

MARITIME FEEDBACK

No: 1

Autumn 2003

EDITORIAL

WELCOME!

This is the first output from Maritime CHIRP. Although launched on 1 July 2003, it is encouraging that advances have already been made in a number of our target sectors and the report handling process has promoted changes and/or raised issues for further consideration.

The reports reproduced here are only edited with the agreement of the reporter and to remove identifying text. They represent the safety concern(s) from the reporter's perspective based on the information available to the reporter.

The reports are reviewed by the Director (Maritime), who is assisted by an Advisory Board made up of cross-industry experts nominated by the principal maritime agencies and representative bodies. The Board assists in extracting the safety issues and determining the most appropriate follow-up action, where necessary.

The first Maritime Advisory Board meeting, leading to this publication took place on 24th September and the Trust (and your Editor) is grateful to all of the participants for their commitment and support.

The reports in this edition give some indication of the variety of issues CHIRP has been asked to deal with, but first a little more about CHIRP:

The objective of CHIRP is to promote safety in the maritime sector for employees and others by:

- *Obtaining, distributing and analyzing safety related reports which would not otherwise be available;*
- *Whilst at all times keeping the identity of the reporter confidential.*

CHIRP is an independent confidential reporting programme for people employed or having an active interest in the maritime industry. CHIRP's primary purpose is to represent safety related issues to the relevant organisation(s) without revealing the identity of the reporter. CHIRP is not intended to be a "whistle blowing" programme.

CHIRP has its origins in the civil aviation industry and has been in existence there since 1982. It is being introduced as a new safety element to the maritime sector as an innovative way of promoting the improvement of its safety culture.

CHIRP for the maritime industry is being funded by the UK Department for Transport. The independent charitable status of CHIRP ensures its impartiality in dealing with all reports received; no matter which organisation may become involved in subsequently remedying any reported problems.

WHAT DO I REPORT?

A Hazardous incident = An event involving a real or potential exposure to injury, danger or loss, Affecting:

- ✓ YOURSELF
- ✓ OTHER PEOPLE
- ✓ YOUR ORGANISATION
- ✓ OTHER ORGANISATIONS YOU DEAL WITH

Incidents/Events can include:

- ✓ ERRORS
- ✓ INDIVIDUAL PERFORMANCE
- ✓ OPERATING/MAINTENANCE/SUPPORT PROCEDURES
- ✓ REGULATORY ASPECTS
- ✓ UNSAFE PRACTICES

WHAT DO I NOT REPORT?

- ✗ Incidents or events with no safety content
- ✗ Issues involving conflicts of personalities
- ✗ Industrial relations and/or terms and conditions of employment problems

WHEN DO I REPORT?

- ✓ When you are concerned to protect your identity (please note that anonymous reports are **not** accepted)
- ✓ When you wish others to benefit from an important "Lesson Learned"
- ✓ When other reporting procedures are not appropriate or are not available
- ✓ When you have exhausted company/regulatory reporting procedures without the issue having been addressed

A Maritime Safety Newsletter

from the Confidential Hazardous Incident Reporting Programme

CHIRP, FREEPOST (G13439), Building Y20E, Room G15, Cody Technology Park, Ively Road, Farnborough GU14 0BR Freefone:(24 hrs) 0800 214645 Fax 01252 394290

You can also e-mail us at confidential@chirp.co.uk - visit our website at www.chirp.co.uk

I hope you find the reports of interest and that you will be encouraged to apply lessons learned in your own operations. If you have something to add to any of the issues raised here or wish to raise a different safety issue, please get in touch.

Keep the reports coming!

Mike Powell
Director (Maritime)

REPORTS

Maritime Reports received in period = 14

Key Areas:

- Dry dock procedures
- The safety role and responsibilities of manning agents
- Obstruction of emergency exits
- Helm order confusion
- Classification Society error
- Risk of food poisoning
- Engine integration
- Operating & maintenance manuals

HELM ORDER CONFUSION?

Crossing a river on a strong ebb tide to lock in bow first, the officer of the watch gave the wheelman the order "steady". The wheelman steadied on a fixed shore object ahead and this, combined with the strong ebb, contrived to give the ship a dangerously "slewed" aspect - unsuitable for entering the lock - which increased as the lock was approached.

It was later made clear when "Steady on the Compass" was required in order to keep the ship's correct aspect for making the lock this way on the ebb.

In the situation described I took command, went "full astern", avoided (narrowly) hitting the wall, and headed back to the other side to round up in a big sweep, so obtaining the aspect well before closing with the lock.

Later it was made the practice to take the lock ebb way by entering stern first.

CHIRP would like to thank George Lang of Warsash Maritime Centre for his assistance with this report.

STCW 95 requires all watchkeeping officers on vessels over 500gt to have a working knowledge of the IMO's publication "Standard Marine Communication Phrases (SMCP)".

Section A2/1 is entitled Standard Wheel Orders.

Phrase All/1.10 is "steady" = reduce swing as rapidly as possible.

Phrase All/1.12 is "steady as she goes" = Steer a steady course on the compass heading indicated at the time of the

order. The helmsman is to repeat the order and call out the compass heading on receiving the order. When the vessel is steady on that heading, the helmsman is to call out: "Steady on...".

The very last sentences of this section in the SMCP states:

"If it is desired to steer on a selected mark the helmsman should be ordered to: "Steer on ... buoy / ... mark / ... beacon". The person giving the order should acknowledge the helmsman's reply."

An informal survey of a number of contacts showed that many of us when steering in a coastal approach or inland waterway were instructed to respond to a "Steady" or "Steady as she goes" command by bringing the vessel to a compass course, advising the con and then steering on a convenient fixed object because we would be able to detect deviation more easily.

All of us trained in that way may have found ourselves in this situation in similar circumstances, unless we became aware of the difference between the fixed object and the original compass course in sufficient time! What about you?

OBSTRUCTION OF EMERGENCY EXITS

I recently travelled as a passenger on the high speed ferry '###' from AAA to BBB and returned one/two days later.

On both occasions I noticed that that cleaning gear, including vacuum cleaners, was stowed in the way of the emergency exits at the aft end of the economy passenger seating area. (The upper passenger deck).

This would hinder evacuation in an emergency as it would need to be moved first.

One of my fellow travellers pointed this out to a deck officer after arrival at BBB on the return trip but was met with lack of interest or acknowledgement. He therefore drew the matter to the attention of somebody in the hotel/passenger service department, and whilst politely received and acknowledged we have no confidence that our concern was taken seriously.

CHIRP contacted the operator concerned and the issue was investigated, confirmed and remedied.

This report demonstrates what CHIRP seeks to achieve with each report; constructive dialogue, investigation by the operator and remedy (if the issue is confirmed). It's simple, effective and confidential.

FIRE IN DRYDOCK

I was employed under a contract with a manning company. While on duty on board of the ferry "MV ###" in dry dock there was a fire. Certain emergency systems were disabled in dry dock either for maintenance or as a consequence of other tasks being undertaken. No crew briefing took place with respect to the disabling of these systems and the measures put in place to compensate.

When I heard, Fire on Board, I followed the emergency procedure and crawled on the floor with a wet towel over my mouth and left my cabin crawling. The alarm was raised by voice. The emergency lighting was inoperative.

At least one crewman was seriously affected by smoke and toxic fumes. Why didn't the company supply breathing apparatus?

A year has passed since the incident and the company do not want to provide an accident report, why?

Fire training on board was not accurate at all. We should be able to breathe when crawling along the deck. My experience indicates that crew should be provided with escape breathing apparatus, a fire in a ship's accommodation generates too much toxic gas. Evacuation training in the event of a fire is no more accurate. Everyone involved in evacuation procedures should be able to breathe including stair marshals.

The incident took place before the 2000 amendments to SOLAS 74, Chapter II-2, Reg 13 came into force on 1 July 2002 and required Emergency Escape Breathing Devices to be supplied. However, the reporter is of the view that the numbers prescribed are too low and unlikely to be of real benefit.

On the facts reported there are a number of ISM Code compliance issues:

1. Section 7 states:

"The Company should establish procedures for the preparation of plans and instructions, including checklists as appropriate, for key shipboard operations concerning the safety of the ship and the prevention of pollution."

Repair periods are clearly "key shipboard operations" which include significant safety risks that have to be carefully managed. The report and the fact that there was a major fire indicate this may not have been the case.

The importance of making all crew members aware of the status of safety equipment during repair periods should be obvious. Whilst it may be impracticable to have the entire crew attend daily briefings, arrangements should be put in place to ensure all personnel are aware of the activities impacting their safety and the compensatory measures adopted.

2. Section 8 states:

8.1 "The Company should establish procedures to identify, describe and respond to potential emergency shipboard situations.

8.2 The Company should establish programmes for drills and exercises to prepare for emergency actions.

8.3 The SMS should provide for measures ensuring that the Company's organization can respond at any time to hazards, accidents and emergency situations involving its ships."

It is not clear how the emergency response activities were conducted, but it is worth highlighting this part of the Code because the roles and responsibilities of seafarers during repair periods often change and can lead to confusion. On the evidence of the report the quality of the training undertaken is also open to question.

3. Section 9.1 states:

"The SMS should include procedures ensuring that non-conformities, accidents and hazardous situations are reported to the Company, investigated and analyzed with the objective of improving safety and pollution prevention."

And at 9.2;

"The Company should establish procedures for the implementation of corrective action."

The alleged absence of an investigation is a contravention of the ISM Code. CHIRP has also learned that Flag State was notified too late for any meaningful investigation to take place."

The absence of an investigation into the incident or evidence of procedural changes after it, combined with the other areas of concern, raise serious doubts as to the effectiveness of the safety management system in this organisation.

CHIRP has learned the vessel was subsequently expelled from her registry.

The reporter was supplied to the vessel operator by a manning agent. This incident and other details emerging subsequently have caused the agent to ask whether there are reasonable steps an agent should/could take to help prevent sending seafarers to sub-standard operators.

Those manning agents that have been willing to talk to CHIRP indicate that beyond credit risk assessment there are few checks undertaken. Their clients are the ship owning/managing principals, but their resources are the seafarers on their books. The ability of manning agents to conduct operational risk assessments of prospective clients varies greatly.

CHIRP believes that this is a subject worth discussing further to see whether reasonable and practical measures may be taken to promote seafarer safety.

CLASSIFICATION SOCIETY ERROR?

This ship was sunk in AAA by the operating crew disconnecting the tunnel bearing cooling pipe. The fire brigade pumped it out and raised it. The fridge system was ammonia with a rotten condenser and the coolers in the holds leaked too, as they smelled strongly of ammonia. I was only on the ship for a fortnight and then left. Heard later it got as far as BBB, which surprised me. There were no tools of any kind on board. No testing gear for any of the injectors. No filters between the service tank and the engine. The two gas oil purifiers had shot bearings in them. The single Titan purifier was in bits as the owner couldn't get the spares, or so he said. The change over lever on the exhaust boiler was jammed and most of the boiler tubes blocked. The valves on the generator were so worn they cut a bit out of the push rods so they'd fit. These engines had no spares whatsoever. The tunnel and tunnel bearings were full of water as the crew working on the generators flung everything down the tunnel. The classification society surveyors were ####. In my view the ship should never have left port. This ship spent three months in BBB doing repairs.

Has this type of incident happened to you?

CHIRP would be interested in hearing of similar recent experiences. Fortunately this report relates to an incident some years ago. However, the strength of the reporter's views allowed him to recall the events in some detail and it was felt worth publishing to illustrate an issue that we all hope has gone away.

On the evidence of this report there may be occasions, when Class has let seafarers down. There may also be occasions when seafarers have let Class and themselves down by not assisting them fully in the performance of their duties. Deceit or "economy with the truth" in order to pass survey ultimately benefits no-one and puts lives at risk.

RISK OF FOOD POISONING

I have recently just come off one of AAA vessels which is at the moment doing R.O.V.(Remote Operating Vehicle) work. I was one of the two Chefs on board catering for 30 people. Recently at a Safety meeting I brought up a very important issue concerning heating and keeping warm the food at each meal time. The food is put out on top of a hot press in the mess room and soon goes cold quick as there is not enough room and some of it sits on top of the fridge. I suggested that they should get proper heat lamps to keep the food at the right temperature so as not to cause food poisoning. That is what will happen soon if something is not done and who will get the blame, us the cooks. An A.B. later informed me that the view of the Safety officer on board was that the

other ships are coping ok without the heat lamps, it's all down to the cost, as is anything else you bring up. If it involves spending money no one wants to know. These new ships are not built to cater for the people on board and before long someone will go down with salmonella. If one of the clients on board or crew goes down ill with food poisoning they have a clear cut case for compensation. It really needs looking in to as soon as possible. I look forward to hearing from you over the result of your investigation.

Other cooks on the company vessels have said the same thing the Second Mate told me, but still nothing has been done. I've been catering at sea for more than twenty years and I know what I am on about. I also have a food thermometer and 20 minutes after the food is put out I test it and it is well below the required temperature.

CHIRP contacted the operator concerned. Another vessel engaged in similar operations had highlighted the problem earlier in the year and additional equipment had been supplied. CHIRP has been informed suitable equipment is now being sourced to remedy this problem.

From a management viewpoint there is a clear benefit in investigating whether lessons learned on one vessel may apply to others.

There is some new regulation which readers may need to be aware of; The Food Safety (Ships and Aircraft) (England and Scotland) Order 2003, which came into force on 18th August 2003. The main effect of the Order is to extend the definition of "premises" in The Food Safety Act 1990, to certain ships and aircraft, in relation to enforcement of food hygiene and specified temperature control requirements.

The Order gives authorised officers the power of entry to ships and aircraft to carry out food hygiene inspections. Our understanding is that the Food Standards Agency is currently in talks with the MCA and others, reviewing a MoU with respect to the enforcement of these regulations.

ENGINEERING

INTEGRATION OF NON-MARINE SPECIFIC COMPONENTS

This issue relates to the integration of marine engines into the vessel and in particular to the terminal connections for fuel and lubricating oil.

Failure of the threads securing the fuel pressure regulating valve to the fuel manifold adapter caused a quantity of gas oil to be sprayed over the running engine. Fortunately, the engine was stopped immediately and the fuel did not ignite. A combination of engine vibration and side loading from a poorly fitted hose connection is likely to have caused the threads to wear on one side and eventually allow fuel leakage.

When the vessel is being built, pipework supplied as part of the engine "package" has to be connected to ancillary equipment, e.g. pumps, coolers, filters etc. The point raised is that the engine manufacturer should take a greater role in specifying exactly how their connections are to be made to the engine system pipework. It is not sufficient to assume that the ship builder is competent to do this.

In service, badly specified and / or fitted connections can lead to premature failure with potentially catastrophic consequences.

The engine manufacturer should specify maximum allowable misalignment, the type, size and securing arrangements for flexible pipe connections/couplings so as to reduce side loading and vibration on the terminal connection. This would ensure that failures due to fatigue cracking and fretting of threads etc are reduced to a minimum.

The incident described could easily have resulted in a serious fire. The engine room was only manned because of other technical difficulties, had it been unmanned, as designed, the result would probably have been far worse. CHIRP has become aware of an incident involving a similar engine which did result in a serious fire and is keeping the relevant investigation body informed.

The Maritime Safety Committee at IMO has raised concerns with respect to engine room oil fuel systems in the past and in MSC/Circ.851 states, with respect to installation:

"One person should be designated as responsible for co-ordinating the initial on-board installation of the complete fuel system.

The co-ordinator must be able to understand the overall design criteria and ensure that the design intent is fully implemented at the time of installation."

Does this happen in practice and who is the co-ordinator?

Class might be the appropriate body, but if the manufacturer does not design the engine terminal connections with adequate tolerances, or does not specify the tolerances and installation requirements adequately, then the shipyard is left to do its best and Class left to say that it has done so.

This would appear to be a rather imprecise process that risks leaving the engineers onboard to discover any defects through operation and take their chances on whether there is a fire or not!

CHIRP would like to gather more views on this issue before approaching organisations that may be able to do something about it.

More reports please!

OPERATING & MAINTENANCE MANUALS

The style and presentation of engine operation & maintenance manuals should be subject to review and a set of minimum standards agreed and imposed by the relevant classification societies.

Too often engine manufacturers adhere to their own ways, which are not always clear and unambiguous. This could lead to confusion, error and ultimately could compromise the safety of the vessel and crew.

In view of the very high capital cost of marine engines, it is reasonable to expect a set of manuals that cover the "as fitted" installation. This is rather than some generic publication that attempts to include many engine variants and applications, marine and non-marine. It has to be said that the North American manufacturers seem to be guiltier in this respect.

In some cases, the manuals provided are not originals, i.e. they are photocopies sometimes of dubious quality. As a lot of photographs are provided in place of engineering drawings it is often difficult to make out sufficient detail.

In these days of inexpensive desk-top publishing, manufacturers could easily arrange for a bespoke publication to be printed and presented from its database.

CHIRP would like to hear more on this subject before pursuing it further. It is believed that this problem may be more widespread. There are ISM Code issues related to the requirements for "valid" documents (s.11) and maintenance systems (s.10).

The International Association of Classification Societies has produced guidance on manuals. Are owners specifying compliant manuals when ordering equipment?

In the aviation industry manuals are part of the approval process leading to certification and are produced to a standard.

Would something similar help here?

UNITISATION OVER UTILITY

Where engines are designed to fulfil a range of duties, there is inevitably an element of compromise. In an effort to make the "package" more compact for an application where space is at a premium, e.g. in a locomotive, the engine builder can introduce access restrictions for maintenance and in some cases introduce unnecessary hazards.

Unfortunately, "one size does not fit all" and where this type of engine is used in a marine application there is generally more space for associated equipment.

Therefore, the manufacturer should make more effort to remove hazards and so reduce risk.

For example, on a well known range of engines, [which can be used as marine propulsion or generator engines], both main and auxiliary lubricating oil and fuel filters, together with their associated pipe work & fittings, are mounted across the engine at the non-drive end and above cylinder cover level.

Note: in the safety section of the operation & maintenance manual under "Safety Signs & Labels" a warning label for both duplex filters is shown which reads -

"WARNING. Filter contains hot pressurised fluid when engine is running. Follow instructions on control valve to avoid injury. If rapid air movement exists to blow fluid, stop engine to avoid fire."

From a maintenance point of view, this means that it is neither practicable nor safe to change filters with the engine running particularly as they are a) at head height and b) are horizontal, therefore impossible to drain fully.

From the safety angle, the position of the duplex filters introduces an unnecessary hazard i.e. potential escape of fuel and hot lubricating oil into an extremely hot area. Poor design and installation of pipe fittings can only exacerbate the risk.

There have been two incidents with this type of engine in recent times where threaded fittings have failed causing leakage of fuel under pressure to spray over the running engine. In the first case, a fire started which eventually led to the loss of the engine room. In the second, the on duty engineer spotted the leakage immediately. He took appropriate action so that no further damage was caused.

The installations referred to were fully approved by the relevant classification society but perhaps rules should be revised to manage and reduce, the risk by removing hazards to a safer location.

CHIRP would like to hear more on this subject.

Again there are elements of design that may need to be addressed. The CHIRP discussions on this report also highlighted the need to ensure the work place is designed or adapted to accommodate the characteristics of equipment and its anticipated use.

LEISURE

BREAKAWAY FROM MOORINGS

A 50', twin-masted yacht, moored between two buoys has broken its forward mooring and is tethered by an approximately 18mm diameter rope aft. The boat has already swung into another boat causing damage and

may interfere with a ferry transit. The Harbour master, although notified, does not appear to be doing anything.

CHIRP contacted the harbour master to confirm he was aware of the problem. Whilst there was a considerable amount of additional "history" surrounding this vessel, any immediate threat it posed had been addressed.

The safety message is an obvious one:

Make sure your moorings are up to the job.

CHIRP has been invited to participate in a new RYA safety initiative and after consultation with the NFFO has agreed to assist in determining the extent of the issue and the risk it may pose to life. CHIRP has been advised of a voluntary code of practice developed by the Shell Fish Association of Great Britain which may address some of the concerns.

The text of the RYA press release is reproduced below:

The RYA Tackles Unmarked Fishing Gear

The RYA is concerned with the alarming increase in the number of boaters experiencing problems with fishing tackle becoming entangled with propellers. In a bid to evaluate the extent of the situation and address the issue the RYA is urging anyone who experiences this problem to report the incident.

Poorly marked or unmarked lobster pots cannot easily be seen in daylight or in a choppy sea. Many have no flag to signal their location and during a fast tide can get dragged under. Unaware of the hazard, boats are driving over the submerged lobster pots and fouling their propellers.

Reports to the RYA are illustrating two situations. Fishermen are using steel wire in some cases to anchor the lobster pots, which propeller cutters cannot sever. If the wire or rope holds, the boat remains anchored to the pot and a member of the crew has to go overboard and attempt to free the boat. In a choppy sea this is an extremely dangerous situation. Alternatively the wire can free itself from the lobster pot and become wrapped around the spinning propeller, potentially lacerating the hull. In some cases the wire or rope can disable the propeller leaving the boat to drift and encounter rocks and other hazardous objects.

Stephen Johnson, RYA Cruising Manager, commented, 'this is a situation that we have been aware of for a while and is escalating. We need to gather all the information possible and urge anyone who has had a problem with fishing tackle to get in touch. When we are aware of the extent of the situation we can begin to do something about it and make the waters a safer place to be.'

Boaters are urged to report any incidents directly to the RYA by contacting RYA Cruising on 0845 345 0370 or by emailing cruising@rya.org.uk. An alternative means of reporting the incident confidentially is to contact the Confidential Hazardous Incident Reporting Programme (CHIRP) which has agreed to participate in this RYA Safety initiative. CHIRP forms are downloadable from the RYA website www.rya.org.uk.

RYA Cruising has been representing recreational boaters in consultations on the Confidential Hazardous Incident Reporting Programme (CHIRP) which allows both the commercial marine sector and recreational boat users to use the service.

CHIRP is a programme designed to offer an independent confidential safety reporting system. After great success in the commercial aviation sector a decision to set up CHIRP for the maritime sector was made by the Shipping Minister in 2002. A consultation process involved several maritime agencies including the Marine Accident Investigation Branch, the MCA, the Chamber of Shipping, the UK Maritime Pilots' Association, the Nautical Institute and the RYA.

CHIRP will receive confidential incident reports from individuals, which are then validated as far as possible. The disidentified reports are then reviewed by the Advisory Board, which includes representatives from the MCA and MAIB. The objective is to make the information as widely available as possible to prevent similar incidents, whilst maintaining confidentiality of the source.

CURRENT MCA NOTICES

The following MCA Notices have been issued since 1 July 2003:

MIN 147 (M):- Written examination dates for Certificates of Competency (Limited to Yachts and Sail Training Vessels) issued by the Department for Transport - Maritime and Coastguard Agency in the year commencing 1 September 2003.

MIN 148 (M):- Engineer Officers (Limited to Yachts and Sail Training Vessels) Written examination dates for Certificates of Competency issued by the Department for Transport - Maritime and Coastguard Agency in the year commencing 1 September 2003.

MIN 149 (M):- Deck and Engineer Officers (Fishing Vessels) Written examination dates for Certificates of Competency issued by the Department for Transport - Maritime and Coastguard Agency in the year commencing 1 September 2003.

MIN 150 (M):- Deck and Marine Engineer Officers (Merchant Navy) The Merchant Shipping (Dangerous or Noxious Liquid Substances in Bulk) Regulations 1996. List of current MARPOL Surveyors.

MIN 151 (M):- Requirements for Maritime Security Training - Port Security Officers, Ship Security Officers and Company Security Officers.

MGN 258 (M+F):- Decommissioning of Halon Systems.

MGN 259 (M+F):- Exemptions to the Port Waste Reception facilities Regulations 2003.

MGN 260 (M):- Guidance to all Owners and Operators of the Jason's Cradle.

MCA Notices are published on their website - www.mcga.gov.uk

CURRENT MAIB INVESTIGATIONS

MAIB reports are published on their website - www.maib.gov.uk

The following incidents are currently being investigated by the MAIB:

Vessel's name	Accident/ incident type	Date of incident
Marbella	Collision	08/05/02
Bro Axel/Noordhinder	Grounding	05/12/02
Amber	Fatality	06/01/03
Arco Adur	Fatality	25/02/03
Claymore	Machinery failure	11/03/03
Pride Of Provence	Collision	18/04/03
Wahkuna	Collision	28/05/03
Diana/Santa Vitoria	Collision	06/06/03
Jambo	Grounding	29/06/03
Briagha-Mara	Collision	07/07/03
Patsy B	Fatality	07/07/03
Stranraer Dory	Two fatalities and one missing person	12/07/03
Breakaway Five (Broads Boat)	Fatality	19/07/03

NEED TO CONTACT US?

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