Safety Clicks

Learning from others' mistakes

Volume 23 **A TDI-Brooks Publication** **November 1, 2017**

The Human Factor– "The Deadly Dozen"

By Shannon Smith

In our last issue we discussed compound disasters—the idea that multiple events or conditions can complicate a single incident or result from it.

While emergency planning, training and drills can provide knowledge and hands on experience, the one thing that is common to and will make or break the success of any plan is the human element.

The human element is a person's ability to deal effectively with the complexity and pressures of both emergencies as well as routine operations. Based on over a decade of near miss reports, the UK Maritime and Coastguard Agency has compiled the 12 most common factors that can influence human error and lead to accidents.

More than half of all contributing elements in these near misses are attributed to the top 3 human factors: Situational Awareness, Failure to use STOP WORK authority & Communication. Roughly 25% were a result of Complacency and failures in Safety Culture.

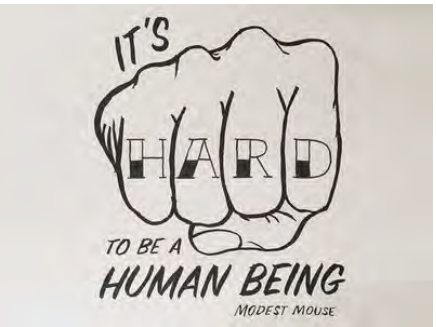
Basically, if we can improve in just the top five areas, we could eliminate three out of four near misses.

…

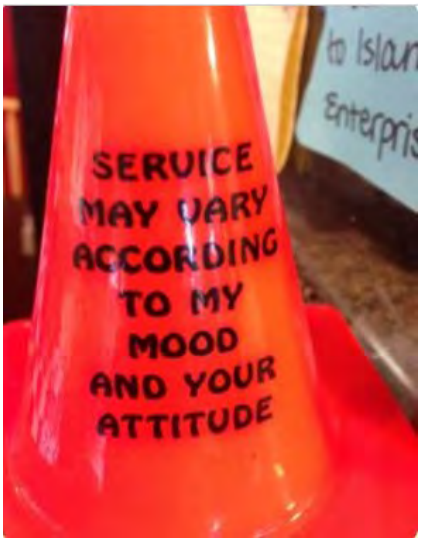
The following information taken from CHIRP Maritime reports lists the 12 most common factors that affect the human element and gives some real scenarios in which those elements played a part. See if you recognize similar situations you have faced.

The Deadly Dozen

1. **Situational Awareness**
2. **Alerting– speaking up, Using STOP WORK authority**
3. **Communication**
4. **Complacency**
5. **Culture**
6. **Local Practices**
7. **Teamwork**
8. **Capability**
9. **Pressure**
10. **Distractions**
11. **Fatigue**
12. **Fit for duty**



"Don't try to be perfect; just be an excellent example of being human."
Tony Robbins



Whenever people are involved in a process, the human element is key to success or failure.

TOP Safety Card Hits

(Fleetwide last month)

Housekeeping	**8**
Tools & Equipment	**6**
Maintenance	**5**

The Human Element—still a long way to go!

CHIRP has received many reports which may be categorized individually as minor near misses. Several of these near miss "one liners" are detailed below. They all had remedial action applied in the form of direct intervention.

- A first trip deck hand's first mooring experience had him actively tending moorings. **CAPABILITY**. (The inexperienced deck hand should have been mentored until he was deemed experienced enough to actively engage in mooring operations).

- A bunker tank nearly overflowed when the engineer overseeing the operation left to answer an engine room alarm. **DISTRACTIONS**. (A dangerous oversight – proper planning (JSA) would have freed up personnel in order to prevent this near miss).

- A lower forepeak space required cleaning – during the planning the supervisor asked for everything to be made ready in half an hour and he would return at that point. When he returned **personnel were already at work inside the compartment even though they had not received an Entry Permit. COMMUNICATIONS**. (The supervisor had in fact tested the compartment and had gone off to write up the permit – the crew however misunderstood the correct procedure).

- An oiler taking daily tank soundings walked under a crane that was in use for storing operations. **SITUATIONAL AWARENESS** and **ALERTING**.(STOP WORK) The oiler could not have been aware of his surroundings or else he would not have stepped under a crane with a load. **But why did no one stop him?**

- Sunglasses were used instead of safety goggles during deck scaling maintenance **CULTURE**, **COMPLACENCY** and **LOCAL PRACTICES**. If "That's the way we've always done it around here", is the philosophy then the culture both on board and ashore needs to be modified to change how people think.

- A supervisor became involved in a mooring operation. The ship had undertaken several port calls in the previous few days, with associated cargo and administrative operations. Amongst other factors, **FATIGUE** could have been an issue. Tired people make mistakes and the supervisor should have restricted himself to supervision and NOT become involved in the actual work.

It is worth remembering that the Human Element can involve multiple factors.

Take the first example of our deck hand getting involved with mooring - this points to a poor on-board safety culture, a lack of standard operational procedures, and a poor company culture within the Safety Management System. A proper risk assessment and toolbox talk would have prevented the deck hand from getting involved.

All of the above examples could have been prevented if the people on board, backed up by shore management, had a heathy **TEAMWORK** ethic which encourages people to challenge unsafe procedures where appropriate, and which involves proper planning and co-ordination of onboard activities.

Good planning also reduces the danger of people being placed under too much **PRESSURE** since tasks are more evenly distributed.

For any "near misses" that you become aware of, try to decide which of the twelve aspects of the Deadly Dozen are most appropriate. There are often several categories.

From a personal perspective, thinking about your surroundings or the tasks that you have been allocated helps you become more self-aware and able to see the dangers before they cause an accident.

Why not discuss the near misses that you experience at your next Safety Meeting and bring in the aspects of the Human Element? You might be surprised at the results.