

# CHIRP FEEDBACK

Issue No: 15

2/2007

## What's in this Issue?

	Page
<b>MERCHANT SHIPPING</b>	
Collision Avoidance – Multiple Crossing.....	1
Who's In Charge Here? .....	2
Fire Extinguisher Failure .....	3
Work Planning and Risk Assessment - Electrical .....	3
Near-miss – Unmooring.....	4
AIS Data Irregularity .....	5
<b>LEISURE</b>	
I've Seen the Light! .....	5
Tube/Rope Lighting Fire Risk.....	6
Mutual Misunderstanding .....	6
<b>EDITORIAL</b>	
Contact Us .....	7

**Number of Reports since the Last Issue: - 24**

**Report Topics Have Included:**

- Near-collisions
- AIS data irregularities
- Port Marine Safety Code Compliance
- Port operations
- Choice of anchorage

**BACK ISSUES**

Back issues of CHIRP FEEDBACK are available from our website: [www.chirp.co.uk](http://www.chirp.co.uk)

The MCA's 24hr Info No. is 0870 6006505.  
(Hazardous incidents may be reported to your local Coastguard Station.)

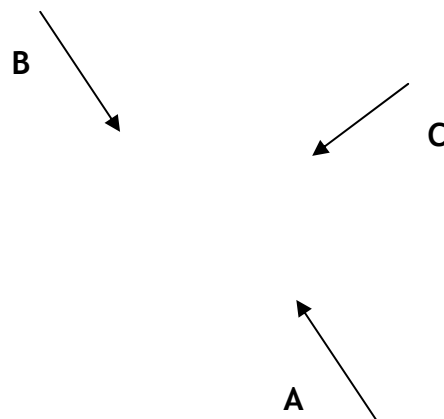
MAIB reports and incident report forms are available on their website [www.maib.gov.uk](http://www.maib.gov.uk) and their 24 hr tel. no. is 02380 232527

## REPORTS

REPORTS ARE PUBLISHED ONLY WITH THE AGREEMENT OF THE REPORTER AND ARE, AS FAR AS POSSIBLE, IN THEIR OWN WORDS, EDITED ONLY TO REMOVE IDENTIFYING TEXT. THE SAFETY CONCERN(S) RAISED ARE BASED ON THE INFORMATION PROVIDED BY THE REPORTER AND THEREFORE REPRESENT THE REPORTER'S PERSPECTIVE.

## MERCHANT SHIPPING

**COLLISION AVOIDANCE – MULTIPLE CROSSING**



**Report Text:**

Vessel (C) Course: 225 (T) in TSS  
 Vessel speed: Approx. 16,5 knots

It was noted that a ferry (A) was crossing the channel at right angles to the flow of traffic. It was noted that this vessel would have a CPA of 0' initially and that the speed of this vessel was initially approximately 16.5 knots. This vessel was on my port bow and thus I was the "stand on" vessel. Initial distance of this vessel approximately 5.5 miles

Simultaneously, it was noted that another ferry (B) was transiting in the opposite direction to (A). This vessel also had a CPA of 0' and as she was on my starboard bow, I was obliged to keep out of her way.

Initial distance of this vessel was also approximately 5.5 miles.

FEEDBACK is also available on the **CHIRP** website - [www.chirp.co.uk](http://www.chirp.co.uk)

A Maritime Safety Newsletter

from **CHIRP** the Confidential Hazardous Incident Reporting Programme

The situation was monitored closely and it became apparent that the initial actions of vessel (A) were insufficient to avoid a close quarter situation with own vessel. I attempted to contact vessel (A), via VHF Channel 16. My calls elicited nil response despite my repeating the call on a number of occasions and using all methods to identify myself.

It was then noted that (A) increased her speed as a method of avoiding a close quarter situation and would pass ahead of us at a distance of approximately one mile. However, I was still having a 0' CPA with the (B) who, quite correctly, maintained her course and speed throughout. I attempted further contact via VHF channel 16 with (A) but once again without response. I wanted to alert the O.O.W. on that vessel that his/her actions were causing me grave embarrassment with (B) and that as a result of the choice to increase speed, I was unable to alter course, as would be required, to avoid (B).

My options were now very limited as being fully laden; it was considered that a reduction of speed would have negligible effect given the proximity of the other vessels involved.

Once it was apparent that a potential 'close quarter' situation was developing, I engaged hand steering and when (A) was observed ahead of my vessel, I altered my course to starboard by an eventual 25 degrees enabling the (B) to pass ahead of me safely.

**CHIRP Comment: This incident was investigated by both the operator of Vessel (A) and the coastal state, who did not identify any significant concerns.**

**The narrowness of this particular waterway and the relatively high speeds of the crossing traffic can mean restrictions on the time available to assess and react to close quarters situations. The Maritime Advisory Board made the following observations:**

- **The passing distances involved are not unusual for this busy area and ferry bridge teams are likely to be accustomed to them, however, they should be aware that other vessels, who transit less frequently, may be concerned by their proximity and should take measures to make their intentions clear.**
- **Whilst VHF use may be appropriate on occasion, the time used by vessel (C) trying to establish contact by VHF may have been used more effectively in assessing and reacting to the situation. Subsequent investigations indicated (C) may not have been transmitting in any event.**
- **A prompt alteration of course or reduction in speed by vessel (C) may have been the best solution and would have required ferry (A) to reassess its own actions.**

## WHO'S IN CHARGE HERE?

**Report Text:** Some dynamically positioned offshore units are "Vessels" in transit and are an "Installation" when working and have a Safety Case. Up to now in this company both the Master and Offshore Installation Manager (OIM) functions, as necessary under SOLAS Chap 5 have been carried out by the same person (a Master Mariner). The unit is "underway" at all times, even if not "making way" and displays the "vessel restricted in her ability to manoeuvre" lights and shapes when working, and additionally the "Morse U" lights for an Installation when working and maintaining station.

When, for example, working a well, the crew are supervised by an Offshore Project Manager (OPM), and a Night Superintendent. They have typically worked their way up through some offshore discipline such as Cementer, Derrickman or Wire Line Operator. It has been suggested that the OPM should be the OIM. This would mean that control of the unit would be handed over to a non-marine person when working in a well.

I have seen something similar to this style of operation before and am aware of incidents where not understanding anything about the action of wind, waves and current, nor navigation and anti-collision rules for that matter almost caused a unit to run aground when a cross current caught it between islands.

The Offshore Installations and Wells (Design and Construction, etc.) Regulations 1996 state:

### Operation of an installation

**7. (1) The duty holder shall ensure that the installation is not operated in such a way as may prejudice its integrity.**

I believe that handing over control of the vessel to a non marine person would both be illegal and would jeopardise the safety of the vessel. The Master would not be able to use his/her personal judgement in emergency situations, nor would he/she be able to exercise rights under Solas Chap. XI - 2 ( Reg 8 ) [Master's Discretion for Ship Safety & Security] to take any action he/she deemed appropriate at the time, if he/she is obliged to cooperate with the appointed OIM.

I believe that this contravenes the D & C Regs. Sec. 7, as above.

The safety aspect is an important one, and I feel that splitting the role and having the Master report to an OIM whilst working a well would have serious safety implications for the vessel and possible environmental pollution problems. I believe two persons cannot be charged with the overall responsibility for the health and welfare of everyone onboard, particularly when one is only interested in the well side of things, and has no real knowledge of vessels, weather and Dynamic positioning principles. To my mind, this is a recipe for disaster.

**CHIRP** Comment: It is not uncommon for errors to be made where lines of responsibility become unclear e.g. teams where the master is on the bridge, but has not formally taken the con, but the OOW assumes s/he has.

In the circumstances outlined above it is not too difficult to imagine a situation where the marine manager may be in conflict with the non-marine manager e.g. where forecast weather may indicate a suspension of operations is necessary, but the non-marine manager responsible for the operation at that point disagrees.

To establish the UK position CHIRP raised this issue with the Maritime and Coastguard Agency, who in turn discussed it with the UK Health and Safety Executive; the response follows:

"A large body of law regulates the safety of offshore installations and related activities while operating in UK waters. In respect of the matters raised in the CHIRP report (i.e. the potential for responsibility conflicts) the key requirement is regulation 6 of the Offshore Installations and Pipeline Works (Management and Administration) Regulations 1995 (MAR). This requires that an installation is at all times under the charge of a competent person appointed by the installation operator or owner (the duty holder). This person is commonly known as the OIM, but that is not a legal title and there is nothing in law to prescribe who the OIM should be. As the CHIRP report indicates, the OIM is commonly the master, where the installation has a master. The role may move from one person to another in the course of operations, for example as the nature of operations changes.

It is for the duty holder to ensure that the most appropriate person is in charge at any given time, i.e. the person who is competent in those circumstances. Not to do so is an offence.

This requirement is intended to ensure the safety of the installation by ensuring both that the most appropriate person is in charge at all times and that there is no doubt about who is in overall charge. Our regulations are not prescriptive and it is up to the duty holder to determine the most appropriate way of complying with them. Where following maritime requirements serves to achieve the objectives of MAR regulation 6 that is perfectly acceptable to HSE. In the installation's safety case the duty holder must demonstrate that the installation's safety management system is adequate to ensure compliance with the law, including the MAR requirements.

Once accepted by HSE, the arrangements set out in the safety case must be followed.

Note that MAR regulation 6 (and several other requirements) apply to an installation only while it is at or being manoeuvred about its working station. At other times (e.g. when in transit) only flag state requirements will apply. Similarly HSE

regulations do not apply to an installation operating in non-UK waters."

The Board suggests Duty Holders in operations where overall charge is transferable should ensure any potential conflicts are addressed in the Safety Case, and/or in operational procedures, as applicable. The identification and resolution of such conflicts may best be achieved by consulting operational staff.

---

### FIRE EXTINGUISHER FAILURE

**Report Text:** An employee recently suffered a serious injury when a fire extinguisher exploded.

Debris was being cleared from the engine room of a vessel prior to dismantling. During the course of the work the employee came across an old foam filled fire extinguisher. In attempting to move the extinguisher it exploded causing multiple injuries.

On examination it was found that the cause of failure was heavy corrosion of the outer shell of the extinguisher.

This is a rare incident but is brought to the attention of the industry so that they are aware of the risks and take extra precautions where there is a likelihood of old fire extinguishers being present.

**CHIRP** Comment: This alert was first published by the UK's Health and Safety Executive. As their material is not generally circulated to the maritime community, CHIRP has reproduced it here. The Maritime Advisory Board also wish to add the following comments:

- Fire extinguishers should be serviced and pressure tested in accordance with Flag State and/or manufacturer's requirements.
- Particular attention should be paid to extinguishers stored in exposed/damp locations
- The potential risks posed by pressure vessels should be considered before work is undertaken as part of risk assessment and individuals should be prepared to "stop the job" if an unexpected risk is encountered.

---

### WORK PLANNING AND RISK ASSESSMENT - ELECTRICAL

**Report Text:** I have experience to be "electrocuted/ electric shock"; this must be reported as a "near-miss report".

I am a fitter/welder onboard a ship of non-UK registry trading between USA, Canada then back to Asian countries like South Korea, Hong Kong, Shanghai, China, Taiwan and Japan. Since (2) days after departing port of Japan to USA at around 1500 H, working with 3rd Engineer and a Wiper, with the instruction from the 2nd Engineer, we took out a sea water pipe (holed) of emergency generator pump from inside the bow thruster room. I repaired/welded the holed sea water pipe. When we are about to put

back the pipe in its original position, a big splash of water coming out and we are all wet. I immediately grab the girder with electric extension cords in it and that's the time I have been electrocuted/electric shock.

We found out that one of the engineers in the engine room runs the Fire and GS [General Service] pump to clean with water the soot collecting tank. There have been no warning signs or checklist.

There have been no immediate actions from my companions at work and in engine room upon knowing what happened to me. Until for a few minutes that I called up the Chief Engineer and inside my cabin the 2nd Officer gave me a medicine of "Magnesium Hydroxide Mixture BP", 2-3 tablespoon per day.

I have told my Chief Engineer of seeing a doctor upon arrival in USA because of hands, feet, armpit, neck muscle pains and now my fingers are numb, but still trying to work out to exercise the muscles.

One day before arrival USA, it seems that my superior officer, especially the Captain, denied me of seeing a doctor. From they are not aware of the non-conformity, no hotwork permit on checklist and not reporting to proper authorities the near-miss report.

**CHIRP Comment: There are lessons to be learned from this incident. Whilst it has not been possible to look into the specifics of this case, where there appear to be residual symptoms the Ship Captain's Medical Guide should be consulted, shore advice obtained, if appropriate, with referral to a doctor at the next port, if necessary.**

**The report raises serious issues with respect to the condition of the vessel and the work planning and risk assessment processes employed. The Board wishes to draw attention to a number of areas of concern:**

- **If the emergency generator could not be operated because of the holed sea-water pipe reports should have been made to Flag, Class and Company and Port State should have been notified.**
- **A risk assessment should have been undertaken prior to work commencing and the necessary permits and notices, including power isolation, should have been issued.**
- **Wiring runs and temporary cables/extension leads should be properly maintained and checked. Even with the GS pump running the individual should not have received a shock.**

**The UK Code of Safe Working Practices for Merchant Seamen contains a good deal of useful advice and can be downloaded from [www.mcga.gov.uk](http://www.mcga.gov.uk).**

## NEAR-MISS - UNMOORING

The vessel was moored alongside and had completed cargo operations. I was posted as Officer in Charge of the forward mooring station. We were secured alongside starboard side to the berth with three headlines (and stern lines) and two springs in good weather, slight to moderate wind on the port beam and a slight sea. The Master, on the bridge in command, instructed the forward station to 'single up to 1 and 2'. This was carried out without any problems. Subsequently, we were ordered to 'single up to 1 and 1'. I asked the crew to let go the remaining headline, which was carried out safely. The Master then instructed us to let go the remaining spring. However, a riding turn had developed on the winch which prevented us from providing sufficient slack for the linesmen ashore to slip the spring from the bollard. I informed the Master of the situation. He simply replied with 'Let go the spring'. At this time, I could hear the bow thruster begin operating and the bow began slipping the berth, with the spring still ashore.

I am not aware of what was happening on the bridge at the time ie. was the Master answering a telephone call or in conversation with the docking pilot at that moment. It may simply have been a momentary lapse in concentration on the part of the Master, which may lead us to question the quality of bridge team management activity on this vessel. At the time in question, the Master was accompanied by the Chief Officer, a Docking Pilot and a River Pilot suggesting that the attention of the entire bridge team was elsewhere. Communication between the mooring stations and bridge was by VHF, and there was no interference or cross channel interruptions at any point during the operation. Quality of reception was loud and clear for all parties.

**CHIRP Comment: This report was forwarded to the vessel's operator; an edited extract of the response follows:**

**"We take such incidents very seriously and I have asked all of our vessels and Masters to investigate as to whether this incident could have occurred onboard their vessel and what steps must be taken to avoid such an incident.**

**There are several factors which give me cause for concern. The poor communications, the misuse of the mooring equipment - all vessels are fitted with split drum winches to avoid any riding turns and damage to the ropes - the failure of the Master or Officer on the bridge to visually check that the ropes were clear before using the bow thruster and the failure of the Officer concerned to report this incident as a near miss under our Safety Management System.**

**If the Officer had a communication problem with the Master then he should have contacted myself as DPA to discuss the incident."**

The Board endorses this view and emphasises the importance of near-miss reporting directly to the DPA if it is not possible to use the normal process. This response was followed up with a message to the fleet:

“Please read and discuss the report and see if this incident could have happened on your vessel and what steps you have to take to prevent such an incident happening. The main focus of the investigation would seem to be communications between the bridge and the focsle where the informant claims that he was unable to contact the Master or Chief Officer.

My own thoughts on the matter are two fold. Firstly, every Master that I have ever observed has always stayed on the bridge wing watching the quay and the lines and making sure that his orders are carried out. Secondly, the normal practise on most vessels is for the last spring and headline to come directly from the split drum reels and therefore there should not be the opportunity to have riding turns on the winch. It would seem there is conflicting evidence in this report.

A third point which again cannot be proven is why if the Master and Chief Officer were both on the bridge and both have VHF radios then even if the Master was distracted by talking to the pilot the Chief Officer would have been able to respond to the call from the Officer on the focsle.

If this report is true and the incident did occur as described then it also shows poor seamanship in that the bow thruster was used prior to the master ascertaining that the ropes forward were all clear.”

---

### AIS DATA IRREGULARITY

**Report Text:** V/I coming up from SW, passing clear and no problem to us but AIS indicating deficient information as Static Ship & Voyage Data Missing, hence no ship name or call sign indicated. The SOG, COG and HDG data were all correct. I know there is an M Notice about poor AIS data to send to nearest MRCC but unable to get through on fax to local MRCC. Appears AIS not set up properly. A pity because it is an excellent tool.

**CHIRP Comment:** The UK M Notice referred to is MIN 231. Although the notice expired on 01 April 2007 it is still available and contains a reporting format and some useful information:

“The MCA, as the UK Competent Authority, has received reports of vessels transmitting incorrect AIS data. This can be a danger to navigation and weakens confidence in the system.

The errors reported include:

- dynamic data (especially heading errors)
- operator input fields and
- predefined fields.

Causes can be:

- faulty interfaces, particularly with the gyro compass,
- incorrectly entered Maritime Mobile Service Identities (MMSI) or International Maritime Organization (IMO) numbers,
- incorrect Destination and estimated time of arrival (ETA) and failure to change vessel status or the use of an incorrect vessel status.”

A number of reports similar to this one have been received. This report was forwarded to the vessel's operator, who responded as follows:

“We requested the vessel to test the AIS and received the reply below.

Furthermore we have now instructed all vessels to reset their AIS units at the beginning of each watch.

This has been a help in improving our Safety on board

Rgds

Fm: Master

Your msg well received.

I checked AIS and on display have been shown all information including ship's name and call sign.

For confirmation proper transmission I called vessel which was 3 Nm from us. This vessel was receiving all our data except ship's name and call sign. Due to a/m I reset our AIS unit and after that the vessel by side of us has confirmed receiving all data also with ship's name and call sign.

I don't know what is the reason that on display is shown all data and we are not transmitting same but we will look for it.

To avoid such situation in future I ordered as routine to reset AIS unit on beginning of every watch.”

The Board is grateful for this response and in addition suggests it is important to notify manufacturers of such incidents so that equipment performance and reliability may be improved.

## LEISURE

### I'VE SEEN THE LIGHT!

**Report Text:** Motor-sailing on a clear night, passage. On watch alone sighted single red light on port bow ("Green to green, red to red, perfect safety, go ahead")! Nothing else to be seen through binoculars. Somehow felt this light was getting closer and could not leave the cockpit to go below to consult radar. In the dark put down glasses, found binoculars again and now white bow wave from black hull with red light close on port bow. Just time to get behind wheel, disengage autopilot and turn hard to starboard (170), when black yacht slid close by,

shout of alarm, dim cabin light, no stern light. She was showing a red light on stbd side!

**CHIRP Comment:** The rhyme quoted is old and well known, but a single point of information will not guarantee safety and if its bearing is steady then you are going to hit it whatever colour it is!

It's always a good idea to have your boat independently checked out and in the UK the RNLi offer a free service which can be booked at [www.rnli.org.uk/what\\_we\\_do/sea\\_and\\_beach\\_safety/book\\_a\\_sea\\_check](http://www.rnli.org.uk/what_we_do/sea_and_beach_safety/book_a_sea_check).

---

### TUBE/ROPE LIGHTING FIRE RISK

**Report Text:** I am the Designated Person for a private yacht (the yacht holds ISM certification).

The crew reported a near miss.

"Rope lighting overheated and charred. This was installed as hidden lighting very close to the deck head - could have started a fire.

This is a recurring problem which has been witnessed many times with this type of lighting by the reporting engineer."

The lighting is 230V, 16.4W and the markings appear to indicate it reaches a temperature of 80C. It is CE marked. The lighting is fitted in a trench at high level close to the deck head. The lighting has to be bent to get it to pass around the corners of the cabin or public area.

I understand that numerous yachts have this fitted with and it may be worth highlighting the risks.

**CHIRP Comment:** This issue was raised with the MCA, who after investigation provided the following:

"The manufacturer provides a large range of tube type lighting for various purposes and it is not clear from the letter exactly which type of lighting was used thus it is difficult to determine if the lighting was fit for purpose.

However having checked the data sheets supplied by the manufacturer on their web site it appears that they have products both incandescent and LED suitable for mounting in channels and capable of being bent to tight radiuses.

As part of their product range they can supply a channel for the mounting flexible incandescent lighting which I would assume as the highest operating temperature and thus it would appear that this lighting would be fit for purpose described.

Therefore we propose that we publish a brief MIN/MGN regarding the use of decorative lighting on vessels stating that:

- It should be fit for the intended purpose.
- Installed in accordance with the manufacturer's instructions."

### MUTUAL MISUNDERSTANDING?

**Report Text** In the afternoon when approaching port we noted a tanker approaching from the southwest. It was clear from its change of bearing that it intended to pass astern of us.

However, without any signal, it altered to port as if trying to pass ahead of us.

I tried calling on 16 to establish his intention, e.g. "Tanker 10 miles south of AAA this is yacht "XXX" fine on your starboard bow: what are your intentions?" No reply. Once again the bearing became steady so at about 1/2 mile distant I was obliged to alter to port and onto the starboard tack so that she was able to pass clear ahead of our intended track. He clearly had underestimated our speed.

I called again after he was clear. This time there was a reply and I told him that he had caused immense worry and confusion by altering course to port to try to pass ahead of us. I think I heard the words "Thank you"!!

There was no hurry as the ship stood off for the rest of the day and did not enter port until the evening.

Perhaps big ship's Officers of the Watch should be invited to spend time on small craft in busy sea lanes. They might learn something.

**CHIRP Comment:** This report was sent to the tanker's operator, who asked the master to respond:

"Regarding to CHIRP report kindly please find my explanations:

- 1) Vsl has been ordered from Port Control to remain 10 Nm outside Port Limit await for pilotage.
- 2) Due to above Vessel steamed with slow speed and var. courses.
- 3) At that time Bridge watch was fully equipped and we not see any serious problem to make a safely pass with small yacht. We heard on Vhf Ch 16 that some station calling a tanker within this area but usually we are not going to making any conversation for such situation with others station.
- 4) Vsl has been changed the course and all the time kept safely distance CPA of more 0.5 Nm"

The reporter responded to this with:

"I would comment on each paragraph as follows:

1. As previously stated, our encounter was, indeed, about 10nm south of the port;
2. I would not rate the tanker's speed as particularly slow as she was creating a fair bow and stern wave in, from our point of view, a moderate sea. However, later in the day, we did note that she was going slow speed before approaching the pilotage ground;

3. It was perverse of the tanker to have altered course towards us in open sea conditions. She gave no indication (visual or sound) that she had seen us. A series of 2 flashes on his Aldis (or blasts on the siren) would, at least, have indicated that she knew what she was about. It is my guess that the ship altered course before she was aware of our presence. We know that our 'blipper' radar reflector is effective up to 6 miles so she should have sensed us;
4. The distance off ahead may well have been as much as 0.5nm, but that did not lessen the alarm experienced from such an unusual and thoughtless manoeuvre when the tanker had the entire Channel in which keep his distance off the port and us."

The issue of passing distances generates a good number of reports to CHIRP, but there is a great deal of subjectivity in the individual assessments made and the other party does not always reach the same conclusion, as this correspondence demonstrates. The Maritime Advisory Board makes the following observations:

- An alteration to starboard by the tanker would have been appropriate.
- There is a need to try and evaluate the situation from the other vessel's perspective; it may be reasonable to ask the question "How close would I like someone to be if I were on the other ship/boat?"
- This report and others we have published features a Radar Target Enhancer (RTE). The majority of RTE operate on the X band (3cm); merchant vessels also operate S band (10cm) radars and whilst the X band radar is commonly used for coastal work it may not be the radar being observed. RTE's can undoubtedly help, but they should not be relied on in making an assessment as to whether you have been seen or not.

## EDITORIAL

As many readers will know watches at sea traditionally change every 4 hours; I've been with CHIRP for more than four years, so am probably overdue to take a break!

"Shipping" is a large and complex industry and there remain many facets which I have yet to explore and I have been offered a great opportunity to progress, so this edition of FEEDBACK will be my last.

A new Director (Maritime) will be announced in due course and CHIRP will continue to highlight issues of importance to the industry and publish incidents, where appropriate.

CHIRP is not able to publish all the reports it receives, usually because of the risk of the reporter being

identified, thus some significant operational safety concerns are resolved discreetly. These incidents have involved ports and ships and have included failures to address and/or report significant safety events, stability concerns, maintenance failures, depths of navigable channels, separation scheme violations and more. Resolution has involved companies, Flag Administrations, charterers, classification societies, P&I Clubs and others; all keen to promote and improve the safety of marine operations.

Some continue to see safety as "woolly" or "non-commercial" or even "expensive", but safety is the product of the commercially sound business qualities of integrity and resilience.

CHIRP reports indicate integrity and resilience in shipping are delivered through an attention to detail in design, construction and operation with good processes applied by the right people technically and operationally. So, if we want to achieve "safety" (and a sustainable business), we need to continue to scrutinise the performance and contribution of all the stakeholders in these areas

Thank you for all your help and safe sailing,  
Mike Powell

## CONTACT Us

Michael Powell Director (Maritime)

Peter Tait Chief Executive

--000--

**CHIRP**

FREEPOST (G13439) [no stamp required in UK]

Building Y20E, Room G15

Cody Technology Park

Ively Road

Farnborough GU14 0BR, UK

Freefone (UK only): 0808 1003237 or

Telephone: +44 (0) 1252 393348

Fax: +44 (0) 1252 394290 (secure)

E-mail: confidential@chirp.co.uk

## REPRODUCTION OF FEEDBACK

**CHIRP**® reports are published as a contribution to safety in the maritime industry. Extracts may be published without specific permission, providing that the source is duly acknowledged.

FEEDBACK is published quarterly and is circulated widely in the maritime sector. If you are not already on our circulation, and would like to be, please send your application in writing to CHIRP at the above address or subscribe free over our web site [www.chirp.co.uk](http://www.chirp.co.uk).

Registered in England No: 3253764

Registered Charity: 1058262

