

HONG KONG SAR BRANCH

The causes and mitigation of fatigue

→ The speaker at the Hong Kong branch in March was our Hon Sec, Donal Keaney AFNI MICS. Donal is a Master Mariner with a BSc in Nautical Science and MSc in Maritime Operations, and is now Admiralty Manager at RPC based in their busy Hong Kong office.

As a student, Donal Keaney wrote two dissertations on seafarer fatigue, and it is a subject about which he is still passionate – a fact clearly demonstrated by his appearance at the branch on St Patrick's Day, when the vast majority of his compatriots were celebrating in a more traditional manner.

More than 30 members and guests gathered to hear him speak, and they were not disappointed. His talk was expertly balanced to be stimulating for mariners who have a good knowledge of the topic, whilst remaining accessible to the landlubbers in the audience.

Beginning with a description of fatigue as found in IMO MSC/Circ/1014: 'A state of feeling tired, weary, or sleepy that results from prolonged mental or physical work, extended periods of anxiety, exposure to harsh environments, or loss of sleep', Donal discussed in detail the major causes of seafarer fatigue.

He considered the effect of long working hours, extended tours of duty, the rigours of some older engine rooms and the tedium of bridge watchkeeping on extended ocean passages. To these he added the anxiety of long separation from friends and family, the potentially disastrous effects of domestic problems and the stress of keeping a watch in areas of high traffic.

He then considered the physical demands of

standing, working or moving in heavy weather and the potential loss of sleep from constant shipboard noise and vibration, pointing out that even when you get to bed in rough seas, it is difficult to sleep.

The speaker also mentioned the effects of health, fitness, diet, age and psychological factors, although these were not discussed in depth.

The consequences of fatigue can be collisions, groundings and an increased likelihood of accidents such as trips and falls. As a case study, he drew our attention to a bulk carrier which grounded on the Great Barrier Reef. The chief officer, who was on watch at the time, had managed only 2.5 hours sleep in the 38.5 hours preceding the grounding.

Donal then analysed the mandated rest periods under the Maritime Labour Convention (MLC) and asked whether they are sufficient to prevent fatigue? The general consensus was that they are not!

Pointing out that 'rest' is not necessarily sleep, but includes the time mariners spend on personal tasks and recreation, he described what constitutes good quality sleep and stressed the importance of the biological clock and circadian rhythms.

Reducing fatigue reduces the risk of casualties and accidents and improves productivity, but this can only be achieved with proactive onboard management. Donal dislikes traditional 'six on, six off' watchkeeping, and described alternatives which he has experienced and which he claims are much less likely to lead to fatigue. Crews need to be educated in good time management, and must be encouraged to report any instances of non-compliance. Where necessary, Masters should also consider arranging to take vessels out of service for a few hours to avoid the crew

becoming fatigued, but we all know this does not happen and it is more likely that the crew will simply falsify their rest hour records and carry on.

In conclusion, Donal Keaney believes the current requirements for rest under MLC are not sufficient to prevent fatigue, and the system of recording rest hours allows scope for falsification. Crew education is vital and shore managers must support onboard efforts to mitigate the effects of fatigue.

There were a number of questions, and these eventually led to a discussion of the situation aboard local craft in Hong Kong waters, where crews are expected to work very long hours. This is an area where there is no legislation and a growing number of accidents. The discussion continued as we made our way to the buffet for food and drink, and was still going on when your scribe reached the limit of his working hours and was forced to withdraw for a rest.

Captain Alan Loynd FNI

