**INTERNATIONAL FEDERATION OF SHIPMASTERS' ASSOCIATIONS** 



**35**TH ANNUAL GENERAL ASSEMBLY

RIO DE JANEIRO, BRAZIL, 6-7 MAY 2009

## MINUTES

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## 35th AGA Proceedings PART B

With the Compliments of The Secretary General

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Capt. Christer Lindvall, IFSMA President & President of our host Association SINDMAR, Capt. Severino Almeida Filho

Capt. Rodger MacDonald, IFSMA Secretary General



AGA Delegates







Opening of the AGA



During visit to the SINDMAR Simulation Center



Barrie Hailstone during his presentation to delegates



## MINUTES OF THE 35<sup>th</sup> ANNUAL GENERAL ASSEMBLY

## Rio de Janeiro, Brazil

The 35<sup>th</sup> Annual General Assembly was held at the Windsor Barra Hotel in Rio de Janeiro, Brazil on Wednesday 6<sup>th</sup> and Thursday 7<sup>th</sup> May 2009.

#### LIST OF DELEGATES

#### **EXECUTIVE COUNCIL**

Christer Lindvall (Sweden)	President
Jerome Benyo (USA)	Vice President
Bjorn Haave (Norway)	Vice President
Willi Wittig (Germany)	Vice President

#### FROM MEMBERS OF ASSOCIATIONS

Rodriguex, Paul	ССИОММ	Argentina
Cuyt, Jef	KBZ	Belgium
Almeida Filho, Severino	SINDMAR	Brazil
Soares, Jones	SINDMAR	Brazil
Pimenta, Cesar Cajueiro	SINDMAR	Brazil
Turner, Peter	СММС	Canada
Beth, Carlos M.	Nautilus Chile	Chile
Gomez, Patricio T.	Nautilus Chile	Chile
Ganzhorn, Fritz	DMO	Denmark
Partanen, Pekka	FSOA	Finland
Havelka, Georges	ACOMM	France
Wittig, Willi	VDKS / ExCo	Germany
Burke, Terry	IIMM	Ireland
Drevickis, Jevģenjis	LSMA	Latvia
Čakšs, Stanislavs	LSMA	Latvia
Van den Broek, Marcel	Nautilus NL	Netherlands
Van Wijnen, Fredrik J.	NVKK	Netherlands
Haave, Bjorn	NMOA / ExCo	Norway
Sande, Hans	NMOA	Norway
Viljoen, Chris	SMMSA	South Africa
Garay, J. Francisco	AVCCMM	Spain
Halvdanson, Marie	SSOA	Sweden
Lindvall, Christer	SSOA / ExCo	Sweden
Benyo, Jerome	CAMM / ExCo	USA

#### **INDIVIDUAL MEMBERS**

MacDonald, Rodger	UK (Ind Mem & Secretariat)
Owen, Paul	UK (Ind Mem & Secretariat)

Patraiko, David	UK (Ind Mem)
Benyo, Jerome	USA (Ind Mem & CAMM & ExCo)

#### SPECIAL GUEST

Admiral Murillo de Morages Rego Correa Barbosa

#### **GUEST SPEAKERS**

Hailstone, Barrie	Robinson & Son	UK
Robinson, James	Robinson & Son	USA
Hernqvist, Martin	Swedish Club	Sweden

#### **GUEST**

Fragoso, Otavio IMPA, Vice President	Brazil
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#### SECRETARIAT

Captain Rodger MacDonald	Secretary General
Captain Paul Owen	Assistant Secretary General
Ms. Roberta Howlett	Administration Officer

A list of apologies received is held at the IFSMA Office.

#### AGENDA ITEM 1 – Welcome

The President of SINDMAR, Captain Severino Almeida Filho, opened the General Assembly by expressing his great pleasure at welcoming IFSMA Members to Rio de Janeiro, thanked IFSMA for accepting the invitation, expressed the wish to show IFSMA Members the work SINDMAR is doing and hoped that the Assembly would be very productive. He invited delegates to visit the SINDMAR Simulation Centre, a bus will be provided to leave the venue at 11:00 and to return to continue the AGA after lunch.

He then introduced Admiral Murillo de Morages Rego Correa Barbosa who addressed the meeting. He thanked the organisers for the opportunity to address the IFSMA General Assembly, he was sure that this would be a good meeting for all Shipmasters' representatives present to discuss and debate the important subjects on the agenda. Following the speech Captain Lindvall presented the Admiral with an IFSMA Plaque to commemorate the occasion.

Captain Lindvall, President of IFSMA, thanked Captain Severino Almeida Filho and Admiral Murillo de Morages Rego Correa Barbosa for their warm welcome, and thanked Captain Severino Almeida Filho for the invitation to visit the SINDAR Simulation Centre, which every one was looking forward to. He then gave his opening address – see IFSMA Annual Review 2008-2009, page 2.

#### AGENDA ITEM 2 – Adoption of Agenda

The following additions to the agenda were agreed, subject to sufficient time: -

Fredrik van Wijnen (NVKK) – three papers: Over Reliance on GPS, The Engine Governed from Ashore and Wind-Farms in the North Sea – a Hazard to Navigation.

Under any other business:

19a - Piracy

19b – Honorary Members

With these additions the Agenda was adopted.

## AGENDA ITEM 3 – Adoption of the Minutes to the 34<sup>th</sup> AGA, Bremen, Germany

The Minutes of the 34<sup>th</sup> Annual General Assembly held in Bremen, Germany, on 21-22 May 2008, were adopted without comment.

#### AGENDA ITEM 4 – Establish Drafting Group.

The Drafting Group was established and comprised: Jerome Benyo, Willi Wittig, Marcel van den Broek and Fredrik van Wijnen.

#### AGENDA ITEM 5 – Secretary General's Report

The Secretary General's main report is reproduced in the IFSMA Annual Review 2008-2009, page 5.

He mentioned the key activities since writing his report. It had been a very busy year and he commenced by thanking Paul and Roberta in the IFSMA office and also the Executive Council for their support. The Annual Review is now without any advertising, otherwise it contains the same useful information. The recent meetings attended include the STW Sub-Committee, the DE Sub-Committee and a meeting in Halifax, Nova Scotia on Arctic Operations.

The results of the future planning exercise for IFSMA is summarised in a document to be distributed later.

At the STW Sub-Committee some progress was made with the comprehensive review of the STCW Convention. There may be an intersessional meeting later this year, but in June next year the STW Conference will be held in Manila where the amendments to the STCW Convention will be agreed. Matters of particular concern covered celestial navigation, the harmonisation of coastal requirements, he added that personally he did not see the need for a difference between coastal and deep-sea qualifications. Alcohol consumption and control. Safe anchor watch. Questioned outstanding include – should there be a special certificate for Ice Navigation; safe manning, IFSMA is still not satisfied with this proposal as it stands. The Navigation sub-Committee will also look at this subject.

IFSMA is a working member of the International Lifeboat Group, the only way we can make a difference is to join with others to make proposals with any chance of success. This Group has support from IACS and also the UK Administration. "Lifeboat Drills Kill People", we should no longer have davits on ships. If the master feels the risk is too high then he should not carry out a lifeboat drill. Servicing of lifeboat systems is also a continuing problem which the group is looking at. The Arctic Operations conference in Halifax, commenced with an exercise, it was monitored and risk analysis used, one of the results of the exercise was that, for the case considered, there was an 80% chance that 50% of the persons on the casualty ship would be saved – these odds were not very good. One of the conclusions was that mandatory certification for Ice Navigation should be introduced.

Piracy still occurs in many areas of the world, Somalia has the news headlines at present. The Maersk Alabama is an exceptional example of what can happen with a ship manned by the flag state nationals who are well trained. The master's actions (to offer himself as a hostage in place of his crew) were commendable and his nomination for next year's annual IMO Award for Exceptional Bravery at Sea was put forward. There was some discussion on this subject, caution was recommended before proceeding with this nomination. The President and Secretary General recently attended Brussels to give the EC presentations on Piracy.

Regarding Criminalisation of Seafarers, IFSMA had been active in this area, he read out a letter from the Korean Government to IFSMA regarding the 'Hebei Spirit'. These officers are being used as political pawns in such situations. He gave further examples of unfair treatment, a Master being fined £1,800 due to his Bosun being drunk when he came back on board ship, fell over, and died as a result. Crew entering a tank, which had not been checked for air quality – master arrested and charged over their deaths. We will try and keep a record of every criminalisation case that we come across and he requested members to send details of such cases to the IFSMA office for recording.

#### **Policy Document**

Concerning the revision of the Policy Document that was distributed to all Associations, he requested any final input before the end of the month so that it can then be finalised.

#### IFSMA Strategic Review

Regarding the IFSMA Strategic Review, four comments had been received which were summarised in a single document, one further submission was received which is included in the distribution which will all be made available to delegates. These are ideas for planning the future for the type of Secretariat you want and how we communicate with members. One common aim is that we must remain focused on Shipmasters, which might extend down to 'soon to be Shipmasters' (Chief Officers), but not to include others, such as engineers.

One comment received which included the statement that 'should make it clear that it is not necessary to be a Shipmaster to represent IFSMA or be employed by IFSMA, the key criteria being competency'. He added that he expected this statement to raise some eyebrows. Could we see a President, Secretary or Assistant Secretary General who were not Shipmasters? Other Secretariat members could be other than Shipmasters.

**Marcel van den Broek** – stated that certain skills were required and that a Shipmaster was not necessarily a good administrator, but if you have someone who has proved to have the necessary skills, why could he not be an executive?

There followed a long discussion on the pros and cons of the statement. The clear majority were in favour of requiring Shipmasters with command experience for the key positions within IFSMA.

Rodger MacDonald continued - regarding communications, should we be looking at more electronic communications as printing costs form a large part of the IFSMA expenditure.

In support of Shipmasters, should IFSMA be more aggressive? He preferred to go quietly to organisations, such as IMO, but where the opportunity arises and is warranted more action can be taken. He gave the example of Captain Laptalo where we acted in cooperation with ITF. We have had good results from writing to the Korean Authorities, but they have the same difficulties with their judicial system as we do. It is a balance as to how aggressive we should be. Christer Lindvall added that we were asked to cooperate with INTERTANKO and ICS as well as ITF to join a demonstration outside the Korean Embassy; fortunately the two officers were released so the protest was called off.

Rodger MacDonald requested further ideas on how members want IFSMA to operate in the future.

#### **Revision of STCW**

STCW is planned to be completed in June 2010 in Manila, both the President and he felt that the next AGA should be held in Manila to coincide with STCW Conference so that as many people as possible can attend.

#### Command Seminar

The Nautical Institute and IFSMA are considering have the next round of Command Seminars, during 2010, in Quebec and Vancouver. There are also plans to request IMPA (International Maritime Pilots Association) to become involved in the future to strengthen the link between Pilots and Shipmasters.

#### UN Law of the Sea Conference

We have been invited to this important meeting at the UN in New York, where we hope to attend with CAMM. It is a three day meeting. This year the agenda includes the subject of Piracy with all the environmental issues and criminalisation. They have also stated that they will be celebrating the first World Oceans Day on June 8<sup>th</sup>, as an NGO we have been invited to mark this day by highlighting issues in an appropriate way. He invited member Associations to consider how they can mark this important day in their own countries.

#### IFSMA Workshop in Manila.

Once again we intend to hold the IFSMA Workshop this year in Manila in conjunction with the Lloyds Ship Management Recruiting and Training Seminar. This year we will focus on fatigue

#### Annual Accounts

The Secretary General apologised and announced that the accounts were not yet ready for presentation due to the difficulty in meeting with the Auditor as their schedules did not match. He reported that last year, on the income side, we made a refund of a donation from Sweden which was paid in error. On the expenditure side the main unexpected costs was for the combined ISPIC and AGA in Bremen which came to a total of £9,425. We do not normally pay for the Annual Dinner where we had a large number of people to pay for and

also for a reception. In addition we paid for some dignitaries from IMO and EMSA to be flown in for the occasion.

Christer Lindvall proposed that the Treasurer's report be accepted subject to receiving the Auditor's report which will be sent to members as soon as possible. – Agreed

Rodger MacDonald distributed the Budget for 2010, he explained there was no proposal to increase subscriptions, with a budgeted contribution of £2,720 at the end of the year.

**Fritz Ganzhorn** - Proposed working closer with IMPA in future to minimise expenditure, and also asked what is the future role of the Shipmaster with criminalisation, workload and communications, he felt it was important we consider the Shipmaster's role in order to assist recruitment of Shipmasters in future. **Fredrik van Wijnen** – Commented that when a Shipmaster is in trouble he should be able to reach the IFSMA office to ask for help, that is why he believed the Secretariat should be as strong as possible. **Otavio Fragoso** – Announced himself as the senior *Vice President of IMPA*, and thanked IFSMA for inviting him to the AGA. He was delighted to hear the wish to strengthen cooperation between IFSMA and IMPA; they will have a meeting on 29<sup>th</sup> May and would be pleased to discuss future cooperation then. He added that the two organisations are part of a small team that brings discussions to real life at IMO.

#### Appointment of Hon. Auditor

Christer Lindvall explained that the current auditor, Colin Evans, has been assisting us for many years, but he is now in his seventies and difficulties were experienced in trying to get together with him as he lives in Wales. The Executive Council has decided to appoint an external auditor for the future, however for the next year it is proposed to appoint **Bjorn Haave**, IFSMA Vice President, as Hon Auditor. He has the advantage of attending many IMO meetings and is often in London.

We should thank Colin Evens for all his devotion and efforts over the years, agreed unanimously.

The Secretary General's Report and appointment of the Hon Auditor was approved.

#### AGENDA ITEM 6 – Visit to SINDMAR Simulation Centre

The General Assembly was halted at 11:00 on day 1, for a visit to the SINDMAR Simulation Centre.

#### AGENDA ITEM 7 – Ship/Shore Coastal Relationships

#### Presented by David Patraiko, Individual Member, UK

See Annual Review 2008-2009, page 20, for the written paper.

Following the presentation the following points came out of the discussions: **Bjorn Haave** – agreed with the speaker, however responsibility is important, if decisions transferred to shore the master remains criminally responsible for any decisions made. **Terry Burke** – The problem we have on the bridge of a ship is too much information. **David Patraiko** - Replied, E-Navigation will lead to more information being available, however, it does not mean that all the information will be displayed. We are at the design stage where we have the

opportunity to say what we need and what we do not need. **Fritz Ganzhorn** – Added that it was important that we go along with this process and the goal should be the accessibility of the information, and that only vessels not conforming are called up.

**David Patraiko** - Invited IFSMA to join with the Nautical Institute as a stakeholder in this process. The invitation was accepted.

#### AGENDA ITEM 8 – E-Navigation, Its Effects on Watchkeeping and Operators

#### Presented by Peter Turner, President, Company of Master Mariners of Canada

For a copy of the paper see Annex 2.

**Bjorn Haave** – A very complex subject, he noted the similarities to the last paper and that there are a lot of unanswered questions and a lot of information to digest. Terry Burke -Commented on the paper regarding 'must maintain a visual lookout ...' and asked how do you go about checking this without a paper chart. Peter Turner – With a paper chart you need to be sure the paper chart is fully up-to-date. Overlays of the radar picture (ECDIS) will also assist. He did not believe ECDIS would make a significant difference, when compared to existing methods, when confirming the position of the ship. Fredrik van Wijnen -Commented that vector charts do not have full coverage at present and the dangers of using raster charts. Peter Turner - Replied, that, speaking for Canada, the information required for these charts is currently being obtained for the agreed phasing-in period that ends in 2018. Jef Cuvt – Asked how the legal responsibility of the Shipmaster would be affected in the future. Peter Turner - Replied that, already where a container vessel may be fully loaded from shore based planning, including dangerous goods, the Shipmaster is already in the position of taking responsibility, for others' decisions, when things go wrong. He could not see this changing until shore based personnel were given appropriate training and some legal responsibility.

#### **AGENDA ITEM 9 – The MARNIS Project**

## A video presentation highlighting the achievements and conclusion of the completed MARNIS project.

Fredrik van Wijnen – Advised that he had been involved in MARNIS from the beginning. While SAR is good in Europe, in the Black Sea it is a disaster, so MARNIS will be a great help. Questions arose over the responsibilities, rights and liabilities of the Shipmaster, what is his role and how is it going to be regulated which was important, with a need to look at the legal aspects. If a high risk ship comes into a MOS area it will be monitored, but this raised the question of which ships would be monitored. If a ship is running ashore the MOS centre will advise the ship. He stated he would be there to protect the role of the Shipmaster during the implementation. Peter Turner - Believes that the person who has the responsibility is the Shipmaster, the role and training has to change - needs to learn more about law and management and where he is finding himself in trouble. With the review of the STCW the master's role is going to change, and the hierarchy system with it. Is it necessary for the master to have the navigational con of the ship, he can be the general manger of the ship but there may be a better navigator than him on board. Fredrik van Wijnen - Commented that the law has to change. MARNIS wants ports to be (better) reached, ports want to attract larger ships and the master is asked to take more risks, shallow ports. 'Custard navigation' how thick is the custard? Pollution could lead to prosecution of the master. Christer

Lindvall – Regarding the functional approach, does the master have to be the navigator? Agreed that this question will return again. Terry Burke – This room is full of experience, what we are heading towards is people who do not have experience. Peter Turner – Voiced his feeling that a ship is a large piece of very expensive equipment, we have people onboard with various qualifications, and experience can only be gained by time spent. Need to change training accordingly. Jef Cuvt – We can compare the situation to naval vessels where the commander is not necessarily the navigator. Peter Turner - The team work and responsibilities must still be in place. Hans Sande – Asked, how do we use the information available and do we have enough resources to monitor all the information. We need to look at how we man bridges. Fritz Ganzhorn - Commented that few vessels in Danish waters need assistance. How do you get the best relationship between the master and coastal services. VTS operators need to have experience as navigators. Believes the Shipmaster must have a navigational background. Fredrik van Wijnen – Remarked that in the future all systems, including SAR, would be replaced by MARNIS. Christer Lindvall - Concluded the discussion by stating that IFSMA will follow this subject carefully and the need to revisit this important subject in the next few years.

Terry Burke noted that during the video presentation Alan Coughlan was featured, he reported that Alan had recently lost his wife Niamh, and asked if the Assembly's condolences could be sent following this tragic event. This was unanimously agreed.

#### AGENDA ITEM 10 – The Dangers of Enclosed Spaces

#### Presented by Marcel van den Broek, Nautilus (NL)

See Annual Review 2008-2009, page 8, for the written paper.

**Christer Lindvall** – Added that this is a very important issue, we will produce an AGA Resolution on this problem, he asked if there were any questions or comments? **Peter Turner** – Commented that the rules only apply to SOLAS vessels, what about non SOLAS vessels? **Marcel van den Broek** – Agreed that all vessels should be included in the safe entry requirements, adding that only one breath of bad air is required for collapse. **Fredrik van Wijnen** – There are many problems arising from the use of CO2 and its escape on board ship, there are proposals to add a perfume to this gas to make it easier to detect. **Bjorn Haave** – Agreed that this is a very important issue which had been discussed for many years, he asked if there was anything we can do in addition to the Resolution. **Marcel van den Broek** – Added that this problem is a fault of the regulatory system. (**Delegate**) - Recognised a lot of errors from the Bourbon Dolphin accident where you could say there was a regulatory problem. They didn't realise the importance of a non-conformity found. The way the ISM Code is carried out resulted in the failure to use safeguards, and a failure to follow correct procedures.

#### AGENDA ITEM 11 – Improving Safety Through IMO Instruments

#### Presented by Bjorn Haave, IFSMA Vice President and NMOA, Norway.

For a copy of the paper see Annex 3.

Jef Cuyt – Agreed with the proposals in the Paper, but did not see how the Norwegian proposal would prevent a navigator falling asleep on the bridge. Fritz Ganzhorn – Did not agree that there was no definition of a minimum rest period. There are rules in Denmark and

other EU countries and also in the Maritime Labour Convention. Can agree with call for three navigators. Should consider the easiest rule to read is regulation of rest periods, it is all pure mathematics. You are either in compliance or non-compliance. This would be a good point for IFSMA – why is it that we are not complying with the rules. A Resolution should also urge members to comply with these rules. Bjorn Haave – Replied that there is no definition of a minimum rest period in STCW and that the ILO convention has not vet been ratified. Agree why don't shipmasters comply with the rules - answer, because we do not have enough crew to comply. There should not be ships out there with only two watchkeeping officers. Fredrik van Wijnen – The problem of fatigue is also of great concern to officers in Netherlands. A lot of accidents have to do with fatigue. Do not agree that all small ships are on a tight schedule. People must be made aware that fatigue exists, it is difficult to control what people do off watch. At IMO International Shipowners Organisations have a huge influence. Bjorn Haave - Added that ship owners also control FOC States and have clever people to present their views. Talking fatigue for long time, instruments to measure fatigue, but people need to rest and have a life, but not the case out there. That is not the case when you are being kept awake for 24-36 hours. Peter Turner - Information given is a lot to think about - STCW Convention and 96 hours, my understanding is that Convention & Regulations imposed on flag states, has enabled Canada to reduce regulations to handle fatigue situation. 96 hours – my understanding is that it does not say that the navigator can work for 96 hrs without a break, valuable point to bring forward. Manning – fully supportive, but I have instructed to abstain on this one as on Canadian west coast most of traffic for tug and barge traffic can be over 24hrs from Vancouver to Alaska. Still need two people. Biorn Haave - Agreed with statement on 96 hrs, not allowed to work more than 18 hrs straight, taken away, minimum rest 10 hrs every 24. However then EU came up with their suggestion for 96 hrs. Christer Lindvall – We had a lot of support in plenary for our paper. Now the EU speaks with one voice (25 countries). We had more success in the sub-committee which urged administrations to think very carefully before allowing less than 3 watch keepers as part of safe manning. Jef Cuyt – The problem of fatigue is not new. As long ago as 1978 he presented a paper to the AGA on fatigue in Bilboa. He believed that Port State Control will not let a ship leave port if the crew are not fit, and that this should include fatigue as well as alcohol. Bjorn Haave – Port State Control is policing ships, we should not need policing. He agreed they do not check work/rest periods. According to Norwegian statistics 60% of groundings could be linked to fatigue. Terry Burke – The quality of rest is also important. Marcel van den Broek – Agreed that the EU block is active at IMO and this recently affected the proposal for more than two watch keepers. We can all agree that the EU block is favourable to shipowners, should we not also direct our energies towards Brussels. Jones Soares - Seafarers must have the right to a life after watch. Seafarers should pay more attention to safety. Bjorn Haave - Agreed seafarers need life after watch and already to consider safety, but often not enough people to take care of this problem on board. Hans Sande - Complex issue - tendency as a group onboard, our attitude if I drop dead, someone else will take my job, you might choose to say it doesn't matter but must face the consequences of what will happen if something goes wrong. Need to tell our colleagues you must defend your decision in a court of law. During the recent Nordic congress one year ago, report of following a ship for one-week recording work hours. Need to ask masters for information which IFSMA can forward on to IMO. Have to try and communicate the fatigue problem a different way. Fredrik van Wijnen - Result of the fatigue study in Netherlands, you work better on board. Fatigue is a problem, but the voyages have become shorter 6/6 weeks, so one of the arguments is, if fatigued only for a few weeks. We need an accident case in EU to wake everyone up to this situation. Christer Lindvall – Summarised the discussion. Must put the responsibility where it belongs with the Shipmaster, he must comply with

today's regulations and if that is not possible he must stop the ship. The EU Block problem is an international problem. 96 hours limit, if we have a not so serious shipowner he may try to use this unrealistic limit. We have the fatigue predictor to use. Also need some emphasis on manning. It was noted that fatigue also affects health and other aspects of life.

#### AGENDA ITEM 12 – Insurance for Members

#### Presented by James Robinson and Barrie Hailstone on behalf of Robinson & Son.

This presentation was a proposal for Insurance for Members in case of incidents and accidents at sea, if any members require further information please contact:-

James Robinson	or	Barrie Hailstone
Robinson & Son		Marine Insurance Consultants Int. Ltd.
PO Box 432		Castle Keep, New Road
144 River Street		Wootton Bridge
Hudson Falls, NY 12839		Isle of Wight, PO33 4JL
USA		UK
Tel +(1) 518 7619260		Tel +(44) 1983 844222
Fax +(1) 518 7619265		Fax +(44) 1983 884777
Email: james@robinsonandson.net		Email: barriehmici@aol.com

Copies of the Presentation are available from the IFSMA Office on CD or from the IFSMA Website.

Following the presentation **Jerome Benyo** asked – considering recent incidents will any exceed the cover being offered. **Barrie Hailstone** - Replied that this was unlikely, he gave the example of the Coral Sea master who would simply have had to make a phone call. He added that they have 3,500 claims handlers around the world.

#### AGENDA ITEM 13 – International Lifeboat Group

#### Presented by Rodger MacDonald, IFSMA Secretary General, UK

For a copy of background paper see Annex 4 in this document.

**David Patraiko** – Commented that we know there are good hooks and bad hooks, and suggested what we need to do is provide advice for members on this, all we have done up to now is to say these are the traits of a bad hook. **Rodger MacDonald** – Replied that you couldn't condemn a particular commercial brand in favour of another; all you can do is specify what criteria a good hook must meet. He gave another example on a well known company's passenger vessel where a green lever on different lifeboats had the opposite meaning. **Bjorn Haave** – Stated that we should not be using these hooks any more and suggested that IFSMA Policy should be for free fall/float free lifeboats. **Fredrik van Wijnen** – The reply from 'Shat Harding' lifeboat manufacturers, when questioned about lifeboat failures was that the shipowner always buys the cheaper alternative spares instead of from the correct source. **Rodger MacDonald** – Added that in the Human Element group that he attends, he was talking to an owner of car carrier vessels who had been watching a lifeboat drill when the lifeboat fell into the sea (thankfully no one was aboard), he said he knew this was an accident waiting to happen for the last five years, but he had done nothing about it. If owners think this way then we really are up against a difficult situation. **David Patraiko** –

Stated that the Nautical Institute would be very happy to join with other stakeholders to work towards some clear guidance. **Bjorn Haave** – Advised that we should not produce a black list, but alternatively we could produce a white list. **Peter Turner** – Had some concerns that we seem to think Port State Control will do something for us. Whilst he has seen that they are stretched, - it really comes down to us as operators to ensure equipment is safe and if not report it under the ISM Code. **Patricio Gomez** – Understood that a register must be kept of all accidents/incidents onboard. **Christer Lindvall** – Replied to the last speaker, that IMO is unable to provide statistics, only major accidents are reported and not all member states report all of those. This is an important subject and we will come back to this at next year's AGA.

#### **AGENDA ITEM 14 – Air Pollution by Emissions from Ships**

#### Presented by Georges Havelka, ACOMM, France

See Annual Review 2008-2009, page 20, for the written paper.

**Rodger MacDonald** – Thanked Georges Havelka for his presentation and commented that he becomes annoyed when people say ships pollute because the aviation industry is much worse and there is no focus on that, and gave the example of tonnes per mile where the aviation industry is much worse. Recent research in Canada has revealed that if you direct the exhaust emission from the engine into the ballast water, all the living organisms are killed. Another little known fact is that the emission of NOx and SOx gasses actually counteracts the effects of global warming, although it may still poison us.

#### AGENDA ITEM 15 – Maritime Resource Management

#### Presented by Martin Hernqvist, Manager MRM, Swedish Club, Sweden

See Annual Review 2008-2009, page 10, for the written paper.

Following the presentation the following questions and responses were given. Christer Lindvall – The training should cover the ship as well as relevant staff ashore. Willi Wittig – Over the last 15 years of running BRM courses, in the majority of cases Masters were at present learning how to work in a team. By enhancing the concept by taking into account all the key players is a very important step forward. There is a need to make these courses mandatory. He would be very pleased if IFSMA could come up with a resolution to recommend to IMO to make these courses compulsory. Martin Hernqvist - Replied that the first BRM course that was translated was cockpit resource management for the airline industry to a BRM course. Struggling hard to make a name change, the air industry changed the name to crew resource management. He felt that all people who can influence safety on board should be targeted. Bjorn Haave - MRM is exactly right. We have to find the real background as to why accidents happen, that is most important. Hans Sande - Ship management companies who are not shipowners carry out 80% of the ship management. Insurers should set terms for insurance to encourage such training. Terry Burke – Delighted to hear that managers are starting to attend these training courses.

#### AGENDA ITEM 16a – GPS Jamming, A Continuing Concern for Shipping Safety

#### Presented by Fredrik van Wijnen, NVKK, Netherlands

For a copy of the paper see Annex 5 in this document.

**David Patraiko** – Commented that the range of GPS jamming devices can range from2km for a handheld device to 200 miles for a jammer that will fit in the back of a motor vehicle. Not only is there a problem with jamming but also with spoofing. With Road pricing using GPS these jammers will proliferate in the future.

#### **AGENDA ITEM 16b – The Engine Room Governed from Ashore**

#### Presented by Fredrik van Wijnen, NVKK, Netherlands

For a copy of the paper see Annex 6 in this document.

**Hans Sande** – Commented on the advantages stated of "experience building for young dual officers", why does the industry believe that if we have difficulty finding engineers today, that it would be more attractive to be dual trained officers? It is just adding an additional burden. **David Patraiko** – Had discussed the project with someone involved. He understood that, if a success, the project may be extended. However, there is other equipment besides the main engine, for example, pumps, plants, fire systems, etc. **Fredrik van Wijnen** – agreed that there are many other considerations for an engineer besides the main engine.

#### AGENDA ITEM 16c – Windmill Parks in the North Sea, A Hazard to Navigation

#### Presented by Fredrik van Wijnen, NVKK, Netherlands

For a copy of the paper see Annex 7 in this document.

**David Patraiko** – Commented that the diagrams presented were alarming, and asked if they are testing the layout of the wind farms by simulation. **Fredrik van Wijnen** – Replied that it had been tested on simulators and his members in NVKK had been asked if 2 miles clearance was enough, they had answered - yes.

#### **AGENDA ITEM 17 – Drafting Group Report**

The Drafting Group reported that they had drafted some General Assembly Resolutions for consideration and approval by those present.

#### **AGENDA ITEM 18 – Approval of Resolutions**

Six General Assembly Resolutions were presented, after some discussion and minor amendments they were all approved. See Annex 1.

#### AGENDA ITEM 19 – Any Other Business

#### 19a – Piracy

**Jerome Benyo** – Introduced this subject which had arisen because of differences between the CAMM and IFSMA positions on the carriage and use of arms on merchant vessels.

The CAMM policy (Position) may be found here - <www.mastermariner.org/positions/>

Peter Turner - When CAMM first brought this to the attention of their members which the President of CAMM put forward in a press release, there was a preference to arm the ships, CMMC supported their concern to stop piracy but did not support their position of arming the ships. There needs to be properly trained crew to use those arms. Once you have armed crew/personnel on board ships you are then introducing the prospect of armed conflict between pirates and merchant vessels. There must be the realisation that the Canadian Government the EU and UN have not taken the necessary steps towards eliminating piracy. David Patraiko – Agreed with the previous speaker, US crews are not trained; you cannot take a crew and make an armed force out of them. **Bjorn Haave** – Agreed with Peter Turner, he regretted very much that some pirates were captured and then released. Jef Cuyt -Belgian vessel hijacked, Belgian Govt will now put 8 paratroopers on board each vessel so requesting them. Concern of escalation, who is in charge of troops. "IFSMA strongly opposes the arming of crews or having armed personnel on board." Fritz Ganzhorn - Danish Shipmasters stand behind IFSMA Policy. Contained problem in Gulf of Aden, problem is length of coastline and that pirates are operating out at sea. Consider accepting armed guards provided they are under control of naval forces. We are in discussion with private security companies from ex special forces from Denmark and Nordic countries, must first decide what the code of engagement, ethics and responsibility are. We hope it does not come to this. DNO members 50/50 in favour of armed guards. For the moment Denmark supports IFSMA Policy. Christer Lindvall - The Somali warlords have stated they can and will buy any arms they need. Rodger MacDonald – We stand by our policy document, but it seems that the situation is a little undecided at the moment, his view was that we should stand by the policy document but respect the fact that, in the case of CAMM, where they have a US crew on a US Flagged ships. They have made that agreement. IFSMA should continue to announce in public that it is still against arming ships. We have to be a little pragmatic. Christer Lindvall - We have had discussions within the Executive Council and at IMO where we have clearly stated that we wish to have no arms aboard ships for the crew and neither armed personnel placed on board. Most of the IMO Members were also against arms on board ship. He had put together some necessary contingency measures:

- 1. Law and order in Somalia;
- 2. Put Pressure on owners to avoid the area;
- 3. Increased surveillance. Control and protection in the safety zone;
- 4. Increased vigilance and alertness on board ships;
- 5. Communications between ship and shore;
- 6. Reporting to MSPA etc.;
- 7. Turn off AIS and LRIT
- 8. Escorts and convoys for the most vulnerable ships with low speed and low freeboard;
- 9. No arms or armed personnel onboard merchant ships;
- 10. Keep the water pressure on all pipes onboard;
- 11. Take care of the seafarers' traumatic experiences after an attack or when released by the pirates.

Georges Havelka - To avoid one extreme or the other, we should leave the door open to a compromise between two extremes. Israeli ships and Russian ships are never attacked. Peter Turner - On 18 April, 18 ships and 310 crew were being held by pirates in Somalia. On the question of armed mercenary soldiers on board ship, one of the security companies in Iraq have offered their services, glad they were turned down. Do not support arms on ships. Hans Sande - We have little to offer seafarers, unfortunately they are left to themselves. I am part of merchant Dept of Foreign Affairs, we carried out an exercise, why is a cruise ship operating in Gulf of Aden. Meeting with RCCL they are giving increased crew rates, if they go there at least provide a convoy. Rodger MacDonald – About three years ago there was a conflict between Israel and Lebanon, the cruise industry took immediate action to stop their ships going to the eastern end of the Mediterranean, so they can take action if they want to. Bjorn Haave - Could see no reason for any ship to go through this area. Peter Turner -Remarked that recently a cruise ship was attacked off the Seychelles, so the area is massive and very difficult to avoid. Marcel van den Broek – Objected to no armed soldiers on board. What his association propose in Netherlands is, for vulnerable vessels, to put Dutch marines on board.

**Christer Lindvall** – Concluded the discussion by stating that we have a policy and the majority of those present do not wish to change it. We can revisit the policy in the future if we believe it needs to be changed.

#### 19b – Honorary Membership

Rodger MacDonald introduced this subject by announcing that it been some time since we had last awarded Honorary Membership, the last being, in 2004, to Admiral Mitropoulos, Secretary General of IMO. The Executive Council wished to propose two names :-

1. Julian Parker, the former Secretary of the Nautical Institute, who had been instrumental in the formation of IFSMA from the beginning. He had worked closely with Julian over the years. He has now retired, and Rodger Macdonald commended him as worthy of Honorary Membership. Agreed unanimously.

2. Michael Grey, who most members will know from his articles in the maritime press, in particular Lloyd's List. He has always been very supportive of the Shipmaster, and continues to write the occasional columns. Agreed unanimously.

## **19c – Invitation for 36<sup>th</sup> Annual General Assembly**

The President announced that we had received an invitation from the Associated Marine Officers' and Seamen's Union of the Philippines (AMOSUP) to hold the 36<sup>th</sup> Annual General Assembly in Manila, Philippines, during June to coincide with the IMO STCW Conference being held there. If accepted he expressed the wish that members could also attend the IMO Conference. He was unable to provide the exact dates at this time. There was no other invitation. Manila was agreed.

The President reminded that next year we will be holding elections for the President and Executive Council for the following four year period.

#### **President's Concluding Remarks**

The President suggested that the concerns expressed by Fredrik van Wijnen, in his three papers, should be shared by all those present – agreed.

The President announced that Nautilus UK will shortly be holding their Biennial General Meeting and that their General Secretary, Brian Orrell, will be stepping down. He invited the Assembly to wish him good luck with his retirement and to offer our thanks for all the good work he has done, especially at ILO, for all seafarers, including Shipmasters. Agreed unanimously.

Peter Turner gave advance notice of The Company of Master Mariners of Canada's intention to invite IFSMA to hold its 37<sup>th</sup> Annual General Assembly in Halifax Nova Scotia during 2011. The President reminded that the final decision would be taken at next year's AGA.

#### **Close of General Assembly**

The President thanked all present for the fruitful discussion and participation in this General Assembly, and also to thank the speakers for some worthwhile papers during this very successful General Assembly. He also gave special thanks to SINDMAR for all their assistance and hospitality we have received here in Rio de Janeiro. Finally he thanked the London staff, Rodger, Paul and Roberta, for all their efforts to ensure this was a successful meeting. The Annual Dinner to follow in the evening with bus transport provided.

He wished all delegates a safe journey home.

## **General Assembly Resolutions**

## **IFSMA RES 1/2009 (AGA 35) ENCLOSED SPACES**

On the occasion of the 35th AGA, the delegates of IFSMA assembled in Rio de Janeiro, Brazil noted with great concern the continuous trend of fatalities and injuries among seafarers in relationship with enclosed spaces. Moreover delegates noted with concern how the principle and the failure of the regulatory regime with respect to enclosed spaces at the international and national levels could criminalise Masters.

IFSMA calls upon the relevant international and national bodies to take appropriate action to ensure mandatory carriage of remote O<sub>2</sub> analysing equipment on all vessels above 500 gross tons.

IFSMA further calls upon mandatory education and training in the use of remote O<sub>2</sub> analysing equipment.

IFSMA furthermore calls for the re-evaluation of all onboard safety equipment and safety procedures so they are fit for purpose and are compatible with use on board vessels.

#### **IFSMA RES 2/2009 (AGA 35) E-NAVIGATION**

On the occasion of the 35th AGA, the delegates of IFSMA assembled in Rio de Janeiro, Brazil noted the effects and consequences of the further introduction of e-Navigation into shipboard operations.

IFSMA will continue to actively monitor and participate in discussions in order to ensure that e-navigation is going to positively assist the workload of the master and crew.

Moreover, in this process IFSMA will emphasise the importance of defining the roles and responsibilities of all parties involved in e-navigation.

IFSMA recommends that before the implementation of e-navigation, the STW Sub-Committee must review the syllabi for certificates of competency, adding new requirements and also identifying redundant subjects which must be amended, corrected or removed.

## IFSMA RES 3/2009 (AGA 35) REGULAR REVISIONS OF STCW

On the occasion of the 35th AGA, the delegates of IFSMA assembled in Rio de Janeiro, Brazil noted that the fast changes in technology are asking for a different approach to reviewing and amending the STCW Convention.

IFSMA therefore urges the International Maritime Organization (IMO) to change its present approach with regard to amending the STCW Convention by introducing any amendments only once within a five year period.

IFSMA furthermore calls upon IMO to review as necessary the STCW Convention regularly every ten years.

#### IFSMA RES 4/2009 (AGA 35) HOURS OF WORK AND REST

On the occasion of the 35th AGA, the delegates of IFSMA assembled in Rio de Janeiro, Brazil noted with great concern the discussion in the present STCW Revision that could lead to the introduction of a maximum period of ninety-six uninterrupted hours of work.

IFSMA urges all IMO Member States to include in this discussion the well established stipulation of hours of work and rest as mentioned in the STCW-Code, Chapter 8 and not to deviate from this stipulation.

## **IFSMA RES 5/2009 (AGA 35) IMO VOTING PROCEDURES**

On the occasion of the 35th AGA, the delegates of IFSMA assembled in Rio de Janeiro, Brazil noted with great concern the recent developments in IMO voting procedures.

IFSMA urges the IMO to end the process of allowing the EU to block-vote with 27 votes without all 27 EU Member States being present at the meetings.

## **IFSMA RES 6/2009 (AGA 35) MARITIME RESOURCE MANAGEMENT**

On the occasion of the 35th AGA, the delegates of IFSMA assembled in Rio de Janeiro, Brazil noted that the introduction of a new resource management concept into the maritime industry could effectively contribute to the achievement of quality shipping.

IFSMA calls upon the Member States of the International Maritime Organization (IMO) to promote the establishment of a No-Blame Culture by introducing mandatory Maritime Resource Management Training in Part A of the STCW Code.

#### E-Navigation, its Effects on Watchkeepers and Operators

by Captain Peter Turner, President, Company of Master Mariners Canada

#### e-Navigation

The early concepts of e-Navigation really came into being when Electronic Charts were first discussed. Initially, e-Navigation was expected to utilise the components that were being used aboard ship at that time. It was assumed that the "e" in e-Navigation stood for electronic.

As a starter this concept was good. However, once this was voiced, many other uses for this were envisaged. Now the "e" in e-Navigation would be better expressed as "enhanced" or "encompassing"

The generally accepted current definition of e-Navigation is:

the harmonised collection, integration ,exchange, presentation and analysis of maritime information onboard and ashore by electronic means to enhance berth to berth navigation and related services for safety and security at sea, and the protection of the marine environment.

From this definition alone, it can be seen that e-Navigation is a lot more than first envisaged.

Users of e-Navigation will include port authorities, vessel traffic services (VTS), environmental agencies, shipowners, pilotage authorities and of course the navigating watchkeeper.

In December 2008 IMO Maritime Safety Committee (MSC) set a schedule for the implementation of e-Navigation.

- 2009 User needs to be reviewed and prioritised
- 2010 Review of system architecture and GAP analysis
- 2011 Cost benefit and risk analysis
- 2012 Implementation plan to include responsibilities of the various parties and a phased-in implementation schedule.

The phased-in implementation of e-Navigation will likely be continued into the decade commencing 2012.

At the same MSC meeting the Committee approved the sub-committee recommendation that the carriage of ECDIS would be mandatory and phased in between 2012 and 2018. Effectively, paper charts will be withdrawn from circulation. e-Navigation can only be implemented after ECDIS is installed.

The capabilities of e-Navigation and displays on ECDIS are considerable, and may be even greater than those envisaged at present. Some of the present capabilities include:

- Charted water depth updated to give real time water depth;
- Up-to-date Notices to Mariners or Navigation Advisories relating to navigation on approach to harbours;
- Real time current and wave information derived from "Smart Buoys" in approaches;

- Seasonal "Areas to be Avoided" relating to endangered species such as North Atlantic Right Whales;
- Relayed information from VTS and Coastal Radio stations;
- Specific meteorological and climatological information (ice routing and ice conditions);
- Overlays of radar information including AIS information received from ships;
- Guard contours indicating shallow water through which the vessel cannot navigate;
- Isolated dangers, including shoal waters; and,
- Warning overlays relating to the dimensional particulars of the ship (beam, draft, length, air-draft)

The display can therefore be modified to suit the needs of the navigating watchkeeper or other user, (VTS, Port Authority etc.) However care must be taken to not overload system with the information derived from the other components of e-Navigation, thereby rendering the chart over-informative, cluttered and ineffective. The navigating watchkeeper must retain the ability and right to switch out overlays.

With the information available to the navigating watchkeeper, there may be a tendency to navigate wholly utilising these displays. It cannot be emphasised too strongly that the watchkeeper must maintain a visual lookout, and utilise all means of navigation available to him or her. Information displayed in e-Navigation is susceptible to human error (digital input), mechanical and electronic malfunctions, and failures. With the double redundancy required for the equipment, this risk is low but nonetheless it exists.

Shipowners installing e-Navigation on vessels will expect to see an increase in efficiency, safety and financial return. Undoubtedly, the efficiency will include corrected navigational information, and electronic downloading for corrections for all aspects of navigation. Safety will be enhanced by the practicality of the equipment and the information displayed. Financial return may be obtained, among other things, by being able to load a vessel to a draft at which the vessel can safely navigate the channels allowing for squat and wave action.

#### Practicality of e-Navigation on the Bridge

Information and risk assessment applied to close quarters' navigation can only enhance safety, but overload of information can render the equipment inefficient and even dangerous. It must therefore be user-friendly, and the development of the equipment <u>must be user-driven</u>. The capability of switching on and off the "overlays" must remain with the user.

Training in the use of all the components must be an essential part of the development of the equipment. In 1962 there was a collision between the USS Kearsage and the Passenger ship Oriana at the entrance to Long Beach harbour in thick fog. At the Court of Inquiry, the question of why the Oriana had employed an apprentice to plot the radar information arose. The apprentice was the only person on the bridge that had completed a Radar Observers' course. Similar situations must not happen again. All navigating officers must have the appropriate training to utilise e-Navigation equipment.

Bridge design will play a large part in the practicality of the equipment. The placing of providing information must be considered. The displays German company Forschungsgesellfchaft fur Angewandte Naturwissenschaften (FGAN) (Research Establishment for Applied Science) and its subsidiary FKEI are developing what they have named an Integrated Navigation System (INS) which undertakes to make the layout ergonomically sound. Similar systems are being developed elsewhere, for example, Sperry and the Memorial University of Newfoundland. The purpose is to make the bridge layout fit the e-Navigation equipment and vice versa.

The designers and manufacturers of the equipment will be bound by standards and operating criteria. They will also be required to meet the users' needs. Those supplying the information will also be required to meet certain standards, criteria and frequencies to meet the international needs of the shipowners and which will enable downloading of information to be of a uniform nature.

#### Navigational Watchkeeping

e-Navigation will necessitate a review of the standards of training, certification and watchkeeping. The STW sub-committee of IMO must review the syllabi against the existing requirements. e-Navigation brings into question the need for various aspects of the present syllabi for Certificates of Competency. Last year IFSMA debated the need for the continuation of the inclusion of Astro *(celestial)* Navigation in the syllabi for certification. Not only will it be necessary to add the new requirements to the syllabi, but the redundant subjects must be amended, corrected or removed.

Now, prior to the advent of e-Navigation, is the time for a full review of STCW convention and a complete overhaul of the qualifications required for a watchkeeper and a Master.

Needless to say, those that examine candidates for Certificates of Competency must also be conversant with the equipment.

The standards required for watchkeeping in the past, as recently as 30 years ago, made it necessary for the watchkeeping officers to have different qualifications in order to operate the ship as well as manage the maintenance and cargo warehousing aboard the ship. Navigation was a science requiring on-the-job training and the deeper understanding of the navigation tools, and the environment in which the ship sailed. The Watchkeeping Mate and Master needed to be conversant with ship construction, cargo stowage factors, stability, marine law etc. As ships have developed the needs for the watchkeepers has changed. The tools for navigation, (eg. Sextant and even bearing compasses) have been surpassed. The outlined e-Navigational equipment are sophisticated computer based displays allowing input from external sources, and selected overlays to improve the local and immediate knowledge of the navigating watchkeeper. Maintenance of the ship and the stowage and warehousing of the cargo are also computer based and to an ever greater extent directed by personnel from ashore.

I quote from the Conclusion section of the Nautical Institute publication, "From paper charts to ECDIS, a practical voyage plan" by Captain Harry Gale FNI

The ECDIS concept is a total change from using paper charts and the transition from paper charts to electronic charts will pose some concerns for the industry, particularly for those who have no current experience of electronic charts. Important bridge procedures are significantly affected, and these require careful analysis and consideration. The experiences of those who have been using electronic charts for some time show its use will reduce the navigational workload when compared to using the paper chart. This will enable mariners to execute in a convenient and timely manner all voyage planning, route monitoring and positioning that is currently performed on paper charts. The ship must retain the prerogative to navigate in all waters, allowing that relevant information should be obtained from VTS ashore and supplemented by the pilot aboard.

#### e-Navigation and the Navigation Watch Aboard.

When the ships are equipped with e-Navigation, the role of the navigating watchkeeper will change. This needs a great deal of consideration, and will affect both the hierarchy aboard ship and the training courses required for certification. There are fundamental differences between the requirements in the existing system and those of the future. The future navigating watchkeeper will need to have enhanced computer skills, understanding of the offered downloads and overlays and the capability to interpret the maritime information provided on the displays. The navigating watchkeeper will probably never use a sextant, nor calculate a great circle course. Therefore there will be a need to review the STCW, the international safety regulations, and modification of the collision regulations.

#### Future Requirements for Navigating Watchkeeping and Responsibilities

There can be no doubt that most commercial shipping operations now rely upon the office staff ashore, superintendents, and specialised contractors to undertake many of the duties which in the past have been the domain of the navigating watchkeeper when the ship arrives in port. Some of those responsibilities must remain with the ship, others will be undertaken by technology utilising computer programmes. However, the hierarchy system aboard ship is becoming outdated. Some of the skills being taught are redundant, while others taught are add-on courses required beyond the Certificates of Competency, (eg ARPA and GMDSS.)

The advent of e-Navigation will require new skills to be taught not only to the candidates for the Certificates of Competency, but also to the examiners!

Now, before the implementation of e-Navigation, is the time when the whole hierarchy structure aboard ship should be considered and the following, no doubt controversial questions asked.

Speculating that the examinations for the pertinent skills for Certificates of Competency are fast becoming redundant, it is certain that the navigational skills required for Certificates of Competency will change with the advent of e-Navigation.

• Prior to the implementation of e-Navigation should the syllabi for Certificates of Competency change to reflect the future needs for trained navigating watchkeepers?

While it has been the practice for a hierarchy of watchkeepers (Mate, 2<sup>nd</sup> Mate, 3<sup>rd</sup> Mate) to be established on board a ship, the duties relating to bridge watchkeeping remain the same for each.

- Should all navigating watchkeepers be qualified to the same standard?
- Would the efficiency of having watchkeepers of equal standards and a "day-work" senior officer who has a superior qualification be more cost effective than the present hierarchy system?

If the watchkeeper meets the requirements, and as such is certificated to keep a navigational watch, the other responsibilities related to Certificates of Competency can be undertaken by an officer who has been examined in these required skills and as such will be able to fulfil the duties, (Return of the 'four mate ship') thereby reducing the likelihood of watchkeepers being affected by fatigue.

- Should the "Master" and "Mates" (those not keeping a navigational watch) be trained and examined to a standard which will include all the additional requirements of the international regulations, and those required by flag states as well as management skills?
- Must the "Master" be the officer with the navigational skills to pilot the ship?

The Nautical Institute has published the document "FROM PAPER CHARTS to ECDIS a Practical Voyage Plan" by Captain Harry Gale FNI, and I recommend this document to you.

#### **Improving Safety through IMO Instruments**

Presented by Captain Bjorn Haave, IFSMA Vice President & NMOA, Norway

The work at the IMO has a main aim of improving Safety and Security for seafarers, ships and the environment. These are statements by the Secretary General of the IMO, Admiral Mitropoulos.

In the Secretary General's opening speech at the 38<sup>th</sup> session of the STW Subcommittee meeting he claimed that fatigue was a major contributory factor to accidents at sea and that manning was a part of the problem.

I shall in this presentation set a light on fatigue and the connection between watchkeeping and groundings based on statistics from the Norwegian Maritime Directorate.

The statistics point out that as many as 20% of all groundings are caused by the fact that the Officer of the Watch falls asleep. IFSMA has acknowledged this fact for years and has seen the revision of the STCW-Code as an opportunity to correct some of the fundamental problems that are not being addressed in the existing Code.

The report of the investigators often conclude with saying that the accident was caused by the fact that the Officer of the Watch fell asleep – and that is it. It seems that this statement satisfies all parties involved – Flag state, coastal state, IMO, ship-owners and everybody else that have an interest in improving safety at sea. The only exceptions are the seafarers themselves and their representatives both nationally and internationally. IFSMA is amongst the very few organisations that try to do something constructive by presenting documents to the IMO for discussion

During the 40<sup>th</sup> meeting on STW in London in January this year and in the preceding meetings at IMO dealing with the revision of the STCW-Code, IFSMA has presented several proposals to improve safety and to fight fatigue which is the main cause of many accidents such as groundings and collisions.

IFSMA suggested that all ships of 500 BT and over where a 24 hr watch system is being maintained should have a minimum of 3 navigation officers including the master. The reason for this proposal is inevitable for all seafarers. Ships in short sea trade are more likely to navigate in coastal waters more frequently than larger ships and they do very often call on several ports in the same day. It is clear that if you have only a master and one navigating officer the stress and workload will cause fatigue. This has been proven over and over again and there are numerous studies presented to IMO that confirm this fact. Even so, and in spite of IMO's Secretary General's opening remarks, that manning and fatigue is closely connected the proposal from IFSMA was thrown out because the chairman of the subcommittee stated that this was a social issue and did not come under the scope of IMO's work. To the seafarers this statement is completely incomprehensible and in my mind counterproductive to safety.

In addition IFSMA also has suggested that there should be a maximum allowed period for an officer of the watch to stand watch. The period should not exceed 6 hrs continuous navigating watch, this proposal was also turned down.

IFSMA also suggested that there should be a definition for a minimum period of rest since any period less than 2 hrs cannot be defined as rest. This suggestion was also turned down.

Then in the working group IFSMA proposed to remove the possibility that presently exists in the STCW-Code, to deviate from the rest hours prescribed in Chapter VIII of the Code. This paragraph allows the navigating officer to stand an 18 hrs continuous watch followed by 6 hrs rest and then another period of 18 hrs watch.

IFSMA succeeded in the removal of this paragraph only to be followed by a proposal from the European Union that allows an officer of a navigation watch to stand a 96 hrs continuous watch. IFSMA again proposed that this suggestion must be removed, but the only support we got was from India and from the ITF. All the other delegates supported the EU proposal or did not comment at all. In light of the Secretary General's opening words on fatigue it is almost incomprehensible that such a proposal can be put forward in a forum where the motto is safer sea and cleaner oceans. It is clear to everyone that working a 96 hr watch is impossible, that is not the problem, but an opening for such a possibility cannot be tolerated.

I shall now take you back to the issue concerning groundings along the coast of Norway.

# It's been established through numerous investigations that fatigue is a main cause of groundings.

In the following I shall go through some of the results from the investigations carried out by the Norwegian administration over the past years.

Groundings have increased significantly in recent years on the coast of Norway

2004:	64 incidents
2005:	73 incidents
2006:	88 incidents
2007:	117 incidents
2008:	Approx 125 incidents

The investigators claim that as many as 30% of these accidents are caused because the Officer of the Watch has fallen asleep, and that he was alone on the bridge. Why does this happen? to me the answer is clear – FATIGUE - due to short manning.

Most of the groundings happen to smaller ships.

They have a SAFE manning certificate that allows them to operate with only 2 navigators – a Master and a navigation officer.

#### Total crew on board is normally between 4 and 6 people.

These ships have a very tight schedule and call at ports several times a week, sometimes several times in the same day. It is clear that with such manning and navigating in coastal waters it is not possible to live by the rules given by the IMO. Why do the administrations around the world let this happen?

- It is clear that time is in short supply
- STCW-Convention demand at least 10 hrs rest every 24 hrs period.
- Running 6 on, 6 off watch system does not allow for all the work that has to be carried out in order to run a ship safe and secure

These are known facts, but still there is nothing done to remedy this problem.

The Safe Manning document issued by the Flag State is not considering the actual workload on board and therefore most small ships in short sea trade are undermanned. It is a fact that in most cases, due to the short manning, the navigating officer is alone on the bridge also at night and in areas with extremely demanding navigation.

The STCW Code prescribes that there shall be a lookout together with the Officer of the Watch, not only at night but also if traffic density or proximity to dangers calls for it. Navigating in coastal waters means traffic and proximity to dangers are always there. So how is it possible for Flag States to issue Safe Manning certificates that states that such ships can have a manning of as little as 4 persons?

The IMO resolution on manning is under review, but as long as the document remains a resolution without being made mandatory, I doubt if the review will have an effect on manning certificates issued by the Flag States.

Even though the fact shows us that ships do increasingly run aground there is nothing done to prevent fatigue, that is one of the main reasons for groundings. Why is that?

As a way to solve the problem the Norwegian administration suggests the following to be done:

- 1) Better education
- 2) Better control of the Shipboard safety system
- 3) Better control of ship's documents such as logbook and charts
- 4) Seafarers' attitude towards safety must improve
- 5) Lecturing the seafarers of the dangers of falling asleep whilst on watch

I am not sure that the above list will solve any problems. It looks to me that the administrations will do anything to avoid facing the real problems, I cannot see that any of the above suggestions will reduce the fatigue for seafarers. If it has an impact on fatigue it will probably be an increase and that again will cause even more accidents to happen.

Administrations must wake up to the actual situations concerning the under manning of ships. I firmly believe that if we want to fight fatigue and thereby reduce accidents such as groundings some of IFSMA's suggestions must be introduced into the IMO's instruments.

Fatigue must be taken seriously.

Maximum length of navigation watches must be defined.

Minimum period of rest must be defined.

All SOLAS ships shall have at least 3 navigation officers including the Master.

I don't think this will solve all the problems with groundings – but I am sure it would reduce the numbers and also reduce the fatigue amongst the seafarers of today.

The IMO must start somewhere and they have the possibility to do that during the revision of the STCW conventions, but they have little time and I am not sure they will seize the opportunity?

#### The International Lifeboat Group

Presented by Captain Rodger MacDonald, IFSMA Secretary General, UK

IFSMA has for many years been concerned about accidents involving davit launched lifeboats. We found that little progress could be made as a sole voice against the powerful lobby of lifeboat manufacturers at IMO.

In 2007 IFSMA joined other International Groups who had shown deep concern that there were too many serious accidents and deaths being caused during lifeboat drills which many administrations state are mandatory. This group was named the International Lifeboat Group, (ILG). The other participants in these groups included the UK Administration, the International Transport Federation, the International Chamber of Shipping, Intertanko, Class, Maritime Accident Investigation Bureau, representatives from the training establishments, and the Lifeboat Manufacturers' Associations.

I am pleased to state that we have achieved some success with measures to prevent accidents with lifeboats - SOLAS amendments were agreed by ILO DE Sub-Committee.

Draft amendments to the International Life-Saving Appliances (LSA) Code and the Recommendation on testing of LSA were agreed, for submission to MSC 86 for approval and subsequent adoption. The draft amendments add to and replace, as appropriate, the existing paragraphs relating to on-load release systems for survival craft, to ensure they are adequately secure and cannot be released inadvertently.

A related proposed draft amendment to SOLAS chapter III, to require the replacement of certain existing release hooks not complying with the new requirements, was also agreed for submission to MSC 86 for approval and subsequent adoption.

Draft *Guidelines for the fitting and use of fall preventer devices (FPDs)* were agreed for submission to MSC 86 for approval. An FPD can be used to minimize the risk of injury or death by providing a secondary alternate load path in the event of the failure of the on-load hook or its release mechanism, or of accidental release of the on-load hook, but should not be regarded as a substitute for a safe on-load release mechanism.

The Sub-Committee also agreed draft amendments to the *Guidelines for periodic servicing and maintenance of lifeboats, launching appliances and on-load release gear* (MSC.1/Circ.1206, annexes 1 and 2) for submission to MSC 86 for approval.

The ILG will continue to work on prevention of accidents involving life saving appliances in general. This will include the on-going review of SOLAS Chapter III and the LSA Code, using a goal-based approach which sets out goals (including: escape, survival, notification of distress and rescue) and functional requirements (including: communication; personal life saving; mass evacuation; and search and rescue).

#### **GPS Jamming – A Continuing Concern for Shipping Safety**

Presented by Captain Fredrik van Wijnen, NVKK, Netherlands

Last year a test programme had been run to research the consequences of GPS jamming for shipping. The tests were performed by the GLAs (General Lighthouse Authorities of the UK and Ireland and DSTL (Defence Science and Technical Laboratory). Only recently the external report on the results of the tests has been released.

In this presentation we briefly summarize the results of the tests. The vessel used for the tests was the NLV "Pole Star", making test-runs of 10 nautical miles through the jamming test area off Flamborough Head. The vessel was equipped with three (D)GPS receivers and an eLoran (enhanced Loran) receiver, of which the output (position and speed vector) could be shown each separately on the ECDIS and transmitted to other systems. The measured data was recorded for further research. The DGPS receivers A and B were standard receivers normally used by the merchant navy vessels. Receiver C was a so-called high end receiver which is used a.o for land surveys. Also used were a few handheld receivers. The vessel was equipped with AIS and VHF-DSC as a part of the GMDSS system.

As a result of the jamming the speed indication of the vessel varied up to 100 knots. The DGPS-C receiver switched itself off in the main function. The eLoran receiver remained operational during all tests. The positions were shown on the ECDIS with an accuracy of 8.1 mile (95%) and transmitted to other systems.

#### Among some other results and conclusions we can mention that:

- The sudden outfall of GPS caused a series of alarms on the bridge which brought about confusion. It took a few minutes before all alarms could be switched off by the bridge personnel who in fact were aware of the jamming beforehand. In the event of a critical manoeuvre, such a defect could have disastrous consequences.
- The nearby DGPS transmitter did not receive any GPS signals as well and switched off automatically. After conclusion of the tests the transmitter had to be restarted manually.
- The handheld GPS receivers showed positions which were mistaken by tens of nautical miles. Part of these showed positions on land.
- The effect of jamming on AIS was clearly visible. The Coastguard observed many false tracks of ships. Some even crossed land.
- Near Flamborough Head synchronized lights are using GPS time controls. If the system is started during jamming, synchronizing will be interrupted.
- Communication via VHF went without problems. However the GPS position used for DSC as part of the GMDSS system was incorrect.
- Vessel which use a track pilot (waypoint to waypoint) could end up in dangerous circumstances due to incorrect readings of position and speed by jamming of GPS.
- The eLoran readings on the ECDIS were very suitable for the continuation of navigation and communication.

# During a workshop of the Netherlands Institute for Navigation, one of the participants, showed a GPS jammer which he had purchased for about 30 USD via the internet. The product was mentioned as a "wireless router" to mislead customs.

GPS and more generally GNSS is a very efficient and effective aid to navigation. However we observe more and more automatic reliance on automatic systems which are fed by GPS. Watchkeepers on the bridge of vessels tend to be less and less accustomed with traditional navigation methods.

In the event of a breakdown of GPS (by jamming), eLoran, if available, can act as a redundant system and navigation and communication can be continued in the same way with all connected systems. The only difference is the accuracy which is a few meters less than that of DGPS. In many worldwide sea areas eLoran is still operational, including the USA, where eLoran is a part of the Department of Homeland Security. In Europe several countries, which have eLoran stations on their territory, have been waiting for years for a European Radio Navigation Pla n ERNP) similar to the USA where a Federal Radionavigation Plan (FRP) exists.

It is understandable that much attention of the European Commission is directed at the development of the Galileo satellite system. It is however very important that the Commission issues a Radio Navigation Plan of which eLoran should be a part. This is important as back-up for navigation and timing appliances. For mobile telephone-, powerand banking networks, eLoran is an important part of the infrastructure in view of the easily available GPS jammers and the disastrous consequences of jamming.

Recent efforts by the European Commission to promote E-navigation and even Emaritime could be influenced by these jamming tests. A terrorist or even a madman would be able to disturb not only navigation of ships but also the operation of a complete port where much of the modern technology is based on satellite acquired data. This information is not only of today. For many years experts, who have nothing to gain from these results, have warned of an overreliance on GNSS.

#### The Engineroom Governed From Ashore

Presented by Captain Fredrik van Wijnen, NVKK, Netherlands

Not only in the airline industry but also on board ships, the function of the chief engineer has become somewhat a point of discussion. Therefore a number of shipowners in the Netherlands, managing smaller ships, has launched an interesting experiment. This contains for the next two years the introduction of an alternative engineroom crew and the monitoring of the engine at a distance from ashore. The proposed team consists of a captain, two dual educated young officers and two AB's. The experiment is valid for shortsea vessels with an engine power of no more than 3000 KW, trading in European waters. Three Dutch shipowners have placed 23 vessels at the disposal of the experiment which is due to last for two years and will be closely monitored by the Dutch Shipping Inspection.

#### Motives for the experiment are amongst others:

- The present shortage of certified and skilled engineers
- The modern excessive automation of engineroom controls
- The improved communication possibilities with ashore

#### **Consequences:**

- An adaption of the STCW rules with regard to safe manning.
- A solid and adequate support from a shore organisation

At the time this legislation was stipulated automation in the engineroom was at the beginning. The controls were in the hands of the engineers who were doing their rounds in the engineroom by looking, hearing, feeling and sometimes smelling. All these tasks have mainly be taken over by automation.

At sea the ship was mainly left to herself. Communication with ashore was scarce and repairs and maintenance were done by the ship's team of engineers. This tradition is slowly coming to an end. Repairs are almost over as engine controls are all computerized and breakdowns can only be remedied by shore experts. Maintenance is covered by shore personnel which comes on board at regular intervals. Trustworthiness of engines should recently have been improved by advanced technology. On the other hand skills by the remaining engineers will be reduced. Moreover fewer and fewer spare-parts are carried for economic reasons.

#### Advantages:

- Less pressure on the acquirement of skilled chief engineers
- Experience building for young dual officers
- A total of three watch certified officers (including the captain) gives more possibilities to avoid fatigue.

#### **Conditions:**

- The safety and continuity of the vessel must not become endangered.
- Work pressure should be closely monitored
- Results should also be monitored under extreme (weather) conditions.
- There is a restriction to only European voyages.

#### Windmill Parks in the North Sea – A Hazard to Navigation

Presented by Captain Fredrik van Wijnen, NVKK, Netherlands

There are well-advanced plans to install windmill parks in the approaches to the new Rotterdam port Maasvlakte 2. These approaches have recently been approved by the International Maritime Organization and offer shipping clear traffic patterns as well as a logical layout for anchoring areas. The risk of collisions has been reduced, course crossing situations are less and ferry traffic from the UK and Ireland is better routed. A labyrinth of windmill parks will absolutely impede shipping traffic. There is a fair possibility that, under certain conditions, ships have to reroute to reach the port. This is costly and environmentally unfriendly.

Windmill parks should be situated in shallow areas where there is no shipping traffic possible. This is already the case in a number of neighbouring nations. Placing windmills close to the coast is no option as the view of the tourists on the beaches should not be hampered.

In unfavourable weather conditions tugboats should not meet obstructions if they have to make fast to a vessel in distress. Vessels with breakdowns could easily come into collision with windmills if they become adrift. Crews of drilling platforms could narrate exciting stories about vessels out of control approaching their operational area. Another dangerous aspect is the effect on the radar screen on board ships. The effect of "smearing" spoils the image which brings navigation in reduced visibility at risk.

Another aspect is the observation that expertise of navigators on board many vessels is becoming more and more doubtful, mainly influenced by the growing shortage of qualified seafarers. And of course there are many more reasons to protest against the windmill policy of the Dutch administration.

Maritime stakeholders such as the Ports of Rotterdam and Amsterdam, pilots and shipmasters have issued a report to express their concerns on the intended windmill park building according to the latest plans. There is little hope that the Dutch administration which in this case counts three Ministries in decision making, will lend a willing ear to these arguments. Decisions will be based on the plea of environmentalists who argue that "clean" energy is crucial for the future of our planet. Nothing against this theory, but locations of windmill parks could be situated in positions which do not hamper the most important transport chain of all, shipping. Advice by all maritime players in this chain should be taken to heart by administrators in The Hague and also in Brussels, where maritime safety is still high on the agenda. We should also realise that once the construction of the parks is completed, there is no way back. These mills will stay there for at least twenty years.