

These flashes summarise key safety matters and incidents, allowing wider dissemination of lessons learned from them. The information below has been provided in good faith by members and should be reviewed individually by recipients, who will determine its relevance to their own operations.

The effectiveness of the IMCA safety flash system depends on receiving reports from members in order to pass on information and avoid repeat incidents. Please consider adding the IMCA secretariat ([imca@imca-int.com](mailto:imca@imca-int.com)) to your internal distribution list for safety alerts and/or manually submitting information on specific incidents you consider may be relevant. All information will be anonymised or sanitised, as appropriate.

A number of other organisations issue safety flashes and similar documents which may be of interest to IMCA members. Where these are particularly relevant, these may be summarised or highlighted here. Links to known relevant websites are provided at [www.imca-int.com/links](http://www.imca-int.com/links). Additional links should be submitted to [webmaster@imca-int.com](mailto:webmaster@imca-int.com)

## 1 Retrieval of Buoys

In October 1995, IMCA published guidance R 1/95 (now referred to as IMCA R 001) referring to plastic spherical buoys, sometimes known as 'Grimsby' buoys or 'Neukleons'. These buoys are used on ROVs and other umbilicals. Safety Flash 09/01, issued this August, contained a reminder of the dangers inherent in the use of these buoys.

We have now received a report of another incident, where an umbilical buoy burst after being on deck for approximately three hours, during which time the buoy was full of seawater. This could have resulted in a serious injury.

The company reporting the incident has recommended that, if these buoys are in use, safety face guards and gloves are to be worn during their retrieval and that all buoys are to be inspected prior to use and rejected if they have any pin holes, small cracks, etc.

## 2 Electrical Fire in Engine Room

A member has reported the following incident which occurred onboard one of its vessels. Due to a sudden power fluctuation, evidenced by flickering lights, the chief engineer went to the engine room to investigate and detected smoke, with a foul smell emanating from the step-down transformer.

He panicked and shut off the main power breaker, causing the vessel to go adrift. He used two DCP-type fire extinguishers to douse the smoke. He tried to establish the cause of the incident and, after about five minutes, he bypassed the transformer and resumed the power supply.

The cause of the overheating of the transformer is under investigation. It is suspected that the transfer insulation and cooling fan may be at fault.

The member, in order to prevent reoccurrence of such an incident, has advised its personnel:

- that it is absolutely necessary to stay calm and assess the situation before deciding on the course of action;
- to conduct a periodic check of all overload relays, MCBs and fire/smoke detection systems for correct function;
- to report defects and ensure corrective action is taken.

## 3 Fatality during Maintenance of Elevator Lift

The following fatality, which occurred during a routine maintenance task on an elevator lift installed on a rig, has been reported to IMCA. The task being undertaken was to change the wire that raised and lowered the lift. During the operation, the securing arrangement used for this maintenance task failed and the lift fell over 100 feet to the bottom of the lift shaft. The Barge Supervisor was on top of the lift when it fell and he died of his injuries.

At present, the exact details of what happened have not yet been fully established, but the company concerned and the UK Health & Safety Executive (HSE) are conducting detailed investigations into the incident.

The company concerned has undertaken to carry out the following actions:

Maintenance activities are to be reviewed and risk assessed to ensure that there are adequate controls in place before the start of a job. This may mean that additional assessment procedures will need to be drawn up for more complex activities;

The requirements of the UK Region Permit To Work (PTW) procedures are to be studied. Department heads, in conjunction with the OIM shall review and, if appropriate, reinforce the PTW system for maintenance activities.

#### **4 Need for Supplied Air in the Vicinity of Man Way during Nitrogen Purge**

We have been notified of the following incident, which occurred while a catalyst change-out was being undertaken. The job was shut down for lunch, a nitrogen purge was on, the man way of the vessel was covered and there was no vacuum.

The supervising engineer of the project and a junior engineer (who had not previously been involved with the project) entered the area, proceeded up the vessel to the man way and removed the board covering the man way. The junior engineer peered in and subsequently passed out due to a lack of oxygen. He was taken to the hospital for examination and was subsequently released.

The company concerned has implemented the following actions:

Until further investigations are complete, anyone going up to a man way must be wearing supplied air when the nitrogen purge is in process;

A chain around the man way ladder must be posted, to prevent anyone from going up to the man way when project staff are on lunch or break.

Additional actions are under consideration.

#### **5 Grit Hose Parting – Near-Miss Incident**

A member reports that while a diver was working on a grit-blasting operation, the grit hose parted from the coupling connection on deck. No one was injured and nothing was damaged.

The LP compressor was shut down immediately and a safety meeting was conducted onboard to discuss the reasons for the parting and the precautions necessary to prevent reoccurrence.

The company has set out the following checks to be made before use of the equipment:

Check the condition of the hose for any physical damage;

Check all hose-line clamps (including gun end and compressor end) for tightness, to ensure no inadvertent parting of the hose while in use;

All hose connections are to be secured with safety rope to prevent a whiplash effect if parted;

Insurance wire is to be fixed on all quick-release 'Chicago' couplings to prevent inadvertent parting of couplings while in use;

All hose lines are to be anchored/secured with rope to fixed structures, again to prevent a whiplash effect if parted;

One person is to be available to man the compressor and blast-pot at all times while work is in progress.

#### **6 Improper Slinging of Cargo**

We have been passed the following, regarding an incident which resulted in cargo loss.

While making a lift from a boat to the platform, the operator picked up a cargo basket and proceeded to swing away from the boat. While swinging the basket, the cargo suddenly shifted causing the O-ring on the latch side of the hook to pull through the latch. When the O-ring pulled through the latch, the two part sling came unhooked from the stinger and the basket dropped on one side resulting in dropping some of the cargo into the water.

There were no injuries, but some of the cargo was lost.

The company concerned has identified the following errors:

The cargo basket slings were too short to be utilized with a single point hookup causing an unstable load and one ring to pull through the hook;

The minimum recommended sling angle (60 degrees) between the sling and the load was not maintained. Actual angle was about 35 degrees;

The riggers on the boat failed to stop the job and used a poor rigging technique (single line stinger hook);

The crane operator failed to observe the rigging techniques prior to starting the lift.



Figure 1: Similar cargo basket with incorrect sling angle.



Figure 2: Similar hook point with incorrect sling angle=hazard.

The company concerned has initiated the following corrective actions:

Utilisation of two-part slings when lifting similar cargo baskets;

Maintenance by crane operators and riggers of a minimum angle of 60 degrees between the sling and the load;

Reinforcement by supervisors of the necessity of stopping the job when proper rigging is not being used;

Supervisors are to review the original safety flash with all crane operators and riggers during a safety meeting.

The company has set out the following 'rules of thumb' for rigging:

Use the same number of pickup slings as the number of o-rings on the load rigging;

Each sling leg should be at least equal distance between the load pickup points (forming an equilateral triangle) regardless of whether using a single stinger or two legged hook-up. This will always give the preferred 60 degree sling angle.

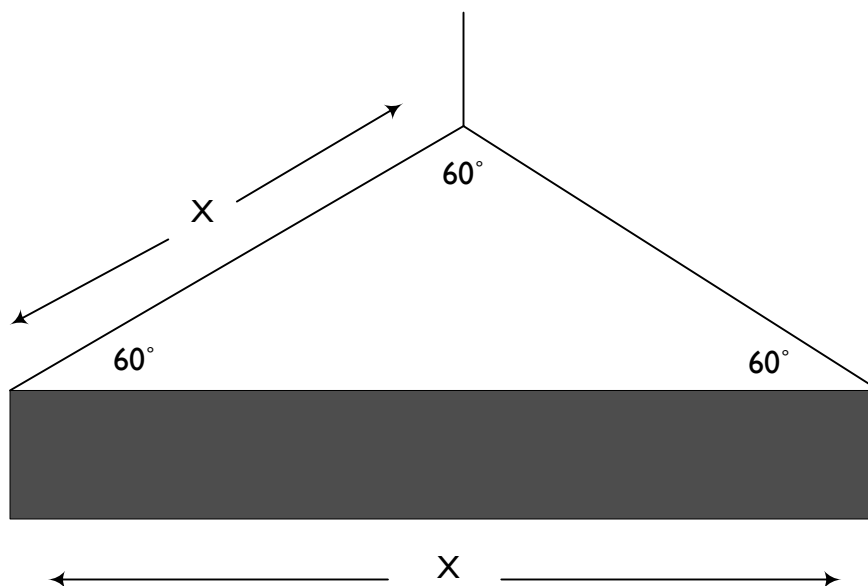


Figure 3: Rules of thumb

## 7 Exploding Light and Smoke Marker

A member has reported that two 'Ikaros' man-overboard light and smoke markers, manufactured by Hansson Pyrotech, were returned from one of its ships to its shore-based workshops. The units had been stored on a pallet and a storeman was in the process of moving each unit to another location.

As he moved one of the units, it exploded with a loud bang, resulting in parts of the assembly shooting across the room. Fortunately he was not struck by flying fragments nor was he otherwise injured. The smoke itself did not activate in the explosion, but instead the smoke powder was widely dispersed.

The company's investigations identified that:

The storeman had not released the pin or moved any trigger mechanisms to activate the unit;

The safety pin was still in the unit when the parts were recovered;

The unit had been subjected to pressure build up from the way it had been torn apart rather than by normal activation of the smoke system;

The unit was still within its safety bracket when it was moved.

The unit was subsequently returned to suppliers for further examination and, although it is not conclusive, they have stated that the unit may not have had the safety pin fitted correctly, thereby allowing the detonator to fire but preventing the correct release of the smoke capsule. The resultant pressure build up caused the unit to explode rather than flare off the smoke.

As this event followed within just a week of IMCA releasing a safety flash on another incident involving Smoke flares which did cause serious injury, (Safety Flash 12/01), the company was concerned that there was a fault with these devices which could have caused further injury. Dialogue with the manufacturers and UK marine authorities is ongoing to further investigate such events. The two manufacturers (the previous notice concerned a Pains Wessex unit) are concerned that there could be a fault with their units, but their responses have been guarded.

Personnel should be made aware that at least two unexplained incidents have occurred and to avoid handling such devices whenever possible for inspection purposes. If they are to be transported, it should be ensured that the manufacturers' instructions are followed exactly and that the safety pin is correctly fitted.

## **8 Fatality involving Offshore Drilling Pipe Rack Fingers**

We have been passed the following safety alert issued by the US Minerals Management Service. Recently, while two roustabouts were positioning a stand of pipe into a pipe rack finger in the derrick, the pipe rack finger fell to the rig floor, killing one roustabout and injuring the other. The nine-stand derrick finger weighed approximately 65 lbs and fell approximately 90 feet. Preliminary indications are that the finger fell as the result of the failure of a weld near the base of the finger.

Although the accident is currently under investigation by MMS, with an official report to be issued at a later date, the above facts and the potential for similar occurrences have prompted this alert.

MMS recommends that all pipe rack fingers currently in use and those scheduled for use be inspected for the purpose of verifying their structural integrity. At the conclusion of MMS's investigation of the accident, the issuance of an additional Safety Alert with further recommendations is possible.

## **9 Winch Incident**

A member has reported that one of its vessels was trenching, during which time the ship was told to hold present speed with the tow wire payed in at the same time. There was no facility to spool the wire onto the drum accurately – personnel were placed adjacent to the tow wire and operated a valve using a nylon rope. This could have resulted in a serious injury and damage to equipment.

The company involved has instructed crews that the winch is to be operated remotely and, if feasible, cameras are to be used in hazardous areas. The ship's speed should also be taken into consideration.

## **10 MSA Surety Sure-Stop™ Shock Absorbers**

Members should be aware of the following 'Stop Use & Recall Notice' issued by Mine Safety Appliances Company (MSA). The full list of products involved is available on request from the IMCA office.



Mine Safety Appliances Company. P.O. Box 426 .Pittsburgh, PA 15230  
Telephone: (412) 967-3000 Writers Direct Dial No.

**Stop Use & Recall Notice**  
**Concerning MSA Surety Sure-Stop™ Shock Absorbers**  
**Manufactured from May through October of 2001**

***Immediate Attention Required***

October 14, 2001

**To: All users of MSA Surety lanyards and fall protection systems using the Sure-Stop shock absorber**

MSA is currently investigating a reported incident involving an MSA Surety Sure-Stop lanyard. Our initial findings revealed that the lanyard was improperly manufactured. Although it appeared to be functional, it provided no fall arrest protection to the user. This notice is directed to all purchasers of products that potentially could also contain this manufacturing error. **MSA asks that you carefully review this notice and immediately remove from service all affected fall protection components.**

Upon examination of the lanyard involved in this incident, we found that there was an error in the stitching that secures one end of the shock absorber to the remainder of the lanyard. Since this joint is glued in preparation for applying the stitches and the shock absorber sleeve covers this area, this lanyard appeared functional. Even if the user tugged sharply on the lanyard, the assembly would still have appeared secure. However, a lanyard in this condition is not functional and provides no fall arrest protection to the user.

This notice involves all MSA Surety Sure-Stop shock absorbers and components that use the Sure-Stop shock absorber. This includes the following MSA Surety fall protection products. See the attached list for the MSA Surety part numbers identifying these products:

- MSA Surety Sure-Stop lanyards
- MSA Surety Gravity harnesses with integral Sure-Stop shock absorbers
- MSA Surety Sure-Grab rope grab/fall arrester
- Certain kits containing the MSA Surety Sure-Stop shock absorber

As indicated above, this notice affects only those MSA Surety Sure-Stop shock absorbers manufactured from May through October of 2001. It does not affect MSA Surety products manufactured outside this time period or any products labeled "Surety Manufacturing & Testing LTD."

The manufacturing date applies to the shock absorber only and does not apply to the complete system or other system components.

Through our investigation we discovered three units that were not stitched in the May and June time period. As a precaution, we are including units manufactured in July, August, September, and October as subject to this notice. Based on several factors, we are confident that MSA Surety Sure-

Stop shock absorbers manufactured outside the specified time period as well as products labeled “Surety Manufacturing & Testing LTD.” do not have this condition and may continue to be used.

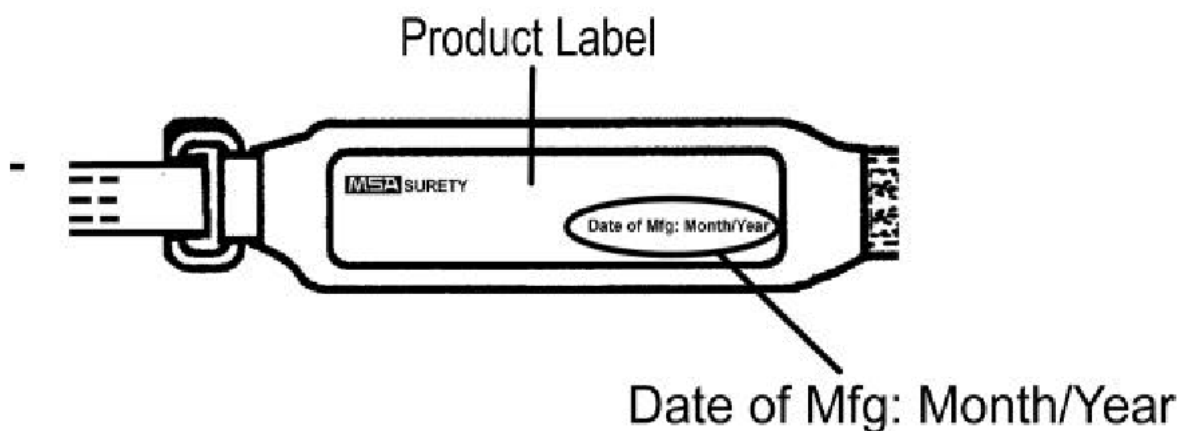
The following outlines the steps you need to take immediately:

1. Locate Sure-Stop components:

Locate all of the above listed fall protection components that use a Sure-Stop shock absorber.

2. Remove affected shock absorbers from service:

Inspect all Sure-Stop shock absorbers to determine the date of manufacture. The date of manufacture is located on the label affixed to the shock absorber sleeve (see diagram below). If this date is within the affected range or if the date cannot be determined, the shock absorber is subject to this notice and must be removed from service. As a reminder, this notice applies only to MSA Surety Sure-Stop shock absorbers and does not apply to products labeled “Surety Manufacturing & Testing LTD.”



3. Contact MSA to arrange for inspection:

Contact MSA Customer Service to make arrangements for the return and inspection of all affected products. Customers in Canada should call 1-888-396-1067. Customers in the United States should call 1-800-MSA-2222.

The equipment used for the inspection will not require disassembly of the shock absorber, however it will be conclusive as to whether the stitching is present. We will affix a green adhesive label around the shock absorber to identify inspected shock absorbers. The label will read “Accepted for Use”. If we find that the stitching is not present, we will replace the system component containing the shock absorber. All replacement items will have a label pack with specifications and warnings attached. The original or replacement products will be express shipped to you within three working days of our receipt of your product.

We apologize for the inconvenience this situation may cause you. However, we are confident that our corrective measures appropriately address this safety concern. If you have any questions, please feel free to contact MSA Customer Service toll-free at 1-888-396-1067 (Canada) or 1-800-MSA-2222 (United States). Thank you.

Very truly yours,

Charles J. Seibel, Jr.  
Manager of Product Safety