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INQUIRY INTO MANAGING FATIGUE IN TRANSPORT

The International Shipping Federation (ISF) is pleased to make a submission to this inquiry. But before providing comments on the various questions under investigation, it might be helpful to explain the role of ISF and our involvement with the issue of fatigue to date.

ISF is the international employers' organisation for ship operators concerned with industrial relations, manning and training, and seafarer's welfare issues. The membership of ISF comprises national shipowners' associations from 35 countries which, through participation in ISF committees, determine the positions to be adopted by ISF at the various international regulatory fora at which we represent maritime employers' interests. The Australian Shipowners Association (ASA) is one of our members.

One of our principal concerns is that whatever rules may be adopted by the international regulators, it is vital that they are applied to shipping globally and on a uniform basis. Rules governing maximum working hours on board internationally trading merchant ships should thus be the same in Brisbane as in Buenos Aires; the alternative would be a plethora of local rules leading to commercial inefficiencies and distorted markets. As such ISF is therefore a strong supporter of the International Maritime Organization and similar United Nations agencies involved in the international regulation of shipping.

ISF is pleased to note that the rest hours provisions contained in Chapter VIII of the International Maritime Organization (IMO) Convention on Standards of Training Certification and Watchkeeping for Seafarers are already being implemented on a global basis. Over 120 countries (including Australia), representing virtually all of the world's maritime flag states, are Parties to the STCW Convention which entered into force in 1997.

ISF had responsibility for representing the global industry's views during the debates leading to the revision of the STCW Convention. Similarly, in our official capacity as International Labour Organization (ILO) Social Partners, ISF represented the Shipowners' Group during the debates leading to the adoption of the new ILO Convention on Seafarers' Hours of Work and the Manning of Ships (ILO 180) and the subsequent joint IMO/ILO meeting (in January 1998) which developed Guidance and standard formats for recording compliance with both the IMO and ILO work hour requirements. ISF is currently an active member of the Intersessional Correspondence Group on Fatigue which has recently been established by IMO to explore the issue further.

Although fatigue can indeed be a significant factor contributing to maritime casualties, unsafe acts and personal injuries, ISF believes that it would be premature to draw firm conclusions regarding the extent to which the impact and incidence of fatigue is as significant as other human factors, such as inadequate training or the failure to follow established procedures, as sometimes appears to be argued.

We contend that much of the widely publicised "evidence" produced to date on the affect of fatigue on maritime safety has, whilst containing interesting information, often been based on seafarers' perceptions of the problem in response to questionnaires as opposed to more scientific evidence from accident investigators or psychological experts.

The extent to which it is safe to draw firm conclusions from such studies is perhaps illustrated by the fact that a recent International Transport Workers' Federation (ITF) study which highlights fatigue as a key concern, was derived from an opinion poll conducted by the MORI organisation on ITF's behalf. The same ITF/MORI study reveals (in spite of the fact that it was conducted before the new International Maritime Organization minimum rest requirements took effect) that "satisfaction with working hours is high with more than seven in ten seafarers expressing satisfaction" (page 50 MORI Seafarers' Living Conditions Survey). Of the 19 different factors affecting working conditions on which seafarers' were invited to comment for the MORI study, satisfaction with working hours scored higher than any other category.

We use the above example to highlight the problems of drawing conclusions about the extent of the problem of fatigue from questionnaire returns based on perceptions. In short, what is required is thorough scientific research, as the recent report by the Australian Maritime Safety Authority (A Survey of the Health, Stress and Safety of Australian Seafarers) has concluded.

A number of academic institutions including the Seafarers' International Research Centre at Cardiff University (UK) and the Sleep Research Laboratory at Loughborough University (UK) are seeking to measure fatigue in ships' crews - through the use of "actimeters" worn on the wrist, self-report logs and infra-red sensors - to determine duration and quality of actual sleep on board ship . ISF feels that it will be important to await the results of these and similar in-depth studies of the scientific realities of the extent to which levels of fatigue are affected by the special nature of life at sea.

The new international regulations governing seafarers' work and rest hours (as adopted by IMO and ILO) contain precise (i.e. numerical) limits and we believe that there should be little difficulty in achieving consistent compliance worldwide provided that the regulations are properly enforced. Moreover, it was with the specific purpose of ensuring compliance that IMO and ILO convened a joint meeting in January 1998 to develop "IMO/ILO Guidelines for the Development of Tables of Seafarers' Shipboard Working Arrangements and Formats of Records of Seafarers' Hours of Work or Hours of Rest" which include a standard format for recording rest and work hours to check compliance with STCW 95 and ILO 180 .The Guidelines also include a standard work schedule which STCW requires companies to prepare and post up on board the ship (as does the ILO Convention which extends the requirement to non-watchkeeping personal who are also covered by the ILO work hour requirements).

Whilst the IMO STCW Convention recommends that companies should be required to maintain work hour records, ILO Convention 180 - which is expected to enter into force shortly - already

makes it mandatory for companies to maintain records using the international formats developed for the purpose as the basis. In order in encourage uniform compliance with international rules governments and shipping companies should be encouraged to use the IMO/ILO Guidelines.

In this connection, the Inquiry might be interested to know that ISF is in the process of developing computer software that will allow rest hours (and work hours) to be recorded and printed off in accordance with the IMO/ILO formats, and which will check that hours worked are actually in compliance with every detailed requirement in Section A-VIII/1 of STCW 95 (as well as ILO 180). The software is expected to be available in the autumn and should help companies maintain what may actually need to be rather complicated records and assist them to plan their schedules in a manner that will reduce the possibility of rules being violated due to bad time management. In addition, however, the detailed records (and calculations checking compliance) that will be produced by the software will hopefully be of assistance to flag state and port state control inspectors.

In the longer term, it may be possible to determine the extent to which the new STCW rest hour regulations are indeed being consistently applied by analysing the results of Port State Control inspections. For the time being, however, it will be incumbent on flag states to inspect records periodically to ensure that companies are in compliance with the applicable regulations.

ISF is also interested in exploring the extent to which the new international work hour regulations may actually exacerbate problems of fatigue. Because the new regulations have the effect of placing strict limits on daily working hours, this could possibly remove opportunities for seafarers to take days off work (with the benefits that this provides) by reducing possibilities to compensate by working longer hours during periods of low activity (e.g. in the middle of the Pacific). Arguably, the need to comply with the regulations might also reduce opportunities for seafarers to assist their colleagues in periods of high intensity work (such as cargo work in port) with the effect that the seafarers engaged in this work might be more prone to stress and the effects of fatigue as a result.

In simple terms there are perhaps two facets to the problem of fatigue on ships. The first is ensuring that the rules which regulate the minimum rest which seafarers must receive, and the conditions that exist on board, are consistent with preventing fatigue from having a significant impact on maritime safety. (There are also social aspects to the problem of which employers have a duty and responsibility to address - and which are regulated by ILO 180 and other ILO instruments on seafarer' working conditions - but which are not directly relevant to maritime safety).

The second aspect, however, is reducing the effects of fatigue that may exist amongst seafarers regardless of the hours which they may be working and which may be similar to that with which we are all confronted, including those of us employed in 9-5 office jobs (it is common to get sleepy in the early afternoon!). Given the nature of circadian rhythms it would seem that minor symptoms of fatigue (i.e. behaviour that falls short of 100% alertness) might be almost impossible to eradicate completely, perhaps indicating the need to consider also how the effects of such fatigue can be mitigated.

It should be recognised that the symptoms of fatigue described in the current IMO definition (impairment of reaction time, decision making etc.) can also result from inactivity or boredom, a factor, of course, which can be common at sea, particularly on long deep sea voyages, and which

we believe is sometimes overlooked as a contributory factor to lapses of concentration that may lead to unsafe acts or accidents.

In view of the fact that Fitness for Duty provisions in the revised IMO STCW Convention only came into force in February 1997 (and in practice the detailed arrangements for enforcing them, such as the introduction of record formats, are still being implemented by most administrations) it is perhaps too early to determine the success with which these new regulations may have an impact in reducing casualties. We suspect, however, in virtually every instance of a casualty to which fatigue has been attributed as a significant contributory factor, the seafarers' concerned would not have been in compliance with the new STCW requirements. We therefore, believe that it would be more productive to focus on the second type of fatigue mentioned above, for which the development of regulations may not be appropriate but for which the development of materials to provide advice would be useful.

We very much hope that the information and comment above is useful to the Inquiry.