

# MARITIME FEEDBACK



Issue 56  
September 2019

An independent and confidential reporting system for the maritime industry

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## The CHIRP editorial

# Fatigue and hours of rest

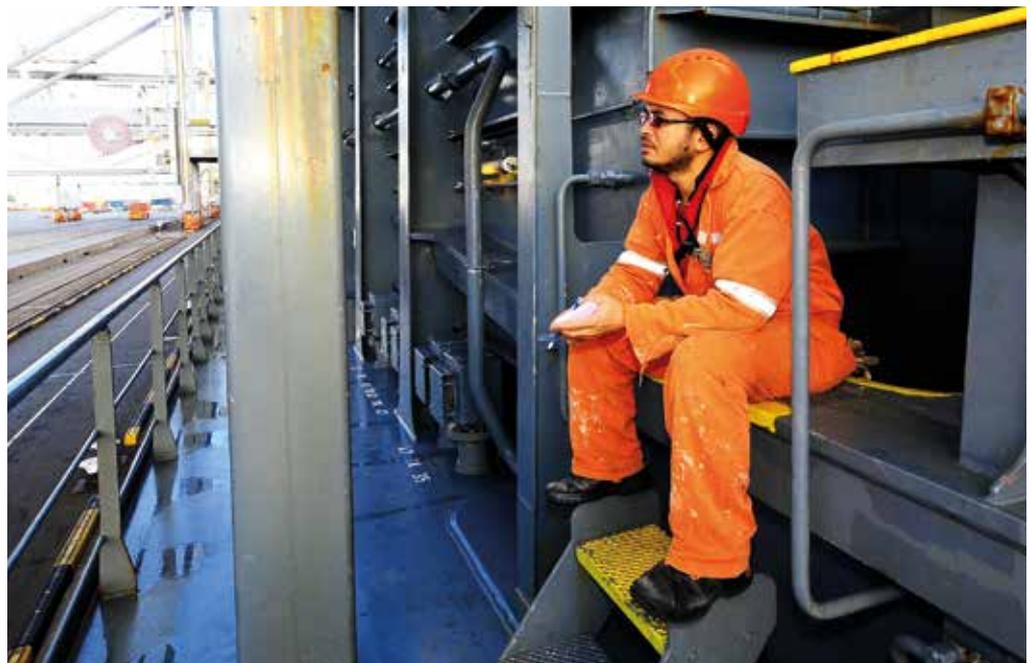


**Capt. Jeff Parfitt**  
Director (Maritime)

In this edition we feature a wide variety of reports, and they have one thing in common – there are valuable lessons to be learned from all of them. We are grateful to our reporters for their commitment to safety, and we invite all our readers to contribute when possible.

Once again in this issue we reproduce the 'Deadly Dozen' diagram which shows various human element factors which contribute to accidents at sea. These factors help us to understand the underlying causes of accidents and permit us to move beyond the basic (and lazy) assertion that many accidents are caused by human error.

Recently, several organisations have been taking a closer look at one of these elements – fatigue. Studies are being conducted to analyse the way hours of work are calculated, which watch-keeping systems contribute to fatigue, and how we can minimise fatigue at sea.



**Fatigue continues to be a major cause of accidents at sea. Are accurate hours of rest records kept on your vessel? (image: Danny Cornelissen)**

Do you have an example which others can learn from? Have you witnessed inaccurate record-keeping of Hours of Rest documents or situations where the demands of the job may have caused fatigue and if so, how did you deal with the problem?

We need accurate records about hours of rest because

**Fatigue, of course, affects safety and decision making at sea, so there is a real need to understand what is happening aboard our ships**

they can help to determine whether fatigue may be present. Fatigue, of course, affects safety and critical decision making at sea, so there is a real need to understand what is happening aboard our ships. Do please get in touch if you have experienced the effects of fatigue, and in the meantime, stay safe!

## Could have been embarrassing

**A report highlighting a delay to the berthing of a cruise liner due to a faulty stabilizer fin.**

### What the reporter told us:

Our vessel, a large cruise liner, was entering port. Upon arrival at the final approach to the inward channel, the vessel's port stabilizer failed to house. Recognising the serious problems that this might incur, the vessel aborted the entry to allow the issue to be resolved. The ship's engineers managed to overcome the problem and house the port stabilizer by manually overriding the automatic system after a delay of about 30 minutes. The vessel then recommenced port entry with no further issues.

### CHIRP Comment:

The Maritime Advisory Board members, after discussion, noted the following points:

- This could have been a serious incident with very expensive consequences.
- The ER/Bridge communications were good on this ship.
- The ship's operating procedures worked.
- If there is any suspicion that an automatic system may have malfunctioned it is essential that the personnel responsible for the equipment or system carry out whatever checks are necessary to positively confirm the actual status of the equipment and to rectify any defect.
- Safety critical systems should be checked and be proven to be operational well ahead of the time they may be needed. Manual override of remote-control systems should also be tested at the same time to ensure that they operate correctly.

From a navigational perspective it is worth noting that the report states that the vessel was on the final approach to the inward channel. The fact that the vessel did abort the inbound transit is a very good indication that the bridge team were well aware of the "final abort position", where you are fully committed to the port approach, and acted accordingly before it was too late.

## Near miss – recreational fisherman and tug

**Whilst fishing at anchor a pleasure vessel had to cut its anchor rope and fishing lines in order to avoid a drifting tug.**

### What the Reporter told us:

My fishing boat was anchored on a fishing mark. The boat is fitted with a radio, a 'radar sounder' transmitter and was exhibiting a black anchor ball and an anchor light at night, to indicate that I was at anchor.

Just before dawn, I had been watching a vessel for several hours approximately a mile away passing up and down and I felt that he would have noticed me since my anchor light is quite bright. Later, during another check on vessels around me, I noted that this particular vessel was now about 2-3 miles to the west of me.

After a while I checked again and, to my horror this vessel was drifting towards me at a distance of no more than 100 yards and closing fast. I shouted as loudly as I

could and used the foghorn but there was no movement from the other vessel.

As I was rapidly running out of time I decided to take what action I could – there was no time to raise the anchor and so I started the engine and cut the anchor rope. My fishing lines were still deployed, and so I was unable to retrieve them. I managed to motor away as the other vessel continued to drift, apparently unaware of the near miss.

I tried to call the vessel on VHF Channel 16, then Channel 12 (the local shipping channel) but there was no reply. I made my way back to the harbour, thoroughly shaken.

### Further Dialogue:

CHIRP learned that the reporter had notified the Harbour Master's office as the near miss occurred within their jurisdiction. The Harbour Master advised the reporter they had contacted the vessel's owners, who responded as follows:

We have looked at this incident in depth including interviewing the captain. We have concluded from the information available to us that although the vessel was close to you, the watchkeeper was fully aware of your position and due to the good conditions, continued to drift as the CPA would not get any closer. He commented that he had not witnessed anyone onboard. Additionally, the VHF was continuously monitored, and nothing was heard from yourself or the local VTS.

### CHIRP Comment:

The Maritime Advisory Board highlighted the following;

- All vessels must maintain a proper lookout at all times.
- Perception of risk differs depending on aspect – the view from an enclosed wheelhouse fitted with ARPA and ECDIS is very different from that of a pleasure boat with a height of eye of only 1.5m.
- For both vessels, engines should be at immediate readiness.

In addition, timely VHF communications are prudent and useful but if a situation requires immediate action then VHF calls are probably not the best use of the available time.

## A positive result following engagement with the DPA

**This report involves two sister ships operated by a major shipping company with the same pilot ladder rigging issue. On this occasion, the DPA readily engaged with CHIRP, acknowledged the issue raised and thanked CHIRP for bringing it to their attention.**

### What the reporter told us (1):

The weight of the pilot ladder was supported by a bracket into which the step fits. This resulted in the weight being taken by the whippings around the chocks directly above the wooden step. I explained the issue to the master and advised him that the weight should be supported by the side ropes. I went to the ladder after berthing and explained to the Chief Mate how ropes should be secured to the side-ropes to take the weight if the pilot boat puts additional weight on the ladder.

### What the reporter told us (2):

This class of vessel has a side door access. The ladder is rigged via slots in an angle bar bracket, thus putting the load on the step lashings rather than on the side ropes. By my reading of the rules and Witherby's Pilot Ladder Manual, this arrangement is not compliant.



Pilot ladder rigged via an illegal angle bar bracket rather than side rope lashings.

Further Correspondence: The DPA was contacted and readily engaged with CHIRP, responding as follows;

*Thanks for bringing this to our attention. The observations are fully acknowledged. As per design the weight should be on the ladder ropes and not the whippings. We are working on rectifying actions with particular vessels in this series. Again, thanks for bringing this to our attention.*

#### CHIRP Comment:

The Maritime Advisory Board members, after discussion, noted the following points;

- Although starting as a non-compliance report the MAB took the view that due to the good communications with, and the positive response by, the DPA this is considered a successful outcome to the initial report.
- The following questions remained unanswered. Who designed the securing arrangement?
- Who approved and signed off this non-compliant, by design, arrangement?
- For the record the major shipping company that currently operates these vessels inherited them through mergers and route sharing agreements and was not involved in the original design and construction of the ships.

## Illegal Bilge Discharge

**Alleged MARPOL contravention in the Caribbean Sea area.**

#### What the reporter told us:

I would like to report an illegal discharge of oily water from my previous ship. The engine crew were discharging oily water from the bilge of the main engine, bilge tank and dirty oil tank using rubber hose and an air pump. The hose was connected by a flange to a pipe going to an overboard valve of the freshwater generator.

I queried this with the 2nd Engineer who told me that since he joined the ship, the oily water separator had never been used for discharging oily water, nor the incinerators used for burning sludge, because the vessel discharged sludge and oily water to port facilities or a barge.

Please make this report confidential

Photographs were attached to the report, but they were inconclusive.

#### Further Correspondence:

CHIRP requested further details whilst confirming that the confidentiality of the reporter would be respected. Suggestions that CHIRP, or indeed the reporter himself, contact the vessel's DPA were met with derision as the reporter had no faith in the DPA.

CHIRP made offers to the reporter to contact the flag state administration and additionally to inform the USCG (in their capacity as Port State Control), since the vessel was trading in the Caribbean Sea area. We highlighted that we could potentially request that the vessel be put on the USCG watchlist. During these exchanges, the reporter belatedly advised CHIRP that he had also been in contact with the ITF and, through them, Port State Control.

Before CHIRP could take further action, we received notice from the reporter supported by an official letter from the authorities that the vessel had been boarded by PSC officials upon her most recent port visit, and that an inspection had been carried out. With respect to the specific allegations, nothing definite had been found. However, the official letter also advised that all appropriate authorities within the Caribbean area had been advised to put the vessel on their watch lists.

Considering the above there was no further action from CHIRP.

#### CHIRP Comment:

The Maritime Advisory Board members, after discussion, noted the following.

- This report was dealt with by a Port State Control inspection of the suspect vessel once the authorities had been notified of a potential violation. The Port State Control authorities are to be commended for their rapid response to the information received.
- CHIRP takes all reports of pollution of our seas and oceans very seriously, there is nothing more reprehensible than acts of deliberate pollution. CHIRP will take whatever action it can and actively support any and all initiatives to stop acts of pollution and prevent further pollution incidents.
- CHIRP will co-operate with and assist all Port State Control and flag state authorities with all credible reports of pollution which we receive provided the reporter agrees.

Following the reporter's request for confidentiality, CHIRP would like to reinforce the fact that all reports are treated in the strictest confidence. The name of the reporter is known only to the CHIRP Maritime Advisor who is dealing with the correspondence, and the reporter's name is never divulged to any other party, company or otherwise. Equally, upon completion of correspondence, the reporter's name is deleted from all of our records.

We also note once again the lack of willingness to approach the DPA. This is disappointing in the extreme, and CHIRP reinforces the fact that the DPA should be a direct conduit between ship and shore, have access to the highest levels of company management, and be seen to be the seafarers' friend, able to proactively deal with their concerns.

## Unsafe Working at Heights

**CHIRP continues to receive reports primarily from the yachting sector concerning unsafe working at height. These highlight practices where the potential for serious personal injury or even death are present.**

#### What the Reporter told us:

Recently I witnessed several deck personnel on the yacht on our port side working at height without any safety equipment. They were working at a considerable height above the waterline washing down with detergent, which in my opinion increased the risk of slipping and falling over the side. As you can see in the photos attached, certain crew

members were leaning over the side of the vessel trying to clean the superstructure.



The photos clearly demonstrate the lack of crew safety awareness and a poor on board safety culture.

#### CHIRP Comment:

The Maritime Advisory Board noted that this report highlights both human element and technical considerations. Too often naval architects and designers, when designing a vessel – in this case a luxury yacht – give scant consideration to the practicalities of everyday operations such as washing down or routine access for inspection purposes. Rounded or sloping housings and decks may be aesthetically pleasing but without suitable handrails, fishplates or securing points for safety harness carabiners or similar devices, are potentially lethal for crew members carrying out their everyday jobs. Long-handled brushes will only go so far to compensate for thoughtless design.

Every member of a ship's company is fully responsible for their own safety. In addition, all members of the ship's company (and especially those in positions of authority) have a responsibility for the safety of other crew members – they should ensure that the necessary tools and equipment such as safety harnesses and life vests are to hand so that tasks can be carried out in a safe manner, and should intervene when such work is not being conducted in a safe manner. It is simply unacceptable to turn a blind eye to safety.

#### IS ANY JOB WORTH RISKING YOUR LIFE FOR?

## Inadequate Master/Pilot exchange

In recent months, CHIRP has received three reports where the Master/Pilot information Exchange was less than fully comprehensive.

#### What the reporter told us (1):

During the Master/Pilot Information Exchange, (MPX), the Master mentioned some defects which in his opinion were minor, of no concern and would have no effect on the inward pilotage. Over and above these, I observed that the Rate of Turn Indicator was not functioning, the radars were on unstabilised head up display with no heading indication, and all analogue gyro repeaters I checked were not working. The helmsman was using a digital display on the console.

When asked about the faults, the master said he had requested a technician to attend the vessel on arrival alongside. All these defects could delay the vessel's

arrival because the pilot can decide if it is only safe to bring the ship in to port in daylight and fair weather. The defects should have been declared in advance and highlighted during the MPX.

#### What the reporter told us (2):

Upon entering the swing basin, we attempted to kick the engine astern to stop the headway from a speed of 3.5 knots. However, the main engine failed to start after two attempts, and so we used the tugs to arrest the headway. Once stopped the main engine was tested ahead and astern and it worked correctly. The berthing continued without further incident.

After the ship was safely berthed, the master informed me that the engine failed because the speed was too high. The master also commented that the speed must be below 3 knots for the engine to start astern. The speed was 3.5 knots when the attempted astern function failed. I advised the Master that this was very important information for the pilot to know and that he must inform pilots of this in the future. This piece of information should have been exchanged during the MPX since it was critical to the success of the manoeuvre.

#### What the reporter told us (3):

I was piloting an outbound vessel and when safely in the channel a course to steer was given, at which point the rudder angle indicator went hard to starboard. I immediately ordered midships but there was no change in the position of the indicator. It was quickly determined that the rudder angle indicator was not working. The vessel in fact responded correctly to helm, so I continued the transit and had tugs escort the vessel out.

Subsequently from next port: Departing the berth I found both bridge wing rudder angle indicators out of order (despite a similar problem at the previous port). The starboard bridge wing indicator was stuck at 'hard over' and the port bridge wing indicator was stuck at Port 20°. The indicator in the wheelhouse worked properly during the pilotage. During the MPX, the master had not mentioned these defects at all.

#### CHIRP Comment:

The Maritime Advisory Board members raised the following points:

- The pilot card as required by IMO Res A601(15) should be completed fully and accurately ready to present to the pilot upon boarding. The completing of the pilot card is frequently assigned to a junior bridge watchkeeper or cadet, and this is quite acceptable provided the completed form is assiduously checked by the master before it is presented to the pilot.
- Why are ships unwilling to report defects? Failure to communicate defects reflects badly on the ship's staff, the management, owners and operators. One purpose of the ISM Code which combines both SOLAS and the STCW Convention is to deal with issues like this.
- The master has an obligation to report defects, deficiencies and anomalies that impinge upon the operability of the vessel to the shore management. Such reports of deficiencies should be thoroughly followed up to a satisfactory closure (defect rectified with measures in place to prevent reoccurrence).
- The pilot may also have an obligation to report defects, deficiencies and anomalies that impinge upon the operability of the vessel to the port authorities.

- Non-disclosed defects can raise suspicion and act as a trigger for a Port State Control visit.
- The shipping industry should listen to and learn from other industries, such as aviation, where an open disclosure policy is embraced.

Arrival at, berthing in and sailing from a port are potentially the most hazardous parts of a voyage. Vessels must enter and operate in shallow and confined waters, probably with increased traffic and other hazards such as squat and interaction.

On the other hand, the vessel takes on board a local pilot with specialist knowledge to compensate for these additional hazards. But although the pilot has intimate local knowledge, he or she may have only general knowledge about the ship and, unless told otherwise, must assume that the ship and all its machinery and equipment is fully operational. The captain, wary of the potential dangers, is looking for guidance and confirmation that the information gleaned from pilot books and other sources is correct and that the vessel is in safe hands.

This is where the MPX is of vital importance. If the MPX is full, frank and comprehensive then barring unforeseen events the pilotage will proceed smoothly. On the other hand, if the MPX is not comprehensive, the pilotage may not be so smooth.

## Collision Regulation contravention

**A report from a North Sea pilot on board a loaded VLCC approaching the SW lane of the Dover Straits highlighting a Colregs contravention.**

### What the reporter told us:

I was piloting a VLCC with a 20.3m draft en route from Skagen to Ningbo via Brixham. As we left the deep water route at the Nord Hinder junction we turned to starboard to proceed in a SW direction towards the Dover Strait TSS. We observed a target approaching the SW bound lane with a small CPA and a TCPA of approximately 20 minutes. The target appeared to have come from the River Thames and according to the AIS data the vessel was proceeding to Rotterdam.

I contacted the vessel on VHF 16/77 to ask his intentions. His reply was that he intended to pass astern of the vessels ahead of me. I advised him that his planned routing was not really acceptable and that he should really head up to the NHR-S buoy before turning to starboard to head for Rotterdam. He actually agreed with my statement. I also pointed out Rule 10 and that he should be aware of Coastguard/VTS surveillance.

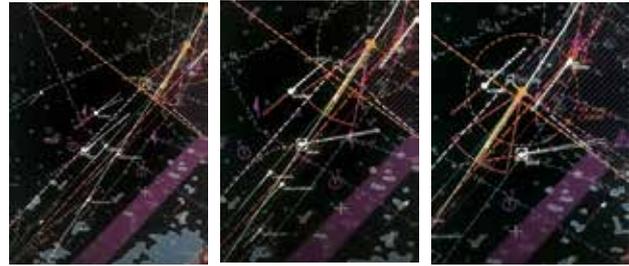
As the vessel approached the SW lane he passed ahead of my ship safely but did not act in accordance with Rule 10 and blatantly continued on a NE heading towards Rotterdam.

### Further Correspondence:

Additional information confirmed that the reporter was on a 333m x 60m loaded tanker following the recommended routing and that the vessel was exhibiting the three red lights in a vertical line as required by Rule 28 to signify a vessel constrained by its draft. In addition, the vessel was included in the Channel Navigation Information Service (CNIS) broadcasts by Dover Coastguard.

The contravening vessel was a 140m x 22m feeder container vessel and was a frequent trader on the Thames, Rotterdam and Kingston-upon-Hull route. It appeared to be taking a direct line between the Thames estuary and Rotter-

dam approaches. Such a course is contrary to the TSS and recommended routing.



**Screen shots of the contravening vessel making no attempt to cross TSS lane at 90°**

### CHIRP Comment:

The Maritime Advisory Board members, after discussion, noted the following points.

- The location is a very busy area with various TSS's and recommended routing areas converging and diverging.
- The Collision Regulations, including Rule 10 in this case, are obligatory for all vessels and as such must be complied with.
- Deep draft vessels can advise the local Vessel Traffic Service and/or Coastal Radio Station of their presence i.e. ETA at given points and speed of transit. Such information will then be promulgated in broadcasts. A rogue ship will still ignore the rules but such information broadcasts will assist most ships to avoid the large deep draught vessels that navigate our narrow, shallow, congested coastal waters.
- The frustrating thing about this report is that even in an area of intense vessel monitoring and surveillance there is no effective enforcement of the regulations or penalty for non-compliance.
- Vessels should be actively encouraged to report rogue vessels that are blatantly contravening the Collision Regulations, particularly in areas where radar surveillance or monitoring is in place to draw the attention of the authorities to these rogue ships. Hopefully this will reduce the number of these incidents especially if there is a realistic expectation of prosecution by the maritime authorities.

## Ships that feature in multiple reports

**Occasionally a ship features in more than one report, sometimes about a single issue and on other occasions about different issues.**

Recently *CHIRP* received three reports about a single ship from different reporters at different locations but concerning the same issue. It would appear that some ships do not (or will not) learn.

A second vessel was the feature of two reports, again by different reporters at different locations, but about different issues. At first reading, this does not look good, but at least the second report closed out the first deficiency which demonstrates that some vessels do try to rectify their defects.

**Vessel One:** A vessel which, due to its freeboard, is required to use a combination pilot boarding arrangement. The arrangement is a trap door-type combination.

**What the reporter told us (1):**

Upon boarding as a pilot, I noted that the man ropes were rigged incorrectly and that the pilot ladder was not attached to the ships side 1.5m above the accommodation ladder platform. The vessel has a trap door arrangement with the pilot ladder shackled under the platform, but this is non-compliant. As this vessel is likely to be regularly calling at this and other ports on the coast, the issue needs to be resolved as soon as possible to avoid future refusal of pilotage services and to remove the risk to pilots. Report dated 05th April.

**What the reporter told us (2):**

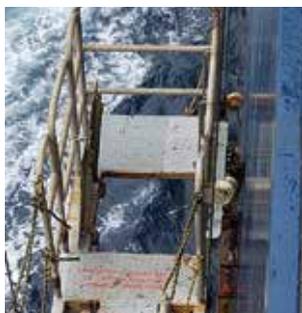
This vessel presented herself for pilot boarding on the 18th May with the following defects.

- The man ropes are too small being less than 28mm in diameter.
- The pilot ladder is not attached to the ships side 1.5m above the accommodation ladder platform.
- The trap door combination ladder arrangement is not compliant.

**What the reporter told us (3):**

The pilot ladder not attached to the ships side 1.5m above the accommodation ladder platform. Although I safely boarded the vessel using the starboard side ladder it was noted that the trap door arrangement was non-compliant. Report dated 1st July

CHIRP made two attempts to contact the vessel's DPA, but our attempts to engage in correspondence did not receive any acknowledgement or response.



**Non-compliant combination boarding arrangement with the pilot ladder shackled to the underside of the accommodation ladder platform.**

**Vessel Two:** A vessel whose size and freeboard allows it to use a direct pilot ladder as opposed to a combination arrangement.

**What the reporter told us (1):**

On this vessel the starboard pilot ladder was noted to be old and very worn, with both side ropes chafed and flattened. The ladder steps were slippery with Palm Kernel Expeller cargo. There was no visible construction plate attached to the ladder. The tripping line was rigged to the aft side of the ladder instead of being led forward. I requested that this ladder be replaced before the vessel's departure. Report dated 24th May.

**What the reporter told us (2):**

As a follow up to a previous pilot ladder report (as highlighted above) I boarded this vessel using the port side ladder which was in a satisfactory condition. The master advised me that the starboard ladder had been condemned and that a new ladder had been ordered. This was expected to be delivered when the vessel arrived alongside. Report dated 29th May

These two reports highlight evidence that some ships do take heed of deficiency reports and take positive action to rectify the issue. This is encouraging and is to be applauded.

**CHIRP Comment:**

After considerable discussion, the Maritime Advisory Board members noted the following points;

- Pilot ladders and combination arrangements are one of the visible faces of SOLAS. Pilot ladders and other pilot boarding arrangements come under the SOLAS regulations and are no less vital for safety than lifeboats, liferafts and lifebuoys. If the condition of the pilot ladders featured in these reports is indicative of the other SOLAS equipment on board it does not bode well in the event of having to abandon ship. Similarly, the safe and compliant rigging of the pilot boarding arrangements on board a ship is comparable to the ability of the crew to launch a lifeboat or liferaft.
- The reports that CHIRP publishes relating to pilot boarding arrangements are a small sample of the numerous reports received on the subject. Virtually every report received includes the phrase "Spoke to the master", but this does not appear to be reducing the number of deficiencies and reports. Perhaps it is time for pilots to become more formal and issue a standard *Letter of Non-Compliance* to the master of the vessel. This can be achieved through the vessel's agents and as such can be directed both to the vessel and the vessel's managers.
- The issuance of such a letter would be a matter to be passed on to the local port state control office for relay to the flag administration of the vessel, thereby becoming a form of alerting.
- Pilots have the right to refuse to use non-compliant boarding arrangements but that still puts the onus on pilots to make that decision. Perhaps it is time for the national maritime authorities to issue directives instructing pilots not to use visibly non-compliant pilot boarding arrangements.
- These reports also raised the question as to what role CHIRP should take with regard to reports received. CHIRP has always followed a course of promulgating to the wider maritime readership with a view to informing and educating. However, in certain situations, is there a case for us to inform maritime authorities and administrations?

Further reading: There is a lot of material in CHIRP Insight articles which may be found on the publications page of our website – <https://www.chirpmaritime.org/publications/>

## Air Emissions alongside – boiler flame failures

**Two reports highlighting issues with smoke emissions.**

**What the Reporter told us (1):**

Our vessel, a tanker, was discharging her cargo with all systems working normally. At 08:15 the auxiliary boiler "Flame Failure" alarm activated, and the boiler shut down. The engineers responded and attempted to restart the boiler on several occasions, without satisfactory results. At 09:25 and 10:50 the shore terminal warned the vessel that smoke had been observed emitting from the funnel. These times corresponded with the vessel's attempts to restart the auxiliary boiler. Following this, the engineers removed the burner and replaced it with an overhauled spare. The auxiliary boiler was

then started without any emissions being observed from the funnel and without any further impact to the vessel's operation.

Examination of the removed burner showed that it was partially clogged. One month previously, the boiler had undergone a full test in the presence of a class surveyor. Prior to arrival at the port, all boiler pre-arrival checks had been undertaken with no problems noted. The burner had been subjected to routine overhaul two weeks prior to the incident. Additionally, the quality of the fuel was checked and found to be satisfactory.

It should be noted that the normal automatic operation of a boiler following a flame failure will result in smoke emissions, since the burner fan will start the purging cycle which removes any gases present in the furnace through the funnel. This process is important since it allows for the correct ratio of air to fuel when the boiler is reignited, (thus preventing a non-stoichiometric initial combustion with potential for drumming and/or firebox explosions).



Air Pollution (library image).

#### What the Reporter told us (2):

Shortly after our vessel departed port, increased smoke emission from the vessel's funnel was observed. The bridge reported this to the engine control room. Simultaneously the alarm of the opacity monitor (high smoke) activated.

In response to the alarm, the engineers started No 2 boiler and stopped No 1 boiler to investigate the cause of the malfunction. During the investigation it was found that a fuel oil sensor was damaged. A new sensor was available on board and the defective one was replaced. As soon as the vessel was in open sea, boiler No1 was restarted and confirmed to be operating satisfactorily.

It was concluded that the excessive smoke generated was due to the damaged pick-up sensor. Specifically, due to the damage to the sensor, the amount of fuel supplied to the boiler for the required load was incorrect, which resulted in incorrect air/fuel ratio, incorrect combustion and the generation of excessive smoke.

It was noted that the sensor was supposedly maintenance free with replacement being condition-based. The malfunction of the sensor was discussed with the boiler manufacturers and advice was requested as to any measures required in order to prevent similar problems in the future. The manufacturer advised that there is no preventative maintenance for the sensors but suggested an upgrade of the existing fuel oil control system with a modern, more robust one, without moving parts. This is being implemented on all our vessels with this type of boiler.

#### CHIRP Comment:

Both reports highlight the importance of fuel combustion equipment maintenance in order to avoid air pollution. Ports are generally taking a more active role in advising vessels of

excessive smoke emissions, and port state control is equally taking a greater interest in MARPOL Annex VI regarding NOx, SOx and particulate matter (PM) emissions.

## Sounds familiar?

**Several brief reports containing subject matter that CHIRP continues to receive with monotonous regularity. Why do these incidents continue to occur? We are not describing any complicated situations – common sense and a little thought would go such a long way to eliminate these types of reports.**

#### What the Reporter told us (1):

The fire alarm sounded, and all crew commenced mustering. Upon reaching the bridge, the master found that the electrician was testing the system, but the officer on watch had not made any public address announcement to inform the crew about this test. Quite apart from the false alarm, crewmembers could have been hurt by the automatic-closing accommodation doors.

#### What the Reporter told us (2):

Whilst transferring an electrical motor to the engine room by crane, it was noted that a non-certified wire sling was being used. The crane operator noticed an AB attempting to connect a hand-made sling for lowering the motor to the engine room. Work was suspended until a suitably certified sling was located.

#### What the Reporter told us (3):

Whilst undertaking purging operations to reduce H<sub>2</sub>S levels in cargo tanks, the bridge OOW saw an ER fitter on deck heading to a midship's store. Being on deck during purging operations was prohibited due to the high concentration of H<sub>2</sub>S in the area. The fitter was instructed to clear the deck immediately.

#### What the Reporter told us (4):

A high-level alarm was activated in the engine room bilge. Whilst transferring the bilges to the bilge holding tank, the duty engineer noted a small amount of water leaking into the bilge well on a continuous basis. This was traced back to a water tap in the engineers' changing room. The tap had been left partially open, presumably as a result of carelessness by an unknown party.

#### What the Reporter told us (5):

During routine chipping/maintenance of the MARPOL cargo drain line at the starboard manifold, an OS discovered a hole in the line from the manifold drip tray to the main line leading to 3S COT. The hole was not as a result of the current maintenance but seemed to be rather old, the result of a previous temporary repair, hidden and painted. The OS reported this to the Chief Officer who checked the drain line and asked the pumpman to remove it in order for a new one to be fitted.

#### What the Reporter told us (6):

On this vessel, the emergency fire pump must be continuously run during laden voyages to cool the main engine jacket. At 07:30 the engineer on duty found the emergency fire pump stopped. No one on the bridge or the engine control room could understand how or when the emergency fire pump stopped. As a direct consequence of the stoppage, the temperatures of the main engine were increasing and the engineer on duty reduced the RPM without informing the bridge. The vessel was due to arrive in port later that

## The Deadly Dozen

### SITUATIONAL AWARENESS

**Do you know what's REALLY happening?**  
Understanding what is really happening and assess its impact on your voyage now and in the future.

### ALERTING

**Do you REALLY speak up when you should?**  
Bringing concerns about actions, situations or behaviour to the attention of others in a timely, positive and effective way.

### COMMUNICATION

**Do you REALLY understand each other?**  
Transmitting and receiving full and correct information ensuring sender AND receiver share the same understanding.

### COMPLACENCY

**Is everything REALLY OK?**  
A misplaced feeling of confidence that everything is OK

### CULTURE

**Do you REALLY have a good safety culture?**  
The blend of understanding, beliefs and attitudes of people and organisations that result in behaviour and actions.

### LOCAL PRACTICES

**Efficiency OR dangerous short cuts?**  
Behaviour and actions applied locally that differ from the official documented practices. Also known as procedural violations.



### FIT FOR DUTY

**Are you REALLY fit to carry out your duties safely?**  
The combination of physical and mental state of people which enables them to carry out their duties competently and safely.

### DISTRACTIONS

**Multi-tasking OR dangerously distracted?**  
An event that interrupts your attention to a task.

### PRESSURE

**Busy OR dangerously overloaded?**  
Real and perceived demands on people. Do you REALLY have the resources you need.

### CAPABILITY

**Is your crew REALLY capable?**  
The blend of knowledge, skills and attitude to enable effective, safe performance. Do they have tools and resources to perform competently?

### TEAMWORK

**Do you work REALLY well together?**  
Working together effectively towards a shared common goal.

### FATIGUE

**Just tired OR dangerously fatigued?**  
A reduction in physical and/or mental capability as the result of physical, mental or emotional exertion which may impair nearly all physical abilities including: strength; speed; reaction time; co-ordination; decision making; or balance.

morning but the reduced RPM, which the bridge OOW was unaware of, caused a reduction in speed resulting in a delay to the port arrival.

### CHIRP Comment:

CHIRP frequently highlights the importance of the Human Element in all aspects of shipboard operations and makes no apology for repeating the message. Reading the above reports there are several themes that are immediately apparent – primarily Communication! Communication! Communication! Work planning which was properly communicated would have gone a long way to preventing any of these reports becoming near misses. Other aspects of the Human Element that are missing in the reports above are situational awareness, culture, local practices and teamwork. It will be no surprise that CHIRP's analysis of all reports received highlight these areas of the Human Element as the ones that consistently show failings. Overall the message is clear – Plan what you do, do what you plan, and record it.

## More on GPS Smoothing

As a follow up to the article published in MFB54 entitled 'AIS and ECDIS offsets', CHIRP is concerned about the effect of randomly altering the smoothing curve settings of a GPS since there may well be unexpected consequences.

We are currently engaging with GPS manufacturers in order to obtain some clarity as to the cause and effect of making changes to the smoothing curve settings. Once this process has been completed, we intend to publish an Insight Article with our findings, learnings, and advice.

In the meantime, we repeat our current advice to shipboard navigators that there is likely to be significant position discrepancy between radar derived positions and GPS derived positions if the smoothing settings are not adjusted according to the GPS manual available on board. In addition, good practice dictates that for coastal and inland water navigation GPS derived positions must be frequently cross-checked against radar derived positions and visually derived positions.

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Centaur House, Ancells Business Park, Ancells Road, Fleet, GU51 2UJ, UK  
www.chirpmaritime.org | reports@chirp.co.uk | +44 (0) 1252 378947

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