

# INTERNATIONAL FEDERATION OF SHIPMASTERS' ASSOCIATIONS



**39TH ANNUAL GENERAL ASSEMBLY**

**MELBOURNE, AUSTRALIA, 16-17 APRIL 2013**

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## **Annual Review Papers**

With the Compliments of  
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## Welcome Address

Captain Christer Lindvall - President



Thank you for your welcoming words.....

Fellow Captains, Colleagues, Ladies and Gentlemen.

On behalf of IFSMA, I want to welcome you all to Melbourne and our Annual General Assembly, especially to those of you - who are attending an IFSMA AGA for the first time.

In this connection I will also say that we are very grateful to be able to come to Australia for the first time and by the invitation from The Company of Master Mariners of Australia (CMMA) to hold our 39<sup>th</sup> AGA in connection with you 2<sup>nd</sup> Congress.

At the same time I will also take this opportunity to thank Söfartens Ledare, the Danish Maritime Officers, for inviting us to Copenhagen last year and their hospitality.

A special welcome goes also to the Master Members of the Singapore Maritime Officers' Union (SMOU) who also have joined IFSMA and thereby we have representatives from 65 countries.

As I usually do - I will now give a brief presentation of Melbourne our host city.

Melbourne, - or "the Garden City" and "the Cultural Capital of Australia" as it is often referred to - the Capital of Victoria is the financial and commercial heart of Australia. It is also Australia's most "European" city – the 21-century with an abundance of the 19<sup>th</sup> century charm.

Legend has it, that when you arrive as a visitor to Perth, locals first ask where you are from; in Adelaide which church you belong to; in Sydney how much money you

make; and in Brisbane simply if you would like a beer, and here in Melbourne they want to find out what school you went to and it was once referred to “the most moral city in the world ???”.

In the beginning of the 19<sup>th</sup> Century the land beside the Yarra River was bought from the Abergins and was named in honour of Lord Melbourne, Britain’s prime minister at that time.

When Mark Twain visited Melbourne in 1895 he was very impressed: “It is a stately city architecturally as well as in magnitude. It has an elaborate system of cable-car services; it has museums, colleges, schools, public gardens, electricity, gas, libraries, theatres, mining and wool centres, centres of the arts and science, boards of trade, ships, railroads, a harbour. Social, journalist and racing clubs a squatter club sumptuously housed and appointed, and as many churches and banks as can make a living. In one word, it is equipped with everything that goes to make the modern great city.”

Personally I think those words are valid even today.

Melbourne is still also home to the world’s largest tram network and the Port of Melbourne is Australia’s busiest seaport for containerized and general cargo.



A short introduction to the The Company of Master Mariners of Australia (CMMA). The Company was founded in 1938 and is an association established to promote the interests and status of the Merchant Navy generally and of Master Mariners in particular, and became an incorporated body in 1988.

The Company is a not for profit professional association that is, limited by guarantee. The Company has six Branches based in Fremantle, Adelaide, Melbourne, Sydney, Newcastle and Brisbane.

The Company of Master Mariners of Australia joined IFSMA in 2009 and once again we want to welcome you as a member of the Federation and once again thank you so much for your invitation.

Again we can look back to a very hectic and successful year. We are becoming more and more involved in areas by ourselves or in joint ventures with other NGOs and others. Our newly appointed Secretary General Captain John Dickie will give us a more detailed report.

I often get asked by our members the question WHY? should we as an organization deal with safety matters in such a wider context? Why can’t we just leave it all to the authorities and to the ship-owners?

In my mind it is because:

1. to improve our health, working environment, safety and security for us as well as for our passengers.
2. to improve and support the competitiveness for us as officers and for serious ship-owners.
3. to improve our image as ship officers and as proud representatives of serious flag states, ship-owners and competent colleagues, and the entire shipping industry in the eyes of the general public.



The four major cornerstones of international requirements for shipping are included in SOLAS, MARPOL, STCW and MLC 2006. The latest will be entering into force - starting August 20 this year as we have now reached the ratification by the required 30 member states. The requirement of 30 % of the world tonnage has been achieved for some years.



The cornerstones are based on the requirements in UNCLOS. We as IFSMA therefore have to participate and to have an impact wherever the decisions are taken. i.e. at UN, IMO, ILO and EU. When the provisions later come down to a national level it is already too late to have any influence or say in the matter. We are also involved in Conferences, Round Table discussions, Seminars, etc.

In January 20 last year IMO appointed a new Secretary-General, Mr. Koji Sekimizu to replace the former Secretary-General Admiral Efthimios E. Mitropoulos.



Mr Koji Sekimizu was appointed as an Honorary Member of IFSMA on December 20, at a ceremony in the Marine Society building in London.

IMO Secretary-General Koji Sekimizu has launched this year's World Maritime Day theme, "Sustainable development: IMO's contribution beyond Rio+20", calling on Governments and the shipping industry to join together and provide a positive contribution towards formulating sustainable maritime development goals.



Mr. Sekimizu said that, as the United Nations' international regulatory body for shipping, IMO has been, and continues to be, the focal point for, and the driving force behind, efforts to ensure that the industry becomes greener and cleaner. He was confident that, through this initiative – it will be something in which IMO, the shipping industry and all other stakeholders that are keen to turn the concept of sustainability into a tangible reality, will be able to join together, and make a very positive contribution.



Last year's World Maritime Day theme "IMO 100 years after Titanic" provided an opportunity to take stock of the developments in maritime safety since that disaster and to examine which areas of ship safety should be given priority in the years to come.



He therefore invited us to submit a paper for the Ship Safety Symposium just before the MSC meeting in June on how to improve safety on all ships. IFSMA will submit a paper based on our objectives, policies and resolutions.

Unfortunately the Costa Concordia accident happened, but could also, as I see it to be a sign, to get something done - because most changes and improvement in international instruments have been achieved after an accident or disaster has occurred.

But on the other hand - do we really need more and more regulations than we already have? If everyone strictly followed and implemented the present rules and requirements, many disasters should have been avoided.

Would the Costa Concordia grounding have happened if all the existing requirements had been followed by the officers on the bridge that day on Costa Concordia? I would say no!!

If Costa Concordia, with about 4300 passengers and crew onboard, had not drifted back and grounded in shallow waters we would have seen a disaster with far many more deaths than the 30 lives that were lost.

What we within IMO are now doing in the aftermath is to look for a “second barrier of protection/defence”. There will be accidents in the future like the Costa Concordia, it is just a question of when not if.

Moreover, evacuation and recovery systems should be studied for the practicality of removing as many as 8000 people from newer vessels during an emergency and also rescue them from their LSA and the sea, and a critical look at the concept of the ship being its own lifeboat should be included.

We therefore have to look at how do we minimize the risks of disaster. In July 2010 new requirements for passenger ships came into force which I hope will improve the situation with new build ships

*“IFSMA believes that the massive media speculation – much of it highly ill-informed – will serve to direct attention away from the long-standing concerns over aspects of the design, construction and operation of large passenger ships.”*



We still haven't got a final report about the causes, with conclusions and recommendations from Italy, which has led to IMO only deliberating on general provisions for passenger ships, learnt from what is already obvious and IMO needs to show some preventative action.

Such as:

## Draft Changes of SOLAS

### Musters and drills

“1. On a ship engaged on a voyage where passengers are scheduled to be on board for more than 24h, musters of the newly-embarked passengers shall take place prior to, or immediately upon, departure. Passengers shall be instructed in the use of lifejackets and actions to take in an emergency.

2. Whenever new passengers embark, a passenger safety briefing shall be given immediately before departure, or immediately after departure. The briefing shall include relevant instructions and shall be made by means of an announcement, in one or more languages likely to be understood by the passengers. (The announcement shall be made on the ship’s public address system, or by other equivalent means likely to be heard at least by the passengers who have not yet heard it during the voyage. The briefing may be included in the muster required by paragraph 2.2 if the muster is held immediately upon departure. Information cards or posters or video programs displayed on ships’ video displays may be used to supplement the briefing, but may not be used to replace the announcement.”)



## DRAFT MSC CIRCULAR

### RECOMMENDED INTERIM MEASURES FOR PASSENGER SHIP COMPANIES TO ENHANCE THE SAFETY OF PASSENGER SHIPS.

1. The MSC having considered the interim recommendations made by Member States and non-governmental organizations in consultative status submitted in response to the request by the Secretary-General, in light of the loss of the Costa Concordia, agreed that Member States should recommend that passenger ship companies conduct a review of operational safety measures to enhance the safety of passenger ships.

2. The recommendations on operational measures for companies owning and/or operating passenger ships were provided in the annex to SC.1/Circ.1446.

3. At its ninety-first session (26 to 30 November 2012), the Committee revised these recommendations, which are set out in the annex.

4. Member States are invited to use the annexed recommendations on a voluntary basis, pending finalization of the marine casualty investigation on the Costa Concordia, and to bring them to the attention of owners, operators and other parties concerned, as appropriate. Passengers arriving after the above muster has been completed, should be promptly provided with individual or group safety briefings.

Access of personnel to the navigating bridge

6. To minimize unnecessary disruptions and distractions to bridge team members in accomplishing their direct and indirect duties during any period of restricted manoeuvring, or while manoeuvring in conditions that the master or company bridge procedures/policy deems to require increased vigilance (e.g. arrival/departure from port, heavy traffic, poor visibility), it is recommended that access to the bridge should be limited to those with operational or operationally related functions during these periods. In addition, companies operating passenger ships are recommended to take policy steps to prevent distractions to watch keeping personnel during these periods.

Voyage planning

7. Companies owning and/or operating passenger ships and their Masters should take steps to ensure that the ship’s voyage plan, has taken into account the *Guidelines for voyage planning* (resolution A.893(21)) and, if appropriate, *Guidelines on voyage planning for passenger ships operating in remote areas* (resolution A.999(25)), including addressing the conditions under which changes to the plan are consistent with Company policies.

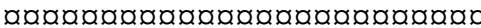
Recording the nationality of persons on board

8. In order to facilitate the effective and immediate availability of key information on passengers in the event of an emergency situation, in addition to the information required by SOLAS regulation III/27, companies owning and/or operating passenger ships should consider ensuring that the nationality of each person on board is also provided.

Lifeboat loading for training purposes

9. Companies owning and/or operating passenger ships should consider adopting a policy that at least one lifeboat is to be filled with crew members equal in number to its certified number of occupants at least every six months. Under such a policy:

- .1 for safety considerations, the loading of lifeboats for training purposes is to be performed only while the boat is waterborne and the boat should be lowered and raised with only the minimum number of crew on board,
- .2 lifejackets should be worn;
- .3 all lifeboat crew and embarkation/boarding station crew are to be required to attend the lifeboat loading drill; and
- .4 if not placed inside the lifeboat, those crew members are to observe the filling of the lifeboat to its certified number of people.



As Costa Concordia having parts of its hull ripped open (4 sections) after the grounding I believe at least two recommendations in Lord Mersey’s Titanic report are still valid. Especially when we have seen many other large passenger vessels (today planned to take almost 10,000 passengers and crew) which have also had the hull partly ripped open after groundings.

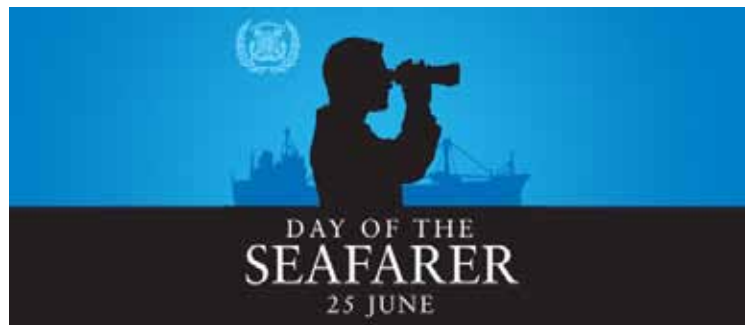


“It is therefore still a desirability and practicability to provide ships with a double skin carried up above the water line; or, as an alternative, with a longitudinal, vertical, watertight bulkhead on each side of the ship, extending as far forward and aft as convenient; or, with a combination of both. Any one of the three alternatives to be in addition to watertight transverse bulkheads and.....

Consider and report generally on the practicability of protection given by sub-division; the object being to ensure that the ship shall remain afloat with the greatest practicable proportion of her length in free communication with the sea.”

STCW Convention 1974 as amended (Manila)

As we all know the Manila amendments to the STCW Convention entered into force on January 1, 2012 and I now just want to remind you about the Annual Day of the Seafarer on 25<sup>th</sup> of June.



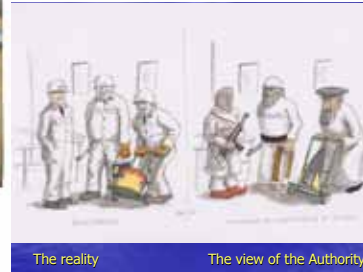
ISPS-Code



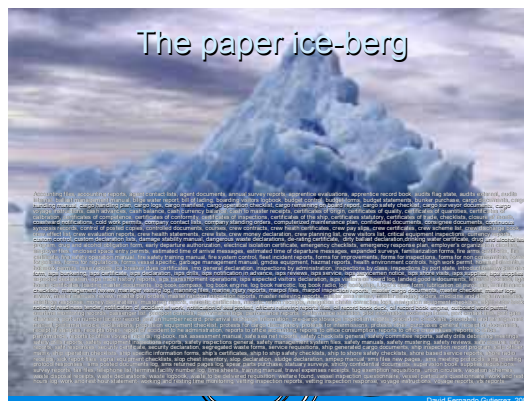
IFSMA conducted the 6<sup>th</sup> Workshop in connection with the Education and Manning Conference in Manila in November last year. The theme was focused on the “ISPS-Code 10 years since adoption”.



Security Örrskär



Presentations were given by Rev Ken Clarke, Natalie Shaw and others. The outcome was presented to the main conference with concerns and implications to Seafarers and ship owners regarding visas, the right to shore leave, workload, manning, fatigue, paperwork, recruitment etc.



### Fatigue and Manning

Resolution 1047(27) on Principles of Safe Manning has been adopted by the IMO General Assembly in 2011. Unfortunately the SOLAS Chapter V on Navigation Regulation 14 was not changed as it was decided earlier to require that the Safe Manning Certificate be issued “in accordance with” the new resolution. Instead, the requirement was changed at the last MSC to only “take into account” - which of course takes the effectiveness of this very important resolution away.

### The Horizon report



This EU sponsored research project is a joint venture regarding fatigue and sleepiness among watch-keeping personnel onboard ships, [Between Warsash Maritime Academy (Southampton Solent University), Chalmers Tekniska Hoegskola AB (Dept of Shipping and Marine Technology (Sweden), the Stress Research Institute of Stockholm University, together with 8 other participant companies and authorities.)]

There are increasing concerns over human safety, environmental damage and commercial loss due to watch officer fatigue. The UK's Marine Accident Investigation branch (MAIB) report entitled "Bridge Watchkeeping Safety Study (2004)" cites fatigue as a major causal factor in collisions and groundings. There is however, very little information about how the watch patterns for instance, 6-on/6-off and 4-on/8-off have an influence on watchkeeper performance.

In this research they studied how the different watch systems have influenced the levels of fatigue or sleepiness, both of deck and engine room watchkeeping officers. The simulation research involving many runs of seven day, realistic voyage scenarios was completed in 2011 and a vast array of data has been assembled. (This has been analyzed by Stockholm University and reviewed by all partners: the findings have been published and the Project's public Final Report is available)

#### General conclusions

- overall, more sleepiness was recorded during the first watch of the day – especially among deck teams
- sleepiness was found to increase with time on watch
- the off-watch disturbance instantly increased sleepiness
- on the whole, sleepiness levels were higher in the 6-on/6-off system than in the 4-on/8-off system
- sleepiness levels did not significantly differ between deck and engine room
- sleepiness levels consistently peaked between 0400 and 0800
- alertness levels consistently peaked between 1400 and 1800



## Piracy



Since we last met we have participated in the UN Contact Group on Somalian Pirates in working Groups 1-3, where we have discussed armed guards, the guidelines for coastal states (*innocent passage*) and port states etc.

The International Organization for Standards' formal audit process for Private Maritime Security Companies (PMSC) will began in early spring with individual audits taking four months to complete. The debate over regulating armed guards has been lengthy, ISO's PMSC standard — ISO PAS 28007 — is the quickest standard to reach public accreditation specification stage, after the International Maritime Organization gave ISO its mandate to produce the standard in May last year.



We can also see that the Djibouti agreement regarding capacity building together with the compliance with the BMP are having an effect with fewer hijackings and

more pirates being arrested and sentenced. Unfortunately we cannot be certain that all attacks are reported.



Captain Willi Wittig on behalf of IFSMA participated in a Security Meeting in Ottobrunn Germany in June last year.

No successful attacks have been recorded on ships with armed guards onboard.



The figures for piracy and armed robbery incidents (IMB Piracy Reporting Centre in 2012)

Worldwide Incidents 2012: updated on 16 Jan 2013 Total Attacks Worldwide: 297, Total Hijackings Worldwide: 28

Incidents Reported for Somalia 2012: Total Incidents: 75, Total Hijackings: 14, Total Hostages: 250

Current vessels held by Somali pirates: Vessels: 8, Hostages: 127.

#### Support organizations

There are some new welfare and support organizations which have been established in connection with the increased criminalization of seafarers, and seafarers who have been attacked or been held hostage by pirates. For example - organizations such as Save our Seafarers, Maritime Piracy Humanitarian Response, Seafarers' Rights International, the Seamen's Church Institute



Here as a Federation we have a very important task to assist our members and even those who are not members, because in the future the same thing could happen to one of our members and become accepted practice.

## Fair Treatment and Port of Refuge



A submission which was dealt with at the MSC in November from ICS, BIMCO, INTERCARGO, IPTA and INTERTANKO which were concerned regarding the non-compliance with resolution A.949(23), *Guidelines on places of refuge for ships in need of assistance* and resolution A.987(24), *Guidelines on fair treatment of seafarers in the event of a maritime accident*.

The Regional Organization for the Protection of the Marine Environment (ROPME)/ Marine Emergency Mutual Aid Centre (MEMAC) reported on an explosion and fire aboard the M/T Stolt Valor during which a fatality occurred. The incident occurred 40 nm from Ras Abu Ali, Kingdom of Saudi Arabia, on 15 March 2012.

Repeated requests to the coastal States represented by ROPME for the casualty to be granted access to a Place of Refuge (POR) were denied and formal permission to access a POR was not granted until 25 June 2012 with the ship reaching the Arab shipbuilding and repairing yard (ASRY) in Bahrain three days later. A period of over 100 days elapsed from the initial incident to reaching the POR. Industry associations are deeply concerned at this excessive response time and question the apparent failure to fully apply the *Guidelines on places of refuge for ships in need of assistance*.

The co-sponsors also expressed concern that regional and international arrest warrants are reported to have been sought for the Master and Chief Engineer of the M/T Stolt Valor and that this action indicates a failure to apply IMO/ILO Guidelines.

Had a place of refuge been more quickly provided, the removal of the remaining cargo and bunkers could have been carried out much quicker, in greater safety and with less risk to the environment. In the circumstances, the salvors were forced to conduct these hazardous operations in the open sea where waves of up to 6 m were experienced causing inevitable delays. During this period, the ship and those seeking to save the remaining cargo and bunkers from causing pollution were harassed and threatened by some regional military forces. Despite experiencing these difficult conditions, during the entire incident no fuel oil was spilled from the vessel. This is testament to the planning and hard work of the owners, local and international salvors, as well as to Saudi Aramco who retained control of the operation at all times. Expert assessment advises that the cargo burn rate was sufficient to account for all cargo lost from the ship's tanks.

The co-sponsors understand that regional and international arrest warrants have been sought for the Master and Chief Engineer of the M/T Stolt Valor. Pertinent information has been made freely available to those concerned and alternative arrangements to interview the Master and Chief Engineer in a neutral jurisdiction, at the owner's expense, have been offered and declined.

It therefore appears completely unjustifiable that arrest warrants should be issued. It is not clear what charges are associated with the above-requested arrest warrants. Further concern is expressed that the future international employment opportunities for the particular officers will be threatened by warrants that do not appear to be based on any particular charge or breach of international law.



The co-sponsors express serious concern at this unwarranted criminalization of the Ship's officers contrary to accepted international best practice as endorsed by the Organization. It is clear that the crew's decision to abandon ship was the correct one; there could certainly have been further loss of life from a subsequent larger explosion that occurred shortly after the evacuation had been completed. There was no need for the crew to remain in Bahrain to assist with the salvage operation as salvors had all of the required information and the immediate need was to fight the fire.

#### Proposal

The Committee is urged to consider what additional measures may be appropriate and to stress the need for all States to apply the following IMO and IMO/ILO instruments:

- .1 *Code for the investigation of marine casualties and incidents* (Resolution A.849(20));
- .2 *Guidelines on places of refuge for ships in need of assistance* (Resolution A.949(23));  
and
- .3 *The ILO/IMO Guidelines on fair treatment of seafarers in the event of a maritime accident* (resolution A.987(24)).

Furthermore, the Committee is urged to consider what further action may be appropriately taken in regard to Resolution A.1038(27), *High-level Action Plan of the Organization and priorities for the 2012-2013 biennium*, and the commitments therein..

#### Code of Conduct

We are still looking into a future Code of Conduct for Shipmasters together with the Centre of Maritime Studies, Hochschule Bremen in Germany. Whether it should be introduced and supported by IFSMA or not, is still to be decided. We need to see the final product and what liabilities IFSMA is taking onboard and what negative impacts it can have on individual Shipmasters.



Finally

Other prioritized areas of concern include: goal based standards, navigation in arctic waters, asbestos in ships' construction, enclosed spaces, ECDIS, e-navigation and changes in the guidelines to the ISM – Code, lifeboat hooks.

A 2006 study on behalf of Britain's Maritime and Coastguard Agency concluded: "most of the more serious accidents, particularly those leading to fatalities, occur because of problems with the on-load release hooks... this study has found that many existing on-load release hooks, whilst satisfying the current regulations, may be inherently unsafe and therefore not fit for purpose".

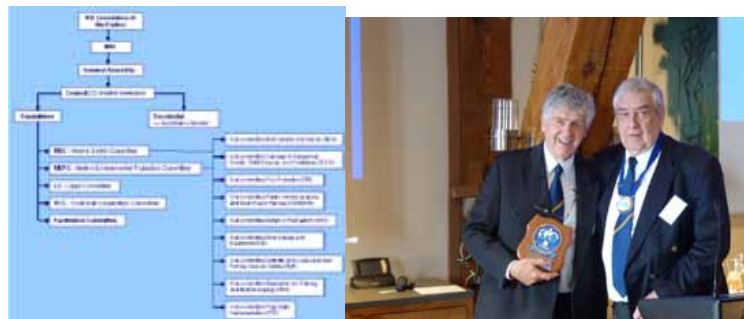


Amendments to the International Convention for the Safety of Life at Sea, SOLAS, aimed at preventing accidents during lifeboat launching entered into force on 1 January 2013.

The amendments, adopted in May 2011, add a new paragraph 5 to SOLAS regulation III/1, to require lifeboat on-load release mechanisms not complying with new International Life-Saving Appliances (LSA) Code requirements to be replaced, no later than the first scheduled dry-docking of the ship after 1 July 2014 but, in any case, not later than 1 July 2019.

The SOLAS amendment is intended to establish new, stricter, safety standards for lifeboat release and retrieval systems, and will require the assessment and possible replacement of a large number of lifeboat release hooks.

It is with these words that I open the Annual General Assembly and once again thank our Australian Colleagues for their invitation. I hope it will be a fruitful AGA and that we will move IFSMA's standing forward.



# Report by Secretary General

## Introduction

This is my first year of writing an Annual Review for IFSMA and it seems like only yesterday that I was in Copenhagen accepting the post of Secretary General.

All that I can say is that it has been a steep learning curve and I am still climbing, but results are starting to be accrued. I wish I could say that everything is well and that there is nothing to worry about, but that would be stupid in these times of austerity.

Recently I wrote my vision for 2013 and I hope that the contents were taken on board for what they were: a vision of where we are and where we want to go and possibly the way to achieve it. I prefer to look ahead instead of back but members need to know what has been taking place and what has been achieved in the second half of 2012 since the AGA at Copenhagen.

My intention is not to go in depth into every detail but to give you an overall picture of what has taken place and the direction that is hoped to be taken. Each section deals with a particular topic and this will assist in forming a picture of what has been accomplished.

## IMO

The coverage at the IMO has been increased and it is hoped to increase further. The year has been marked with an increase in the number of interventions made and the number of papers presented. The majority of these have been made jointly with other organizations, but 2013 will see more individual papers being presented at the various committees.

On the 20 December 2012, the IMO Secretary General accepted his honorary membership of IFSMA at a small reception at HQ.

There is ongoing work with Harmut Hesse the IMO Secretary General's Special Representative on Piracy and Maritime Security.

IFSMA is becoming better known and this is partly by attending the presentations and receptions held after the end of business. It is also by the attendance at nearly every committee and sub-committee and networking with everyone possible. This will continue as part of the strategy of raising the profile of IFSMA at the IMO.

IFSMA endorses and supports the IMO Secretary General's vision for the future of the IMO and the global maritime industry, and works to promote this vision whenever it can.

## Finances

TaxAssist Accounts have been retained to conduct the accounts and complete the tax return for each financial year. This will ensure that a full and transparent set of accounts are available. The 2012 Tax return is being worked on at this time and will be completed in the near future. It should be noted that this is at zero cost to IFSMA.

Over the second half of 2012 a complete spending review was conducted by the Secretariat to identify if further savings could be made without compromising services being delivered. Where an item was identified it was amended and costs reduced.

For 2013, a monthly review of all expenses is being conducted to identify where and when expenditure is being made to balance against income. This will allow an end of year budget to be produced for 2014 based on sound financial results.

There was a large sum of unpaid debts identified for the end of year. Every effort has been made to reduce this as much as possible, but unless something else turns up it may be necessary to write off these debts and start with a clean slate. Those who have failed to pay will be informed and this will be placed before the AGA for the membership to make a final decision on what action to take.

In these times of austerity, it is necessary to minimise every outlay and ensure that every penny is accounted for. Only by keen fiscal awareness can it be possible to improve the financial position of the organization.

The secretariat has received no pay rise or bonus for 2013. This will be reviewed at the end of this year.

The planned renovation of HQ has been put on hold for this year until final figures and payments are assessed.

There has been no increase in membership fees for 2013. These are being held at the 2012 level.

## Membership

This is an emotive subject and has been discussed at AGA and ExCo meetings. The criteria for membership will remain as it always has been and there will be no changes.

There has been a drive to increase the number of Associations who are members of IFSMA and also an increase in the number of Individual Members. This has met with a limited success of having Associations from Singapore and Turkey joining.

There have been communications with Myanmar, Bangladesh, Yemen, Kazakhstan, Greece, Indonesia and Iran and the negotiations are moving slowly but for the most part will not result in the associations joining.

There is the problem of the disparity of the number of Members declared to IFSMA for membership and the total number of Members in these Associations. For some Associations this works out at about £0.30 per member per year. Whereas other Associations declare their full membership and pay the fees accordingly, without this support IFSMA would cease to function.

This matter needs to be addressed and it is by ExCo Meetings and support of the membership at the AGA that a strategy can be put in place and this matter resolved to everyone's satisfaction.

One Association was suspended from membership and will not be invited to re-join IFSMA at any time in the future. This was due to many factors including the failure to pay membership fees for a number of years.

There have been a number of Individual Members who have not paid fees and they have been notified of their position.

The future will be to retain membership and grow the number of Associations and Individual Members. If this can be sustained then the requirement of increasing fees may be able to be averted.

## Projects

The term project covers a number of different events. These include attendance as well as speaking at conferences / summits. On one occasion, this resulted in the chairing of an event.

There has also been the initiative of the Group of NGOs representing personnel employed in the maritime industry. This has been very demanding and time consuming in respect of the bringing together of a number of organizations and having them work closely but also loosely together on topics of mutual importance. The number of organizations has expanded and at this stage there is a refinement of points of order for the group to continue to exist. IFSMA is acting as coordinator for the group and leaving the members to decide the direction and structure that should be used.

There have been a few IMO initiatives where IFSMA has been invited to participate and these include the IMO/WMU Initiative on EEDI and Green House Gas Emissions.

There has also been work with the NI and others on ECDIS in a technical group.

Other projects have been working on the Resolutions from AGA 38 at Copenhagen. This has been involving other organizations to try and progress the items to a successful conclusion.

## Meetings

Regular ExCo meetings have been held and the minutes recorded. It has not been possible to have everyone available at the same time and this is understandable due to the nature of employment of the ExCo members and their location in various parts of the world.

2012 ExCo meetings were in March, June and September.

The Strategy Meeting in December 2012 was eventful with a large number of issues discussed to find the way forward for IFSMA. Not just for the next year or two but in the long term.

The Secretariat has regular meetings to discuss the issues affecting the operation of IFSMA and also to review the financial position as well as any queries raised by the membership.

## HQ

The office space for HQ at 202 Lambeth Road, London is in need of renovation and to make it more modern and inviting to members and persons visiting the office. This has been put on hold, as at this time the cost cannot be justified against the other fiscal conditions of IFSMA.

There will be minor ongoing alterations to the office and a programme of creating a minimalist effect of the contents and materials and functions. This will be updated in the monthly report by the Secretary General to the Executive Council.

#### Secretariat

The Secretariat is continuing as per their job descriptions and on a part time basis of employment.

As the workload increases, such as taking on new projects and an increase in the overall work commitment there will need to be a review of manning levels and costs incurred.

The alternative is to remain static and reduce the commitment to new projects and other matters which in effect would be against the vision for IFSMA.

#### Summary

At this time IFSMA can survive and continue to support its membership. Regrettably, if the Federation wants to grow and increase its recognition in the Marine Industry then a strategy is needed to find the finances to achieve this.

In 2014 the President; Deputy President and a number of the Vice Presidents will be standing down and the need to find their successors starts now.

The strategy meeting of December 2012 raised a number of issues and these are being reviewed to find a coherent way forward. This has highlighted certain changes to the way that IFSMA operates and how it can be achieved in a cost effective and efficient manner.

A number of issues will decide the way forward and how the membership feels it should be handled. For 2013 and 2014 the need for stringent fiscal awareness will dictate how many of the possible opportunities for IFSMA are handled.

# Master responsibility in case of issues arising from the use of armed guards on board.

*Captain V.G. Havelka*

## Generalities

At the 30th IFSMA AGA in Buenos Aires, some delegates raised the question of arms on board merchant vessels to defend themselves against pirates. The overwhelming majority of attendees were against such a measure. Doubtless our feelings did not change as far as the use of arms by crew is concerned.

However, the emergence of PMSC (they are over 200 today) changed somewhat the scene, as no ship with armed guards has been hijacked up to now.

Most parties concerned, owners, governments, charterers and shipmasters are today in favour of such a solution, i.e. an armed defence against pirates entrusted to a special team and which is not *stricto sensu* part of the crew. In countries where PMSC on board are not authorized, as is the case in France (all EU States are in favour of PMSC except France and the Netherlands) the alternative is to embark a military unit of 5 men. It is also possible to change the port of registry and choose a flag that authorizes the PMSCs.

Let us mention here, there are PMSCs that do not embark armed teams on board ships to protect, but use escort fast boats instead. This is the case of the only French PMSC, GALLICE. At first sight this seems interesting, as the shipmaster is less involved in exchange of fire, if any, but a deeper analysis shows it is not so.

This use of private security guards has several aspects, technicalities, weapons, their storage on board, intervention methods, cost and so on. We will limit our exposé to the aspect of master responsibility only. In short, if there are armed guards on board, or on an escort ship, is he in danger of being prosecuted in case of an incident or accident, whether trivial or serious?

## International Law or Laws?

There are statements such as “Under International Law...” This is an esoteric expression that hides the fact that there is not a clear streamlined International Law, applied by courts and tribunals the World over.

As far as the shipping sector is concerned, we are subject to multiple laws and regulations that more often than not contradict each other.

- International organisations such as UNO, IMO, ILO etc issue their regulations which are not necessarily binding for every state, as not every state is party to those organisations. And even if a state is party to them, it may not ratify a particular regulation. Many IMO resolutions give explicitly to a member-state the right to adapt them, mostly to make them stricter
- Law of the Port State and law of the Flag State.

- Treaties between states, either public or secret. Those treaties may be rescinded without notice, due to a change of government. Thus, a ship may arrive at a port with weapons on board and be in trouble because the local law has changed.
- National law in coastal states and territorial waters.
- As there are many nationalities on board a ship, national law of their countries may apply according to circumstances.
- Warships may also cause complicated legal problems as have shown many collisions between them and fishing boats.

When PMSCs are authorized by above mentioned bodies, or part of them, there are always safeguards in their regulations, such as

*“The use of force must be limited to cases in which it is, “necessary, justifiable and proportionate” (Norwegian Act)*

*“The decision to use armed guards may only be taken once a risk assessment has been completed that shows that measures in accordance with the BMPs will not ensure satisfactory security” (Norwegian Act).*

*“ The use of PCASP should be considered as an alternative to Best Management Practices (BMP) and other protective measures” (MO SMC)*

Consequently, if something happens when armed guards are defending the ship against pirates; the shipmaster is never sure how the procedure will turn out. An escort ship pursuing a pirate boat may be accused of committing an “act of piracy” and the master of protected ship of being party to it.

#### Contracts

Bearing in mind what has been said, it is useful to draw up a contract, binding the owner and the PMSC and defining the responsibility of each of them, especially the shipmaster. Everybody appears to agree about the need to have at one’s disposal a clear, standard contract, internationally accepted. It seems that this is actually just wishful thinking.

There are as many contracts as there are PMSCs. However, 2 types of contracts seem to emerge, that is those which involve the shipmaster in the decision to open fire, (e.g. Norwegian Ship Safety and Security Act) and those which keep him away from such a decision (e.g. BIMCO). In all cases the shipmaster has the overriding right to stop the fire.

In our view the difference between those 2 types of contract is slim in the hands of skilful lawyers. A fire is opened without the captain’s agreement. If he does not stop it, as he has the right to do, he is implicitly responsible....

In all those contracts, the PMSC team is fully responsible for the acquisition and transport of arms and for all administrative procedures concerning them.

When the captain’s power is increased, as is the case under the Norwegian legislation, there is naturally also an increase in penalties facing him if something goes wrong.

When the armed force on board is a military unit as opposed to PMSC, there is also a contract between the owner and the Armed Forces Authorities. This is the case of SAPMER, a large French fishing fleet company in the Indian Ocean. It is the French Navy that provides armed guards. The shipmaster is involved in the decision to open fire but he has no power to stop it. ACOMM's President and past IFSMA's Vice-president Yannick Lauri, is actually managing director of SAPMER and is satisfied with this kind of protection of his ships, mainly from the point of view of efficiency and cost.

#### IMO Recommendations

The basis for all coastal states regulations and contracts on the use of private armed guards on board ships should be based on the IMO document MSC 1/Circ 1405 and 1406. It is really a "work in progress" document, a general guidance for ship owners and shipmasters.

IMO accepts without endorsing their use. Let us quote 2 statements:

*"At all times the master remains in command"*

*"The master should maintain a log of every circumstance in which firearms are discharged, whether accidental or deliberate. Such actions should be fully documented in sufficient detail in order to produce a formal written record of the incident."*

The first statement is in accordance of that in SOLAS, part 1, Chapter XI-2§

- 1 *"The master shall not be constrained by the Company, the Charterer or any other person from taking or executing any decision which, in the professional judgment of the master...etc."*
- 2 *"If, in the professional judgment of the master, a conflict between any safety and security requirements arises...the master shall give effect...the master may implement temporary security measures...etc"*

#### Guardcon

This is a standard contract proposed by BIMCO. Let us quote the observations made by CPS (UK Crown Prosecution Service):

*"Under no circumstances should there be a derogation of the shipmaster's authority..."*

*"The CPS cautioned against allowing the master to be involved in the decision to open fire..."*

As Guardcon tries to satisfy every party concerned, we find in the contract: "The master cannot order a guard to shoot (not to be exposed to a criminal action later).. He has no right to invoke the RUF or the use of force by safety guards but he retains the right to order the guards to stop firing. But every guard has the right to defend himself".

#### Norwegian Ship and Safety Act

This is not really a contract but a legislation that authorizes the presence of PMSC on



board Norwegian ships and defines the responsibilities of all concerned. It gives the master special authority to use force. It says:

*“The decision to use force to repel a pirate attack is the master’s alone”*

Consequently, there are penalties for breaches of the act.

## Risks

They are implicit in what precedes. In International Waters, only the Flag State law should apply. But, there may be a tribunal which decides otherwise, as we have seen for ex. in the case of RUBY (murder committed on board). In the case of ERIKA, after more than 10 years of court procedure the competency of a French tribunal is still challenged.

Another example is given by the Italian oil tanker ENRICA LEXIE. While on high seas, i.e. international waters, with armed guards on board belonging to the Italian Navy, an Indian fishing boat was by mistake taken for a pirate boat and two fishermen killed by the guards. According to above-mentioned laws, it was up to the flag state, Italy, to open legal proceedings. But the Indian Navy boarded the ship and took her to India where she was held for 2 months waiting for the procedure to open in India. 2 guards were accused of murder and are liable to be sentenced to the death penalty under Indian law IPC 302. According to legal analysis published on the web the shipmaster could also have been easily charged by the Indian Authorities; by chance for him, he was not.

In January 2013, after a year of negotiation, the Supreme Court of India decided that the Italian marines must stand trial in India for now.

In territorial waters of a coastal state it is the law of that State that applies. But that law may be inconsistent, changing rapidly, or just different from that of the Flag State. It may consider the shipmaster responsible for whatever happens on board his ship.

It may so happen that a master with armed guards on board, in accordance with the Flag State legislation, could be prosecuted by a state that does not authorize the presence of armed guards.

We may then safely state that there is not 100% safe legal protection for the shipmaster, whether the armed guards are Navy marines or PMSCs. This leads us to the usefulness or even the necessity for him to have at his disposal a specific insurance contract covering as much as possible the foreseeable risks, that is

- Coverage for defence and legal costs in criminal and civil proceeding.
- Wage continuation in the case of detention while awaiting trial.
- Employment dispute

## MMP MasterMarinerProtect

This IFSMA project is a tailor made insurance contract to protect the shipmaster from risks arising from a pirate attack. Its initiator, our colleague Willy Wittig

will doubtless be pleased to give you more information about it and to answer your questions, if any.

### Master's Responsibilities

Generally speaking, the master, according to regulations, in case of PMSC on board, may be responsible for

- Carrying out the relevant contract and all applicable regulations
- PCASP is not an alternative to BMP
- Choice of PMSC under some Flag States regulations
- Application of RUF according to contract or Flag State (Open fire)
- Stop fire except when stated otherwise (ex. Military unit)
- Keep a record of what happened.
- Crew list. According to contracts/regulations, PCASP is entered in crew list, fully, partially (supernumeraries) or not at all (passengers).

### Conclusion

It appears that the master's basic problem is twofold:

- His overall command of the ship
- His eventual desire not to be involved in the decision to open fire in order not to face a prosecution later.

### ABBREVIATIONS

PMSC	Private Maritime Security Company
PCASP	Privately Contracted Armed Security Personnel
BMP	Best Management practices
HRA	High risk area
RUF	Rules for the use of force
CEP	Convoy Escort Vessel
SAMI	Security Association for the Maritime Industry

## Recent Disasters Aided by electronic instruments

*A. K. Bansal, Individual Member*

On June 9 1995, cruise liner Royal Majesty, sailed from Bermuda with 1509 persons on board, equipped with every modern navigational instrument including an integrated bridge system connected to GPS, three radars, an autopilot, a radar-map, Loran C, an echo sounder plus a fathometer.

The ship was connected to her autopilot for the first 500 mile straight run to the entrance of approach to Boston traffic separation scheme. Her normal watch routine was that the Second officer took over from Chief officer at 8PM till midnight. The navigator did the middle watch. All was uneventful during the first 24 hours. The ship apparently followed her set course of 336 Degrees. Her GPS could provide accurate position data to the NACOS 25 autopilot within 100 meters. In turn the autopilot was to automatically correct the effect of set and drift to keep the ship on her programmed track. At 14.1 knots, all fixes during the voyage were with position data from GPS.

Six lighted buoys named BA, BB, BC, BD, BE and BF, with Radar reflectors define traffic lanes for ships going in and out of Boston. The Chief officer saw a radar blip at 6:45 p.m., seven nautical miles away to port. Depending on the wrong GPS display of the ship's position, he concluded that this blip was of the BA buoy they should have seen at about that time. In fact it was a wreck marking buoy, 17 miles inland of where the ship should have been. When she passed this buoy 1.5 miles to port, he made a log book entry about it. But he did not see what light the buoy was flashing to verify if it was indeed the BA buoy. When the Master asked him if the BA buoy had been sighted, the Chief officer confirmed it but did not tell the Master that he had not visually affirmed that it was indeed the BA buoy.

At 8 PM when the Second officer took over watch, the Chief officer informed him that the ship was well inside the traffic lane. The Second officer reduced the radar range to six miles to give the traffic lanes his full attention but did not switch on a second radar to monitor long range. Soon the lookout reported seeing a yellow light on the port side! Several minutes later, both lookouts reported seeing high red lights on the port side. Radio towers with flashing red lights are located on the Eastern end of Nantucket about 30 miles from traffic lanes but are generally not visible to vessels transiting the traffic lanes. But since the ship was 17 miles nearer they were visible to the lookout men. Nantucket Island was out of his 6 mile radar range. Therefore the Second officer could see nothing and did nothing.

Press reports highlighted that two Portuguese fishing vessels called the ship on VHF and warned the OOW that his ship was off course.

At 2145 the Master asked the 2/O whether he had seen the BB buoy. The 2/O replied that he had. But in fact he had not seen it. Soon after this the lookout informed him of "Blue and white water ahead." The 2/O looked at his chart and did nothing?!

The Royal Majesty grounded on the Rose and Crown shoal, about 10 miles east of Nantucket Island, at 1051 pm on 10.6.1995, 17 miles off course causing heavy bottom damage and lost revenue. Fortunately she did not take in any water and did not leak fuel, thanks to her double bottom. Thankfully there were no deaths or injuries. A

passenger with a cell phone alerted the Coast Guard. The ship was pulled out about 24 hours later by the use of five tugs.

Only after she grounded it was found that her GPS antenna had come out of its socket 52 minutes after sailing. Her Atlas 481 echo sounder with digital readout was not turned on. Her fathometer alarm, normally set to go off at less than 3 meters below the keel, was set at 0 in port. If it had been set to 3 meters before sailing from Bermuda, OOW would have been alerted 40 minutes before the grounding. Had the duty officer taken note of the VHF warning reportedly given to him by the fishing boats he would have known that his ship was off course.

All this suggests that the navigating officers were over-relying on their electronic navigation equipments without appreciating their limitations. Perhaps it was due to the euphoria created by the fact that these very instruments had never let them down over many previous voyages. One wonders if it was good seafaring practice not to give their navigation a second independent check especially when she was nearing land. Loran C was readily available. It does not rely on electronic signals from satellites but takes radio signals from shore based stations. It provides good accuracy along the U.S. Coast and as the vessel approached closer, the positions would have been within about 500 meters of each other. Ordinary practice of seafarers requires us to re check our position with auxiliary equipment provided on ships.

Rule 5 (a) of COLREGS stipulates that “Every vessel shall at all times maintain a proper lookout by sight and hearing as well as by all available means .....” So how have the duty officers of Royal Majesty complied with these international requirements especially when they ignored the warnings of their own lookout men?

Above all what about ‘ordinary practice of seamen’ to recheck everything we do on the navigation bridge and position we fix with an alternate system? There was a time when even the gyro compass was checked with the magnetic compass AFTER magnetic compass error was ascertained!?

On December 14<sup>th</sup> 2002, M.V. Kariba collided with and sank M.V Tricolor in the TSS of the English Channel, with visibility less than half a mile. Kariba at 16 knots had Tricolor overtaking her on the stbd side in the same NW part of TSS.

But even though his ship was fitted with two radars and ARPA and the Master was on the bridge monitoring navigation of his ship, he did not know that Tricolor was overtaking from under the stern of his ship at 17.9 knots!

A third ship, M.V Clary, approaching the North East part of TSS from the Atlantic, was on collision course with Kariba. All three ships were navigating in thick fog, only on Radar at full speeds and none were sounding fog signals. The Master of Kariba wrongly believed that Clary was the give way vessel under rule 15. In fact rule 19 applied in thick fog. Thinking that Clary did not give way, he altered Kariba 30 deg to stbd, colliding with and sinking Tricolor. It is to be noted that ships navigating in TSS are not relieved of their obligations under COLREGS. Hence the following violations of COLREGS:-

All three ships violated Rules 2(a), 6, 6(a), 19(b) and 19(d). They did not follow the ordinary practice of seamen, they proceeded at high speeds in TSS with visibility 0.5 mile, in the vicinity of other ships and did not take suitable action in ample time to avoid collision. They also violated Rule 35(a) as none sounded fog signals in restricted

visibility and did not observe principles of safe navigation watch as per Part 3 section A-VIII/2 of STCW Code. Clary and Kariba altered course instead of reducing speed. Kariba also violated Rule 5 by not detecting Tricolor on her stbd quarter and by altering course without proper appraisal. Tricolor also violated rule 19(e) by not reducing speed in thick fog when in a close quarters situation with Kariba.

US District Court Judge blamed the Master of Kariba for the “logic-defying” navigation causing the collision which could have been avoided if the Master had simply held Kariba’s course and cut speed under COLREGS. The case went on appeal and it was reported that in view of above violations by all three ships, it was held that ALL three ships were liable. Kariba was held 63% liable, Clary 20% and Tricolor 17% liable.

On November 7, 2007, about 0830 local time, the out-bound container ship M/V Cosco Busan, allided with the San Francisco-Oakland Bay Bridge Delta Tower in dense fog. It caused a deep gash in her forward port side, breached No 2 port ballast tank and 3 and 4 port fuel tanks spilling 53,500 gallons of oil in San Francisco Bay. Damage was estimated at \$2.1 million for the ship, \$1.5 million for the bridge, and over \$70 million for the cleanup of pollution caused.

As per the Harbour Safety plan vessels safely moored at a dock within the bay should not move out if visibility was less than 0.5 nautical mile. On that morning visibility was reported 1/8 to ¼ miles. Rather than “talking” with the Master about visibility, he told the Master on boarding at 0651 that ‘this looks good’ and that he could “single up”. He told investigators that it was common to operate outbound voyages in fog.

In compliance with STCW, the company’s SMS stated that the Pilot “acts only as an advisor. Should the Master consider the Pilot to be endangering the ship or contravening any law, rule or regulation, he shall reject the Pilot’s advice and relieve him of his duties and assume control of the ship himself.” The Master was unaware of how the Pilot intended to proceed with his ship. He should have exercised his prime authority to refuse to cast off from a safe berth in thick fog when her bow could not be seen from the bridge.

The Pilot was reported to have told investigators that at about 0825, when the ship was turning to port to approach the Bay Bridge at more than 10 knots, ‘radar picture of the bridge got distorted’. Also that minutes before the collision, VTS gave the Pilot incorrect confusing navigational information about the ship’s heading. The Master was reported to have told investigators that his previous experience led him to assume that controlling authorities would close the port in such weather. He reportedly stated, “It is not for me to decide whether to set sail or not under such a condition”. “Basically, I have to follow the Pilot’s direction. Even though I realize that the Master has full responsibility”.

Claims against owners and managers of the ship for causing pollution with spillage of 53,500 gallons of oil in San Francisco Bay were reportedly settled at \$44.4 million. Pilot John J Cota was reported jailed for ten months.

Exactly a month later, after midnight, on December 7 2007, Samco Europe and MSC Prestige collided 16 miles south-east of Bab El Mandeb traffic separation scheme at the entrance to the Red Sea, at almost a 90 deg angle, in visibility of 10 miles. Total structural damage was over \$50 million. SAMCO EUROPE was loaded with 284,844 tons crude, speed 16 knots. MSC PRESTIGE had a speed of 26 knots. Both ships were

equipped with two ARPA radars, AIS, ECDIS and VDR and had each other on Radar. Press reports indicated that navigators on both ships were not keeping visual lookout in clear visibility but depended on VHF and ARPA.

At 40 knots relative speed of both ships, even if radar echo of SAMCO EUROPE was observed 9 miles away, the total time available to avoid collision was less than 14 minutes. But it was widely reported that both navigating officers were glued to their radar sets and talking to each other on VHF. Had the officers been observing their approaches to each other in such clear visibility they would have seen the sidelights of the ships clearly to take appropriate action under ROR instead of depending on radar observations and talking to each other on VHF. MSC PRESTIGE was the give way vessel. Under rule 17, SAMCO EUROPE's duty was to maintain her course and speed. But under rule 17(a) (ii) she was required to act to avoid collision when it became apparent that the other vessel was not taking appropriate action. Rule 17(c) also provides that a stand on vessel shall not alter course to port for a vessel on her port side.

It was also reported that no sound signals were given while altering course. Action agreed between ships on VHF cannot be against COLREGS. Therefore the direct cause of collision can only be attributed to navigational action or inaction against Collision Regulations.

Extensive navigational aids now available to mariners provide them with much information. But Rule 5 mandates a proper lookout "by all available means". This is notwithstanding assistance of electronic instruments. In this case, a good visual lookout would have been safer.

Neither vessel took correct action to avoid a dangerous close quarters situation. Failures by both vessels to indicate their course alterations by sound and light signals under rule 34 also contributed. VHF conversations achieved nothing and only increased culpability of both. MSC PRESTIGE was found 60% liable and SAMCO EUROPE 40% liable.

So, what about Visual Lookout from sunset to sunrise under ROR provisions, STCW stipulations and the ordinary practice of seafarers?

## Pilot – Master Relationship In The Electronic World

*Dimitar Dimitrov, President of Bulgarian Shipmasters' Association, Pilot in the Port of Varna, Bulgaria*

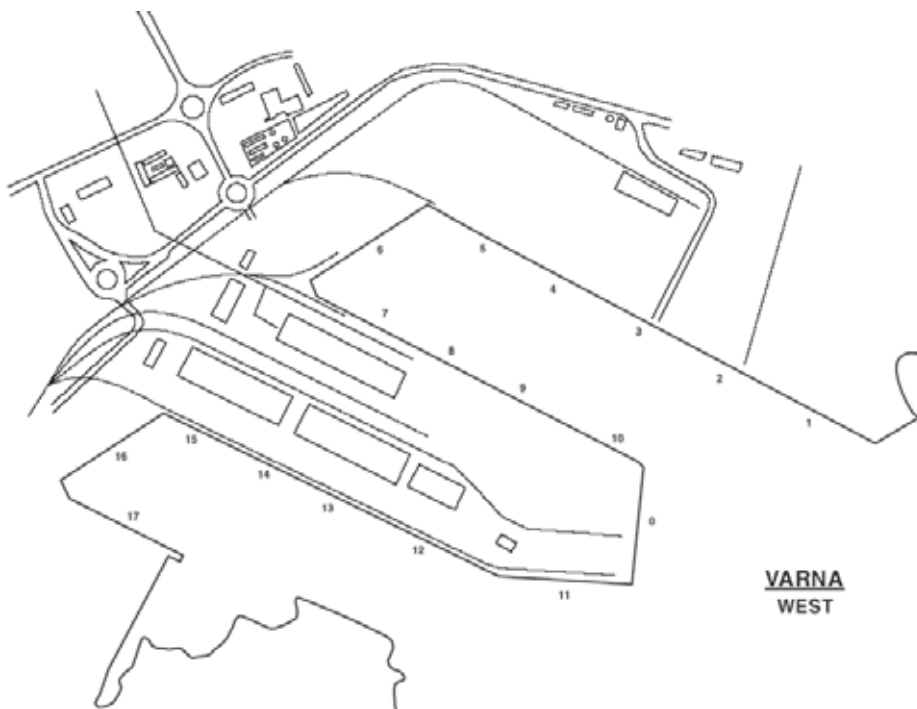
The relationships between the Shipmaster and the pilot had always been an interesting topic with a lot of variations in different countries, ports and nationalities. The basic rule is that the Master is responsible for the navigation of the ship and the pilot is an adviser to the Master with limited responsibilities depending upon different countries and ports.

Navigation has changed enormously during the last decades. More and more Masters and officers on board ships rely on electronics and this is quite reasonable. Nowadays we have reliable systems for fixing the ship's position, there are reliable means of communication between ship and shore, electronic charts are already compulsory for all the ships. That is the ship's side. From the pilots' side there are portable pilot units available, improved systems for measuring distances, etc. The technical revolution opened wide possibilities to improve the Shipmaster's and pilot's situation awareness. On the other hand, it is the situation with personnel on board the ships. We have witnessed the decrease of the required experience to obtain professional qualifications at sea or to pass from one degree to a higher one. Work at sea is more intensive. A number of maritime professionals have talked about mentoring. But is there time at sea for mentoring? Definitely there is no such time on board short sea shipping, on board feeder containerships calling in port every day and even on board ocean-going ships with all the paper work that has to be completed and with a decreasing number of crew.

The situation regarding the interaction and responsibility on board when the ship is manoeuvring in port is more or less the same as in the old times. The Master is still responsible for everything that happens on board, the pilot is still doing the manoeuvres and he is giving orders to the wheel and engine confirmed by the Master. Even with all the electronics available in most ports the Masters and pilots rely mainly on their sensitiveness and appraisal without having time even to look at the electronics. When manoeuvring in a tiny place, let's say in a narrow canal of 180 meters width, with a ship of 200 meters length without engine one has no time to measure distances or to observe the GPS position. The Master / pilot should rely on his/her own eye estimation and to react on the spot. In this situation less experienced and a poorer crew will increase the probability of accidents and near misses. The present crisis in the shipping industry is forcing ship owners to seek cheaper manpower, which leads to employment of substandard or low standard crewmembers with a poor knowledge of English. In a normal situation maybe it works and owners save money, but in a critical situation the timing and a quick reaction is crucial. Master and pilot should be prepared to react properly in time and the rest of the crew and port services providers should follow their orders strictly.

Officially on paper all is well organized. We have IMO standard vocabulary, the Masters and crew are STCW certified, and the ships are regularly inspected by port and flag state control inspectors. One example when that paper readiness was not working in practice concerns the following near miss. During the manoeuvre for departure in the port of Varna West from berth 9 to sea (see the plan below) we had a Sierra Leone flagged ship with a multinational crew consisting of two Syrians

– Master and chief officer and seven citizens from Azerbaijan. The Master/pilot exchange form was handed from the pilot to the Master, the ship's Master confirmed his ship's readiness for departure. The tug was secured centrally aft and all the lines from the shore had been cast off at around 2200LT. At that moment seven of the crew jumped ashore through the ship's side (free board was less than one meter). It was dark and it was not possible for the pilot to see what had happened forward and aft. The ship remained with Master, chief officer, chief engineer and pilot on board. She remained with no lines to the shore and no crew on board except the above mentioned people. The shore cranes were quite close to the quay and the ship's stern began to open with the bow going close to the shore cranes. With almost no wind the pilot took the ship out from the quay. The Master continued to confirm that the ship was ready to sail and that she should sail. The pilot was not aware how many crew remained on board and whether there were enough crew to handle the ropes, anchor, engine, etc. The place was narrow and in order to go to open sea the ship was supposed to pass through two narrow canals and two lakes where the anchors had to be ready as well as the engine. Furthermore, the ship at that moment was with one tug and it was not possible to control it if the engine was not working. What happened? The pilot evaluated the situation and informed the traffic management operator. He immediately ordered a second tug to attend.



The time for the second tug to arrive was 15 minutes. The pilot discussed with the bridge team (Master and chief officer) the new situation. The Master tried to start the engine but the attempt was unsuccessful. Later the pilot found out that due to unpaid salaries all the crew except the Master and the chief officer decided to boycott the departure. The chief engineer was the only crew member besides the ship's Master and chief officer remaining on board but he refused to start the main engine. In position 3 on the plan the pilot proposed to the Master that the chief officer should go to the forecandle with VHF station set on the working channel to handle the ropes and the anchor as well. The ship's Master went to the stern of the ship, also with VHF station on the working channel. The ship had very slow movement astern with no possibility at position 3 to be stopped. South of position 4 there was shallow water.



Alongside berth 11 there was a container ship as well as ships in almost all the berths 12 to 17. The second tug was originally berthed alongside berth 16. The pilot ordered the tug made fast at the stern of the ship to let go and as quickly as possible to take the rope centrally forward to stop the ship moving astern. The order was executed and the chief officer on the forecastle shortly succeeded in handing over the rope to the tug and to make it fast. The movement of the ship was stopped. Shortly after that the second tug arrived and the Master who was at the stern handed over the line to her. The traffic management operator ordered the pilot to berth the ship back to berth 10 which was free and more convenient. With the assistance of two tugs and without engine the ship was put alongside berth 10. Due to the shortage of crew the pilot ordered the tugs to give their lines ashore and both the Master from the stern and chief officer from the bow handed over springs ashore which were made fast. At 2345LT the ship came safely alongside.

The stress for the Master and pilot had lasted for almost two hours. What went wrong? The Captain was inexperienced. He was pushed by the shipowner to sail and thus he underestimated the situation and decided to sail with all the problems and expected boycott in order to satisfy his shipowner. The result was a near miss, increased expenses in the port (two tugs paid extra, double pilotage, extra port state control, control formalities, etc.) and extreme stress to both pilot and Master. An experienced Master would have evaluated the situation and even pushed the shipowner by saying that he would not order pilot and tug until the problems were solved. A 'quality' shipowner would have paid the salaries of the crew in time and thus he would not have faced such problems on board his ships.

Finally, perfectly completed papers did not ensure a safe operation in this case. What is the solution? I would not say that we should reject paper work. Pilot – Master exchange is useful. It is the interchange of the most important information between the pilot and the Master. But as in mathematics there are necessary and sufficient conditions. The necessary condition for a successful manoeuvre is the information exchange and preparedness from both the ship and port services, and the sufficient condition is that all the additional ad hoc information regarding details which could not be shown on the pilot /Master exchange form or pilot card. Also, the psychological or mental state of the human element taking part in the manoeuvre.

In conclusion we would say that electronics give a better situational awareness and more possibilities to evaluate different factors and circumstances influencing the manoeuvre in port. All the papers required by the International Safety Management Code, International Standardization for Pilot Organizations Code (ISPO Code), SOLAS and other international and local rules and regulations are useful and helpful, but the core factor for a successful manoeuvre in port is still the human element and both pilots and Masters have to be trained in the use of the new generation of electronics. They should definitely obtain the necessary experience before taking the responsibility of commanding the ship.

# PROJECT HORIZON — a wake-up call

*Marcel van den Broek, Nautilus International (NL)*

## **Introduction**

The delegates of the 38th IFSMA Annual General Assembly held in Copenhagen in June 2012 noted with great concern the findings of the European-study “Project Horizon”.

A research into the effects of sleepiness on the cognitive performance of maritime watch keepers under different watch patterns, using ship’s bridge, engine and liquid cargo handling simulators. With resolution 7/2012 the delegates requested the Executive Council to ensure that the IFSMA policy would appropriately reflect the recommendations resulting from the findings of the Project Horizon as stated in the official Research Report 2012.

Ever since the resolution was passed the findings and recommendations of the research have been of great assistance and guidance to the Executive Council members that participated in various meetings at the IMO where the subject of fatigue was discussed. The Executive members’ use of the Project Horizon research findings and recommendations subsequently led to further dissemination of the findings among important stakeholders of the maritime industry. At the same time it was noted that although the findings and recommendations of the Project Horizon are quite clear, just distributing the booklet among stake holders, in many cases did not lead to the desired result i.e. taking the findings and recommendations seriously and acting accordingly.

In this document, Nautilus International seeks to identify ways that will lead to further dissemination of the findings and recommendations of the Project Horizon globally and subsequently the global introduction of measures that will help to fight fatigue in the shipping industry. Nautilus believes that the involvement of IFSMA’s National Member Associations is of critical importance in reaching this goal.

## **The Project**

The aim of the Project Horizon was to deliver empirical data to provide a better understanding of the way in which watchkeeping patterns can affect the sleepiness levels of ship’s watchkeepers.

The project was established to:

- define and undertake scientific methods for measurement of fatigue in various realistic seagoing scenarios.
- determine the effects of watch systems and components of watch systems on fatigue.
- capture empirical data on cognitive performance of watchkeepers working within those realistic scenarios.
- Assess the impact of fatigue on decision-making performance.
- Develop a tool for evaluating potential fatigue risk of different watch systems using mathematical models.

- Determine arrangements for minimising risks to ships and their cargoes, seafarers, passengers and the marine environment.

The Project Horizon was based on very rigorous scientific principles, involving unprecedented and cutting-edge use of deck, engine and cargo handling simulators. A total of 90 appropriately qualified and experienced deck and engineer officers were recruited to undertake the simulated voyages in two of the most common watchkeeping patterns — six hours on, six hours off and four hours on, eight hours off.

It all led to a more informed and scientifically rigorous understanding of the way different watchkeeping patterns at sea affect the performance of ship's officers. The range of measurements and the high degree of realism provided detailed data sufficiently robust to provide input to marine validated mathematical fatigue prediction models within a fatigue risk management system.

### **MARTHA: Fatigue management toolkit.**

Developed by the Project Horizon researchers, the prototype maritime fatigue prediction tool MARTHA is intended to provide practical guidance for seafarers, ship-owners and operators, port state and flag authorities, regulators and other relevant bodies covering:

- the nature of fatigue or sleepiness at sea
- pointers to aid recognition of such conditions
- measures by which mitigation of them might be achieved
- concrete indications how the conditions might be avoided at source and the findings of the project might be applied.

It is a computer-based system that provides an interface with selectable watch schedules and a 'do-it-yourself' watch system facility. Users will be able to enter their working schedules over a six-week period and receive predicted estimates of the most risky times and the times of highest potential sleepiness for each watch and for the whole watch schedule, as well as for time outside watch duty.

MARTHA could be used on board during voyage planning to develop watch systems that are efficient and that minimise risk. Shipping companies can use the system when planning voyage schedules and the size of the crew. The tool could also yield important International Safety Management Code benefits, as part of Fatigue Risk Management Systems and might be used for insurance and classification purposes. Finally Martha could also assist flag states and port state control authorities, enabling solid documentation if, for instance, a ship is to be detained in order to let the crew rest before the voyage is resumed.

### **Where to go from here?**

Nautilus International would highly welcome the active, professional involvement of all IFSMA's National Association members in disseminating the outcome of the Project Horizon study to their member shipmasters, national administration, port state and flag state authorities and national ship-owners. While contacting the aforementioned parties, the National Associations are specifically invited to make use of the MARTHA prototype maritime fatigue prediction tool.

\*\*\*\*\*Accompanying Pictures\*\*\*\*\*

Remove watches in the calendar by clicking the day that you want to clear.

Remove all watches in the calendar.

Alternate between showing watches and sleeps.

Alternate between calendar showing fatigue\* during watches and risk\*\* of falling asleep during watches.

Alternate between normal view and advanced view. Advanced view shows the calendar as a graph with time on the x-axis and KSS on the y-axis.

Clear (24h) day    Clear calendar    Show sleeps    Show risk\*\*    Advanced view    Help

Fills the calendar with preset watches.

Here you enter an abbreviation to indicate the type of the watches

4h    00:00    6/6A    6/6B  
4:00    4/BA    4B    4C  
12A    12B

4h    5h    6h    7h  
8h    9h    10h    11h

Change the sleep's start and end times.

Add a new sleep

Delete this sleep.

Change graf view to the previous day

Change graf view to the next day.

This graph displays the sleepiness in KSS during the selected day

Amt. of watch time with reduced wakefulness

Mon    Tue    Wen    Thu    Fri    Sat    Sun

w.1    w.2    w.3    w.4    w.5    w.6

Select if this week should be included in the evaluation (the button has a red frame) or not.

This is the calendar in which you enter your watch schedule. Select a watch in the list to the left and click in the appropriate day when you enter the schedule.

Select this watch (the button will have a red frame) and enter it into the schedule by clicking in the appropriate day of calendar. You can also change the times of watches and the abbreviation of watches by clicking in the upper white box.

MARHTA 1.0 ©2011 Stressforskningsinst. & C. H. Portin    \*) Reduced wakefulness, KSSz5    \*\*) High risk of falling asleep, KSSz8



## The Role of the Master

*Peter Turner, Company of Master Mariners of Canada*

My purpose in presenting this paper is to bring attention to the role, qualifications, authority and responsibilities of the Master in today's Merchant Navy. On my first attempt at this project I reviewed the STCW and the annexes and developed a paper based on these and other international marine conventions. At the termination of that paper I attempted to draw some conclusions from the study, but found that the conclusions were not supported by the information brought forward in my paper; principally because the role of the Master is not met by the qualifications outlined in the STCW.

The STCW name has changed from International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, (1978) to Seafarers' Training, Certification and Watchkeeping (1995). It was created as a means of producing equally qualified and trained Officers regardless of their country of training. The standards of certification developed in the Convention were the minimum requirement to meet accreditation. Training standards are left, by and large, to the discretion of state issuing the accreditation.

Over the past three and a half decades the International Maritime Organization (IMO) has modified the STCW, the last occasion in Manila in 2010. The STCW convention is no longer a single document, but a series of Annexes built on to the original convention; and they have developed as the focus of the world, and the equipment aboard ship, have changed.

The maxim, "If it ain't broke, don't fix!" seems to be well utilised in the deliberations of the IMO. The trouble is that the machinery of the STCW is getting fatigued and is being encumbered by the tools and repairs (annexes) put in place to maintain it.

Certificates of Competency meeting the requirements of the STCW need additional endorsements and ancillary courses before a holder of a certificate is qualified to take up the position identified in the Certificate of Competency.

STCW identifies the qualifications needed to take up the position of Master, but covers only part of the responsibilities that fall to the Master in the role as the person responsible for all aspects of safety of life and equipment, security, protection of the environment and managing the functions of the day to day operations. A Master needs to be adept in human relations law, emergency management, health and welfare guidelines and legislation, international environmental law, corporate law, insurance and liability, standards of the appropriate classification society, public relations and dealing with the news media, budgeting and budgetary control and accounting; to name but a few.

The Master in the modern merchant navy is no longer "Master under God" but because of the technological advances in communications equipment, the Head Office, local Agents and port state government agencies have recourse to "advise" and direct the Master. Nevertheless, in the event of any marine incident, environmental damage, accident or unforeseen occurrence, the Master is the chosen one to be castigated, charged with an offence, penalised or fined, incarcerated and criminalised. It must

also be borne in mind that the Company's interests do not necessarily align with those of the Master.

In order to verify the roles of the members of the ship's complement and the specific operations to be undertaken, IMO identified the need for and developed the ISM Code and the Safety Management System aboard. What this has accomplished is a code that enables government inspectors to castigate the Master and the crew for non-compliance. It also can be used as a tool to support the claims at a court of inquiry where the ship, the Master or the company are implicated in an incident.

In the event of a pollution incident, the international community has recognised that the clean up process cannot be the responsibility of the Master alone, and has developed a position identified as the "Designated Person Ashore." The role of this person; principally the liaison between the ship and the senior management of the company; is in effect a recognition that the Master can be overwhelmed by the bureaucratic wrangling associated with such an event.

What qualification does the Master have to justify the position where he or she is responsible for the safe conduct of all functions aboard the vessel? Undoubtedly, the safety of navigation and cargo operations are functions where the background as a deck officer and watchkeeper ensure this competence. The Certificate of Competency examinations will endeavour to provide the Master with background knowledge to understand the principal functions, but not the complexities, of other departments. Experience over time will aid in this knowledge, but, returning to the question; what qualification does the Master have to carry out his or her role?

Questions arising from this:

This is a wake-up call to all who have an interest in the operation of ships, either seagoing or in the marine industry ashore. The ship, personnel and equipment under the executive control of the Master are valuable and high profile, supporting a nation's trade and in the event of an accident or incident capable of causing extensive damage to third party infrastructure, the environment, the industry and the "trademark" of the company.

How long will it be before a ship owner, a nation state or the Master recognises that the STCW is not a sufficient instrument to qualify a person for command?

Is there an opportunity to qualify someone for command of a vessel who has not been trained in the deck/ navigation watchkeeping/ cargo operation mode?

Are the qualifications of any of the STCW Certifications suitable to place upon a person the authority, responsibility and liability of command?

Must command be a purview of the deck department?

Recognising that a vessel's prime purpose is to safely and competently carry passengers and cargo to the designate destination, should the command of the vessel be allowed to be undertaken by an individual who has limited qualifications in this primary purpose?

Will a company provide courses for additional qualifications for the holder of a Certificate of Competency as a Master, in order that the position of command is

undertaken by a person with the required knowledge and experience?

Conclusions.

There is an urgent need for a study of the STCW and its annexes in order to ascertain how the ancillary courses can be brought into the body of the syllabi for examinations for Certificates of Competency. The examination syllabi need extensive review, removing redundant course matter and inserting into the syllabi the capability of including modern, and future, modifications for equipment, policies and responsibilities. Competency based training must be developed to suit the trades where specific training is required, eg tankers and gas carriers, dynamic positioning.

It is necessary to undertake a review of the course content needed to meet the qualifications required for the role of command, bearing in mind the changes in policy, technologies, equipment, and manning, as well as business management to meet the requirements of the profession

Under existing legislation and guidelines training must be in place for an individual to undertake the functions for which that person is involved or oversees. This applies equally to Masters as well as to other crew members.

It is necessary to ensure that the Master (or commanding officer) in the role as a chief executive officer on board a vessel has sufficient authority, trained personnel and equipment, to carry out these responsibilities.

From STCW document:

***Function** means a group of tasks, duties and responsibilities, as specified in the STCW Code, necessary for ship operation, safety of life at sea or protection of the marine environment*

*END*