



Nautical Institute Cyprus Branch - Event report

Event Title: On Board Fatigue. Are we, the office staff part of the problem? Can we become a solution?

Venue: Marlow Building, 13 Alexandrias Street, Limassol

Date: Wednesday 8th February 2017

The Nautical Institute Cyprus Branch along with InterManager organized a workshop on fatigue and the findings from Project Martha. Capt. Kuba Szymanski of Intermanager and Professor Mike Barnett of the Southampton Solent University were the facilitators-presenters of this event. The topic attracted a lot of interest from the marine community on the island, which was evident by the attendance of 121 shipping professionals and students.

Building on its predecessor, Project HORIZON which identified serious concerns with the 6/6 shift pattern where 50% of participants fell asleep during their shifts, Project MARTHA was launched in 2013 to address this issue and longer term fatigue. Its aim was to trial elements of a Fatigue Risk Management System (FRMS) and to provide fatigue awareness training, fatigue prediction models, fatigue reporting systems and advise on corrective actions to take to minimise/eradicate fatigue incidents.

Partly funded by the TK Foundation, who gave \$1.5million and other contributors who gave another \$1.5million, the three-year project gathered a large database of new information from over 1000 seafarers, and carried out a field study of over 100 seafarers working at sea worldwide. The study collected data on seafarer fatigue levels, sleep patterns and psychological wellbeing. An important element to the study was the use of Actiwatches for extended periods, which volunteers wore to register their periods of activity and sleep.

The study was led by the Warsash Maritime Academy, and the consortium also included: the Stress Research Institute in Stockholm; the Centre of Maritime Health and Society in Denmark; the University of Southampton; the Dalian Maritime University in China; and the ship managers' trade association, InterManager.

The Results

Some of the findings were outlined by Professor Mike Barnett as below:

- The Master's role differed from that of other crew members. Masters have more weekly work hours. Also, their sleep pattern is more disturbed than it is with other seafarers.
- Masters feel that work in port is surprisingly less demanding than work at sea.
- Masters are far more fatigued at the end of a contract.
- Masters are slightly more overweight compared to others on board.
- Second Officers tend to get the least sleep compared to others on board.
- The longer seafarers are at sea, motivation decreases.
- During interviews, seafarers pointed out that not being relieved on time is having a great effect on their motivation.
- Both fatigue and stress levels are perceived as worse at the end of a voyage rather than the beginning by most crew, with some seafarers saying that port work is more demanding than work at sea – with 48.6% of participants feeling stress was higher at the end of a voyage
- Sleepiness levels vary little during the voyage, suggesting there are opportunities for recovery while on board.
- European seafarers worked fewer hours than their Chinese colleagues.
- Chinese seafarers on dry bulk carriers worked an average of 15.11 hours a day compared to European seafarers who worked an average 10.23 hours a day.

- There is evidence of higher levels of both fatigue and stress in Chinese seafarers, rather than European seafarers.

Possible Solutions

Capt. Kuba Szymanski asked the audience 'what do seafarers dislike the most about their work'?

Active participation from the audience confirmed that the issues were universal:

- Berthing in night. This was not surprising considering that most charter parties start at midnight.
- Stress
- Seasickness
- Delayed relief
- Number of emails
- Lack of empathy, such as when calling the ship at night for trivial questions
- Excessive paperwork
- Ineffective air-conditioning
- Noise and vibration
- Lack of adequate fresh water
- Poor quality of food
- Less people on board.

Capt. Kuba Szymanski asserted that even before increasing the number of people on board, there were few steps that could be taken by the office to alleviate feelings of fatigue among seafarers:

- Proper food, taking into account cultural preferences. Healthier seafarers would sleep better.
- Good quality water.
- Comfortable pillows and mattresses. If possible to have a policy setting out intervals at which these should be changed.
- Minimise effects of noise and vibration during the voyage.
- Provision for internet and entertainment. Relaxed seafarers would sleep better.
- Remove unnecessary paperwork.
- Communicate (email/phone) with empathy so it does not unduly stress mariners.
- Create awareness on fatigue, including establishing a fatigue reporting system.
- Data driven predictive risk analysis for fatigue risk assessment, workload management and monitoring adequate sleep. Know what time of day are your people more active; this will help you identify when your crew is at higher risk.
- As a start, he suggested to inform the crew that you went to a fatigue seminar or read about fatigue. And then invite suggestions.

The Chairman, Captain Graham Cowling thanked Capt. Kuba Szymanski and Professor Mike Barnett for the interesting workshop and the participants for the lively discussion. The interesting event was followed by a snacks and cocktail in the adjoining room. CPD certificates were issued to all participants from whom the feedback was overwhelmingly positive.

- VS Parani, Hon Secretary, Cyprus Branch.