



Do you make best use of the information offered in safety reports? Captain JOHN ROSE of the Confidential Human Incident Reporting Programme (CHIRP) explains that help is at hand...

Let's all make 2017 the year of safer ships

stop shop for seafarers and companies to refer to when looking at why people are doing what they do when encountering hazardous occurrences and involved in incidents.

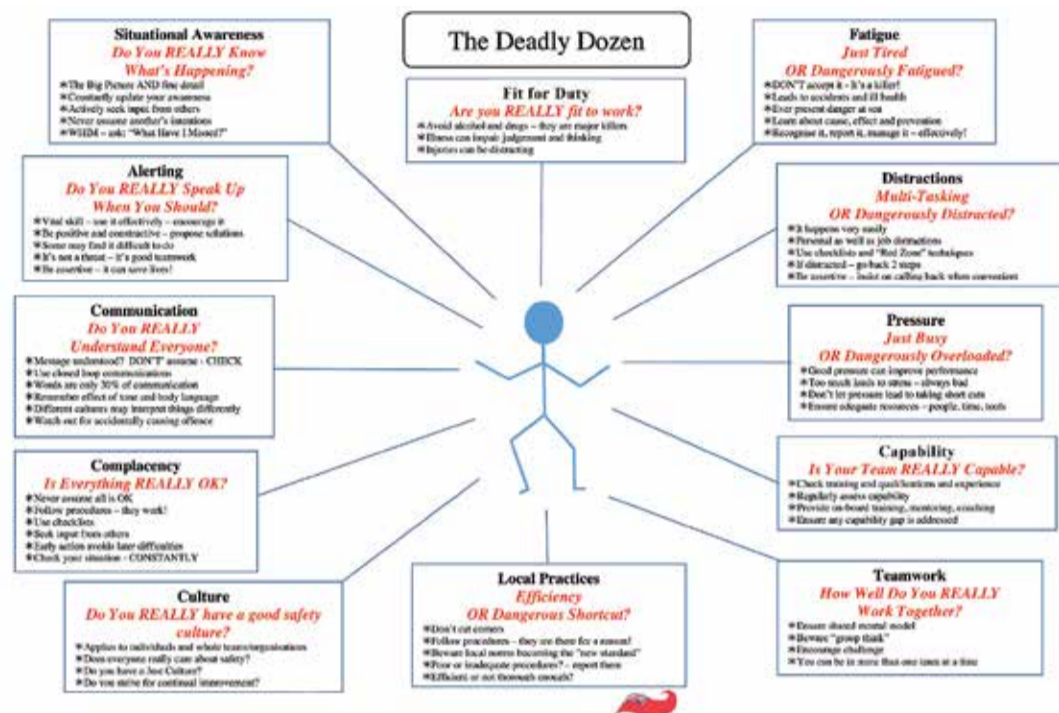
Perhaps best of all, it is a system that is quick and easy to understand, and has simple checklists for easy identification of each of the deadly dozen of the human element in causal factors identified in a report.

Take a look at page four of the M-notice — pictured right. If nothing else, you can use this to help invigorate your thinking into why an occurrence happened. Undertake a few of these investigations — they can take a few minutes each, and you can soon identify a trend and analysis from the reports.

For clarification on the scope of each element, the MCA provides a summary page for each, with useful 'dos and don'ts'. This can help create remedial action plans and prevent recurrence of the same event with the people involved, and for sharing elsewhere in the fleet.

Each of the 'dozen' has guidance on what companies, masters and seafarers can do to improve their approach to safety. After all, good safety performance is reliant not on individuals but on effective use of teamwork.

Let's look more closely at this guidance. Here are some examples of the 'can dos':



Graphic: MCA

For companies

- maintaining an effective safety culture, ensuring this is a high priority onboard your ships
- ensuring effective resource allocation — people, tools, equipment, manuals, spares, instructions, procedures, etc
- developing an effective accident and incident reporting and analysis process and providing feedback to ships

For masters

- creating a culture where people

are not afraid to speak up

- building an onboard safety culture which nurtures a positive attitude to working habits, monitoring, checking, updating awareness, etc.
- regularly reviewing procedures and practices with your crew

For seafarers

- taking personal responsibility for safety
- only attempting tasks where you are suitably qualified and experienced

- supporting each other — if you notice someone being distracted, speak up

The MGN also raises issues to look out for and provides sources of further relevant information. Perhaps a valuable start to 2017 may be to use this as a fresh approach to safety? Readers are strongly recommended to read the guidance and apply it to all incident and near-miss reports.

The Confidential Hazardous Incident Reporting Programme

(CHIRP) applies this process to all its reports, and the results can be found via the search function on our website: www.maritimechirp.org.

CHIRP shared the results with the MCA, with a summary of 12 years of reports which can be found on page five of MGN 520(M). It is interesting to note that a similar exercise, just looking at the past four years, shows the trends and high-risk areas are very similar with regards to the ways individuals think and react to hazards. Put simply, we are not learning fast enough!

The most frequent causal factors are:

- 1: Situation awareness — Do you REALLY know what's happening?
- 2: Alerting — Do you really speak up when you should?
- 3: Communication — Do you REALLY understand everyone?
- 4: Complacency — Is everything REALLY OK?
- 5: Culture — Do you REALLY have a good safety culture?

For those wanting to know more about the human element, MGN 520(M) should be read with the Human Element Guidance series of MGNs and other human element publications, such as that found in the aviation industry at www.skybrary.aero, a reference site for aviation safety knowledge. Stick with this MCA publication and make a new year's resolution to give it a try. You will not be disappointed.

Fictitious case study to illustrate MGN 520 (M)

RA vessel en route from Genoa to Rotterdam had to make an unplanned 10-hour stoppage in the western approaches to the English Channel to repair a fault on the main engine. This meant the ship would be late for its planned ETA, so the master decided to make a full speed run through the Dover Straits with the engineers on standby rather than the planned run at manoeuvring speed. The decision was challenged by the chief officer, but overruled.

While in the Channel, a deck cadet received some distressing news from home via social media. The vessel subsequently arrived at Rotterdam five hours late.

While berthing, the engineers noticed a minor leak on a salt water general service pump situated near to the bottom plates. It was deemed that the junior engineer should have a look once the vessel berthed, but there was no further discussion on how to do the job. Up on deck the cadet had to be reminded twice to get out of the way of mooring lines under tension.

Once safely berthed, and after all the port formalities for arrival were completed, the suppliers for bunkers, victualing stores asked to start their loadings, and at the same time a port state control inspector walked up the gangway — all hands on deck!

Using a plan based on the original ETA, the loading of stores and bunkers had originally been planned to be staggered throughout the day.

The catering department were ordered to help with loading the stores and, in doing so, they left the galley unattended — dinner bubbling along nicely.

After a long period approaching the berth and mooring the ship, despite having just been stood down, the crew

were turned to again to deal with the additional workload.

In the engine room, the junior engineer left his job working on the salt water pump to help with bunkering operations, and in doing so left an unguarded grating open on the engine room upper plates. During the bunkering operation, an engine room alarm sounded — it was a bilge high level alarm and was investigated by the second engineer, who narrowly avoided falling into the unguarded gap beside the salt water general service pump.

While passing through the galley during the storing, one of the catering department noted smouldering at the galley range — the cook had left his apron in contact with the hot plate in his rush to attend the call to load stores. No problem, the danger was rapidly dealt with.

Finally, our deck cadet walked under a crane loaded with a pallet of stores and once again had to be reminded to get out of the way.

One might think that there is nothing unusual about the above — happens every day and is a part of life at sea. However, if the human element is taken into account and the causal effects are analysed using the Deadly Dozen, the story reveals many lessons to be learned. The following gives examples — there are no definite 'answers'.

Following the main engine breakdown, the master decided to forego the original plan and head for Rotterdam at full sea speed. Why? **Pressure**, perhaps, either self-imposed, or a fear that the charterer and the owner's managers would not be best pleased, the latter implying **Safety Culture** failings between ship and shore. The challenge by the chief officer was a good example of

Alerting, but the response discouraged any **Teamwork** whatsoever.

The decision to head at full speed and not advise anyone was a change of plan resulting from the delay effecting repairs on passage. This almost certainly led to a loss of **Situational Awareness** of the big picture, with the result that everything happened simultaneously on completion of mooring operations. The lack of planning following a change almost certainly impacted upon the vessel's personnel — after a lengthy Channel standby, port approach and berthing, was **Fatigue** now a factor? Did the lack of **Communication** ensure that the timing of stores and bunkers, (and port state control), was now haphazard or is this simply accepted as **Local Practice**?

Turning to the cadet, there was some distressing news, and upon three occasions he was **Alerted** to keep out of the way. It very possible that the cadet was **Distracted** by the news from home — and depending upon the severity he may not have been **Fit for Duty**. Did anybody notice? Was the cadet acting in an unusual manner? This in itself is a form of **Communication**, **Culture**, and **Teamwork** — surely the cadet should be able to speak to somebody?

Meanwhile, the events in the engine room can also have the human element applied to them. The minor leak on the salt water pump was an unplanned maintenance event, yet there was little in the way of planning or supervision — a lack of **Teamwork** and **Communication** and possibly a demonstration of **Complacency** about the use of checklists. An unplanned maintenance permit to work would have ensured that the area was safely guarded and that all precautions were adequately assessed. In this case, however, it might be **Local Practice**

to simply ignore procedures. Equally, the **Pressure** of all of the events might have taken its toll, and it should be taken into account that **Fatigue** after the stoppage may have been a factor. Was the junior engineer the right person for the job and **Capable** of effecting the repair? Whatever the reason, he left the job when called for bunkering and stores — was he **Distracted** enough not to place safety guards around the grating or was it simply standard operating practice onboard? The second engineer almost paid a heavy price, narrowly avoiding injury.

The catering department left the galley unattended, and the subsequent near fire could equally be attributed to **Local Practice**, **Complacency** or **Distraction**. It should be noted that in this case none of the department **Alerted** the cook about the dangers of leaving the galley unattended with the range in use.

So much for the story — there was certainly the potential for several incidents to happen at all stages of the narrative. Fortunately, nothing did happen. One might be tempted to state that if the master had not made the decision to run at full speed, none of the events would have taken place. This might be true, but it is worth considering why the master made that decision.

Analysis using the human element would examine this one stage further and identify a potential weakness in the safety culture and management of the company — the human element should be applied from the managing director and through all of shore management team. There is no reason why the master should not have felt comfortable in announcing the delay and re-planning the port schedule.