

IMCA Safety Flashes summarise key safety matters and incidents, allowing lessons to be more easily learnt for the benefit of all. The effectiveness of the IMCA Safety Flash system depends on Members sharing information and so avoiding repeat incidents. Please consider adding safetyreports@imca-int.com to your internal distribution list for safety alerts or manually submitting information on incidents you consider may be relevant. All information is anonymised or sanitised, as appropriate.

1 Cyber-security – malicious spoofing and phishing

The United States Coast Guard (USCG) has released very timely Marine Safety Information Bulletin (MSIB) 19-20 relating to malicious email spoofing incidents. The USCG notes that there are increasingly sophisticated malicious email spoofing techniques being used.

The bulletin is timely because IMCA has recently received a report from one of its members relating to cyber security awareness. In this incident, personnel received messages claiming to be from senior management. Management will not be asking for action on matters like flight tickets, hotels, urgent payments for contracts, etc. via SMS, social media, or personal email addresses. These requests will always be done via official channels.



Image: https://www.mailguard.com.au

What is phishing?

Most of us will be aware of phishing emails and know what to look out for. There are multiple types of phishing, and it is good to be aware of the main types. Phishing is someone pretending to be someone they are not, in order to gain access to confidential information. Phishing can also be done via phone calls, SMS and other online messaging services.

- Suggestions for dealing with potential phishing SMS, phone calls and other messages:
 - Never feel pressured into clicking a link in a message or taking any other action;
 - Take a minute to check if you were expecting this phone call or message;
 - Check for any spelling/grammar errors in the text or unusual senders (e.g. check the country code of the phone number);
 - If in doubt, REPORT messages/phone calls/phishing emails to your company IT department and BLOCK the number.

Members may wish to refer to:

- UK National Cyber Security Centre Phishing: Spot and report scam emails, texts, websites and calls (advice from other governments is available)
- False or scam emails warning
- IMCA Cyber Security Update Information note ID: 1579

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2 Watch your hands!! person injured while using an angle grinder

What happened

A member of the crew was badly injured whilst cutting a piece of wood using an angle grinder fitted with a cutting blade. He was cutting dunnage for a new washing machine. The vessel rolled and the injured person lost control of the grinder, such that it caught his left arm causing a deep laceration from his left thumb to his elbow.

He was given first aid and transferred to a nearby rig, and from there evacuated by helicopter to hospital ashore. On examination there were two major lacerated cuts with crush injury and damage to the muscles and tendons underneath and his left radial artery was completely cut. All this was repaired in surgery and the patient made a full recovery. The injured person was an experienced hand who well understood how to safely operate portable hand tools of this sort.

What went wrong?

- He was using a hand-operated power tool in rough weather;
- He was using a wood cutting disc in an angle grinder;
- He started work with no job hazard analysis nor a toolbox talk;
- There was no guard on the grinder nor an automatic "dead man" switch cut-off;
- The wood he was cutting was not supported nor held firm, but just placed on deck. The injured person was using his left hand to hold the job still whilst applying the spinning blade with his right hand.

What were the causes?

Our member notes:

- Improper handling of hand tools;
- Human Element poor perception of risk and inadequate supervision;
- The sea conditions not directly responsible but remaining part of the chain of causation of the event.

Some of the lessons learned:

- Risk assessment and toolbox talk before starting work no matter how routine the job;
- Correct and proper management of hand tools
 - Use the right tool for the right job, use guards; use "dead man" switches.
- When using powered tools, ensure the job is secured and cannot move before starting work;
- Appropriate supervision of crew in this case the chief engineer was unaware that the injured person was doing this work.

Members may wish to refer to

- Injury to Fingers During Grinding Activity
- Hand injury from portable handheld Angle Grinder
- IMCA "Be prepared to work safely" short video watch your hands
- Portable Grinders Hand Safety
- Grinding Using A Cutting Disc
- Fatality: Grinder Incident (2005)

Applicable Life Saving Rule(s)



Line of Fire

Safety Controls



3 UK HSE: Employee in shipyard killed by falling steel post

The UK Health and Safety Executive (HSE) has prosecuted a shipbuilding and repair company after an employee was fatally injured when struck by a 10m steel post. See press release here.

What happened

Five workers were adapting a large bogie used to land and launch vessels on

and off the company's slipway. One of the bogie's steel side-posts weighing approximately 1800kg fell and fatally struck the employee on the back of the head.

What went wrong

HSE investigation found that:

- The steel side-post had only been secured to the crossbeam on the bogie by two slackened bolts;
- The steel side-post was not supported by a crane or other means at the time of the incident;
- The company had failed to carry out a suitable and sufficient risk assessment and implement a safe system of work;
- The company did not provide the information, instruction, training and supervision necessary to ensure the health and safety at work of its employees during the task of regulating the slipway.

The HSE inspector noted "This incident was entirely preventable if the risk had been identified and suitable control measures put in place. Adequate training and supervision should also have been in place to ensure the regulating of the slipway was carried out safely by employees."

Members may wish to refer to:

- Fatality: person crushed when secured material fell on him and update to this incident
- Secured material fell against crewman causing injury
- Member of the public killed following unplanned movement of an unsecured load
- Serious leg injury from falling winch sheave
- Life-raft dropped to the jetty

4 UHMPE pull-in rope damaged during mooring connection to buoy

What happened

A synthetic pull-in rope used in a subsea mooring operation was violently pulled out of the control of an ROV. The ROV was pulling the thimble side of the rope away from a submerged turret production (STP) buoy when it lost

control of the pull-in rope, causing damage to its 7function arm. The pull-in rope was slowly paying out from a special handling winch, in combination with a capstan to overcome the friction on the full rope over the vessel deck.

Another ROV witnessed the sheave spinning very fast and the pull-in rope spooling off towards the surface, and that the thimble was stuck between the sheave and the buoy.

An ALL STOP was called on the bridge for investigation and intervention. The damaged ROV was returned to



deck to carry out repairs on the damaged arm. The other ROV grabbed the loose end of the pull-in rope to keep it away from the thrusters.

What went wrong?

Slack on the pulling rope built up subsea, creating a catenary close to the vessel's port side propellor. A combination of the sea current, pulling force of the vessel thrusters and wash from the propulsion of another nearby vessel caused the pull rope to be ripped out of the hand of the ROV, and the other end went into the propellor which cut and damaged the rope.

What were the causes?

Our member discerned the following causes:

- Immediate causes
 - High sea current (2.8 knots) at time of incident combined with subsea conditions and the effects (wash) of nearby propulsion systems;
 - There was insufficient monitoring of the pull-in rope catenary as it went over the vessel stern rollers;
 - The vessel was in an unfavourable heading with respect to the direction of the current.
- Underlying causes
 - The friction acting on the rope from the steel deck, was higher than anticipated;
 - The synthetic (UHMPE) pull-in rope was (too) light;
 - The task plan did not appropriately address the environmental conditions subsea;
 - The supplier providing the mooring system confirmed that they did not consider environmental conditions during the design of the equipment.
- Root cause Ineffective assessment and control of the impact the subsea environmental conditions would have on the pull-in rope during the operation, including design limitations.

Actions

• The installation procedure and task plan for this work were amended, particularly with regard to the impact the subsea environmental conditions would have.

Members may wish to refer to:

- Line of fire: deck tugger wire failure
- Rigging failure clump weight dropped to seabed

5 Crew member stopped unsafe cargo operations

What happened

During third-party cargo operations from the dock to the vessel it was noticed that the lift was being conducted using a wire set with no colour code and the cargo/metal box had no valid certification marks. The Second Officer immediately **stopped the work** and asked the client's lifting supervisor to provide relevant assurance on lifting gear and cargo certification. No evidence was provided, and so the cargo was left on the quay and quarantined afterward.

What went right?

 Stop Work Authority was properly and correctly exercised by the Second Officer, demonstrating a duty of care and a good example to the entire crew;



• The deck officer fully understood the requirements for lifting equipment and rightly stopped the work when he observed that the requirements could not be met.

Recommendations

- KNOW the lifting requirements and colour coding systems in use on your vessel and by your company's clients;
- **INSPECT** lifting equipment before activities start to ensure that all requirements are met;
- **EMPOWER** any person on the crew to **stop the job** if it is unsafe.

Members may wish to refer to:

- Short IMCA videos Are you prepared to work safely? (3-4 minutes)
 - Lifting equipment
 - Lifting operations
- HSSE 019 Guidelines for lifting operations
- Bypassing safety controls violation of working at height requirements
- Unsafe lifting operations