

Subject :

*IMO MSC Circular relating to ISM Code  
"Guidance on Fatigue Mitigation  
and Management"*

# **NKTECHNICAL INFORMATION**

No. : 426

Date : 9 November, 2001

*To Ship Owners and Ship Management Companies concerned*

*Dear Sir(s)*

*The Maritime Safety Committee (MSC) of IMO developed a "Guidance on Fatigue Mitigation and Management" in June 2001 considering the issue of human fatigue and ships safety, and approved the annexed "Guidelines on Fatigue" composed of 9 self-contained modules, each addressing a different party. The modules (M) are as follows:*

*M1: Fatigue (in general)*

*M2: Fatigue and the Rating*

*M3: Fatigue and the Ship's Officer*

*M4: Fatigue and the Master*

*M5: Fatigue and the Training Institution and Management Personnel in charge of Training*

*M6: Shipboard Fatigue and the Owner/Operator/Manager*

*M7: Shipboard Fatigue and the Naval Architect*

*M8: Fatigue and the Maritime Pilot*

*M9: Fatigue and Tugboat Personnel*

*Appendix: Fatigue related documentation*

*M1 gives general information on fatigue including its definition and says that recent accident data and research point to fatigue as a cause of and/or contributor to human error because of its impact on performance. Human error resulting from fatigue is now perceived as the cause of numerous marine casualties. M1 also gives the common causes of fatigue known to seafarers as lack of sleep, poor quality of rest, stress and excessive workload, and explains them in details. M1 then gives the basic concepts in understanding the fatigue and its effects.*

*M2, M3 and M4 are the modules addressing the Rating, Officer and Master onboard the ships. Here the methods how to recognize the fatigue are described by listing the performance impairments and the symptom associated with them. 13 things are listed up that may cause fatigue such as lack and poor quality of sleep, insufficient rest, stress, noise or vibration, excessive work load, and so forth. Then the issues are discussed how can people prevent and mitigate the fatigue. M3 and M4 give measures that can be done to reduce crew fatigue on board ship within Ship Officer's and Master's ability.*

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*M5, M6 and M7 are the modules addressing the shore training management, ship owner/operator and shipbuilding engineers. These modules teach that fatigue is an important issue for safe operation of ships and how can shore personnel participate to ensure the fatigue prevention practiced onboard.*

*M8 and M9 are the modules addressing the pilot and tugboat personnel respectively. These modules discuss what can cause fatigue and what measures can a personnel take to protect or mitigate it in each respective field of work.*

*Appendices contain fatigue related documentation such as various references, model format and IMO instruments in Appendix 1 to Appendix 8.*

*You can see the original text of IMO MSC/Circ.1014 (12 June 2001) at web site of IMO, <http://www.imo.org>.*

*Yours sincerely,*

*If you need more information about these matters, please do not hesitate to contact us.*

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