

# CHIRP FEEDBACK

Issue No: 25

New Year 2010

## EDITORIAL

### FATIGUE

A recent meeting of the Human Element Advisory Group, which is coordinated by the UK Maritime and Coastguard Agency (MCA), focussed on fatigue. The meeting was opened by the Minister for Shipping, highlighting the importance that the UK Government and the MCA attaches to this subject.

The possible consequences of fatigue were well illustrated in a presentation by the Marine Accident Investigation Branch. This described the grounding of a general cargo vessel on the shore of Northern Ireland in 2008. The officer of the watch (OOW) had fallen asleep shortly after taking over the watch at midnight. With no-one awake on the bridge, the ship ran aground three hours later. The OOW (the chief officer) had been working a 6 hours on / 6 hours off watch-keeping regime with the master. Such a routine on vessels engaged in near coastal trade poses a serious risk of cumulative fatigue. Additional safety measures which could have helped mitigate the risk were not used. There was no lookout on the bridge throughout the night and the watch alarm was not switched on. The company's Safety Management System (SMS) audits had failed to pick up that these important safety requirements were routinely not being applied. The full report can be found on the MAIB website.



*Asleep then aground!*

So who is responsible for managing the vessel so that fatigue does not endanger people or the vessel?

**The Managing Company** must ensure that the proper resources, particularly manpower, are provided. He must keep a proper oversight of hours being worked. It is often the case that a port state control inspector will

find discrepancies in the records. The ship's superintendent should have discovered these beforehand and taken remedial action. Furthermore, in a company with a good safety culture, if the ship's staff has been engaged in a particularly intense workload, the superintendent will proactively discuss with the master whether special actions, e.g. delaying sailing, are prudent.

**The Master** and the ship management team must be alert to the risk of fatigue.

**The Authorities** scrutinise records of hours of work and rest to determine compliance with regulations. Such scrutiny is part of Port State Inspections. In the UK, the MCA detains vessels on which serious breaches are found.

**The individual Mariner** must tell his supervisor if he/she feels that fatigue is compromising ability to work safely. This is not always easy, firstly because of a natural human reluctance to admit this and, secondly, because fatigue may dull the recognition by the individual that his/her fatigue may cause a safety risk. Nevertheless, this individual responsibility is important.

If a mariner is concerned about the management of fatigue on his/her vessel, he should first express that concern to the master or senior officer. If the concerns remain, then contact the company's Designated Person Ashore (DPA). From our conversations with DPA's in a number of companies, we know they want to hear of such issues. However, if for any reason you have a concern that you do not feel able to raise within your company, please contact us. You can be assured that the matter will be treated in the strictest confidence and that we will discuss with you how the matter can best be progressed.

### DISTRIBUTION OF MARITIME FEEDBACK

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A Maritime Safety Newsletter

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

# REPORTS

**CHIRP** receives reports on a range of hazardous incidents that have occurred within the commercial, fishing and leisure sectors of the maritime community. Here are a number of reports which will be of wider interest, together with the "lessons learned" as described by the reporter. The **CHIRP** comments have been reviewed by the **CHIRP** Maritime Advisory Board which has members from a wide range of maritime organisations. Full details of the membership can be found on our website - [www.chirp.co.uk](http://www.chirp.co.uk).

## COMMERCIAL SECTOR

### APPROACHING AN ANCHORAGE

**Report Text:** My vessel, a large laden tanker, was making its approach towards a busy anchorage. At the time of the incident we were steering a course of 225° True with a speed of 06 knots, with many ships at anchor on my starboard side.

We saw a bulk carrier just abeam on our port side. It was on converging course and her speed and my speed was almost equal. VHF Contact was made with the vessel to ask her intentions. I requested them to slow down & pass from my stern, but they refused and said that they will maintain their course. I then noticed that the bulk carrier had increased a speed so as to cross my bow from our port side. When she was 4 points on my port bow at a distance of 6 cables, I stopped my engine & then put it to slow astern. She finally passed at a distance of 3 cables from my bow.

I was in embarrassing situation as I could not go starboard due to anchored vessels.

The bulk carrier was clearly in violation of Rules 15 and 16. No attempt was made for a safer passing distance. There was no apparent reason for her not to alter course to starboard or to reduce speed and pass.

**CHIRP** Comment: We contacted the manager of the bulk carrier regarding the incident and he discussed the incident with the Master. He responded that he did not feel that there had been a dangerous situation. Nevertheless, it does appear from the initial report and the response from the bulk carrier that, by the bulk carrier crossing closely ahead of the tanker, the margin of safety had been eroded.

As a general comment, navigation in or near to a busy anchorage requires a high level of situational awareness, with the bridge team reinforced to achieve this.

### PREMATURE COMMENCEMENT OF LOADING LNG

**Report Text:** Our LNG (Liquefied Natural Gas) carrier recently had a problem at a loading terminal. There was the normal discussion between the Loadmaster and the Chief Officer regarding safety matters etc. On completion of the Cold Emergency Shut Down [ESD] test the Loadmaster asked if the vessel was ready to commence loading. The Chief Officer explained that prior to loading the ship's lines had to be cooled to -

110°C. At that time the warmest part of the system was at -28°C and therefore not adequately cooled.

A short time later the Loadmaster asked if they were ready to load but still the lines were not cooled to the correct temperature. The Loadmaster left and returned within minutes and advised the Chief Officer that loading had commenced at a rate of 1000m<sup>3</sup>/hr. At this time the vessel was not lined up for Loading.

The terminal was given a Letter of Protest.

We eventually received this statement:

"The procedure for loading of LNG ships at our terminal has not been changed. But during the cool down operation and start of loading of your good vessel, the terminal procedure for loading of LNG ships was not followed by the loadmaster. This issue has been discussed with all loadmasters at the terminal and correction done for the future."

I can't help thinking that if one of our ships had started discharging into a terminal that had not been lined up, a little more may have been made of it, with demands for dismissal, retraining of staff, changes in staff selection policy, Risk Assessment methodology, corrective and preventive actions in great detail, etc. - and an abject apology.

**CHIRP** Comment: We consulted the Society of International Gas Tanker and Terminal Operators in relation to this report. They commented that it appears that the requirements of the Ship/Shore Safety Check-List, as specified in the International Safety Guide for Oil Tankers and Terminals (ISGOTT), had not been met.

The incident highlights the importance of meticulous attention to communication between ship and shore, with proper dialogue on each item of the check list.

## LEISURE & COMMERCIAL SECTORS

### PROPELLER WASH FROM TUG

**Report Text:** This incident occurred some time ago but is worth reporting to draw boat owner's attention to the hazards of passing large harbour tugs.

A large vessel was finishing mooring operations with tugs holding her on the berth. As the vessel was secure an outbound ship with tug was allowed to proceed past. A port authority patrol boat was also nearby.

A small motor boat was towing a disabled speed boat back into the harbour. There appeared to be ample sea room for the motor boat to pass between the outbound ship and the berthing vessel and so the motor boat and tow continued with the shortest route. However as he passed astern of the first tug the propeller wash forced the motorboat across the fairway and towards the course of the outbound ship.

The tug master alerted the ship to the problem and, after confirming it was safe to do so, reduced power to lessen the propeller wash. The motor boat did not have sufficient power to counteract the wash effect and was spun around. When the tug reduced power the motorboat realised the danger and continued to distance himself from the area until the outbound ship

had passed and the way was clear to transit on the far side of the channel.

It is important that boat owners appreciate the enormous power of modern tugs and the considerable distances that the underwater wash will influence passing vessels. This was reported as a near miss to the tug company and the Port Authority.

**CHIRP Comment:** We spoke to the Harbour Master who was well aware of this issue. A specific warning of this risk is included in the local marine guide for leisure users. In the reported incident, the skipper of the tug was alert to the situation and was able to reduce power without prejudicing the safety of the berthing operation. In different circumstances, the situation could have been more hazardous. It was therefore completely appropriate that the incident had been reported to the Port Authority as a near miss.

## LEISURE SECTOR

### LIFEJACKET

**Report Text:** My lifejacket inflated accidentally, fortunately not in a serious situation. However, on inspection I noticed that the yellow material that covers the bladder has separated - a significant risk factor. This is the first time that the jacket has been inflated under duress, rather than annual checks. It looks like that the process of sealing the yellow material has been poorly completed and that the fault lies with the sewing that attaches the whistle to the material. When the jacket inflated the pressure broke through at this weak area. I suspect there are many jackets with this fault.

The jacket was bought in 2004.

**CHIRP Comment:** The reporter and CHIRP liaised with the manufacturer of the lifejacket. The manufacturer cooperated fully and inspected the lifejacket. This was of a type that has been in service for many years with a good track record. It transpired that the lifejacket had accidentally inflated in a small locker. It appears that as the bladder could not expand fully in the confined space, there was an abnormally high stress on a seam which failed.

On the general subject of lifejackets, we take this opportunity to highlight the importance of regular checks. As a user, look at the outer casing and straps for any obvious damage. Check that the gas bottle is properly screwed tight - this can be done without disturbing the stowage of the bladder. Remember that if a lifejacket is inflated, the bladder must subsequently be re-stowed in accordance with the manufacturer's instructions. If in doubt on this, obtain advice!

It is important that lifejackets are inspected by a competent inspector in accordance with the manufacturer's recommendation. The inspection will include examination and weighing of the gas bottle. The severely corroded bottle shown in the photograph was from a lifejacket that had been in service up to the time of the inspection.



The inspector will inflate the lifejacket from a gas supply to a prescribed pressure. It will subsequently be checked to make sure that the pressure has not fallen below a prescribed allowance, taking into account any change in temperature during the test.



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### LOOK OUT!

**Report Text:** I was on my yacht, and was single handed. The weather was fair with a decent wind to sail under full main and headsail. At approximately 1100, just south of the west bound traffic lane I observed a yacht which was heading on approx 020°. I continued to observe the yacht and assessed we were on a collision course. As I, on starboard tack, was the "stand-on" vessel, I maintained my course. I checked the yacht with binoculars, and could not see any crew on deck, I therefore assessed a collision was inevitable. I changed course to pass down the port side and astern of the yacht. As we drew level, at 1133 I sighted the crew who were sheltering under the spray hood, facing aft, and either reading or sleeping. I hailed them very loudly, and questioned which part of the collision regulations

they did not understand. They reacted, but did not reply.

**CHIRP Comment: The International Regulations for Preventing Collisions at Sea are predicated on the fundamental requirement that all vessels must keep a proper lookout. If you think you are looking around the horizon every five minutes, the real interval may actually be much more than that. Remember that a ship going at 20 knots may be getting closer to you by two miles every six minutes.**

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### ENCOUNTER IN FOG

**Report Text:** We set out from a UK South coast port in our yacht on route for the Channel Islands. The course chosen was to pass two miles West of the Casquets. This course would bring us close to, but clear of, the Traffic Separation Scheme.

15 miles into the journey we ran into fog which quickly closed in to less than 200 metres visibility. Whilst we were concerned by the conditions, we had the benefit of a shipping forecast that had referred to fog patches and we had fully expected to come in and out of fog for the rest of the journey. This unfortunately did not lift until we had passed the Casquets. In any event we have had plenty of experience of sailing through fog and my yacht is very well equipped for such an event. We have onboard AIS, Radar, VHF, two excellent chart plotting devices and an excellent radar reflector.

As we approached the West going shipping traffic we had several large ships clearly plotted on our equipment and it was relatively simple for us to establish if any of them were to pose a danger to us. We had VHF conversations with several ships, checking that they knew of our position and confirming our view that they would pass either North or South of us and more importantly would not change course towards us. Our conversations were cordial and business like and on several occasions to our surprise the reply would be to the effect that they would alter course 1 or 2 degrees to port or to starboard to be safe.

At about 1000 hours, we noticed a vessel some 12 miles to our East that was clearly heading directly for the centre of our AIS and our Radar screens. At 10.9 miles we called up the merchant ship as is our practice, only to be told that we must have the wrong ship as he could not see us on his radar. Before acquiring our AIS Plotter this would have been highly likely but not now we have the benefit of viewing the ship's information, this most definitely was not the case. At 8 miles we again called up the merchant ship who this time confirmed that he had us on his Radar and rang off.

At 6 miles we considered the situation as becoming urgent and we needed to know what to do to best avoid a collision. Clearly both boats in dense fog had a duty to make an early decision to avoid contact. We being a relatively slow moving boat had far less opportunity to take effective evasive action than a ship travelling at three times our speed. With other vessels around us and us being the stand on vessel it seemed to be unwise to do anything that would be unpredictable, so we called the threatening ship again and got no answer.

At 2.9 miles we eventually made contact with the

captain of the ship who on this occasion made it quite clear that he had no intention of either altering course or reducing speed and that what we did about the situation was down to us. We were then completely shocked by his retort that "If you don't understand the regulations the consequences are down to you".

We turned our boat around and continued on a reciprocal course until the ship had crossed our intended track. Whilst doing so we duly reported this incident to Portland Coastguard less there should be any mishap.

I would like to take this opportunity to state that this incident has not changed my view that for the most part the captains of merchant ships are very reasonable people. On the same journey we had skippers telling us that whilst we might be clear of them we should possibly watch out for the ship following on the other side. We even had one ship call us up because he had lost our radar image in his wake. We were able to confirm his safe passing and thank him for his concern.

**CHIRP Comment: The yachtsman referred to the bulk carrier as being the give way vessel. The terms "give-way vessel" and "stand-on vessel" are used in the ColRegs Section II (Conduct of vessels in sight of one another) but not in Section III (Conduct of vessels in restricted visibility.) Our reading of the situation is that by Rule 19d, both the ship and the yacht should have taken avoiding action in ample time. The action of the yacht in turning away appears to have been appropriate but, with hindsight, could probably have been taken earlier.**

**In general, use of the VHF for collision avoidance is not encouraged; the ColRegs do not make provision for its use. (Refer to the MCA Marine Guidance Note No. 324 - "Operational Guidance on the Use of VHF Radio and Automatic Identification Systems (AIS) at Sea").**

**The communication with the Coastguard, in case there had been a mishap, was prudent.**

**CHIRP is pleased to note that the yachtsman's experience with mariners on merchant ships has been generally favourable. However, the attitude of the Officer of the Watch on this bulk carrier appears to have been cavalier. The ship should have been proceeding at a safe speed, as per Rule 19 (Conduct of vessels in restricted visibility.) Furthermore, as per that same Rule, once he detected the yacht by radar, he should have taken avoiding action in ample time. Fog signals should have been sounded.**

**We sent a disidentified copy of the report to the manager of the ship in the Middle East. CHIRP receives responses from 90% of the managers with whom we communicate, but as yet we have not received a reply from this one. However, as some months had elapsed between the incident and the report, it is unlikely that the ship would still have an electronic record of the incident and the officer on watch at the time may no longer be on the ship. In general, it is better to report such incidents to us as soon as possible.**

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## INADEQUATE MARKING OF FISHING GEAR

**Report Text:** Whilst motoring in my yacht in the Solent in force 6 wind, there was a 'bang' and the engine stopped instantly. I initially suspected a problem with engine, but it restarted and ran normally in neutral. The engine stalled when ahead and astern gears engaged. I returned to my berth under sail where divers removed fishing gear comprising a punctured white fender, anchor warp weighted line with fish hooks attached and grapnel.

The feathering propeller was badly damaged. The vessel was subsequently lifted from the water and a spare propeller fitted.

Lessons Learned: In a moderate tidal stream, marker buoys are often dragged below the surface, and amongst white horses can be very difficult to spot, especially when the markers are white.

**CHIRP Comment:** The fishing buoy on which the yacht fouled her propeller was a small white fender which would have been difficult to see in white-crested waves. The Maritime and Coastguard Agency issued revised guidance in 2008 on the marking of fishing gear. Furthermore, for the Solent, the Southampton Harbour Master has authorised his patrol craft to remove fishing gear that is not properly marked.

In contrast to the improperly marked gear noted in this report, it was pleasing to see a commercial fishing boat with buoys that were conspicuously marked. However, we would observe that if the fishing signal (two cones with apexes together in a line one above the other) were to be attached to the masthead by a halyard rather than a fixed lashing, this would allow the signal to be lowered easily when not fishing.

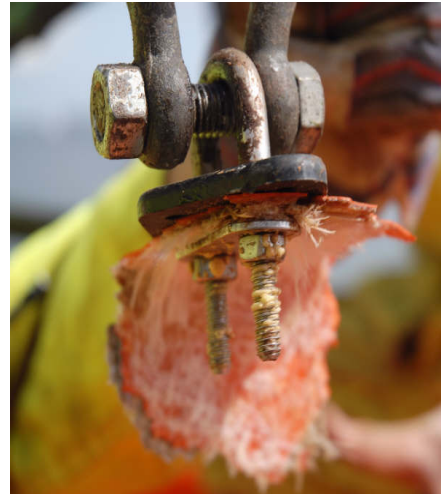


## CORRESPONDENCE

**CHIRP** welcomes correspondence about the reports we publish. We reserve the right to summarise letters received. We apply the same rules as for reports, i.e. although you must provide your name, we do not disclose it.

### RESCUE BOAT FAILURE

**Letter Text:** Perhaps as an ex Chief Engineer, I might be permitted to comment on the "Rescue Boat Failure" on page 25 of Maritime Feedback 24?



Although the proximate cause of the incident would appear to have been correctly ascertained examination of the photographs would seem to show the following additional factors that should be checked on all similar boat attachments:

- 1) The shackle pin would appear to have been replaced with a fully threaded stainless steel bolt, as well as not being a snug fit in the holes in the shackle bow there would be a risk of vibration causing the threads of the bolt to wear the lifting eye. There also remains the question of if the bolt would be as strong in shear as the correct shackle pin, certainly if this is an unauthorised substitution it would render the shackle outside it's original certification.
- 2) I believe that the doubling plate under the detached eye is too small, I would expect it to have an area of at least 4 times that of the top plate.
- 3) I was surprised that the fibreglass does not appear to have been locally thickened in this region.

Can I close by congratulating you on an excellent, readable publication, I regularly draw the members of my yacht clubs notice to the incidents involving sailing and other leisure craft.

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### ENGINE ROOM CRANE

**Letter Text:** I refer to the accident report in CHIRP Maritime FEEDBACK Issue No 23 concerning overloading the engine room crane. The photograph showed this to be marked with an SWL of 3500 kg.

I would agree that a length of hoisting chain should be paid out equivalent to the stroke of the engine before removing the connecting rod top bolts from the top joint

(MAN and MAK)

Should the engine turning gear be disconnected after the respective piston has been removed, then precautions should be taken to prevent any crankshaft assembly rotation due to the imbalance caused by piston assembly removal. The bottom line is to ensure that the job card is written correctly, that fully experienced operatives operate the equipment. In the reported incident, the torque generated by the engine turning gear should have been realised before work commenced.

## REPORTS FROM SHIP MANAGERS

Ship managers with well established safety management systems typically have their own in-house reporting schemes. Often such reports would be of interest to the wider maritime community. **CHIRP** is pleased to receive and publish these. We respect the confidentiality of the reporters and do not disclose identities of ships or companies.

### SMALL FIRE, HIGH POTENTIAL

**Report Text:** In the early hours of the morning, a fire broke out on the open poop deck of a merchant ship.

Seven of the vessel's eight garbage bins stored on the starboard side of the poop deck caught fire causing complete destruction of the seven bins and damage to both sides of the two adjacent bulkheads of the adjoining spaces (the engine room and deck store) and also caused scorching to the deckhead of the engine room workshop. The bins were of the plastic wheelie bin type of 200 litre capacity each.

The fire was started by linseed oil soaked rags after a can of linseed oil had been mistaken for varnish remover. The oil soaked rags had been placed in a garbage bin on the poop deck and had started a fire by spontaneous combustion.



#### SUMMARY OF LOCAL ACTIONS:

Stores in the adjacent deck store were scorched and smoking and close to ignition. The fire was rapidly extinguished by the use of 3 portable fire extinguishers

and 2 fire hoses.

There were no injuries, no pollution and no permanent damage to the vessel. However, due to the potential of this incident, an in depth investigation was carried out.

#### NEW LESSONS LEARNED:

An audit to be carried out across the company's fleet of the construction of all the garbage receptacles on ships in use for the reception of oily rags.

The company's initial outfit standard for new vessels to include the supply of receptacles in compliance with the garbage management plan for the storage of oily rags internally and on external decks.

Develop guidance highlighting the hazards of spontaneous combustion in linseed and other vegetable oils and bio fuels.

Ensure there is a full inventory of all chemicals carried on board.

Highlight this case to chandlers and reinforce the company's terms and conditions regarding packaging and Material Safety Data Sheets.

Modify the procurement procedure to ensure a more comprehensive checking of all stores received on board and positive reporting to the chief engineer of any goods not meeting the ship's or company's requirements.

Run an awareness campaign focusing on the management of chemicals in use around the ship and reinforcing the importance of the availability of the MSDS with the product. The use of the MSDS as a proactive tool rather than a reactive resource should be emphasised. Following the awareness program, review the Job Hazard Analyses related to work involving chemicals, and assess the robustness of the process.

Carry out a review of the Garbage Management Plan with special regard for the management of oily rags.

**CHIRP Comment:** This report illustrates that, what may seem to be a minor non-compliance, in this case improper disposal of oil-soaked rags, can lead to a serious incident. The company carried out a comprehensive investigation and applied the lessons learned across its fleet. We thank them for sharing them.

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# CHIRP

## MARITIME REPORT FORM

**CHIRP** is totally independent of the MCA and any organisation in the maritime sector

Name:	<input type="checkbox"/>
Address:	<input type="checkbox"/>
Post Code:	Tel:
e-mail:	<input type="checkbox"/> Indicates Mandatory Fields

1. Your personal details are required only to enable us to contact you for further details about any part of your report. Please do not submit anonymous reports.

2. On closing, this Report Form will be returned to you.  
**NO RECORD OF YOUR NAME AND ADDRESS WILL BE KEPT**

3. **CHIRP** is a reporting programme for safety-related issues. We regret we are unable to accept reports that relate to industrial relations issues.

If your report relates to non-compliance by another vessel with regulations, **CHIRP** generally endeavours, to follow this up with the owner or manager of that vessel, unless you advise otherwise. The identity of the reporter is never disclosed.

No. You do not have my permission to contact a third party

If your report relates to safety issues that may apply generally to seafarers, it may be considered for publication in **MARITIME FEEDBACK** unless you advise otherwise. Reports may be summarised. The name of the reporter, the names of vessels and/or other identifying information are not disclosed.

No. Please do not publish in **MARITIME FEEDBACK**.

### PLEASE COMPLETE RELEVANT INFORMATION ABOUT THE EVENT/SITUATION

YOUR POSITION ONBOARD OR IN ORGANISATION		THE INCIDENT		THE WEATHER	
MASTER/SKIPPER	<input type="checkbox"/>	CHIEF ENGINEER	<input type="checkbox"/>	DATE OF INCIDENT	WIND FORCE: <input type="text"/> DIRECTION <input type="text"/>
DECK	<input type="checkbox"/>	ENGINE/ETO	<input type="checkbox"/>	TIME	LOCAL/GMT <input type="text"/>
CATERING	<input type="checkbox"/>	OFFICER	<input type="checkbox"/>	VESSEL LOCATION	VISIBILITY (MILES): <input type="text"/>
MANAGER	<input type="checkbox"/>	RATING	<input type="checkbox"/>	<b>YOUR VESSEL</b>	
OTHER:		<b>TYPE OF OPERATION</b>		NAME: <input type="text"/>	
		COMMERCIAL TRANSPORT	<input type="checkbox"/>	OFFSHORE	<input type="checkbox"/>
		FISHING	<input type="checkbox"/>	LEISURE	<input type="checkbox"/>
				TYPE: (TANKER, BULK CARRIER, FISHING, YACHT, ETC)	
				FLAG: <input type="text"/>	

### DESCRIPTION OF EVENT - PHOTOGRAPHS, DIAGRAMS AND/OR ELECTRONIC PLOTS ON A CD ARE WELCOME:

Your narrative will be reviewed by a member of the **CHIRP** staff who will remove all information such as dates/locations/names that might identify you. Bear in mind the following topics when preparing your narrative:

Chain of events • Communication • Decision Making • Equipment • Situational Awareness • Weather • Task Allocation • Teamwork • Training • Sleep Patterns

**continue on reverse**

 PLEASE PLACE THE COMPLETED REPORT FORM, WITH ADDITIONAL PAGES IF REQUIRED, IN A SEALED ENVELOPE (no stamp required) AND SEND TO:

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Confidential Tel (24 hrs): +44 (0) 1252 393348 or **Freefone** (UK only) 0808 100 3237 and Confidential Fax: +44 (0) 1252 394290

Report forms are also available on the **CHIRP** website: [www.chirp.co.uk](http://www.chirp.co.uk)

**LESSONS LEARNED**

Describe the lessons learned as a result of the incident. Do you have any suggestions to prevent a similar event?



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**For market research purposes, where did you obtain this report form:**