures)

Task Description: *No details available.*

Recommendations: After this tragic accident it was recommended that each affiliate reviews its current arrangements as following:  
Diving Procedures - if the local diving legislation is lacking then ensure that TFE and IMCA rules are the basis of any local procedures and contractual arrangements Only pre-qualify contractors or sub-contractors who are members of IMCA for diving work. This is a standard which should be applied worldwide. Review your current or recent diving practice against GS-STR-461 and the IMCA International Code of Practice for Offshore Diving. Modify current practices and procedures accordingly to be in line with these two standards. Perform a risk assessment for all diving operations. Management System Ensure that the modifications or changes to working procedures are covered by defined rules and steps. Ensure that for

higher risk activities that the level of supervision is adequate and defined. That a culture of get-the-job-done on time and on budget does not exist to the detriment of safety.

Contact Details: Chris Allen of TotalFinaElf Exploration UK Plc on 01224 297070.

### 319: Methanol release - Failed Techlok Clamp

Summary:	1 1/2" Techlok clamp failed in service resulting in loss of containment and a small release of methanol.
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:	<p>On the 28th January 2003, a 1 1/2" Techlok clamp on pipework in the Methanol Skid failed; failure was by fracture of one of the clamp segments, close to the shoulder area. Subsequent metallurgical analysis revealed high hardness values of 433 HV (Vickers) with the failure mechanism attributed to hydrogen induced stress corrosion cracking (HISCC). It should be noted that the source of hydrogen for this type of failure can also be residual from the manufacturing process. It was also noticed from the fracture faces that failure had occurred progressively over a long period of time following crack initiation. The heat number was still visible from the failed clamp; this had come from Heat No 51640. As a result, all remaining Techlok clamps on the Methanol Skid were inspected by MPI for crack indications; none were found.</p>
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	<p>It was discovered that another operator had experienced a very similar failure in October 1998; the failed clamp was a Techlok 1 1/2". This clamp had also failed from HISCC, moreover it was found to be from Heat Number 51640, same as the Britannia clamp. Analysis of the</p>

failure experienced by the other operator showed that the high hardness problem was essentially related to 1 ½" clamps with varying hardness values found elsewhere. This work also revealed that up until the mid-1990's, Vector International were supplying three specifications for Techlok clamps; two of these are NACE compliant with an upper hardness specification of 235 HBN (Brinell), the third does not quote an upper hardness limit. In general, for carbon steels there is an increased susceptibility to hydrogen cracking at hardness values above 331 HBN (350 HV). Analysis of Britannia's Techlok clamp certification, treating the 1 ½" size as the priority shows that from a total of 1014 clamp segments, 549 have come from heat numbers with no upper hardness value specification. Of this 549, 177 are from heat number 51640 (ref failed clamp).

Task Description: *No details available.*

Recommendations: Due to the probability of data spread and the fact that one of these clamps has already failed, hardness testing of all clamps where upper hardness values have not been specified has been recognised as a requirement and is recommended to other users.

Contact Details: J.Gray or D.Brennan , e-mail [safetyad@bol.co.uk](mailto:safetyad@bol.co.uk)

## 320: IMCA Safety Flashes - Summary

Summary: These flashes summarise key safety matters and incidents, allowing wider dissemination lessons learned from them. Please click on the following link to re-direct you to the publication. IMCA Safety Flashes - Summary

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: *No details available.*

Specific Equipment: *No details available.*

Lessons Learnt: *No details available.*

Task Description: *No details available.*

Recommendations: See individual reports for recommendations

Contact Details: None available

<http://dcwfptest.steel-sci.org/stepchange/News/StreamContentPart.aspx?ID=1286>

## 321: High pressure glycol leak in re-boiler room

Summary: A fine mist spray was coming from an area of pipework on train 'A' re-boiler skid which was on line.

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: During routine watchkeeping a production technician noticed a fine mist spray coming from an area of pipework on train A re-boiler skid which was on line. On closer investigation it became obvious that there was a leak from a section of 2" pipe on the discharge of the glycol pump and the skid was shutdown. No liquid was discharged to sea. Area of leak was covered in stainless steel lagging. Upon removal the lagging was found to have rubbed against several areas of pipework due to the fiber inside having disintegrated. Over time and due to pump vibration the wear became so severe that the pipe was holed. Other areas of the same pipe are also badly worn. (See photos)

Specific Equipment: *No details available.*

Lessons Learnt: Investigate other similar areas of stainless steel lagged pipework in high vibration areas.

Task Description: *No details available.*

Recommendations: Check our stainless steel clad pipework in areas of higher than normal vibration to ensure that this is not occurring elsewhere. Replace pipework found to be in poor



condition from survey.

Contact Details: Michael O'Connor HSE Advisor 01502 522815

#### **Leak Area 1**



#### **Leak Area 2**



Area close to leak



## 322: Dislodged Bracket

Summary:	Bracket became dislodged and fell some 140 feet from KEMS system in the derrick.
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 tripping in hole with 5" DP, roughneck heard something land on the starboard side of the rig floor some 6 feet away. On investigation a bracket was found lying on the starboard side of the drill floor. Bracket had become dislodged and fallen some 140 feet from the KEMS system in the derrick. No one in vicinity at that time, no injuries or other damaged sustained.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	Highlight the need to look at all potential dropped objects with a fresh pair of eyes, to assess for D/O potential. Manual to be revised. Experience level of auditors to be monitored.
Task Description:	<i>No details available.</i>
Recommendations:	Operations were suspended. Removed KEMS system proximity switches and brought down from the derrick. Checked for any other loose objects - none found. Reset to lower position. Discussed with drill crews and plan to operate under PTW with KEMS removed from service.

Contact Details: [vicki.riach@conocophillips.com](mailto:vicki.riach@conocophillips.com)

### 323: Object dropped from port flare boom onto boat

Summary: Section of handrail fell off the port flare boom onto deck of supply vessel.

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: 3.5 ft section of hand rail fell off the port flare boom onto the deck of a standby vessel alongside drilling rig. The investigation revealed that the rail was pulled off by the crane wire and the slot cut in to the rail by the wire. It fell approximately 135ft and landed on the stern of the boats deck. No injuries were sustained and no further damage to equipment resulted from the falling object.

Specific Equipment: *No details available.*

Lessons Learnt: Instruct all crew to report any damage (or potential damage) to any equipment as soon as it occurs.

Task Description: *No details available.*

Recommendations: Crane operations were underway at the time and were immediately suspended. Barge engineer inspected the boom for further potential for loose objects. The inspection revealed that only 1 hand rail was damaged.

Contact Details: vicki.riach@conocophillips.com

### 324: Gas vented off to atmosphere in wellbay

Summary: Gas was vented off to atmosphere.

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: Routine venting down of gas from the wireline Riser and Lubricator through the choke manifold and platform high pressure vent was not carried out correctly resulting in gas being vented off to atmosphere in the wellbay.

Specific Equipment: *No details available.*

Lessons Learnt: Incorporate a valve status program.

Task Description: *No details available.*

Recommendations: Incorporate a valve status program. Incorporate written procedures and incorporate Buddy system for venting down.

Contact Details: vicki.riach@conocophillips.com

### 325: Loss of Containment during Mechanical Integrity Leak Test

Summary:	High pressure leak test was being carried out to the main production pipework for new production slot. The maximum test pressure to be achieved during this test is 721 barg.
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:	During the test a leak developed within the system on one of the small bore instrumentation valves at 320 barg. As per test procedure the test was halted and the system was depressurised to enable leak to be rectified.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	The mechanical integrity to leak test was not reviewed thoroughly enough prior to the permit being requested. The work pack P@ID's did not reflect the full vent path. The personnel walking the line stopped at the last valve because of item. 2.
Task Description:	<i>No details available.</i>
Recommendations:	Construction Superintendent to ensure that the mechanical integrity of the system to be tested is reviewed (System needed to be put in place). P&ID's to reflect the full vent path in future. The full line to be walked in future as per P&ID. Low press vent line to be inspected for signs of over pressuring with possibly a pressure integrity test to 10 bar carried out to prove the

system. It is felt that the line should not have been grossly over pressured because the system was open to atmosphere and the angle valve was only cracked open and closed immediately, but further checks may be warranted.

Contact Details: [vicki.riach@conocophillips.com](mailto:vicki.riach@conocophillips.com)



## 326: Failed Switch on Methanol Injection Pump Motor

Summary: Workman locked off methanol injection pump motor but switch failed to physically open.

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: While isolating equipment for maintenance work person isolated then locked off methanol injection pump motor. All indications showed that the cubicle was isolated but 440 volts was still present at the fuses. It was found during the verification/proving dead process that the switch was closed and not open as indicated.

Specific Equipment: *No details available.*

Lessons Learnt: Further investigation ongoing with the manufacturer to establish failure mode

Task Description: *No details available.*

Recommendations:

- Issue note to all supervisors stating that only electricians shall isolate equipment in switchrooms until further notice.
- Electricians to verify electrical supply not live. consult with manufacturers and investigate failure mode.
- Check all existing switchroom isolations and verify electrical supply not live.

Contact Details: [vicki.riach@conocophillips.com](mailto:vicki.riach@conocophillips.com)

## 327: Lifting A Dual & Single BOP Combination

Summary:	Correct safe procedure for lifting made up Wireline BOP's.
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:	Correct safet procedure for lifting made up wireline BOP's. Personnel are making up 2 BOP's and lifting them with the upper BOP cage sling assembly. This assembly is then being used above its rated SWL. When 2 BOP's are lifted already made up the correct method for lifting them is to use the 3 ton certified blank lifting cap. This may require the use of a certified shackle since the hook may not fit the ring bolt in the cap. The wrong and right methods for lifting 2 BOPS are shown below.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	BOP'S have a cage installed around them rigged and certified for lifting the BOP on which the cage is installed.
Task Description:	<i>No details available.</i>
Recommendations:	All personnel involved in WHE operations
Contact Details:	Gordon Richmond Support Supervisor - Wireline Tel: (01224) 728000





## 328: Gas Release due to Corrosion Under Insulation

Summary: This alert highlights a potential design fault which can, if not detected, lead to corrosion under insulation (CUI).

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: Although the causes and conditions which contribute to corrosion under insulation are well known and documented across the industry, a minor gas leak occurred on a 4" Carbon Steel Fuel Gas Pipe running around the circumference of a furnace. Although minor, the release did have potential to escalate and the release caused a loss in production for 4 days due to the repair and additional checks undertaken. The 4" Fuel Gas Line was lagged and, due to the close proximity of the line to the main seam joint of the furnace (see picture below), the lagging proved difficult to apply and clearly had not provided the necessary integrity. In summary, the seam joint encroached on the fuel gas line allowing the lagging to be penetrated. Severe corrosion then occurred over a period of time and this was not detected by inspection.

Specific Equipment: *No details available.*

Lessons Learnt: *No details available.*

Task Description: *No details available.*

Recommendations: 1. Check that adjacent structures etc. in close proximity do not encroach on lagged pipework 2. When designing a

facility, ensure enough pipework to be lagged has a sufficient standoff distance for the correct application of the lagging. 3. Regularly inspect areas of pipework where lagging may be obscured by adjacent structure. This may require the removal and reinstatement of lagging to check the condition of the pipework.

Contact Details: Ewan Ross on (01224) 297862 or  
ewan.ross@tfceuk.co.uk

**Pipework after lagging removal showing close proximity to vessel seam**



### 329: Loading of Lifeboats during Drills (Revised)

Summary:	This notice updates a previous SADIE alert (254) and it makes recommendations for the loading of lifeboats with personnel and for the use of maintenance pennants during drills.
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:	Lifeboats have been involved in a number of serious/fatal incidents during maintenance operations and drills (eg see SADIE 102) when the boat has inadvertently fallen into the sea. The following recommendations for loading lifeboats with personnel, and for the use of maintenance pennants during drills, have been made for the continued practice of lifeboat drills among crews. These recommendations reflect the outcomes of a risk assessment. These outcomes will be published, along with others from the work of the Step Change Lifeboat Loading & Launching Work Group, in a Step Change Guidance document during 2Q2003.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	<i>No details available.</i>
Task Description:	<i>No details available.</i>
Recommendations:	1. Individuals should be offered the opportunity to become familiar with lifeboats during offshore induction and by means of regular drills, however:- 2. The



launching of lifeboats with any personnel on board should not be carried out for the purpose of drills. 3. The maximum number of persons in an in-situ lifeboat at any given time be restricted to an absolute maximum of 5 (five) persons, on condition that this is within the Safe Working Load of the maintenance ram for free-fall lifeboats, or maintenance pennants for davit launched lifeboats, should this option be selected (see 7 below). 4. Fully loaded drills are only to be carried out when a lifeboat cannot fall eg with the lifeboat in an unsuspended state, not over water and with the boat solidly supported either on the deck or in other suitable hard landing area (or onshore). 5. Notwithstanding (3) and (4) above, when a Dutyholder has decided to permit lifeboats to be loaded to their full capacity then a full written risk assessment must be carried out and justification should be provided by way of outlining the benefits to be achieved, identifying the safety measures in place and confirming that these are suitable to ensure the safety of the personnel involved. All personnel must be in agreement with this. 6. When carrying out the above assessment it is incumbent on the Dutyholder to take account of the number, type and integrity of the various securing devices and measures which may be put in place. These differ in extent and effectiveness dependant on the type of launching appliance and the specific devices available on each installation. 7. For davit launched life-boats, maintenance pennants may be fitted at times when persons are in the lifeboat but this is at the discretion of the Company on whose Installation the lifeboat is located and it is dependent on the activity being undertaken.

Contact Details: Robert Hirst of TotalFinaElf Exploration UK plc, 01224 297891, e:mail [robert.hirst@tfueuk.co.uk](mailto:robert.hirst@tfueuk.co.uk) OR Step Change in Safety, 01224 881272, e:mail [info@stepchangeinsafety.net](mailto:info@stepchangeinsafety.net)

### 330: Work Lifejackets

Summary: Recently a scaffolder on one of our Installations picked up a Lifejacket to wear whilst over-side working. He noticed that the Lifejacket had already been activated, deflated and packed away again and it now appeared to be OK for use. He reported the error and obtained a 'good' lifejacket to allow him to continue 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: Recently a scaffolder on one of our Installations picked up a Lifejacket to wear whilst over-side working. He noticed that the Lifejacket had already been activated, deflated and packed away again and it now appeared to be OK for use. He reported the error and obtained a 'good' lifejacket to allow him to continue working.

Specific Equipment: *No details available.*

Lessons Learnt: Although the Installation Safety Officer periodically checks lifejackets to ensure that they are ready for use and within the specified maintenance period, for lifejackets that are used for work activities this may not be sufficient. In addition to end-user checks, items of specialist PPE issued for use on worksites may require special checks to ensure their integrity and functionality.

Task Description: *No details available.*

Recommendations: A. Specialist PPE should be numbered and registered then inspected by a competent person prior to issue for use. Thereafter the user should be responsible for the integrity of the equipment whilst it is in their custody. B. All personnel should report non-functioning or poorly functioning PPE as soon as this is noticed – even if this is after the work is completed – to prevent the sub-standard equipment inadvertently being re-used. C. Locations should consider the use of weak brightly coloured thread to indicate lack of use (As with the 'Air Pocket').

Contact Details: Mike Forster, EH&S Department Amerada Hess Ltd Tel- 01224 243317 / Fax-01224 243130 Email- [mike.forster@hess.com](mailto:mike.forster@hess.com)

### 331: Chemical Drum Falls Into Sea

Summary: Webbing lifting slings 2 x 5 metre long x SWL 1 tonne were used for lifting 2 drums at a time from the deck to the chemical skid. This is the normal practice for moving drums around the Installation. As the lift was swung outboard and round to the chemical skid the crew made their way to the landing area. As the crane came round with the last two drums, the driver saw one of the drums fall/slip out of the webbing sling. The drum fell about 6 feet struck a bracket outside the landing area handrails and fell into the sea. It landed in the sea about 20 feet away from the side of the vessel. A small amount of liquid from the plastic drum was observed in the region where it struck the bracket and the drum was observed to be leaking in the sea. The drum floated for a couple of minutes before sinking below the surface. The standby vessel was called in to see if they could observe or recover the drum. They could not find any trace of the drum which was assumed to have sunk.

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: Webbing lifting slings 2 x 5 metre long x SWL 1 tonne were used for lifting 2 drums at a time from the deck to the chemical skid. This is the normal practice for moving drums around the Installation. As the lift was swung outboard and round to the chemical skid the crew made their way to the landing area. As the crane came round with the last two drums, the driver saw one of the drums

fall/slip out of the webbing sling. The drum fell about 6 feet struck a bracket outside the landing area handrails and fell into the sea. It landed in the sea about 20 feet away from the side of the vessel. A small amount of liquid from the plastic drum was observed in the region where it struck the bracket and the drum was observed to be leaking in the sea. The drum floated for a couple of minutes before sinking below the surface. The standby vessel was called in to see if they could observe or recover the drum. They could not find any trace of the drum which was assumed to have sunk.

Specific  
Equipment: *No details available.*

Lessons Learnt: • Webbing slings are not always suitable for short cylindrical items. • Barrel lifters are available for chemical drums although some designs are unsuitable for plastic drums. • Nets, baskets or specially designed lifting frames are often the most suitable options.

Task Description: *No details available.*

Recommendations: • Stop using webbing slings warped round drums for lifting (any drum metal or plastic). • Do not use webbing slings for lifting gas bottles. • Check with drum suppliers if our barrel lifter is suitable for their drums. • Only use barrel lifters with positive locking devices. • If barrel lifter not suitable then drums must be in a basket or net. • Amend lifting procedures to clearly state that slings are not to be used on drums. • Ensure all information is passed to all personnel (safety meeting etc).

Contact Details: Mike Forster Tel-01224 243317 Fax-01224 243130  
Email—mike.forster@hess.com Or Mail To : HS&E  
Helpline@hess.com

### 332: Wire rope failure

Summary: The winch wire on a riser lay system failed at the winch sheave resulting in loss of the flexible riser to the sea bed.

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 winch wire on a riser lay system failed at the winch sheave resulting in loss of the flexible riser to the sea bed. The wire that was rated for a breaking strain of 416 tonnes failed at a load of 118 tonnes. The wire was of a die-formed, high tensile, anti rotational three layer construction. The cause of failure was initially determined as a fatigue failure induced by localised wire deflection at the winch guide rollers and the constant movement of the load while suspended from the winch in fixed positions for extended periods. The situation was exacerbated by poor penetration of lubricant to the core of the wire during routine maintenance although corrosion was not a contributory factor. Following recovery of the running end of the wire from the seabed, further examination, tests, and reconstructions indicated the rope had failed under tension having been weakened as a result of mechanical damage to the outer rope strands caused by interaction with the winch wire spooling guide rollers.

Specific Equipment: *No details available.*

Lessons Learnt: 1. A wire rope can be substantially weakened by relatively minor surface damage 2. Industry standard inspection and maintenance procedures were not adequate for assuring the condition of wire ropes that have been in service on systems required to handle 'live' loads. 3. The design limits of a lifting system may be lower than the limits of individual components of the system 4. A load test certificate does not guarantee that a wire will not fail at less than its stated SWL if other design and maintenance factors are not taken fully into account.

Task Description: *No details available.*

Recommendations: 1. During the design of complex lifting operations, and of specialized lifting equipment, consideration should be given to the compatibility of the various components of the system and to the design limits of the system as a whole. 2. All winch ropes on lifting duty should be treated as crane ropes. 3. All wire ropes used on lifting equipment and winches must be new or have been subject to NDT inspection over the full length of the rope, lubricated and declared fit for service by the rope manufacturer or third party competent person. Routine rope cut back and destructive testing should be included as appropriate and the rope's maintenance history should be clearly managed and recorded. (See UK Upstream Regional Safety Management System doc UKCS-TI-011 for further advice.) 4. When a 'live' load such as a flexible riser has to be lifted or lowered with a crane or winch, the procedure should be structured so that the requirement to hold the load static on the winch or crane wire is minimised. The option to hang-off with fixed rigging where suitable arrangements to allow movement such as shackles and chains should be used where possible

Contact Details: Robin Barr, DPU Originator John Beaumont Technical Authority Patrick McCrory (email [mccrory@bp.com](mailto:mccrory@bp.com))

### 333: Housekeeping

Summary:	An incident occurred recently on an offshore installation where loose scaffold boards that had been left on an office roof were lifted off the roof by the down draught from an approaching helicopter. The boards fell to the deck where they struck a person who was waiting to disembark on the helicopter.
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 incident occurred recently on an offshore installation where loose scaffold boards that had been left on an office roof were lifted off the roof by the down draught from an approaching helicopter. The boards fell to the deck where they struck a person who was waiting to disembark on the helicopter. On this occasion, fortunately, the person was not seriously injured but the potential was there for a serious injury or even damage to the helicopter, which could have been catastrophic.
Specific Equipment:	Scaffold boards, Helideck
Lessons Learnt:	Good housekeeping must be maintained at all times during scaffolding operations. Un-used or spare tubulars, boards and fittings must be returned to the proper storage rack. When scaffolds are being dismantled all equipment must be returned to the proper storage racks. Scaffold boards that have been used for 'skidding' loads must always be returned to their proper storage rack once the



task is complete. If equipment has to be left away from the storage racks then it must be properly secured to a fixed structure. Supervisors/ Chargehands must carry out an inspection of all areas adjacent to where a scaffold has been erected or dismantled to ensure that nothing has been left lying about.

Task Description: *No details available.*

Recommendations: Ensure that work sites are left in safe condition and all equipment returned to racks when the task is completed

Contact Details: John Boyce&

### 334: Spilt beverage in helicopter cockpit

Summary: Spilt drink inside box tray leaked out onto centre console of helicopter

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

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

Activity Location: Floating production/storage unit

Activity Type: Air transport

Description: During a rotors running stop on a platform, aircrew refreshments were passed through to the cockpit in a cardboard box, beverage had spilt within the box unbeknown to the aircrew. As the box was tilted, the spilled beverage ran out of the corner of the box over the center console instrumentation causing a malfunction in the engine control system. The system was cleaned and dried, checks carried out and the aircraft returned to service.

Specific Equipment: *No details available.*

Lessons Learnt: Spillage of any liquid on sensitive equipment will have a detrimental effect

Task Description: *No details available.*

Recommendations: Boxes containing liquid refreshment should be water tight to contain spills; cups or containers should have lids to prevent spills.

Contact Details: Lawrence Baldwin Bristow Helicopters

### 335: Slipped of flight deck net knot

Summary: Pilot stepping down from cockpit stood on and slipped off a net knot resulting in an ankle injury and LTI.

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

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

Activity Location: Fixed Installation

Activity Type: Air transport

Description: Whilst stepping down from the cockpit onto a netted deck, pilot stepped on a knot and went over her ankle sustaining an injury.

Specific Equipment: *No details available.*

Lessons Learnt: Actions taken for granted in higher risk environments may result in accidents.

Task Description: *No details available.*

Recommendations: Continual awareness programme (already instigated within the airline) to all who come into contact with known hazards, in this case, a netted deck, that continual awareness is required whilst in, on or travelling through the known risk. This is pertinent not only to the injured party but to all personnel in contact with known hazards with higher risks than normal.

Contact Details: Lawrence Baldwin Bristow Helicopters Ltd &

### 336: Mobile Telephone Incident

Summary: A cellular phone exploded while charging the battery.

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 cellular phone exploded while charging the battery. On 26th March 2003 at 0915, a cellular phone (HP) type Siemens M35 exploded while charging. The HP had been charging for 45 minutes and placed on the owner's desk in room 1-021. Owner was sitting in his room when the HP exploded. Some papers were burned and extinguished by hand. During charging, the temperature of the cell battery was overheating and caused pressure inside the battery tube to increase. The battery shield was not able to hold the pressure and the battery exploded and fired.

Specific Equipment: *No details available.*

Lessons Learnt: Failure to secure and warn – owner left HP while charging it without frequent monitoring. Inadequate purchasing (lack of quality). Owner purchased non-genuine manufacturer battery with uncertain quality, which is 50% cheaper than the price of original battery from manufacturer. Lack of awareness. Owner did not know the risk of using counterfeit/sub standard battery.

Task Description: *No details available.*

Recommendations: 1. Unocal Indonesia Co, ESS Department to campaign regarding battery charging safety and awareness for purchasing qualified cellular phone and accessories products. 2. Unocal Indonesia Co, ESS Department to share information regarding battery charging safety through safety meetings.

Contact Details: HS&E Helpline@hess.com



### 337: Hand Injury - Slickline

Summary: Wiring slipped and went through finger

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: Statement from Injured party:” It was near the end of shift and I decided to go into the shack and ream some stuffing box packing as part of routine preparation for the next operation. I had put a length of wire in the vice and had a ‘tail’ of wire approximately 18” long sticking out of the vice. I was putting the packing on one at a time and pulling the packing up and down over the wire to ream them. I was gripping the packing in my right fist and pulling it up and down the wire, as I pulled the packing up it slipped off the wire and as I moved my hand down the wire went through my finger. I had coated the wire with WD 40 to keep it cool; this also made the wire slippery. I was wearing the blue thin rubber type of gloves, which did not give a good grip. I did not have a handle on the wire, I have been trained to carryout this task and know I should have used a handle”.

Specific Equipment: *No details available.*

Lessons Learnt: The incident happened because the injured party decided to take a short cut and did not follow procedures. It is also clear that personnel need to make themselves aware of the procedures covering the activity they are about to

undertake.

Task Description: *No details available.*

Recommendations: Ensure procedures are followed

Contact Details: Tony Gunn Service Quality Coach - WCP-K (01224)  
406000

### Wire & Glove Pic 1





Wire & Glove Pic 2





### 338: Fire in Production Lab caused by temporary Heater Element

Summary:	A heater element used to heat processing chemicals for radiographic film development ignited a waste bin within the platform production lab
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 temporary darkroom for radiography had been set up in the platform production laboratory. Heating of the developer solution was achieved by immersion of a "figure of eight" heater element in the chemical bath. It appears that this element had been laid on the deck while still energised and the technician had been called away to another location. The element ignited an adjacent waste bin and spread to a localised area within the lab. Heat detection alerted platform staff to the fire which was extinguished by means of electrical power isolation and limited use of a portable extinguisher. Damage was relatively minor and localised and no injuries were sustained.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	1. The heater elements are of a very rudimentary design having no thermal cut-outs or on/off switches and can only be de-energised at the power supply point. 2. The elements generate high temperatures when operating in air presenting a significant fire risk and an injury potential

to personnel handling the equipment.

Task Description: *No details available.*

Recommendations: Safer method of heating developer chemicals to be investigated and procured. In the meantime inspection contractors should ensure that this hazard is addressed in darkroom procedures and is properly communicated to technicians using heating equipment

Contact Details: Talisman HS&E Department 01224 352500

#### **Damaged Heater Element**



### 339: Employee Struck by Toolbox Lid

Summary: In a recent incident on an offshore installation the lid of a cargo box struck the arm of an employee as he attempted to remove tools inside the toolbox.

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

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

Activity Location: \*Any Location Type

Activity Type: Drilling, workover

Description: The toolbox lid had been opened to retrieve the tools inside the toolbox. The toolbox lid had no means to hold it open and had been held open on previous entries to the box by the employee. In this instance the lid was not held open which allowed it to fall back into the closed position striking the IP a glancing blow on his forearm.

Specific Equipment: *No details available.*

Lessons Learnt: 1. The toolbox had no safety locking mechanism fitted to prevent the lid from falling down while personnel were reaching into the box. 2. There was a broken hinge on the toolbox, which may have contributed to the lid falling. 3. The toolbox talk held prior to the job had not specifically covered how the tools were to be removed from the toolbox. Personnel should not assume that a toolbox talk will covers all safety points. IP should have restrained the lid physically or got someone to hold to toolbox lid open while he reached inside.

Task Description: *No details available.*

Recommendations: 1. Ensure that all future purchase orders or contracts with equipment suppliers/ vendors stipulate that " all top opening toolbox lids must be fitted with a safety locking mechanism to allow them to be secured in the open position". 2. Inspection and maintenance practices are to be improved to prevent defective equipment being supplied offshore.

Contact Details: Mike Ewen, HSE Coordinator KCA DEUTAG Drilling Ltd,  
Tel 01224 299600 email -  
michael.ewen@uk.kcadeutag.com



## 340: Carbon Dioxide Ingress into Control Room & Muster Point Location

Summary: This alert highlights a potential for ingress of carbon dioxide into manned areas on an offshore installation.

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: As the result of a fault during an auto-test function on an offshore installation's CO<sub>2</sub> system, CO<sub>2</sub> was discharged into the cable voids which it was designed to protect. The voids were designed to contain the pressure/volume of such a discharge. The Control Room operators were aware that the CO<sub>2</sub> had been discharged due to an alarm indication, but they then noticed that CO<sub>2</sub> was migrating from the void space into the Control Room itself. The decision was made to evacuate the Control Room and muster. The installation's muster area was directly beneath the Control Room and, within a few minutes, CO<sub>2</sub> was detected in the muster area which resulted in the complete evacuation of the installation's Temporary Refuge (TR) to the alternative muster point outwith the TR. No ill health or injury resulted from this incident but the installation was shut down for a number of hours until an investigation had taken place. It was established that the CO<sub>2</sub> ingress into the Control Room was caused by the void seals being impaired by age. It was also established that the hatch access door seals were damaged and screws were missing in the hatch doors. The CO<sub>2</sub> ingress into the muster point area was caused

by the void being impaired due to holes and incorrect fitting of cable glands. This failure was attributed to various projects/modifications over a number of years.

Specific Equipment: *No details available.*

Lessons Learnt: *No details available.*

Task Description: *No details available.*

Recommendations: 1. Independent quality control checks after modifications around voids protected by CO<sub>2</sub>. 2. Implement a programme to check the integrity of voids/hatches protected by CO<sub>2</sub> on a periodic basis and include in the installation Performance Standards (where applicable). 3. Personnel working around CO<sub>2</sub> protected voids should be warned of the importance of maintaining the void integrity. This can be achieved by highlighting the hazard in a risk assessment included as part of the job pack, or by highlighting the hazard in any associated PMR Task Sheet.

Contact Details: Ewan Ross of Total E&P UK PLC on 01224 297862 or [ewan.ross@total.com](mailto:ewan.ross@total.com)

### 341: Inflatable Lifejackets

Summary: Recently a fisherman and a workboat crewman died when the inflatable lifejackets they were wearing failed to inflate. We suspect that the gas cylinders may have worked loose since the lifejackets were last inspected

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 a fisherman and a workboat crewman died when the inflatable lifejackets they were wearing failed to inflate. We suspect that the gas cylinders may have worked loose since the lifejackets were last inspected.

Specific Equipment: *No details available.*

Lessons Learnt: *No details available.*

Task Description: *No details available.*

Recommendations: Manufacturers provide instructions and maintenance procedures for inflatable lifejackets which include details of regular and routine inspections. LEARNING POINTS: 1. Owners of inflatable lifejackets should have them serviced and inspected in accordance with the manufacturers' instructions; 2. Owners should include the servicing and maintenance of inflatable lifejackets within their safety management system; 3. Users of inflatable lifejackets should be instructed in their use; 4. Owners should maintain a record of servicing, inspection and the training of users of inflatable lifejackets; 5. Users of

inflatable lifejackets should inspect them before putting them on. 6. Inspection should include: 6.1 Inspection of straps, buckles and the outer cover; 6.2 Inspection of Safety harness, its stitching and buckles; 6.3 Inspection of the inflatable lung for abrasion damage; 6.4 Inspection of the gas inflation cylinder for signs of corrosion; 6.5 Inspection of the gas inflation cylinder for tightness of connection to the inflation mechanism; and 6.6 Inspection of the automatic inflation system, if fitted.

Contact Details:   Iain Campbell Offshore & Emergency Planning Officer  
MCA Aberdeen iain\_campbell@mcga.gov.uk



## 342: Mooring Chain Failure

Summary: FPSO maintenance operation to stow mooring chain using a Hydralift Linear Tensioner Assembly. FPSO fitted with eight mooring chains and the routine was to stow two links of chain on all eight units. The first attempt to perform the operation on number 5 chain resulted in the loss of the chain in an uncontrolled manner to the sea bed and damage to the linear assembly unit.

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 planned routine maintenance operation was in progress. The routine was to individually move each of the eight anchor chains to a pre-arranged plan to ensure that the chain links are not subject to wear and fatigue at the same points over the life of the mooring chain. This operation has been successfully repeated annually since 1999. The Linear Tensioner Assembly equipment was pressured up to allow for the stowing of two links of chain for tensioner number 5. The chain was lifted by energising the rams to raise the chain gripper and the chain stopper was opened. When the rams reached their full extent the operator tried to close the chain stopper to engage the chain in its new position. The chain stopper would not fully engage. The rams were lowered back to the start position and a second attempt was made. Once again the chain stopper could not be engaged due to incorrect chain position (i.e. tried to close on the side of the link, rather than on the shoulder of the link). After the

second attempt failed the operator made the decision to lower the rams to stow the chain in to its original position and report the problem. As the rams were being lowered the operator heard a load noise and realised there was a major problem and abandoned the immediate work site. The failure of the equipment assembly resulted in the gypsy wheel being torn from the deckhead, the upper assembly sheared off of the rams, the chain grippers sheared their retaining bolts allowing the chain to free fall and pay out of the locker. The bitter end shackle pin broke in the chain locker and the chain paid out to the seabed. Post Incident Investigation Action 1) Establish if the incident was related solely to the movement of the mooring chain during the bunkering operation. (Clearly established that this was the cause and if no further action was taken to move the remaining 7 chains there was no danger of a repeat incident) 2) Suspend all mooring chain stowage operations on the FPSO until investigation team has established the root cause of the incident. 3) Contact the manufacturer (Hydralift have been fully involved and made aware of the investigation teams findings) 4) Establish if similar Hydralift Linear Tensioner Assemblies are used by other floating vessels. (Contact with the manufacture has confirmed that the equipment on the Captain FPSO is unique in its use of a combined upper gripper and lower stopper assembly combination in one installed unit) 5) Review design of tensioner system, including gypsy wheel (This is being done in conjunction with Hydralift)

Specific Equipment: *No details available.*

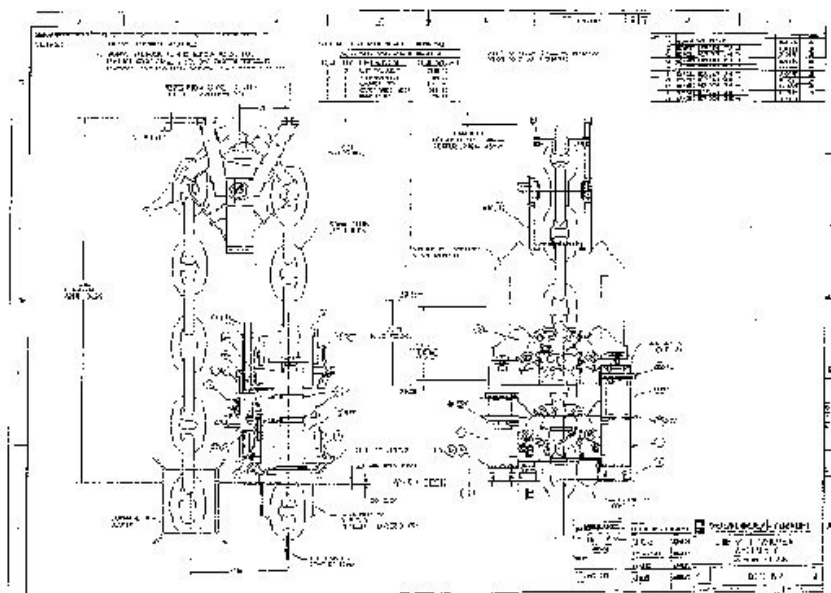
Lessons Learnt: Still under investigation

Task Description: *No details available.*

Recommendations: Investigations are still ongoing and we are currently pursuing the following possible causes: 1) A malfunction in the logic of the equipment that allowed both the gripper

and the stopper to open at the same time releasing the mooring chain. (This will be tested fully when the equipment is removed, returned and rebuilt onshore). 2) Full investigation of bearings and supporting structure around the Gypsy Wheel assembly. (Trying to establish if a load shift occurred from the Linear Tensioner Assembly to the Gypsy Wheel through failure of Gypsy Wheel rotation). Due to the high potential for injury from falling equipment and the fact that we are unable to establish a root cause at this point. It is suggested that if similar systems are used by others then the operator is as remote as possible from the equipment being operated.

Contact Details: For a large scale copy of the image please [click here](#). Rick Faulkner, ChevronTexaco Upstream Europe, Seaford House, Hill of Rubislaw, Aberdeen



### 343: Fatality - Failure of Air-hose Connection

Summary: Recorded circumstances of a recent fatal injury caused directly as a result of failure to fit 'whip check' to an air hose. Please click on the following link for the full report 'Fatality - Failure of Air-hose Connection

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 worker was struck on the head by a compressed air hose which blew off its fitting on a piece of equipment. He received serious head injuries which proved fatal. The air hose was held by hose clamp on the fitting with no keeper or restraining chain or sling to prevent the hose from thrashing around.

Specific Equipment: *No details available.*

Lessons Learnt: The primary cause of this accident was the failure to secure the hose and hose clamp by means of a keeper or sling and chain respectively.

Task Description: *No details available.*

Recommendations: Although routine tasks don't require a formal written JSA, the destructive potential of "unrestrained" compressed air hoses should be highlighted to all personnel and be included in toolbox talks and safety training. Restraining devices such as keepers, chains, slings proprietary

special coupings and whip checks should be installed on all diameter or high pressure compressed air houses to prevent them from thrashing about in the event of a hose or coupling failure. Regular inspections of all compressed air powered equipment, including hoses, should be carried out to assess the integrity of the couplings, clamps, keepers, hoses and corrective action taken where necessary.

Contact Details:     None available

### 344: Fatality as a result of a fall from from a suspended work platform

Summary: Please see " Saipem Scaffold HSE Flash Info" link below for the full HSE Flash Information.

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: Temporary access

Description: The victim access work on the lower level of a suspended modular scaffold. He fell from the scaffold through a gap between two modular platform section. The plywood used to close the gap between the two platforms was found on the floor. The victim fell from approximately 18 metres sustaining severe injuries. The victim was modivac to hospital and died of severe injuries.

Specific Equipment: Scaffolding

Lessons Learnt: Subcontracting Supervisor and subcontracting employees did not receive training concerning scaffolding procedures. Victims Supervisor thought the scaffolding was safe because it was set up so he authorised the victim to go to the work location, to complete previous days activity. Lack of communication between subcontractor setting up the scaffolds and subcontractor using the scaffolds. The victim did not recognise the 90 degree tube across the platform walkway as a barrier.

Task Description: *No details available.*

Recommendations: Ensure that " ONSITE" Risk assessemnt is carried out

prior to commencement of any task.

Contact Details: Department HSE, St Quentin en Yvelines&amp;amp;amp;

### 345: Gas Cylinders unscrewing in Lifejacket

Summary: There is evidence to suggest that whilst wearing the Crewsaver Seafire Solas Lifejacket for scaffolding operations the gas cylinders, installed within the lifejacket, can work themselves loose from their release unit. This can result in the automatic inflation mechanism failing to operate.

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: See abstract.

Specific Equipment: Crewsaver Seafire Solas Lifejacket

Lessons Learnt: Whilst investigations and discussions with the manufacturer continue the following recommendations are made with regard to life-vests for scaffolders: 1. Where possible use an alternative product. 2. If not, inspect and check securing of gas cylinders prior to every use.

Task Description: *No details available.*

Recommendations: Whilst investigations and discussions with the manufacturer continue the following recommendations are made with regard to life-vests for scaffolders: Inspect and check securing of gas cylinders prior to every use.

Contact Details: Peter Carrier &



### 346: Following Safe Systems of Work

Summary:	High potential incidents as a result of not following SSOW
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:	<p>There have been two serious near misses in the laundry. In both these cases procedures were not being followed and as a result a fire started in the laundry. The procedures were not being followed because there was a perceived need to get the job done and to get the job done on time. This compromised safety because, in these cases, the safe system of work for ensuring the cooling cycle on the tumble dryer is completed before removing items was not followed and the heat from the garments caused a fire. There was also an incident, which resulted in a first aid injury, where the safe system of work was not followed. The incident occurred during the cleaning of the galley canopy and filters. The task requires a permit in this case and attached to the permit was the safe system of work, which required a ladder to be used to gain access to the canopy. Although all those involved in the task held a toolbox talk, an elephants foot was used to gain access to a table top. The injured person had fallen from the table causing bruising to the persons leg.</p>
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	Active monitoring of safe systems is necessary to ensure

procedures are put into practice

Task Description: *No details available.*

Recommendations: Implement active monitoring process

Contact Details: Neill Murray [murray-neill@aramark.co.uk](mailto:murray-neill@aramark.co.uk) 01224 726940

### 347: INFLATABLE LIFEJACKETS FAIL TO INFLATE

Summary: Recently a fisherman and a workboat crewman died when the inflatable lifejackets they were wearing failed to inflate. We suspect that the gas cylinders may have worked loose since the lifejackets were last inspected

Manufacturers provide instructions and maintenance procedures for inflatable lifejackets which include details of regular and routine inspections

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: Refer to abstract

Specific Equipment: *No details available.*

Lessons Learnt: Owners of inflatable lifejackets should have them serviced and inspected in accordance with the manufacturers' instructions Owners should include the servicing and maintenance of inflatable lifejackets within their safety management system Users of inflatable lifejackets should be instructed in their use Owners should maintain a record of servicing, inspection and the training of users of inflatable lifejackets

Task Description: *No details available.*

Recommendations: Inspection should include Inspection of straps, buckles and the outer cover Inspection of Safety harness, its stitching and buckles Inspection of the inflatable lung for

abrasion damage Inspection of the gas inflation cylinder  
for signs of corrosion Inspection of the gas inflation  
cylinder for tightness of connection to the inflation  
mechanism Inspection of the automatic inflation system, if  
fitted

Contact Details: Ali Dillon, MSF

### 348: POSITIONING OF EMERGENCY POSITION INDICATING RADIO BEACON

Summary: 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.

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: Refer to abstract

Specific Equipment: *No details available.*

Lessons Learnt: None stated

Task Description: *No details available.*

Recommendations: We would 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: Ali Dillon, MSF

### 349: Transportable Chemical Tank potential dropped object

Summary: Swire Oilfield Services owned STS-40xxx series transportable chemical tanks have a dip stick tube which may become detached in transit due to failure of one of the two attachment welds. These attachment welds should be inspected for integrity prior to lifting / shipping. If either of the two welds have failed, the tube should be removed and discarded.

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 inspection identified the failure of both the lower and upper attachment welds. The dip stick tube was removed from the tank frame to remove the potential for the tube to fall during a lifting or shipping operation.

Specific Equipment: *No details available.*

Lessons Learnt: Dip sticks are no longer required to be transported with individual tanks. All STS-40xxx series tanks will be quarantined on return to Swire and the dip stick tubes will be removed

Task Description: *No details available.*

Recommendations: .All STS-40xxx series tanks should be inspected to confirm condition of dip stick tube attachment welds. If either of the two welds have failed, the dip stick tube should be removed prior to lifting / shipping

Contact Details: Roy Burrell, Operations Manager, Swire Oilfield Services.  
email: [rburrell@swireos.com](mailto:rburrell@swireos.com)





### 350: Moisture in Breathing Air

Incident Date:	<i>Date of incident not available.</i>
Summary:	Moisture found in breathing air immediately prior to entering a confined space.
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:	Immediately prior to entering a confined space, an industrial cleaning operative was donning his breathing apparatus. When the valve was opened, he was aware of moisture vapour against his face. He immediately removed his mask and observed the air flow which still appeared to contain moisture droplets. Liquid was observed inside the mask and the liquid appeared to have a citrus-like smell. There was no harm to the individual, however he stopped the job and the incident was reported.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	It is unlikely that the moisture came from the BA compressor. Each BA compressor is subject to air purity testing prior to despatch and only after satisfactory completion of the test is the equipment declared ready for shipment. There is a slight chance that the hoses could have been the source of the moisture due to the fact that they are pressure tested using fresh water. It is likely however that the source of the moisture was the mask

itself. It is possible that residual water settled in the base of the mask and was not evident during pre-mobilisation inspection. The breathing apparatus did not malfunction in this case.

Task Description: *No details available.*

Recommendations: With immediate effect, after completing air purity checks, all personnel using BA should purge the lines with mask attached prior to donning the mask: 1. Connect mask 2. Hold at arms length 3. Open valve to release air 4. Observe mask for any moisture This process would rid the lines or mask of any residual moisture.

Contact Details: Steven Law, SHE Advisor, Rigblast Group Limited

## 351: Eye Injury through Rigwash Solution

Summary:	The Injured Party utilised a solution of rig-wash cleaning to lubricate an SSR releasing dart. Safety Helmet fell into solution and was wiped clean before being worn again. As work continued sweat ran into the right eye of the IP causing immediate stinging
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:	Well services / intervention
Description:	The Injured Party utilised a rig-wash solution as a lubricant in inserting a SSR releasing dart. It was normal practice to utilise hand soap but the proximity of a roustabout scrubbing down with rig-wash offered a source of alternate lubricant. The roustabout gave the IP a bucket of rig-wash from the bulk tank. Whilst loading the dart into the top drive head the IP lost his safety helmet which fell into the bucket of rig-wash. He recovered his helmet, shook it dry and wiped the helmet inside and out before returning it to his head and resuming his work. After completing his task the IP stood up and a bead of sweat ran down his forehead and into his right eye. There was an immediate stinging sensation, he removed his safety glasses and wiped his eye with his coverall sleeve. He proceeded to an eye wash station and irrigated his eye with 500 ml of eye wash. He also washed his head and face with fresh water and noticed that the foam padded forehead band on the inside of his safety helmet was still soaked with rig wash residue. After medical treatment offshore the IP was landed for hospital treatment. A small

section of eye tissue was lost from the cornea with partial sight impairment, although full recovery is expected.

Specific  
Equipment: *No details available.*

Lessons Learnt: Changed operation without assessing new associated hazards. Eyes need thorough irrigation if in contact with chemicals not a one bottle sluice. Never use chemicals without first establishing the hazards they create and assess their use and put in place suitable and sufficient control measures. If product containers are not labelled do not assume the chemical is non-hazardous. Personnel utilising rig wash must always wear the correctly rated safety goggles with visor if required to prevent facial contact from splashing. Safety helmets immersed in any hazardous solution should be replaced because of contamination and any integrity damage.

Task Description: *No details available.*

Recommendations: 1. Always reassess if there is a change to the planned task. 2. Ensure that personnel are fully aware that if they have experienced eye or skin contact with a hazardous substance that irrigation for 15 minutes as a minimum is recommended. 3. Ensure that MSDS, COSHH assessment, information is communicated and the emergency response actions for contact are clearly understood. 4. Goggles are always worn for rig wash cleaning operations. If rig wash is used for some other purpose the hazards remain the same and the appropriate controls must be employed. 5. Impregnated PPE must be thoroughly cleaned, necessary parts replaced or the equipment replaced.

Contact Details: Jason Harrower HES HSE Department Tel 01224 795904

## 352: Coiled Tubing Skid Alert

Summary:	Mobilisation of a Coiled Tubing Skid unit offshore discoverde to have a snagged lifting assembly.
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:	<p>A Coiled Tubing Skid was mobilised from Aberdeen for delivery to an offshore location. The skid was inspected prior to leaving the yard and was then subsequently inspected by a third party prior to loading onto the supply vessel at the harbour. On arrival at the offshore location the supply vessel commenced the discharge of its load. The supply vessel deck crew attached the skid lifting assembly to the Installation crane hook and it was at this point that it was noticed that the lifting assembly had become snagged on one of the shackles located at the corner of the skid. The vessel crew signalled immediately for the lift to stop. After the crane lowered the hook it was disconnected from the crane lifting assembly, the assembly was closely inspected and found to be damaged. The skid complete with the lifting assembly was returned to Aberdeen where a new lifting assembly was located on the skid.</p>
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	The assembly was checked and inspected on several occasions prior to being loaded onto the offshore installation. On two inspections it was found to be correct.

This demonstrates the importance of inspection at every stage of the supply chain. The lifting assembly was fitted with cross beams to prevent the lifting assembly becoming entrapped in critical equipment. This does not offer protection to the lifting assembly connections

Task Description: *No details available.*

Recommendations: Everyone throughout the supply chain must remain alert to possible snagging hazards. Everyone must be prepared to stop the job and make it safe. UKOOA Guidelines for the Safe Packing and Handling of Cargo to and from Offshore Locations - Chapter 6 CCU Guidance- Appendix 6.8 - Snagging Hazards.

Contact Details: Norman Marwick HES HSE Department 01224 728449

### 353: Potential Dropped Object

Summary:	An equipment skid was transported by road from Aberdeen to Montrose with a tool stuck on grating with the potential for displacement on route.
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:	Land transport
Description:	A third party equipment skid was being returned by road transport to it's owners. On arrival at the destination yard a Stanley Knife was found to be loddged in the edge of the kennedy grating on the unit. This had the potential to be dislodged during the fifty mile journey through rural and urban areas. The consequences of striking another vehicle or pedestrian would have resulted in a serious injury.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	Everyone must remain alert of possible loose tools or objects on any load being transferred from facilities. The inspection protocols in place had not been stringently applied. The red Stanley Knife should have been readily apparent against the yellow grating. In addition to inspection, everyone involved in maiantaining or preparing equipment or containers for transfer must receive regular information, instruction and training to ensure they remain alert to the dropped object potential
Task Description:	<i>No details available.</i>

Recommendations: Reinforce load inspection protocols and back up with a random / regular audit of the process.

Contact Details: Norman Marwick HES HSE Department 01224 728449

### **Knife lodged at grating edge**



### **Location of knife and displacement potential**





### 354: Defective hammer shaft

Summary:	A fibreglass sledge hammer shaft failed during first use
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 support a new client policy, the company was changing over to use of fibreglass shafts for all hammers over 2lbs. One of the first to be sent offshore was a 14lb hammer. Within a short period of use, the shaft showed signs of cracking just behind the head of the hammer. Use was stopped and the defect reported. After discussion with the supplier and the client, we have now withdrawn all fibreglass handled hammers and will revert to wooden shafts
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	Latest technology is not necessarily better. Good pre-use inspection is still a critical requirement and cannot be ignored or bypassed by supposedly better technology in this case.
Task Description:	<i>No details available.</i>
Recommendations:	Take care in the selection of tools. Ensure users are aware of pre-use inspection requirements.
Contact Details:	Howard Dunn, Sparrows Offshore Services Ltd. (44) 1224 704868

**Fibreglass shaft cracked near head of hammer**



### 355: Shackle Failure

Summary:	During retrieval of a mooring assembly, a 55 tonne Dee shackle connecting a suspension line to a pusnes was noted to have split across the crown.
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:	Marine activity, shuttle offloading
Description:	During retrieval of a mooring assembly, a 55 tonne Dee shackle connecting a suspension line to a pusnes was noted to have split across the crown. Background Information: The shackle was visually inspected prior to being deployed. It had been subject to prior inspections in accordance with LOLER, and had not been subject to overloading in use. Visual inspection of the shackle did not reveal manufacture identification or any markings linked to a known reputable manufacturer of shackles.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	Failure of the shackle had occurred through a brittle fracture which had initiated from a manufacturing surface breaking defect found on the inside surface of the bend at the origin of the fracture. It was considered possible that an impact shock had occurred at some point, resulting in the indentation on the outer edge of the shackle in line with the defect at the fracture origin. The shackle material was found to have poor impact resistance at 0°C. This factor alone was considered to be the major reason for failure, with the presence of the defect and the

indentation damage being significant as a result of the low impact strength of the material. Identification of the manufacturer for the shackle was not visibly established to a known reputable source of supply. Failure Causes : Poor Impact strength of the shackle material resulting in brittle fracture. Impact shock of the shackle. Manufacturing surface defect and impact indentation.

Task Description: *No details available.*

Recommendations: All Owners / Operators require to check that all shackles in service have visible markings that can be substantiated through service traceability to a recognised reputable source of manufacture. Shackles that are not identifiable by this method should be considered suspect and withdrawn from service pending further detailed inspection and investigation.

Contact Details: George McGavin OCE, HSE Manager 01224 797300

### 356: Failure of anti-slip tread on vertical ladder rung

Summary:	Whilst descending a vertical ladder on the platform, the technician took hold of one of the ladder rungs which subsequently came away in his 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:	*Any Activity Type
Description:	Whilst working on level 2 of the installation, the technician was carrying out an ultrasonic Pipework survey. In order to gain access to another area, the technician took hold of one of the ladder rungs whilst descending the ladder, and subsequently the anti-slip tread came away in his hand. The technician was approximately 7 feet above the deck when this occurred and had he not had a firm grip on the ladder with his other hand, he could have fallen to the deck below causing personal injury. The anti-slip tread is of a composite 'U' shaped construction that is simply fixed to the top of the rung with adhesive.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	Raising awareness of this event will hopefully prevent a re-occurrence. It has highlighted a need to review all vertical ladders where these anti-slip treads are utilised. Subsequent checks on all other ladders on the installation highlighted another 150 or so treads that were loose. These have now been removed.
Task Description:	<i>No details available.</i>

Recommendations: Routine inspections of all anti-slip treads have been scheduled into the PM system and a full review will be carried out in order to identify what action to take to design out this problem. Particular attention must be given to vertical ladders with treads that are in high locations where the loss of one of these treads could become a possible dropped object – drilling derricks could be one of these areas.

Contact Details: Mandy Marples, ChevronTexaco Upstream Europe,  
Seafield House, Hill of Rubislaw, Aberdeen. AB15 6XL.  
Tel: +44 1224 334336, E mail:  
MandyMarples@chevrontexaco.com

### 357: Standby Vessel Collides with Offshore Installation

Summary: A standby vessel collided with the installation it was protecting during December 2002. The vessel was not carrying out Close Standby duties at the time. Two of the installation's starboard columns received minor indentation damage as a result of the impact

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

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

Activity Location: \*Any Location Type

Activity Type: Modification of plant/structures

Description: 1. A standby vessel collided with the installation it was protecting during December 2002. The vessel was not carrying out Close Standby duties at the time. Two of the installation's starboard columns received minor indentation damage as a result of the impact. 2. The standby vessel's hull plating and internal structure in way of the bow area were badly damaged and distorted. Hull repairs took more than one week. The weather conditions at the time of the incident were clear visibility, easterly wind force 4 – 5 and an easterly swell. There was no injury or pollution reported.

Specific Equipment: *No details available.*

Lessons Learnt: 3. The collision occurred because the bridge watchkeeper on duty failed to comply with the following: · Rule 5 of the International Collision Regulations – "Every vessel shall at all times maintain a proper look-out by sight and hearing as well as by all available means appropriate in the prevailing circumstances and conditions so as to

make a full appraisal of the situation and of the risk of collision”; •

Task Description: *No details available.*

Recommendations: The UKOOA Guidelines for the Safe Management and Operation of Vessels Standing by Offshore Installations, paragraphs 3.1-3.3 inclusive (Routine Operations - On Location); • MGN 72 (Navigation Safety); • MGN 166 (Guidelines for Voyage Planning); • Bridge Procedures Guide. 4. Watchkeepers should also bear in mind that the use of mobile telephones and laptop computers are a distraction from keeping a proper look-out. The use of such equipment should be carefully considered when on watch.

Contact Details: Iain Campbell Offshore & Emergency Planning Officer  
Maritime & Coastguard Agency 01224 597930  
iain\_campbell@mcga.gov.uk



## 358: Navigation near Offshore Installations

Summary: Notice to Offshore Installation Managers, Shipowners, Masters, Officers and Seamen of Merchant Ships and to Owners, Skippers and Crews of Fishing Vessels 1. There are a growing number of near miss incidents between vessels and offshore installations. These incidents have exposed the vessels, installations and their respective crews to unnecessary risk by passing too closely. In some cases, installations have had to stop their operations and muster personnel to Emergency Stations. 2. Safety zones exist not only to protect mariners by reducing the risk of collision but also to protect the lives and property of those working in the oil and gas industry, (divers and submersible vehicles are particularly vulnerable), and to reduce the risk of damage to the marine environment.

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

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

Activity Location: Fixed Installation

Activity Type: Marine activity, shuttle offloading

Description: 3. The Maritime and Coastguard Agency wishes to remind vessels, Owners and Operators, that all oil and gas installations are protected under the Petroleum Act 1987. It is forbidden for vessels to enter the 500 metre safety zones except under the following conditions: (i) With the consent of the Secretary of State, or a person authorised by him; 0 (ii) To lay, test, inspect, repair, alter, renew or remove a submarine cable or pipe-line; (iii) To provide services for an installation within the zone or to transport persons to or from it, or under authorisation of a government department to inspect it; (iv) For a general

lighthouse authority vessel to perform duties relating to the safety of navigation; (v) To save life or property, owing to stress of weather or when in distress. 4. In order to avoid near miss incidents happening in the future, MCA wish to make the following recommendations: · Vessels transiting or passing close to areas of offshore activity should navigate with extreme care. · Passage plans should give installations and areas of development a wide berth. · Vessels should, where practicable, avoid heading directly towards a safety zone or offshore installation. Such action may be perceived as a threat, resulting in the installation having to suspend its operations and muster personnel to Emergency Stations. · Mariners should bear in mind that installations may have to initiate emergency procedures when a vessel is heading towards them, at a distance of ten miles. This is not only costly for the installation operator but more importantly, detrimental for the safety of all concerned. 5. To avoid any doubt as to the intentions of vessels, MCA would encourage communication with the installations PROVIDED that it is safe to do so and that the Collision Regulations are adhered to.

Specific  
Equipment: *No details available.*

Lessons Learnt: *No details available.*

Task Description: *No details available.*

Recommendations: 6. Communications should be initiated through Channel 70 on Digital Selective Calling (DSC), thence to Channel 13. Fishing vessels not yet fitted with GMDSS equipment, should use Channel 16 to call up (UNLESS DISTRESS/URGENCY MESSAGES ARE BEING PASSED), before switching to a working channel. 7. Installation operators should ensure they have sufficient communications equipment (GMDSS DSC) and qualified operators if they do not have a standby vessel in attendance. 8. Entry into a safety zone by an

unauthorised vessel makes the Owner, Skipper and others who have contributed to the offence liable on summary conviction to a fine, and on conviction on indictment, to imprisonment, or to a fine or to both. Vessels failing to communicate with installations who are concerned regarding their intentions may also be subject to enforcement action.

Contact Details: Iain Campbell;Offshore Emergency Planning Officer;Maritime Coastguard Agency;01224 597930; iain.campbell@mcga.gov.uk

### 359: Confirmation of isolations

Summary: During the last 12 months we have several incidents on sites and installations involving inadequate plant isolations. All such incidents are investigated and the findings acted upon, however we consider that company wide action is required to support prevention of any future potential incidents or injuries

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: During the last 12 months we have had several incidents on sites and installations involving inadequate plant isolations. All such incidents are investigated and the findings acted upon, however we consider that company wide action is required to support prevention of any future potential incidents or injuries. Health and Safety Executive guidance on permit to work systems clearly states that the person issuing the permit to the person in charge of the work should ensure;

- The work site has been examined, and all precautions specified, including isolations, to be taken before work commences have in fact been taken and will remain effective while the permit remains in force.
- The person in charge of the work being done under the permit is aware of the precautions taken, any additional ones which are to be taken, particular equipment to be used or worn, and the procedures to be followed, during the period of the permit.
- The work site is examined at any time when work is suspended, and before it is restarted, and finally when the work is

completed to ensure that it is in a safe condition.

Specific  
Equipment: *No details available.*

Lessons Learnt: *No details available.*

Task Description: *No details available.*

Recommendations: With immediate effect, it is a requirement that all AMEC personnel in charge of work activities must physically check all isolations relevant to the part of the plant that they are working on with the person issuing the permit or their authorised delegate. It is the responsibility of the person in charge of the work to satisfy themselves, as far as reasonable practicable, that the isolations are of sound integrity to allow them to safely proceed with the given work scope. Remember, physical disconnection is the most effective means of isolation and is the only method recommended for working on pressurised hydrocarbon systems where there may be risk of leakage and when vessel entry is necessary.

Contact Details: [robert.carrier@amec.com](mailto:robert.carrier@amec.com)

## 360: EQUIPMENT ALERT

**Summary:** The following incident occurred recently on one of our rigs. While drilling 12 1/4" hole at a depth of 6,349 ft using three Mud Pumps with 4500 p.s.i. at the manifold, No 1 mud pump discharge strainer-retaining cap failed. This resulted in an uncontrolled escape of oil based mud under pressure from the discharge strainer manifold into the pump room.

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

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

**Activity Location:** \*Any Location Type

**Activity Type:** Drilling, workover

**Description:** Release of mud under pressure from pump strainer The Assistant Derrickman was carrying out routine checks in the mud pump room at the time of the incident, he was unhurt. A large quantity (25 bbl) of oil based mud was discharged into the mud pump room. The mud was contained and did not pose any immediate environmental threat.

**Specific Equipment:** *No details available.*

**Lessons Learnt:** Following an in depth investigation by the rig team, assisted by European Field Support (EFS) and National Oilwell, the following Corrective actions are being taken. Close visual inspection of No 2 Mud Pump HP Strainer Assembly prior to being returned to service. Regular inspection of No 2 Mud Pump HP Strainer Assembly - Additional control measures introduced temporarily to ensure condition does not deteriorate prior to corrective

actions being applied. Close visual inspection of No 3 Mud Pump HP Strainer Assembly Verifying the suitability of the remainder of the Mud Pump/Mud Piping installation within the pump room and stand pipe area Replacement of No 1 Mud Pump strainer (spare) Further investigation of failed cap and associated manifold by EFS HP strainers on Mud Pumps No 1 & 2 will be fitted with the latest OEM approved strainer system. The strainer system, and if required any other accessory or component of HP mud system e.g. discharge manifold etc., will become part of the rigs routine inspection for the HP mud system.

Task Description: *No details available.*

Recommendations: Please review the incident learnings and corrective actions with your rig teams and take such action as required to prevent a similar incident occurring on your rig. The strainer cap that failed was an old type and not the type normally found on our pumps, however the principles of inspection to these devices equally apply to all installations

Contact Details: Derek Hart Transocean Dhart@aberdeen.deepwater.com

### 370: Incorrect Freight manifested and loaded

Summary: Freight placed in the tail cone of a helicopter on an offshore platform was incorrectly manifested with regard to its overall weight and combined with the container dimensions exceeded the floor loading.

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

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

Activity Location: \*Any Location Type

Activity Type: Air transport

Description: Freight placed in the tail cone of a helicopter on an offshore platform was incorrectly manifested with regard to its overall weight and combined with the container dimensions exceeded the floor loading. The accurate weighing and manifesting of freight for the helicopter is not only a legal requirement but critical regarding its centre of gravity and all up weight, being outside the prescribed limits of either of these results in the aircraft being illegal regarding its certificate of airworthiness. It also has an impact on the critical phases of flight and should a problem occur, an overweight aircraft may be unable to recover and fly its prescribed path. Exceeding the floor loading of the tail cone could have structural implications to its overall serviceability. Finally, freight that is a lot heavier than identified becomes a serious manual handling problem by those persons unloading the aircraft. This perceived simple and innocuous failing has serious ramifications for all phases of the flight operation.

Specific Equipment: *No details available.*



Lessons Learnt:     Accurately weigh freight before raising the manifest.  
                             Follow the instructions in the OPITO HLO's Handbook

Task Description:    *No details available.*

Recommendations: Any queries regarding freight issues, contact the operator  
                             beforehand or ask the pilot in command.

Contact Details:     [lawrence.baldwin@bristow.co.uk](mailto:lawrence.baldwin@bristow.co.uk)

### 371: Bursitis

Summary: Domestic Maintenance Technician (DMT)/ handyman, suffered severe swelling of the knee following carrying out tasks involving prolonged kneeling. This condition is known as bursitis or housemaids knee.

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: Earlier this month an Offshore employee working as a Domestic Maintenance Technician (DMT) or handyman, reported to the medic that he was suffering from a swollen knee. He was sent ashore and a doctor diagnosed the condition as bursitis. This is commonly known as “housemaids knee”, which is an inflammation of the knee caused by prolonged pressure or friction on the knee usually as a result of prolonged periods of kneeling. The investigation established that the work carried out by the DMT involved long periods of kneeling in order to carry out maintenance on equipment. The investigation also revealed that the DMT did not wear knee pads while carrying out these tasks and that the procedures did not identify the need to wear knee pads.

Specific Equipment: *No details available.*

Lessons Learnt: 

- Lack of awareness that prolonged kneeling could lead to this type of condition
- Inadequate procedures as regards the use of appropriate PPE
- Inadequate risk assessment in that the assessment did not identify kneeling as a

hazard.

Task Description: *No details available.*

Recommendations: Raise awareness of this type of condition among all staff. Ensure that knee protection be worn for tasks involving kneeling and break tasks up to reduce prolonged kneeling. Revise DMT risk assessment to include kneeling as a hazard. Also ensure kneeling is identified in other tasks where necessary. Review method of work control for maintenance work Review the level of auditing and monitoring of accommodation work to improve supervision and work control.

Contact Details: Neill Murray, ARAMARK Ltd [murray-neill@aramark.co.uk](mailto:murray-neill@aramark.co.uk)

### 372: Incident - alert

Summary: Fall from a loading bay at an onshore facility. IP fell 1.5m striking his head on a concrete floor. Potential fatality

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: Catering / hotel services

Description: IP was sent to loading bay to collect a delivery of milk, which had been left on the edge of the loading bay at the far end. On bending down to pick up cartons of milk the IP fell striking his head on the concrete floor. He suffered a serious head wound and was taken immediately to hospital by ambulance. He has now made a full recovery. The IP entered the loading bay unannounced and unsupervised, although this was the practice at the time. The building had recently changed occupants and the loading bay procedures had changed leading to a loss of control.

Specific Equipment: *No details available.*

Lessons Learnt: There were no proper safety barriers in place on the loading bay, which is a shared facility. There was no specific risk assessment or safe system of work in place to account for this. A change in activity led to a loss of control on the loading bay.

Task Description: *No details available.*

Recommendations: Any change in activity should lead to a change assessment being completed. All loading bays must

have an appropriate safety barrier. Access to loading bays must be controlled

Contact Details: Neill Murray, ARAMARK Ltd [murray-neill@aramark.co.uk](mailto:murray-neill@aramark.co.uk)



### 373: Use of Incorrect Backing Disc on Sander

Summary: During maintenance/ testing of a 4" air operated sander recently the fitter received an abrasion to the index finger of his left hand. Investigation into the incident revealed that one of the root causes of the injury was that a 4" P24 abrasive disc had been used as a backing disc with the abrasive surface towards the rear of the machine.

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: During maintenance/ testing of a 4" air operated sander recently the fitter received an abrasion to the index finger of his left hand. Investigation into the incident revealed that one of the root causes of the injury was that a 4" P24 abrasive disc had been used as a backing disc with the abrasive surface towards the rear of the machine.

Specific Equipment: *No details available.*

Lessons Learnt: *No details available.*

Task Description: *No details available.*

Recommendations: Supervisors are to carry out the following actions: All air operated sanders are to be inspected to ensure that they have the proper backing disc fitted (this should be either fibre or rubber). Any that haven't are to be quarantined until a proper backing disc can be fitted. Stress to all employees at next Safety Meeting/ Toolbox Talk the potential consequences of using abrasive discs as

backing discs, using this incident as an example. Conduct random checks of next three months to ensure this bad practice has been eradicated.

Contact Details: J Boyce Group HSEQ Manager 01224 246000



### 374: Incorrect Manual Handling Techniques

Summary: During July five incidents have occurred offshore where operatives have suffered back injuries. Investigation into these incidents has revealed that in all cases the root causes of the injuries have been incorrect manual handling techniques during relatively simple routine tasks.

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: During July five incidents have occurred offshore where operatives have suffered back injuries. Investigation into these incidents has revealed that in all cases the root causes of the injuries have been incorrect manual handling techniques during relatively simple routine tasks.

Specific Equipment: *No details available.*

Lessons Learnt: It is recognised that manual handling is a frequent activity in most jobs that Salamis employees undertake. It is extra important, therefore, that the correct techniques are used all the time, every time, even for the simplest lifting or carrying task.

Task Description: *No details available.*

Recommendations: Supervisors are to carry out the following actions: Stress to all employees at next Safety Meeting/ Toolbox Talk the potential consequences of incorrect manual handling techniques and explain the correct methodology for lifting and carrying (power-point presentation available from



Project Managers). Conduct random checks of next three months to ensure correct manual handling techniques are being employed, particularly during routine tasks.

Contact Details: J Boyce Group HSEQ Manager 01224 246000

### 375: High Potential Near Miss - Annular BOP Cap Maintenance to remove worn sealing element

Summary: Whilst undertaking maintenance on a 13-5/8" 10K Hydril Annular Blow Out Preventer, one of four pull down bolts had been removed and removal of the second was underway when the annular cap was suddenly ejected from the annular body a distance of 4 to 5 ft up from the assembly. The cap landed slightly off centre back on top of the annular. The three remaining pull down bolts were sheared when the cap was ejected. There were no injuries to personnel.

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

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

Activity Location: Drilling unit

Activity Type: Maintenance

Description: Whilst undertaking maintenance on a 13 5/8" 10K Hydril Annular Blow Out Preventer, one of four pull down bolts had been removed and removal of the second was underway, when the annular cap then forcibly and unexpectedly ejected from the annular body 4 to 5 ft directly above the assembly. The cap landed slightly off centre back on top of the annular. The three remaining pull down bolts were sheared when the cap was ejected. No personnel were injured. Subsequent examination of the stripping accumulator bottle bladder showed that it had ruptured and as a consequence, the nitrogen pre-charge was not confined to the accumulator system, instead, pressure was introduced under the annular operating piston and "locked in" due to the design of the control system pipework which incorporated quick

disconnect couplings. These couplings only allow fluid to flow when the male and female elements are made up. If disconnected (As in this case), they act as block valves preventing fluid return from the top of the operating piston. (Reference figure 5.5 “Surface Hook Up Stripping” below). When the cap locking jaws were released, the force on the piston was transferred to the four pull down bolts via the annular cap. The bolts are not designed as load bearing devices and after the first one was removed, the force on the piston was sufficient to shear the remaining bolts and eject the cap. Two Roughnecks were working in the vicinity of the cap when it was ejected although no injuries were sustained.

Specific  
Equipment: *No details available.*

Lessons Learnt: See recommendations section below

Task Description: *No details available.*

Recommendations: 1. Review safety alert at next safety meeting. 2. Raise awareness of the isolation policy within the permit to work system, document within weekly safety meetings. 3) All systems to be isolated from all actual and potential energy sources and bled off prior to maintenance and controlled through the permit to work system. 4) Specific risk assessment for removing annular cap to involve pressure hazards and to be reviewed by either a Mechanic or a Hydraulics Engineer 5) Bleed manifold with gauge equipment to be considered for visually checking pressure/bleeding pressure and checking integrity of the bladder. 6) Consider undoing locating pull down bolts first, then undoing locating Jaws, to reduce likelihood of personnel standing over annular cap.

Contact Details: Richard Mearns, HSE Co-ordinator, GlobalSantaFe Tel: 01224 654400

### 376: Potential puncture wound

Summary:	Offshore operator utilising a rag from the rag box to wipe the sweat from his forehead found a large pin stuck through the rag with the potential to cause a puncture wound
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 Coil Tubing Supervisor was involved in the process of rigging up equipment on the rig floor. As he was sweating he went to the rag box and selected an unused rag to wipe his forehead with. After wiping the sweat from his forehead he detected a 1" sewing pin that had been left in the rag. There was no injury incurred, however there was considerable potential for a puncture wound to his hands or face. The rags supplied come through a chain of suppliers and the rag source is variable.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	Boxes of rags are a widely used commodity within the industry and they may not be free from contamination or sharps. The checks within the process of rag supply require the user to also check the rag before use.
Task Description:	<i>No details available.</i>
Recommendations:	Everyone using rags must remain alert to the possibility of contaminants or sharps within boxes of rags. Rags may have been used to soak up a contaminant and returned to

the rag bag and should as a precaution never be used to wipe your face. Rags should have a quick check to ensure they do not have pins, needles or sharps attached to prevent hand or finger puncture

Contact Details: Norman Marwick HES HSE Department 01224 728449

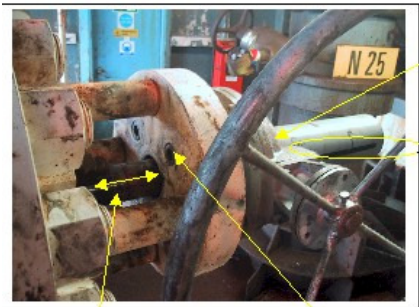
### 377: Unintentional Stroke of Valve Stem

Summary:	Unintentional stroke of Valve Stem. Valve type: - T 32002-V 6" Bel API 10000lb Thr'o Conduit Split gate valve with Exeeco Gearbox.
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:	Mechanical Technicians were asked to remove the gate valves Exeeco gearbox. The gate valve is on a section of vertical Pipework. The stem for the valve protrudes from the valve body horizontally approx. 6ft from deck level. The gearbox is fitted over the end of the valve stem and is secured by four bolts. The technicians removed the last retaining bolt from the gearbox when the valve spindle moved to the open position. The valve previously was in the closed position. Valve stroke 12". At the end of the stroke the outer casing and gears came off the end of the stem. The gearbox weighs 60 lbs. Process pressure in Header.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	Risk assessment required to be more comprehensive. Detailed procedures to be created and awareness presentations to be produced for gearbox and actuator removals. Improve competency of personnel.
Task Description:	<i>No details available.</i>

Recommendations: Produce procedures for removal of gearbox. Awareness presentations : Valve construction.

Contact Details:     Johntone Lee at Total E&P UK PLC on 01224 297392 or johnstone.lee@total.com

Gearbox casing came off valve stem when valve stroked unintentionally

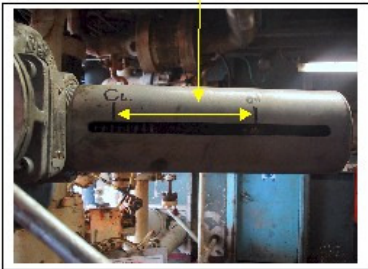


Valve handle was removed at time.  
Casing weighs 60 lbs

Valve stroke length 12"

Valve stem

Gearbox retaining bolts (x4)



### 378: Injury to right hand crushed by pipe

Summary:	Whilst lifting a short section of lubricator from a Pressure Control skid, the Operator caught his hand between the thread protector of the lubricator and the frame of the skid (see picture below). The storage unit is designed for long joints which can be rolled out and lifted by overhead crane. The section was too short to fit across the sliding rail brackets in the skid, as such a decision was taken to lay one end on the deck then use slings to fully remove the section from the skid. Unfortunately as the end was being lowered to the deck, the operator saw that the other end was not free. On attempting to free the trapped end his hand became caught as the other end dropped to the deck.
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:	See abstract.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	The equipment transport was not designed to take short pup joints but rig personnel had got into the habit of storing the short length with the others. There was no immediate consequence for their action until an inter-field transfer occurred when the risk of the change to the system became apparent. There was no safe procedure for removing short lengths from storage. Both men were trained how to conduct the job safely. They had received



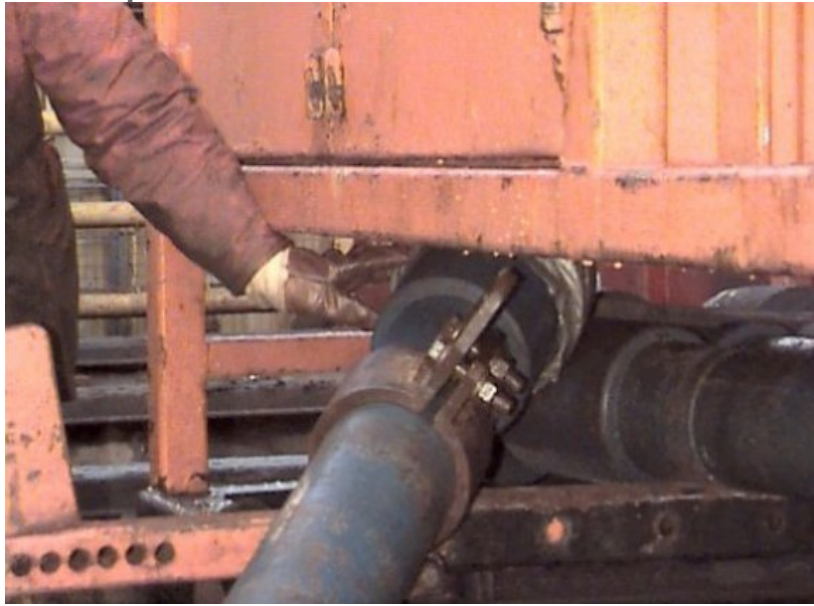
the unit from a nearby rig and were faced with a problem they did not create. In this case they recognised that the short pup joint should not have been placed into the storage unit. Rather than STOP the job they decided that they could carry on, by working around the problem. Having decided to remove the short length of lubricator they did not think through what might have gone wrong. The trained personnel did recognise that a risk existed but failed to analyse that their own solution was equally dangerous. In effect they traded one risk for another. STOP training should have been employed by Personnel in the location. Management did not consider that short length's of lubricator may be required to transfer between sites and had not given clear instruction on how this might be accomplished safely.

Task Description: *No details available.*

Recommendations: Redesign of storage transport, e.g. insert another rail to cater for short lengths of lubricator, or transport short sections of lubricator within open storage baskets such that they can easily be picked up by an overhead crane. Re-enforce the application of task based risk assessments that seek formal risk assessment when workers are faced with non-routine duties. Re-enforce that everybody has the responsibility to apply STOP to prevent such incidents.

Contact Details: Simon Smith, Production Engineering Supv. Marathon Oil; 01224 803074; spsmith@marathonoil.com

Handtrap2



### 379: Crane Hydraulic System Failure

Summary: This alert highlights a potential failure mechanism of a crane hydraulic system.

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: During the lifting operation of a 14 tonne load from a supply boat, a 1½” Keller T Piece fitting on the crane’s hydraulic system failed at the threaded connection. This resulted in the load being dropped about 15 feet before the load was arrested by the fail brake system. This incident did not result in any personal injury or material damage as the load was stopped prior to impact with any object. On further investigation the Keller T Piece was found to have surface corrosion on the internal threaded connection. The cause of the corrosion was due to entrapment of water within the internal threaded connection of the fitting. The extent of the surface corrosion resulted in the hydraulic pipework dislodging from the fitting causing loss of the crane hydraulic system.

Specific Equipment: *No details available.*

Lessons Learnt: *No details available.*

Task Description: *No details available.*

Recommendations: 1. Check all fittings subject to exposure to water for signs of corrosion and replace as necessary. 2. On completion of the strip and inspection the Keller Fittings should be

protected with Denso tape to be applied to all fittings with the potential of water ingress. 3. Include strip and inspection of fittings within crane planned maintenance routines.

Contact Details: Robin MacDonald at Total E&P UK PLC on 01224 297317

### 380: Hazards of Wire Buffs

Summary:	Wire Buffs
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:	Maintenance
Description:	Whilst using a pneumatically powered “Die Grinder” with a rotary wire buff head attached, a strand of the wire buff detached itself and was lodged in an employee’s left knee. This incident went unnoticed at the time and only came to light when the employee experienced acute pain whilst out running some time afterwards. X-ray examinations identified a foreign body in the knee, which turned out to be a bristle from a rotary wire buff (die grinder). This resulted in local surgery to remove the bristle.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	Raise awareness of the potential dangers associated with the use of powered wire buffing tools
Task Description:	<i>No details available.</i>
Recommendations:	1. Discuss / communicate incident at staff monthly Safety Meetings 2. Always Risk Assess work activities to identify and effectively manage RISK 3. Use the revised when working with wire buffs PPE (rubber aprons and rubber gloves)

Contact Details: Norman McGlashan Tel: 01224 741424



## 381: Fracture of Fittings on Nitrogen Quads During CT Reel Purging Operations

Summary: Fracture of Fittings on Nitrogen Quads During CT Reel Purging Operations

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 recent incident occurred offshore during normal purging of water from a CT reel using a set of Nitrogen Quads. The Nitrogen quads set (Primary & Secondary) were coupled together using HP hosing before onward connection to the CT reel. During the operation the hose connection fitting on the primary quad set failed and resulted in the N2 dissipating from the open end causing the hoses to flail about. This excessive movement of the hoses then caused the fitting connecting the secondary quad set to the hose to also fail. Quick action taken by an operator prevented further escalation of the event by closing off the supply from the N2 bottles from the rear. It should be noted that no one was injured in this event but there was a clear potential for a far more serious event.

Specific Equipment: *No details available.*

Lessons Learnt: Well Supervisors involved with Nitrogen purging operations using Nitrogen Quad Sets should re-assess their use of such equipment and take relevant steps to mitigate the risks highlighted in this event to prevent re-

occurrence.

Task Description: *No details available.*

Recommendations: Inform staff of incident and highlight potential areas of risk in similar operations.

Contact Details: John Styre UK CTS, CTD and Matrix/Pumping Manager  
Tel: 741424





## 382: Finger Broken & Crushed While Preparing Sentree 7 Lifting Clamp

Summary: Finger Broken & Crushed While Preparing Sentree 7 Lifting Clamp

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: Sentree 7 lifting clamps were being made ready to install onto Sentree 7 on the rig floor. A task assessment had identified that there was the potential for the clamps to topple over during the operation but that the alignment pins would hold the two halves together. The task required the clamp to be in the vertical position to allow access to remove the two retaining bolts. When the retaining bolts were removed the top half of the clamp slid back and dropped about 12" resulting in a break and crush injury to index finger a Sentree 7 Operator. On inspection of the clamp it was found that this particular clamp was not fitted with the alignment pins.

Specific Equipment: *No details available.*

Lessons Learnt: Supervisors, Operators and maintenance staff to ensure that all Sentree lifting clamps are fitted with alignment pins. Sentree lifting clamps should not be assembled during storage on the Rig floor. Assembly and disassembly of Sentree lifting clamps should be carried out in the horizontal position where possible. Task assessments need to consider the impact for all potential

hazards. Do not assume that equipment is in perfect working order.

Task Description: *No details available.*

Recommendations: To raise awareness that Sentries 7 Lifting clamp alignment pins must be fitted. To raise awareness that all potential hazards must be identified and correct control measures taken.

Contact Details: Ken Davidson EIC, Engineer In Charge Tel: 01224 799247



### 383: Foot Injury

Summary:

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: While rigging up braided line, timber was used to prop up the grease head. The crew had finished making up the grease head and was about to tighten it. The 3rd member of the crew went to remove the timber. IP was standing over it with the timber between his feet. As the timber was pulled out, a nail protruding out of the side stabbed through IPs boot and into IPs heel thus causing it to pierce the skin. No one in the crew had noticed any nails sticking out of the timber being used.

Specific Equipment: *No details available.*

Lessons Learnt: The incident happened because the crew used a scrap piece of wood, which they failed to inspect prior to use. We have now eliminated the use of wood to support Slickline PCE during rig up / down, we now supply Rhino racking with our load outs.

Task Description: *No details available.*

Recommendations: The incident happened because the crew used a scrap piece of wood, which they failed to inspect prior to use. We have now eliminated the use of wood to support Slickline PCE during rig up / down, we now supply Rhino

racking with our load outs.

Contact Details: Jorgen Berg: Operations Manager Tel: 01224 406000



### 384: Fire inside Falcon Steamer

Summary: A fire occurred inside a Falcon Steamer Model No: E5478

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: Catering / hotel services

Description: The Night Cook Baker was returning to the galley after his break when he could smell burning, he then noticed that there was smoke coming from the top of the steamer, he then informed the Facilities Manager (FM) of this and the FM accompanied the Baker to the galley to investigate. The FM cautiously opened the steamer door and could see that the elements in the base of the steamer were glowing red they then caught fire. The FM immediately closed the door to contain the fire within the stainless steel unit and then switched off the power from the main control panel The fire was extinguished by starving it of oxygen. The OIM was informed immediately, the machine was made safe and an investigation would be carried out.

Specific Equipment: Falcon Steamer Model No: E5478

Lessons Learnt: The Investigation: Investigation showed that there was a blockage in the pipe that feeds the water into tank and into unit. There is no system warning lack of water to unit also no fail safe i.e. thermostat cut off for elements.

Task Description: *No details available.*

Recommendations: Daily visual checks to be made on unit to assure water is flowing freely to unit. Contact manufactures to enquire if a

fail safe device could be installed within this unit.

Contact Details: John Fraser&

### 385: Incident involving a Sealion 60D crane boom

Summary:	A serious incident occurred when the crane boom of a Sealion 60D crane fell from an angle of 45 degrees onto its boom rest.
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:	Crane boom fell from an angle of 45 degrees onto its boom rest. There was no one in the crane at the time of the incident but one person on the main deck was slightly hurt by debris as the crane boom fell. The crane suffered significant damage to the boom, luffing winch, brake and hydraulic motor and the potential for serious injury is obvious. No root cause has so far been identified and an investigation is still ongoing. Initial investigations suggest that although the crane was left in a properly parked mode both winch drum brakes and the safety pawl all stayed off or partially off when the crane was de-energised, when in actual fact they should all have engaged. Three co-incidental failures seem an extremely unusual mode of failure and investigations are currently centred on whether the hydraulic system could have somehow locked pressure in to keep all the brakes off.
Specific Equipment:	Sealion 60D crane
Lessons Learnt:	Investigation is still ongoing.
Task Description:	<i>No details available.</i>

Recommendations: None specified

Contact Details: George Fiddes at DNO Britain Limited&



## 386: Internal Explosion Within 12V Forklift Battery

Summary:

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: The forklift battery was found to be flat and it was changed out with a replacement that was held onboard and tested as per procedures, the forklift was also function tested and all were working okay. The following morning the pre-start up checks on the forklift were carried out, and no problems were identified. The forklift operator then attempted to start the engine, as he did this he heard a loud noise behind him, he immediately switched off the engine, and turned to see vapour and electrolyte spilling from the battery compartment. The spill was contained, and the electrician was called to make the area safe by disconnecting the battery. The battery was found to have a ruptured cell and was returned to the supplier to determine the cause of failure. The battery was a 12 volt sealed lead acid type.

Specific Equipment: *No details available.*

Lessons Learnt: On inspection it was found that the cell plates within the battery had sulphated and dried, the mud space was also found to be full, which is a natural process with age, and this combination had led to an internal explosion. The failure occurred inside the battery enclosure, which protected personnel from flying battery case particles and

electrolyte, the electrolyte that spilled, had drained from two holes in the base of the battery compartment.

Task Description: *No details available.*

Recommendations: 1. Change out all batteries of sealed lead acid type annually. 2. Future PTW & TRIC cards should take this incident into consideration, if jump starting or fault diagnosis is carried out with the battery exposed.

Contact Details: Mike Ewen HSE Co-ordinator, KCA DEUTAG. 01224-299600

### 387: Compatibility of PPE with escape chutes

Summary:	This notice reminds duty holders of the need for PPE to be compatible with equipment provided for Evacuation, Escape and Rescue, specifically escape chutes.
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:	Training incl. emergency response
Description:	<p>A recent fatality during an evacuation trial using an escape chute highlights the need to ensure that the use of PPE with evacuation devices does not introduce an increased potential for injury.</p> <p>The Marine Accident Investigation Branch (MAIB) is carrying out an investigation into the fatal accident of a volunteer evacuee during a deployment drill of a vertical-chute type marine evacuation system.</p> <p>The initiator for this accident appears to have been the riding up of the volunteer's lifejacket over the face and head. It appears that in struggling, the volunteer's feet got caught, which allowed the torso to continue downward. The casualty ended up in a piked position, thus blocking the chute.</p> <p>This case illustrates that blockages in vertical-chutes can occur. This alert reproduces the two main MAIB interim recommendations on the conduct of drills, the adverse effect of blockages in an actual emergency, and the need to remove the risk of blockages in the chutes. The recommendation to manufacturers has not been included</p>

since it is believed that manufacturers have already been alerted.

Specific Equipment: *No details available.*

Lessons Learnt: *No details available.*

Task Description: *No details available.*

Recommendations: Duty holders who have, or are intending to have, vertical-chute marine evacuation systems installed on their installations are recommended to:

1. Revalidate their safety case and/or risk assessments on the adverse effects of possible blockages in chutes at the time of the evacuation in an actual emergency.
2. Ensure that all personnel using a vertical-chute marine evacuation system wear lifejackets which will not ride up during the descent of a chute. Please consider this interim guidance only until the MAIB has issued a final report.

Contact Details: Further information on the interim findings is posted on the MAIB website;

## 388: Mooring Chain Failure - Update to Incident No. 14/03 - 14<sup>th</sup> April 2003

**Summary:** FPSO maintenance operation to stow mooring chain using a Hydralift Linear Tensioner Assembly. FPSO fitted with eight mooring chains and the routine was to stow two links of chain on all eight units. The first attempt to perform the operation on number 5 chain resulted in the loss of the chain in an uncontrolled manner to the sea bed and damage to the linear assembly unit.

**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 planned routine maintenance operation was in progress. The routine was to individually move each of the eight anchor chains to a pre-arranged plan to ensure that the chain links are not subject to wear and fatigue at the same points over the life of the mooring chain. This operation has been successfully repeated annually since 1999. The Linear Tensioner Assembly equipment was pressured up to allow for the stowing of two links of chain for tensioner number 5. The chain was lifted by energising the rams to raise the chain gripper and the chain stopper was opened. When the rams reached their full extent the operator tried to close the chain stopper to engage the chain in its new position. The chain stopper would not fully engage. The rams were lowered back to the start position and a second attempt was made. Once again the chain stopper could not be engaged due to incorrect chain position (i.e. tried to close on the side of

the link, rather than on the shoulder of the link). After the second attempt failed the operator made the decision to lower the rams to stow the chain in to its original position and report the problem. As the rams were being lowered the operator heard a load noise and realised there was a major problem and abandoned the immediate work site. The failure of the equipment assembly resulted in the gypsy wheel being torn from the deckhead, the upper assembly sheared off of the rams, the chain grippers sheared their retaining bolts allowing the chain to free fall and pay out of the locker. The bitter end shackle pin broke in the chain locker and the chain paid out to the seabed.

Specific  
Equipment: *No details available.*

Lessons Learnt: After conducting a lengthy investigation process that has involved the manufacturer of the equipment and our own ICP the following lessons have been learned; 1) The size variation of the individual chain links has had a major impact on the redesign of the chain tensioning equipment, which was not fully understood or taken into account in the original design. This has had a significant impact on both the Chain gypsy wheel design and the chain gripping arrangement. 2) Changes made during the design stages were not fully evaluated for their effect on the installed equipment. This has resulted in the need to redesign and change out the Gypsy Wheel and extend the full hydraulic ram lifting movement was insufficient to allow for the tolerances on the mooring chain and correct engagement of the stoppers at certain points in the chain. 3) The angle of engagement between the mooring chain and the upper grippers during the chain moving operation was critical. If an increased angle was seen there is a potential for the chain weight to force open the upper grippers.

Task Description: *No details available.*

Recommendations: 1) Redesign of the Gypsy Wheel and gypsy wheel support structure. This ensures that bearing and chain snagging are eliminated. Development of PMR to ensure maintenance is performed. 2) Modification of tensioner assembly to lock chain grippers and stoppers in place hydraulically to ensure correct alignment and prevent movement and chain release due to chain loading. 3) Modification to increase ram travel distance to ensure correct stopper engagement can be achieved when chain is lifted. (Taking into account chain link tolerances and variations) 4) Fitting of a remote control device to allow the operator to be well clear of the equipment when chain movement operations take place.

Contact Details: Rick Faulkner, ChevronTexaco Upstream Europe,  
Seaford House, Hill of Rubislaw, Aberdeen. AB15 6XL.  
Tel: +44 1224 334133, E mail: [rifj@chevrontexaco.com](mailto:rifj@chevrontexaco.com)

Figures: *No figures available.*

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### 389: Mooring Chain Incident - 3rd Update

Summary:	FPSO maintenance operation to stow mooring chain using a Hydralift Linear Tensioner Assembly. FPSO fitted with eight mooring chains and there is a yearly routine was to stow two links of chain on all eight units. The first attempt to perform the operation this year on number 5 chain resulted in the loss of the chain in an uncontrolled manner. The chain fell to the sea bed and damage to the linear assembly unit.
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:	A planned routine maintenance operation was in progress. The routine involves individually moving each of the eight anchor chains to a pre-arranged plan to ensure that the chain links are not subject to wear and fatigue at the same points over the life of the mooring chain. This operation has been repeated on an annual basis since 1999 without incident. The Linear Tensioner Assembly equipment was pressured up to allow for the stowing of two links of chain for tensioner number 5. The chain was lifted by energising the rams to raise the chain gripper and the chain stopper was opened. When the rams reached their full extent the operator tried to close the chain stopper to engage the chain in its new position. The chain stopper would not fully engage. The rams were lowered back to the start position and a second attempt was made. Once again the chain stopper could not be engaged due to incorrect chain position (i.e. tried to close



on the side of the link, rather than on the shoulder of the link). After the second attempt failed the operator made the decision to lower the rams to stow the chain in to its original position and report the problem. As the rams were being lowered the operator heard a loud noise, realised there was a major problem and evacuated the immediate work site. A failure occurred with the chain tensioning equipment, which resulted in the gypsy wheel being torn from the deckhead, the upper tensioner assembly being sheared off the rams and the chain grippers shearing their retaining bolts. These failures allowed the chain to free fall and pay out of the locker. The bitter end shackle pin broke in the chain locker and the chain paid out to the seabed.

Specific  
Equipment: *No details available.*

Lessons Learnt: After conducting a lengthy investigation process involving the manufacturer of the equipment and our own ICP the following lessons have been learned; The investigation process revealed the size variation of the individual mooring chain links had a greater impact on the tensioning equipment than was realised during the design phase. This has had an accumulative effect on the equipment functionality of both the gypsy wheel and the chain gripping arrangement. 1) The mooring chain did not always fully engage in the gypsy wheel due to the pocket design of the wheel. This has led to the deformation of the sealed for life bearing. 2) The gypsy wheel bearing material was not suitable for sealed for life design. 3) There was insufficient travel in the hydraulic ram lifting movement to account for the tolerances on the mooring chain. This resulted in problems engaging the tensioner assembly stoppers at certain points in the chain during movement operations. 4) The angle of seating engagement between the mooring chain and the upper grippers is critical. If an increased angle, due to chain tolerances, is seen during the moving operation there is a

potential for the chain to force open the upper grippers.

Task Description: *No details available.*

Recommendations: 1) Redesign of the gypsy wheel and supporting structure.

This is to ensure that; • the gypsy wheel bearing is of a suitable material, • chain snagging is eliminated, • extra loading on the supporting structure does not lead to failure. 2) Development of PMR to ensure bearing maintenance is performed. 3) Modification of tensioner assembly to lock chain grippers and stoppers in place hydraulically to ensure correct alignment of grippers and stoppers. This will prevent potential movement of the grippers and stoppers if increase chain engagement angles are present. 4) Modification to hydraulic lifting rams to increase the travel distance to ensure correct stopper engagement can be achieved when the chain is lifted. (Taking into account chain link tolerances and variations) 5) Fitting of a remote control device to allow the operator to be well clear of the equipment when chain movement operations take place.

Contact Details: Rick Faulkner, ChevronTexaco Upstream Europe,  
Seaford House, Hill of Rubislaw, Aberdeen. AB15 6XL.  
Tel: +44 1224 334133, E mail: rifj@chevrontexaco.com

### 390: Dropped 20 inch Packer

Summary: While attempting to make up of the cement stinger to the bottom of the 20½" Inflatable Packer Assembly the 1½" type slot tool, that was installed at the top of the assembly prematurely disconnected. This caused the lower part of the packer assembly, which was twenty-five foot in length and weighed 1.2 tonnes to free fall onto the drill floor.

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 dropped object incident occurred on a mobile drilling units. The incident occurred while the drill floor personnel were attempting to make up the eleven foot x 2 7/8"OD tubing cement stinger to the bottom of the Baker 20½" Inflatable Packer Assembly. The packer assembly was suspended from an air winch line and the bottom of the assembly was approximately eleven feet from the drill floor deck. While attempting to make up of the cement stinger to the bottom of the 20½" Inflatable Packer Assembly the 1½" type slot tool, that was installed at the top of the assembly prematurely disconnected. This caused the lower part of the packer assembly, which was twenty-five foot in length and weighed 1.2 tonnes to free fall onto the drill floor. Four personnel were injured as a result of the incident, one of which was classed as Loss Time Accident. Injuries to the accident victims however were not caused from being struck by the falling packer but were sustained during their attempts to escape from the immediate incident area and striking against

equipment and tools on the drill floor.

Specific  
Equipment: *No details available.*

Lessons Learnt: Preliminary tests have shown that this type of J-Slot connector can become partially unlatched. This was not known at the time of the incident. Similarly, this tool can become unlatched during a lifting operation as it relies on gravity to hold the J-Slot in the fully engaged position. This makes it difficult to lift the tool from the horizontal to the vertical with confidence.

Task Description: *No details available.*

Recommendations: Based on the information gained from the incident and the investigation that followed the following should be noted when using such tools: „h Good house keeping practices must be maintained on the drill floor with all surplus equipment removed to a safe location. „h Risk Assessments must be carried out for all operations „h J-slot tools must not be used as stand alone lifting equipment. The BHA should be assembled and placed in the rotary table before the two halves of the J-Slot connectors are assembled. „h Where the J-Slot connector is required to be installed in the work string assembly as a single tested component, a dog collar/safety clamp must be installed on the seal nipple, butting up against the washover shoe to lock the connector in the fully extended position. Before fitting the dog collar/safety clamp, ensure that the J-Slot tool is fully engaged in the extended position. This will keep the connector locked in a safe position until it can be made up into the work string at which time the dog collar/safety clamp may be removed.

Contact Details: [nigel.taylor@maerskcon.co.uk](mailto:nigel.taylor@maerskcon.co.uk)  
[richie.adams@maerskcon.co.uk](mailto:richie.adams@maerskcon.co.uk)

## 391: The Hazards of Pressure Testing

Summary: During hydrotesting and pressure testing operations incidents sometimes happen. This Safety Feedback Notice provides some typical examples which can be used as an aid in highlighting the hazards and dangers involved are what are often seen as routine operations.

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

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

Activity Location: \*Any Location Type

Activity Type: Inspection/testing

Description: See the attachments which gives details of five incidents that have occurred during hydrotesting and pressure testing operations.

Specific Equipment: *No details available.*

Lessons Learnt: *No details available.*

Task Description: *No details available.*

Recommendations: See attachments.

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

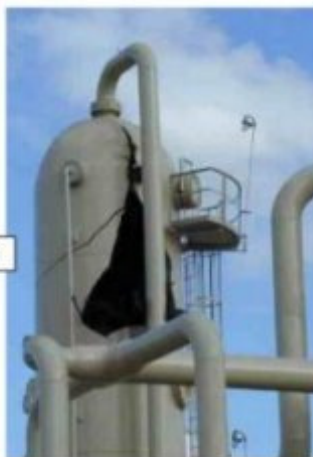
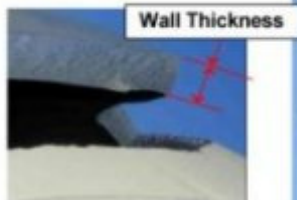
**THE HAZARDS OF PRESSURE TESTING****Why this subject ?**

During hydrotesting and pressure testing operations incidents sometimes happen. This Safety Feedback Notice provides some typical examples which can be used as an aid in highlighting the hazards and dangers involved are what are often seen as routine operations.

**Details of the 5 incidents****1. Hydro-test of a new vertical vessel**

The root cause of the incident is not fully known but there was some thought that hydro-testing with "very cold" water was a contributing factor.

Fortunately no injuries occurred.

**2. Filling of a vertical tank**

The filling of the tank was made with water from a fire hydrant.

The top of tank blew off because the relief valve could not displace the air fast enough for the volume of water that was being pumped in.

Fortunately no injury happened, but an operator was on top of the tank a few seconds before.



### 3. Emptying of a vertical tank

The collapse of this tank happened while it was being emptied. A plastic sheet protecting the roof was trapped in the vent; hence a vacuum was caused.



The plastic sheet  
on top of the tank



There was no injury. It should be noted that this type of incident is not that unusual.

### 4. Sphere collapse

The accident happened during the filling of a 2000 m<sup>3</sup> LPG sphere. Its legs collapsed. One person was killed and one seriously injured.

At the time of the accident, the sphere was approximately 80% full of fresh water.

The vessels last hydro-test was 10 years ago and the last inspection of its legs was 5 years ago.

Severe corrosion of the legs under the concrete fire protection was the main cause. The corrosion occurred due to water ingress between the concrete and the steel legs.

The water protective cap located over the concrete was not sufficient to keep the water out. After the accident, it was verified that the steel legs had thickness reductions of up to 8mm, with pitting holes of up to 10cm<sup>2</sup>.

After analysis and tests, it has been found that the following factors caused the collapse:

- Water caps over the fire-proofing concrete were of poor design thereby letting water penetrate between the steel beams and the concrete.



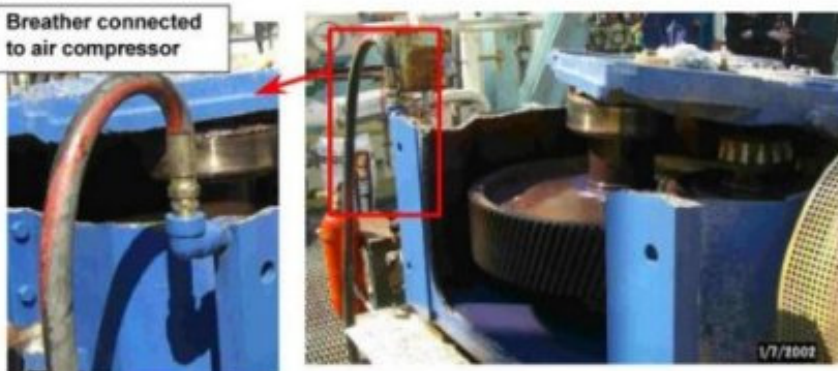
- ♦ Vertical cracks in the concrete let water in.
- ♦ Repairs had been done to the concrete, but with poor workmanship.
- ♦ The new concrete had not adhered to the old concrete, again letting water in.
- ♦ The deluge system had been tested with salt water, increasing the possibility of corrosion.

#### 5. Emptying of a gear box

To speed up the removal of 250l of oil from a gear-box, the gauge hole was plugged and the breather was connected to the 6 bar air network.

The gear box exploded, and threw missiles around seriously damaging surrounding piping and structure. Fortunately there was no injury.

Breather connected  
to air compressor



#### SPECIFIC RECOMMENDATIONS

For each case the specific recommendation are generally obvious :

**1<sup>st</sup> incident** : Water temperature is critical when hydro testing. TFE specification (GS PVV 211) states that both metal and water temperature during pressure testing shall be maintained at least at 16°C or at least 10°C above the impact test temperature of the metal.

**2<sup>nd</sup> and 3<sup>rd</sup> incidents** : venting systems shall be inspected and checked before filling and emptying operations.

**4<sup>th</sup> incident** : Is a maintenance problem ? Before testing an old vessel, a complete inspection must be performed visually and with NDT. This inspection shall include the vessel, nozzles, appurtenances, and supporting structures.

**5<sup>th</sup> incident** : obviously a gear-box is not a pressure vessel, but productivity may lead to a risky attitude.



**RECOMMENDED ACTIONS FOR PRESSURE TESTING**

Tests may be a routine operation pressure for you, however, do not forget that in fact pressurisation is energy storage. Its instantaneous release works as a bomb and may cause severe damage to persons and equipment.



As for most of the operations, good preparation is essential to avoid incidents. It is recommended to use the following check list :

- ⇒ A detailed check list procedure must be prepared as per the standards and specifications. It must cover the testing operation from filling up to emptying the vessel.
- ⇒ Good co-ordination is essential to avoid performing the hydro-test at the same time as other operations. A work permit procedure / Job Hazard Analysis should be used.
- ⇒ The equipment should be in good condition and adequately maintained and certified.
- ⇒ Testing equipment must be as far as practicable from the recording and pumping station.
- ⇒ Testing equipment (even if brand new) must be checked.
- ⇒ The test area must be roped off.
- ⇒ During the test, from filling up until the end of depressurisation, all non-essential people must be out of the test area.
- ⇒ The test crew must attend a toolbox talk.
- ⇒ All people must wear their appropriate PPE.
- ⇒ Inspection for leaks shall be performed at least 15mn after the test pressure has been reached and only by designated personnel.
- ⇒ Never tamper with, or tighten any fittings (i.e. connections, bolts, hoses and the like) while under pressure or during pressure-up stages.



Also do not forget that as pipeline pigging is similar to pressure testing. As a minimum the same checklist should be used.

## 392: Air Line Coupling Incident during cleaning operations in a Produced Water De-gasser

Summary:	Air Line Coupling Incident during cleaning operations in a Produced Water De-gasser
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:	<p>Internal cleaning operations in a produced water de-gasser were being undertaken by two Contract Cleaners. The vessel has been open for over a week and forced extraction was in place to ensure that fresh air was being drawn in. In line with normal operating procedures the two cleaners were working under air from a breathing apparatus air line unit fed from a breathing apparatus compressor. During the operation a coupling on the air line parted, terminating the primary source of air supply. The problem was immediately recognised by the vessel entry control personnel and both cleaners immediately opened the air supply from their personal secondary supply and withdrew from the vessel to a place of safety.</p>
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	<p>Not all quick disconnect fittings are interchangeable. Physical connection of different types of quick disconnect fittings does not necessarily indicate that they are interchangeable. Always refer to the manufacturer for details on the compatibility of different types of quick disconnect fittings. Where possible standardise on a</p>

specific single or multiple interchangeable fittings for specific applications (e.g. Parker CJ304 Coupling with CJ604 Nipple for breathing air line). To minimise the potential for operator error use only hose end fittings that cannot be unscrewed and replaced with another end fitting.

Task Description: *No details available.*

Recommendations: Apply lessons learn

Contact Details: Steven Harris, Quality Manager, Hydrasun Limited Tel: +44 (0)1224 618618, [info@hydrasun.com](mailto:info@hydrasun.com)

### 393: Failure of hose coupling under pressure

Summary:	During retro-jetting operations, a coupling connecting the flexi-lance to the jetting hose failed when pressurised. The coupling struck the operators thumb and he sustained an impact injury as a result. The operation was stopped immediately.
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 the retro-jetting of a 1" line an incident occurred when the operator was retrieving the flexi-lance from the pipe. It had only been retracted a few inches when the coupling joining the flexi-lance to the jetting hose failed, causing one end of the coupling to strike the operators thumb (injury classified as a First Aid Case). The hose assembly in question was rated for use at 14000psi (tested to 22000psi) and at the time of the incident the pressure on the gauge of the jetting unit was 8000psi.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	All personnel involved were trained and competent and were wearing the correct PPE. All equipment in use was appropriately certified. Investigation was inconclusive in determining the cause of failure, however the cause is thought to be due to a lateral load/bending stress whilst the connector was being inserted into or removed from the pipe.

Task Description: *No details available.*

Recommendations: Hose assembly to be returned to the equipment manufacturer for further analysis. Company procedures revised to specify mechanisms for preventing the coupling entering the pipe and a minimum bend radius. Introduce the use of hose restraints to prevent hoses whipping in the event of a similar failure. Pre mobilisation briefings to highlight findings from this incident.

Contact Details: For further information, please contact Steven Law, SHE Advisor, Rigblast Group Limited - [steven.law@rigblast.com](mailto:steven.law@rigblast.com)

### 394: Lifting hoist chain fell out of a 10 tonne chain hoist bucket

**Summary:** During an offshore lifting operation utilising a 10 tonne long fall air driven hoist, the lifting chain spilled from the attached chain collection bucket to the landing area below causing minor equipment damage. No one was injured as a result of the incident.

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

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

**Activity Location:** Floating production/storage unit

**Activity Type:** Lifting, crane, rigging, deck operations

**Description:** A 3.5 tonne swivel utility module was being replaced at approximately 11.15 at night. The load was secured to the hook of the hoist on a 4 leg bridle and was being moved upward from its position to the top of the turret swivel (25ft approx) The load had reached the required height for traversing into position and during the traversing operation the chain spilled from the bucket to the landing area below.

**Specific Equipment:** *No details available.*

**Lessons Learnt:** Initial Investigation Findings : The Chain was not properly retained in the bucket. There was a failure to observe the stowage of the chain (Links possibly hanging out the bucket). The bracket supporting the bucket was bent. Possibly during a previous lifting operation. No dedicated signalman was observing the bucket and directing the operator. Risk Assessment had not identified possible risk of particular failure.

Task Description: *No details available.*

Recommendations: A failure investigation and subsequent design review is underway and the recommendations and will be made available in due course. This notice serves as an immediate notification for operators of this type of equipment to ensure appropriate operating procedures and lifting plans are in place to prevent a similar occurrence

Contact Details: George McGavin OCE, HSE Manager 01224 797300  
g.mcgavin@offshore-crane.co.uk

### **Hoist and Bucket On Location**



### 395: Vehicle Incident

Summary: An unladen vehicle travelling at approximately 40mph spun through 180 degrees after the brakes were applied.

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: While travelling along a straight section of road in an unladen vehicle at approximately 40mph, the driver braked to avoid wildlife in the road. Upon applying the brakes the vehicle spun through 180 degrees, slightly hitting the kerb before coming to a halt. The vehicle was undamaged and the journey completed. Upon reporting the incident, the vehicle was removed from site pending investigation.

Specific Equipment: *No details available.*

Lessons Learnt:

1. The rear brakes had not operated properly due to a problem with the load sensing valve mechanism.
2. The load sensing valve did not make up part of the service checks carried out.
3. An earlier scheduled service had not taken place.

Task Description: *No details available.*

Recommendations:

1. Vehicle Contractor to carry out six-monthly interim health check on all vehicles to include the load-sensing valve where the mechanism should be appropriately lubricated.
2. All site vehicle brake systems to be checked.



3. Record of service dates to be kept to ensure scheduled service dates are adhered to.
4. Contract Sponsor to set up database to record vehicle incidents to identify and monitor trends.

Contact Details: *No details available.*

## 396: Double Fatality in Utility Leg of Offshore Platform

Summary: Two fatalities as a result of the anaesthetic effects of hydrocarbon gas causing asphyxiation while attempting to stop a liquid leak from a pipeline.

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: At 15:35 p.m. on the 11th September 2003 two platform technicians entered the concrete Utility Leg on the installation. One of the technicians had been asked to visually inspect the condition of a leaking temporary pipe patch on a 4 inch drain line located on the 81 m level approx 70 meter below deck level inside the leg. Shortly after the personnel entered the leg gas detectors started to pick up the presence of gas in the leg at the location of the two technicians. The men reported to the platform control room that there was a significant leak of liquid from the pipe patch and they were trying to stop it. A General Platform Alarm (GPA) was initiated automatically by the fire & gas system followed by a Surface Process Blowdown (SPB). The bodies of the technicians were found at 19:15 p.m. by a recovery team who entered the leg once the atmosphere had been confirmed as gas free. Immediate Causes A hose clip (Jubilee) on the drain line patch had been slackened on an un-isolated line, apparently by one of the technicians, causing a significant leak from the pipe eventually resulting in gas condensate flashing to a heavier than air gas mixture in the leg. The rate of the release and quantity of gas was sufficient to

rapidly overcome the two technicians who did not put on their emergency rebreathing apparatus.

Specific  
Equipment: Confined space

Lessons Learnt: The integrity management programme for corrosion control and temporary pipe patch management needs improvement. The overall process for assessing the risk of interconnected systems with potentially compounding factors needs improvement. The risk associated with the anaesthetic effects of hydrocarbon gas need to be better understood by the workforce. The procedures governing leg entry and gas hazard response (i.e. immediate evacuation and/or donning of rebreathers) were not adequately followed.

Task Description: *No details available.*

Recommendations: To be followed in all instances of leak investigation, breaching of hydrocarbon envelope, and leak intervention Always use 2 portable gas monitors when investigating a known leak or breaching a hydrocarbon envelope. One monitor to search for leaks and One monitor to monitor breathable atmosphere. i.e probably requires 2 people If a hydrocarbon leak is observed on the installation do not intervene unless a gas monitor is available to test the atmosphere i.e. if necessary evacuate the site and return with a gas monitor(s). In all the above situations, if levels of hydrocarbon in the atmosphere reach 10% LEL, evacuate to safe area to assess risks Carry out risk assessment and if appropriate return to the leak area with suitable PPE (e.g. BA set) to conclude investigation and/or seal leak.

Contact Details: None available

<http://info.ogp.org.uk/safety/>

### 397: Single Joint Elevator Failure

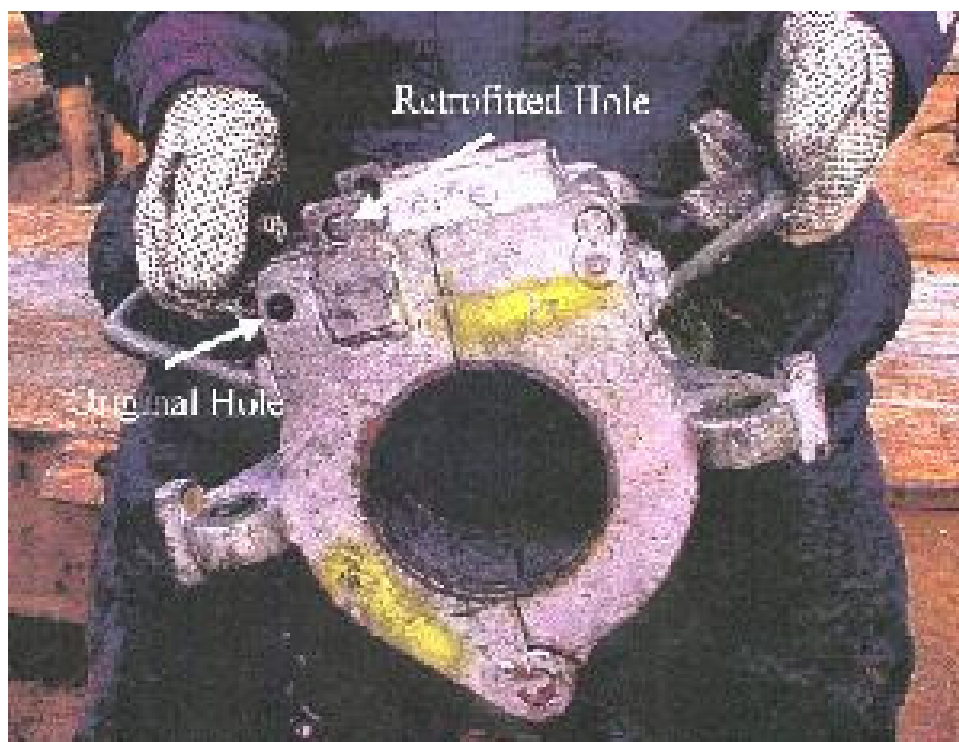
Summary:	A single joint elevator opened while picking up 4 1/2" casing. This resulted in the pipe being released and the pipe falling down the vee door, sliding across the cat-walk and coming to rest against the handrails at the end of the cat-walk.
Incident consequences (potential or actual):	<i>No details available.</i>
Cause of accident or incident:	<i>No details available.</i>
Activity Location:	Drilling unit
Activity Type:	Well services / intervention
Description:	Two incidents occurred in 2000/1 whereby two single joint elevators opened while picking up pipe. This resulted in a Safety Alert being issued, a redesign of the tool and a retro-fit program initiated at all company locations worldwide. The retro-fit was to reposition the elevators safety pin retaining holes. The retro-fit was incorrectly performed and was not identified during subsequent maintenance/inspection. This resulted in two sets of safety pin retaining holes being available for use. The drilling contractor's employee was not aware of the hazard and used the wrong set of safety pin retaining holes, which resulted in the elevator opening and the casing falling. No persons were injured.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	1) Always re-inspect retro-fits performed by third party companies. 2) Share lessons learned externally as well as internally.

Task Description: *No details available.*

Recommendations: 1) Issue a new Safety Alert to all company managers, supervisors and technicians. 2) Re-check all retro-fits performed on this design of casing elevator. 3) Share SA with other interested companies.

Contact Details: [colin.thatcher@franks.co.uk](mailto:colin.thatcher@franks.co.uk)

### **Defective elevator**



### 398: Casing Fill-Up Tool - Dropped Object Incidents.

Summary: 2 x high potential dropped object incidents have recently occurred involving fill-up and circulation tools. Details of the first incident are attached. See separate SADIE report for details of the second incident.

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

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

Activity Location: \*Any Location Type

Activity Type: Drilling, workover

Description: INCIDENT - Casing was run for approximately 2-1/2 hours. At 2:15 PM the casing string was lowered to the rig floor. After unlatching the elevator, a single joint of casing was being lifted into the derrick. While the joint was still in the V-door, the Fill-Up Tool disconnected from the top drive and fell to the rig floor as one piece. It was estimated that the complete tool weighed 200 kilograms (440 LBS) and fell from a height of 5 meters (16 FT) above the rig floor. No injuries resulted.

Specific Equipment: *No details available.*

Lessons Learnt: INCIDENT CAUSE: Rig crew used a chain tong for the initial make-up of the HT55 connection between the Fill-Up Tool's top sub and the top drive's saver sub. A torque wrench was used for the final make-up (35,000 FT-LBS). The drilling contractor's report of investigation stated that there was a gap between the two shoulders after the initial make-up was complete. The report estimated that this gap could have been as much as 1 inch (25mm). During the final make-up, it is believed that the piston on

the torque wrench extended completely prior to achieving 35,000 FT-LBS. However, since the cylinder was fully extended, the hydraulic pressure increased without applying additional torque to the connection.

Consequently, the torque gauge gave a false reading that the intended 35,000 FT-LBS torque had been achieved.

Task Description: *No details available.*

Recommendations: INCIDENT LESSONS LEARNED 1. After initial make-up of the top drive and the Fill-Up Tool, a visual check needs to be conducted to confirm that the gap between the pin and box connections does not exceed 1/8 inch (3mm). 2. If a cycled or ratcheting device is used during final make-up of the top drive and the Fill-Up Tool, the torque wrench cylinder may stroke out completely, resulting in a false torque indication. The most reliable means of ensuring proper make up torque is to initiate an additional stroke after the target torque is achieved. When this type of equipment is used, it is important to reset the device and reapply the torque to confirm that the indicated torque has been achieved.

Contact Details: [colin.thatcher@franks.co.uk](mailto:colin.thatcher@franks.co.uk)

Figures: *No figures available.*

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### 399: Fill-Up & Circulation Tool - Dropped Object Incident

Summary: 2 x high potential dropped incidents have recently occurred involving fill-up and circulation tools. The details of the second incident follow.

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

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

Activity Location: \*Any Location Type

Activity Type: Drilling, workover

Description: After 168 joints of casing were run, the Fill-Up Tool, while it was being lowered, impacted the top of the lift nubbin and was deflected entirely outside of the casing. The impact and bending due to the collision caused the lower portion of the tool to separate and fall to the rig floor. The tool parted at the threaded connection between the mandrel and the top collar. It was estimated that the section of the tool that fell was one meter (3 FT) long and weighed 43 kilograms (95 LBS) and fell from a height of 12 to 13 meters (40 to 43 FT) above the rig floor. No injuries resulted.

Specific Equipment: *No details available.*

Lessons Learnt: CAUSE: The Fill-Up Tool was being lowered while the joint was being made-up. The rotation caused the top of the casing joint to “wobble,” which made it difficult to stab the Fill-Up Tool into the casing. Instead of entering the ID, the mule shoe impacted the top of the lift nubbin. Further lowering imparted a side load on the lower portion of the Fill-Up Tool causing it to deflect away from well center. The threads at the top collar / mandrel interface sheared



out when the bending became too great. The lower portion of the Fill-Up Tool fell along the side of the casing and landed on the rig floor.

Task Description: *No details available.*

Recommendations: LESSONS LEARNED: When running the Fill-Up Tool without a flexible hose, i.e. in the "rigid configuration or in the configuration commonly called "Configuration 3," 1. Insertion of the Fill-Up Tool into the casing ID is not to be attempted until the uppermost joint of casing is completely made-up to the string and the casing tongs have been removed from the connection. 2. Additional caution and slower lowering speeds must be employed when attempting to insert the Fill-Up Tool into the casing ID. 3. Pre-job meetings with driller should be held to discuss this procedure and caution the driller not to lower the blocks until he has positively confirmed that the Fill-Up Tool has successfully entered the casing.

Contact Details: [colin.thatcher@franks.co.uk](mailto:colin.thatcher@franks.co.uk)

## 400: Abnormal / Heavy Load Movement Procedure

Summary: "A Frame" came into collision with a bridge

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 when an A-frame came into collision with the overhead bridge. The A-frame was being transported on a step-frame from Peterhead to Tullos, Aberdeen.

Specific Equipment: *No details available.*

Lessons Learnt: The incident was the direct result of the vehicle transporting the A-frame without the correct dimensions of the load and therefore was unable to proceed through the bridge at the height the load was travelling at.

Task Description: *No details available.*

Recommendations: In order that reoccurrence of this type of incident is prevented, with immediate effect all movements of abnormal loads shall be transported in line with the revised procedure. Amendments have been made to this Work Instruction All to capture the lessons learned from the incident referred to above: requests for the movement of abnormal loads shall be advised to the Traffic Office in writing rather than from a verbal communication, such as a phone call. All three dimensions of length, width and height as well along with the weight of the abnormal load shall be required to

ensure that the relevant fax can be initiated and sent to the appropriate authorities. Once the equipment has been loaded onto the trailer, the load shall be re-measured by personnel to ensure it complies with the documentation already received. On completion of these checks to the satisfaction of the driver and other relevant personnel, final authorisation for the transportation to commence shall be required from the Traffic Controllers.

Contact Details: ZAK FLEMING&

## 401: Mearns Quay Congestion

Summary: One way system in operation due to congestion.

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: Congestion at Mearns Quay. With immediate effect and until further notice a one way system will be in operation at Mearns Quay. Approach will be via the roundabout at the junction of Market Street and North Esplanade East. Turning left on to Midchingle Road, turn right on to Albert Quay, and right on to Ferry Place to gaining access to Mearns Quay. Please refer to maps included in Transport Information Books.

Specific Equipment: *No details available.*

Lessons Learnt: *No details available.*

Task Description: *No details available.*

Recommendations: No one with the exception of opened extenders will gain access to Mearns Quay via North Esplanade East, where they will be strictly controlled. Under No Circumstances are you to reverse your vehicle any distance at Mearns Quay without someone to guide you. The reason for the introduction of these control measures is due to the amount of work currently being carried out within the Mearns Quay harbour area and the congestion this is currently causing. These control measures are to ensure the safety of the Mearns Quay staff and any other

personnel working in the area, which includes YOU.  
SPEED is also an issue and all drivers must ensure that they drive at a speed appropriate to the confined space and the amount of personnel and equipment working in this area. Remember maximum speed limit on Bases is 10mph.

Contact Details:    ZAK FLEMING TRANSPORT MANAGER

## 402: Vehicle Loading and Unloading

Summary: Near Miss Incident

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: Following a recent Near Miss Incident, the bullet-point procedure below is to be applied during vehicle loading and unloading unless a Risk Assessment has been completed that dictates otherwise.

Specific Equipment: *No details available.*

Lessons Learnt: *No details available.*

Task Description: *No details available.*

Recommendations: Minimum 7 Tonne forklift to be used for trailer loading / unloading (Mini• Lorry drivers shall always remain in vehicle cab during•Containers etc.). All other personnel to remain well clear•loading / unloading operations. Units to be loaded with lifting bridles to•during vehicle loading / unloading. Lifting•left or right of trailer, not caught or jammed in between units. bridles to be secured whilst vehicle is in motion (Ratchet Strap).

Contact Details: Mike Rogers&

## 403: Failure of high pressure quick open closure July 2003

Summary: An end cap failed on a pig receiver

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: An end cap failed on a pig receiver during weekly pigging operations. The 6" class 900 Huber-Yale quick open closure comprises a cap that fastens to a hub welded to the pig receiver body. The closure uses a wide pitch ACME thread with an O-ring seal on the top surface. During pressurising up the receiver in preparation for pigging, at approximately 30 barg pressure the threaded joint failed. The end cap detached from the pig receiver, broke the attached davit arm and was projected upwards.

Specific Equipment: *No details available.*

Lessons Learnt: An immediate recommendation is that all similar threaded type end closures are examined. The thread condition should be checked for wear and corrosion and thread profiles measured against manufacturer's or specific thread standard dimensions and tolerances.

Task Description: *No details available.*

Recommendations: Users of this closure type should review of maintenance requirements and frequency of lubricant replacement against manufacturer's recommendation.

Contact Details: N/a



## 404: General Waste Skips

Summary:

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: Would all personnel please ensure that only General Waste is placed in the waste skips. We are currently reviewing establishing a waste recycling area with specific Skips for Wood, Metal Etc NOTE: - Further to a recent incident that occurred prior to operatorship of the Bases, it is imperative that Fridge Units, either domestic or commercial, are not disposed of in general waste units.

Specific Equipment: *No details available.*

Lessons Learnt: *No details available.*

Task Description: *No details available.*

Recommendations: We have a legislative obligation to ensure that these units are disposed of in a correct manner and that there is no damage to the environment as a direct or indirect result of our operation.

Contact Details: Mike Rogers HSEQ Advisor

## 405: NON ASCO Transport Incident

Summary:	Third Party Haulage Company employee sustained an LTI
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:	An incident, unrelated to ASCO operations, occurred whereby a Haulage Company sustained an LTI. The incident was attributable to a small item coming loose from a pallet during transit. On arriving at the destination the driver attempted to lift the material back onto the pallet resulting in him injuring his back.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	As a direct result of the investigation it was agreed that industry 'Best Practise' should reflect that any small-palletised cargo being loaded onto a vehicle for onward transportation should be secured to the pallet, prior to loading. This would reduce the risk of such an incident reoccurring.
Task Description:	<i>No details available.</i>
Recommendations:	I would ask all Managers or Supervisors connected with this type of activity to amend any procedure or work instruction relevant to this topic, ensuring that there is a specific point made relevant to the security of palletised

cargo. This memorandum should be viewed as being proactive instead of reactive.

Contact Details: Zak Fleming Transport Manager

## 406: Transport Trailers

Summary:	Whilst egressing from vehicle, drivers sleeve caught on bolt.
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:	During a routine operation where by a driver had connected his vehicle air and electrical lines to his trailer, he then proceeded to egress from the vehicle catwalk to ground level. During this process his sleeve caught on a bolt that was sited proud of the trailer headboard, and although no injury was sustained, the potential exists for injury.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	On further investigation, it was found that the wrong bolt assembly has been fitted and the likelihood is that there are several other trailers currently within the fleet that could also have this problem.
Task Description:	<i>No details available.</i>
Recommendations:	Therefore any driver discovering this, must DEFECT the trailer so that the problem can be rectified without any delay or injury to personnel.
Contact Details:	IAIN THOMSON Transport Safety Advisor

## 407: Vessel Manual Handling Risk Assessments

Summary:	Crewman injured during manual handling of setting down the gangway.
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:	Marine activity, shuttle offloading
Description:	Recently there was an incident onboard one of the fleet Vessels, where a crewman was injured during manual handling of setting down the gangway.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	Investigation into the incident highlighted that no formal Manual Handling Risk Assessment had been carried out and as a result the personnel designated with carrying out the operation were unaware of the procedure to be followed and the inherent risks of the activity.
Task Description:	<i>No details available.</i>
Recommendations:	We would therefore request all vessels to carry out a review of their current Risk Assessments for this operation ensuring that any deficiencies are rectified and personnel informed of the change.
Contact Details:	Stephen Wilson Marine Safety Technical Advisor

## 408: Vessel Risk Assessments - Mooring Systems

Summary: Review of Risk Assessments

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 onboard an chartered Platform Supply Vessel which has resulted in a crewmember fracturing his forearm. This was the consequence of an event that happened during activity that the crew engaged within frequently – a “routine” activity. While the vessel was preparing to enter port, the crew became engaged with recovering ropes from the enclosed foc’sle head space, onto the upper foc’sle head in preparation for mooring alongside. This operation involved the transfer of ropes from the starboard to port side of the vessels foc’sle head using the ships windlass. Under turns were used to improve the lead towards the port drum end. Two crewmembers were involved with the operation, one driving the windlass and one engaged with the rope at the drum end. While putting a third turn onto the drum end the crewmember engaged at this position found his glove end had become trapped, resulting in his forearm being pulled into the drum end before the windlass could be stopped. The resulting consequence is that he has a fractured arm and is now unable to continue at work, the potential could have been much more serious.

Specific Equipment: *No details available.*

Lessons Learnt: *No details available.*

Task Description: *No details available.*

Recommendations: The Master on each fleet vessel is asked to review the task based risk assessment and method statement used for preparation of mooring systems in anticipation of the vessel entering port. In particular the vessel aspects should be addressed, i.e. altering course; varying speed and the effects to the ship condition due to those changes. How those changes affect crew operations require to be reviewed and re-addressed on all vessels, as a matter of urgency. Each vessel should report to the undersigned on completion of the task based risk assessment and method statement review. This feedback should include an assurance of the adequacy of those processes, associated with the task in question

Contact Details: Alastair D McArthur Marine Technical Manager - Europe

## 409: Tremcards & MSDS

Summary: Clarification between Tremcards and MSDS

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: It has been identified that clarification is required on the difference between a Tremcard and a Material Safety Data Sheet (MSDS) and what is required by regulations.

Specific Equipment: *No details available.*

Lessons Learnt: *No details available.*

Task Description: *No details available.*

Recommendations: There is no requirement within the regulations for a Tremcard or MSDS. The regulations state that the driver must be provided with Emergency Information, this must be in documentary form. This documentation should be kept readily available in the drivers's cab. This Emergency Information shall comprise details of the measures to be taken by the driver in the event of an accident or emergency and other safety information concerning the goods being transported. Nature of Danger. • Load. • The data required on this Emergency Information is: Additional actions to be • General actions to be taken by the driver. • PPE. • Additional Information. Either a • First Aid. • Fire. • taken by the driver. Tremcard or an MSDS will be sufficient to accompany goods being transported, along with the Transport Documentation



provided by the consignee ie, Consignment Note and Dangerous Goods declaration.

Contact Details:   Iain Thomson&

## 410: Anchor Handling Equipment

**Summary:** Some time ago a presentation was made to Marine Safety Forum Members on anchor handling equipment in general, particularly wire terminations. This was done as the result of a number of ferrule failures when used in mechanical stoppers. It is now time to remind Members of the outcome of that meeting and the meeting's commitment NOT to use alloy ferrules in mechanical stoppers.

**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:** Marine activity, shuttle offloading

**Description:** If alloy ferrules are in use then chain links should be used between hard eyes to enable safe and efficient use of stoppers. (Para 10.10.1 (vii) in UKOOA/C of S Guidelines refers). Please also bear in mind that alloy ferrules, in use on long term moorings where they are subjected to long periods of immersion in seawater, can deteriorate rapidly due to electrolytic action between the steel of the wire and the alloy of the ferrule. It is believed that this has contributed in no small measure to some of the failures that have occurred whilst being used in conjunction with mechanical stoppers.

**Specific Equipment:** *No details available.*

**Lessons Learnt:** *No details available.*

**Task Description:** *No details available.*

Recommendations: A proprietary band of steel ferrules is available, which is certified and type approved for use in mechanical stoppers and this type should be used in preference to alloy ferrules. A number of Operators already insist on steel ferrules for all their wires.

Contact Details: *No details available.*

## 411: Anchor Handling Equipment Best Practice

Summary:	A new anchor handler, working on its first rig move in deep water west of Shetland, suffered a closed spelter socket failure whilst trying to deck an anchor. The anchor being decked was the third anchor worked by the vessel and only the third time that the vessel's new work wire and fittings were in use.
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:	*Any Activity Type
Description:	The anchor was some 10 metres below the roller when the connection between work wire and chasing pendant reached the work drum. At this point the socket (closed spelter) on the work wire was sitting on top of the drum with approximately 100 tonnes tension on it. Without warning, the bow of the spelter parted from the main body of the socket and the chasing pendant shot down the deck and over the stern. The deck crew members were following their risk assessment for this particular operation and were sheltering in the winch house/accommodation whilst the anchor was being heaved up, so no one was exposed to potential injury.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	Subsequent metallurgical analysis of the socket revealed that it had failed in a brittle manner, under non-axial loading, applied in bending. In addition, a major contributory factor to the failure was considered to be the

low mechanical properties of the material used in the manufacture of the socket, resulting from unsuitable or inadequate heat treatment. The socket was certificated at a Minimum Breaking Load (MBL) of 600 tons

Task Description: *No details available.*

Recommendations: Three issues are raised by this incident; 1. The bending moment applied to the socket as it was being spooled onto the drum. 2. The low mechanical properties of the material the socket was manufactured from. 3. The Certification for the socket appeared to be in order. It is quite worrying that the Certification for this particular item was in order and appeared to follow a QA process that was quite clearly deficient somewhere along the line! The vessel Owner is addressing this with its supplier and issue 2 via its QA System process. Issue 1 raises questions as to the suitability of large splatters for use in work wire systems, where the sockets can be subjected to frequent bending forces during spooling operations. Some Ship Owners/ Managers do not use them on work wire assemblies at all, due to these bending forces, but will use them on tow wires where force is applied to the socket in a straight, linear pull. This Forum is unaware of any splatter socket failures on tow wires. Best practice would therefore dictate that the alternative, shorter, Pee Wee type of socket should be the preferred choice for use on work wires.

Contact Details: *No details available.*

## 412: Positioning Of Emergency Position Indicating Radio Beacon

Summary: Details of an incident that recently occurred in Aberdeen.

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: 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: Ali Dillon - MSF Secretary

## 413: Working with Tubulars – Incident Report

**Summary:** While carrying out backloading operations at a rig in the N. Sea, a crewman suffered a lost time injury. The operation being carried out at the time was the movement of tubulars to make room for an extra 50ft basket. There were a number of learning points, which came out of the inquiry into this incident, which if instigated in future should prevent a recurrence of this type of incident.

**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:** 1. No backload list had been supplied to the vessel to allow a loading plan to be produced before backloading commenced. The basket was also an additional item, which was only prepared for backloading after the original backloading was completed. 2. This was the second time the tubulars had been moved during this voyage. The tubulars were in different size bundles and of differing lengths. There was not enough tubulars to make use of the pipe stanchions viable.

**Specific Equipment:** *No details available.*

**Lessons Learnt:** 3. Inadequate risk assessments were carried out onboard the vessel when the task changed from a standard lifting process. The strops of one of the tubulars being moved were trapped and therefore the crane hooks were put through a bight on the strops to try and free them. Also when one of the strops failed to come free and it was



decided just to straighten up the stow of that tubular, there was no reassessment. There were job discussions as to what to do (i.e. toolbox talks), but these did not include a discussion on the associated risks. 4. At no time did anyone call a “time out for safety” when the operation changed. Also nobody stopped the crewman going into the danger area when they saw him. (Crewman was seen to walk on the unsecured tubulars to grab hold of the for’d crane hook, instead of waiting for the hook to come to him). 5. The crew of the vessel knew that the statutory procedures for backloading were not being followed, but saw the process as “common practice” when working rigs. During the investigation the comment, “you never know what you are going to backload until it is on the hook when working a rig”, was made quite a few times. The acceptance of “common practice” which is not always “best practice” still seems to be happening in our operations.

Task Description: *No details available.*

Recommendations: It is recommended that the industry investigate some of these “common practices” and make industry recommendations for improvement, rather than individual companies having to be at odds with their clients. 6. There was a general acceptance both on the vessel and the installation that non-compliance with the UKOOA PSV and Packing guidelines was acceptable. All companies have accepted the need for common guidelines and practices. Masters should be encouraged to challenge where installations are not complying and vice versa.

Contact Details: Ali Dillon - MSF Secretary

Figures: *No figures available.*

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## 414: Tank Cleaning Restrictions - UT 755 Type Platform Support Vessels

Summary: Prohibit tank entry for cleaning of the No 5 Port and Starboard Wing Tank (s) Double Bottoms of UT755s Type PSV's under our management

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: Production operations

Description: We are determined to meet our legal and moral responsibilities of providing our employees and those of our contractors with a safe place of work. There are no options, we are not prepared to compromise the safety of our people. Task Based Risk Assessment A fundamental element of our safety management process towards achieving our aspirations in safety performance, is the task based risk assessment process. Tank Cleaning - UT 755 Type PSVs An activity that is subject to rigorous Risk Assessment PSV tank cleaning. A recent risk assessment associated with potential tank cleaning operations in the - No 5 Port and Starboard Wing Tank(s) Double Bottom of a UT 755 type PSV, gave sufficient cause for concern that Senior Management instructed a second independent TBRA to be carried out. A summary of the findings is given below: Summary of Risk Tank configuration does not facilitate safe access /•Assessment Findings egress in the event of an accident, with particular problems associated with the bottom level/tier of the tank, where height restrictions and longitudinal and There are physical•transverse framing

combine to create confined space. limitations and demands placed upon personnel, when within these confined Effective spaces, which are unacceptable for normal tank entry operations. Use of visual or verbal contact could not be clearly established or maintained Breathing Apparatus introduces additional risks to personnel, again associated Safe and timely removal of an injured party cannot be with confined space effected

Specific  
Equipment: *No details available.*

Lessons Learnt: Based on the Task Based Risk Assessments, we have no option but to prohibit tank entry for cleaning of the No 5 Port and Starboard Wing Tank(s) Double Bottoms of UT755s Type PSV's under ASCO management. This will remain effective until such time as a safe means of carrying out the task can be established.

Task Description: *No details available.*

Recommendations: As a result of the above information we wish to clearly set out our policy regarding the use of these tanks - Until a safe system of work can be found, tank entry for the purpose of tank cleaning is prohibited. - Tanks currently in use for the carriage of clean cargoes can continue to be used for this purpose. - We will inform all vessel owners prior to chartering any vessel of the UT 755 type. In the intervening period all vessels of the UT 755 design with wing tank /DB configuration similar or the same as that mentioned in this information note will not have their number 5 wing tanks cleaned at off-hire. The carriage of clean product in those tanks if necessary, will be responsibly managed by Marine operations. - Tanks must not be used for the carriage of "dirty cargo" unless as a part of a response to an extreme emergency offshore – there must be a clear and present danger to life. Stopping drilling or production does not constitute an extreme emergency in this instance. In any case prior permission must be secured from senior Management. Distribution

The policy explained above must be communicated to relevant personnel, Contractor and Client organisations; this includes brokers, shipowners and managers, this will be co-ordinated by personnel who are also the focal points for any clarification or further information that may be required.

Contact Details: Andrew Macdonald Head of European Operations

## 415: Safety in the Galley

Summary: Cut hand on exposed metal bracket.

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 occurred recently when a cook onboard one of the fleet vessels reached for a bottle of washing up liquid and cut his hand on an exposed metal bracket holding a hot water urn. The laceration required medical attention and the Injured party left hospital with 4 stitches in his index finger.

Specific Equipment: *No details available.*

Lessons Learnt: *No details available.*

Task Description: *No details available.*

Recommendations: We therefore ask all fleet vessels to carry out an inspection of their Galley to identify any exposed/sharp edges and remedy where necessary.

Contact Details: Stephen Wilson Marine Safety & Technical Advisor

## 416: Non Conforming Backloaded Cargo

Summary:	Reporting of any non-conformances
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:	Production operations
Description:	All Fleet Vessels are advised that on arrival in port they must report any non-conforming cargo to the Quayside Tallyman prior to discharge commencing. Particular attention should be paid to tubular cargoes where end caps and bulldog clips have become loose.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	<i>No details available.</i>
Task Description:	<i>No details available.</i>
Recommendations:	Quayside staff will then raise a Service Improvement Document (SID) against the offending parties to ensure that future cargoes conform to the necessary guidelines and legislation.
Contact Details:	Stephen Wilson Marine Safety Technical Advisor

## 417: Support Vessel Tank Entry and Cleaning - All Business Units

Summary:	Cause for concern regarding previous memo
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:	<p>You will have gleaned from a previous notice, that following rigorous risk assessment associated with tank entry/cleaning operations on UT 755 type PSVs, Tank configuration•cause for concern was raised around the following areas: does not facilitate safe access / egress in the event of an accident, with particular problems associated with the bottom level/tier of the tank, where height restrictions and longitudinal and transverse framing combine to create There are physical limitations and demands placed upon•confined space. personnel, when within these confined spaces, which are unacceptable for normal Effective visual or verbal contact could not be clearly•tank entry operations. Use of Breathing Apparatus introduces additional•established or maintained Safe and timely•risks to personnel, again associated with confined space removal of an injured party cannot be effected.</p>
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	Accordingly, we had no option but to immediately prohibit tank entry for cleaning of the No 5 Port and Starboard Wing Tank(s) Double Bottoms of UT755s under our

charter/management. This prohibition shall be extended to apply across all business units. The instruction as conveyed on Safety Memorandum 10/03 shall be applied without exception and will remain effective until such time as a safe means of carrying out the task can be established.

Task Description: *No details available.*

Recommendations: Other Vessels – Address Individually Task Based Risk Assessments, or where currently applicable Job Safety Analysis, shall obviously continue on other marine support vessels prior to commencement of each tank entry/cleaning activity. Those will be considered on an individual basis and where issues of risk to personnel arise, appropriate controls will be applied. In the event that the risk cannot be reduced to a level, which is acceptable to the work party and us, the task shall be suspended and reviewed. If it is subsequently evaluated that further reduction of risk to personnel cannot be achieved, the work shall not go ahead. I trust the content of this correspondence is clear. However, in the event that you require supplementary information or indeed guidance, please contact myself or John Fraser, VP HSEQ – Europe.

Contact Details: Chris Lloyd&



## 418: 5th Wheel Locking Mechanisms and Dog Clips

Summary:	Dropped trailer incidents
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:	Following numerous dropped trailer incidents and or trailers breaking free from Tractor Units 5th Wheels, a Time Out for Safety was called, which included a practical demonstration of the locking mechanisms and backup measures incorporated in a Road Going Tractor Units 5th Wheel.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	Contrary to popular belief a Tractor Units 5th Wheel does not consist of a set of two Locking Jaws gripping around and holding a Trailers Kingpin from opposite sides. (This type and method may however be adopted and employed in specialist applications such as the 5th wheel configuration on an Automatic Release Tug Master.
Task Description:	<i>No details available.</i>
Recommendations:	)A standard Road Going Unit's 5th Wheel incorporates FOUR methods of securing The Kingpin•and restraining a Trailer Kingpin, each locking out the other. Retainer, (Fig. 3) which wraps itself around the Kingpin, (Fig. 4) preventing •horizontal and vertical release via the Kingpin Recess and Button. (Fig. 1) The Locking Wedge, (Fig. 5) will not allow the Retainer to open as the Wedge The

Wedge Lever prevents•blocks the path of both the Retainer and the Kingpin. movement of the Wedge by engagement into the body of the 5th Wheel by means of a The Dog Clip, (Fig. 7) then locks the Wedge Lever in•Stepped Recess. (Fig. 6) position. The Automatic Drop Arm type of 5th Wheel incorporates FIVE methods of locking and restraining a Trailer Kingpin, which again lockout the other as previously discussed. This type of 5th Wheels components and operation are the same as the above however the design of this 5th Wheel has an additional Spring The Kingpin•Loaded Drop Arm, (Fig. 8) with the sequence of lockout as follows. Retainer, (Fig. 3) wraps itself around the Kingpin, (Fig. 4) preventing •horizontal and vertical release via the Kingpin Recess and Button. (Fig. 1) The Locking Wedge, (Fig. 5) will not allow the Retainer to open as the Wedge The Wedge Lever prevents•blocks the path of both the Retainer and the Kingpin. movement of the Wedge by engagement into the Body of the 5th Wheel by means of a The Spring Loaded Drop Arm, locks the Wedge Lever in•Stepped Recess. (Fig. 9) The Dog Clip, (Fig. 10) locks the Drop Arm and Wedge Lever•position. (Fig. 8) against the body of the 5Th Wheel. It can therefore be seen that each locking device and component is dependent upon the later to ensure and guarantee that a Trailers Kingpin is held secure in the 5th Wheel. It should also be noted, that the design and the location of the Dog Clip engagement holes, whether of the Standard or Automatic Drop Arm type 5th Wheel, will only become available and allow fitting of the Dog Clip (Fig.8 and 11), if all the previous locking mechanisms have deployed and activated properly. Therefore should a driver experience difficulty in fitting, or indeed can not fit the Dog Clip at all, (Fig. 12) confirms that the 5th Wheel Locking Mechanisms have not activated and deployed correctly and the Trailer Coupling Procedure must be repeated. In this event, it is IMPERATIVE that the operator pulls forward gets out of the cab and checks that the 5th Wheel has not miss-fired,

and re-set the mechanism, (if required) prior to a second attempt to couple. Likewise should a trailer fail to couple on the first attempt again the operator **MUST** check and re-set the 5th Wheel (if required) prior to a second attempt to couple. On finally fitting the Dog Clip, visually inspect that there is **NO SPACE** between the 5th Wheel and Trailer Rubbing Plate and or that the Trailer Kingpin has not **RIDDEN OVER** the 5th Wheel and **DROPPED DOWN** the back of the 5th Wheel Body. In conclusion the Dog Clip may appear as an insignificant piece of additional superfluous equipment however it is in actual fact a **VITAL** component, which **MUST BE FITTED** to ensure and confirm secure coupling of a trailer into the 5th Wheel of a tractor unit.

Contact Details: Charlie McCormack Fleet Engineer

**Figure 06**



Figure 04



Figure 01



Figure 02



Figure 03



Figure 05



Figure 07



Figure 08



Figure 09



Figure 10



Figure 11





Figure 12



## 419: Mearns Quay Lifting Incident

Summary: During lifting operation, cab of truck damaged by two bundles of pipe.

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: During a recent lifting operation, the cab of a truck was damaged by two bundles of pipe, which were being loaded onto its trailer.

Specific Equipment: *No details available.*

Lessons Learnt: The root cause of this incident was that each bundle had different length of slings and one hung above the other when lifted. This incident could potentially have had a much more serious consequence had the driver been inside his cab during the loading.

Task Description: *No details available.*

Recommendations: To avoid recurrence personnel involved in pipe handling operations SHALL ensure that pipe bundles slung with slings of differing lengths are not to be lifted together but MUST be lifted individually. This means that bundles of pipe shall only be lifted side by side. Please ensure all relevant parties are made aware of this.

Contact Details: Doug Hamilton Base Manager

Figures: *No figures available.*

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## 420: UKOOA and Deck Cargo Plans

Summary:	UKOOA Guidelines for the Safe Management and Operation of Offshore Support Vessels.
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:	All Vessel Masters are reminded that under the UKOOA Guidelines for the Safe Management and Operation of Offshore Support Vessels, sect. 6.3.4 Documentation and Marking, prior to sailing the Master MUST prepare a deck cargo plan showing the position of all lifts including dangerous goods and marine pollutants and detailing unit ID numbers. On completion it should be submitted to the Base Operator.
Specific Equipment:	<i>No details available.</i>
Lessons Learnt:	<i>No details available.</i>
Task Description:	<i>No details available.</i>
Recommendations:	Therefore we would request that on receipt of the cargo manifest the Master must provide the Shipping Clerk / Base Operator with the proposed deck cargo plan for on-pass to the installation. 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

