

# INTERNATIONAL FEDERATION OF SHIPMASTERS' ASSOCIATIONS



**40TH ANNUAL GENERAL ASSEMBLY**

**SANDEFJORD, NORWAY, 5-6 JUNE 2014**

## **MINUTES AND ANNEXES**

- |                |   |
|----------------|---|
| <b>Annex 1</b> | <b>40th AGA Resolutions</b>   |
| <b>Annex 2</b> | <b>Resources and Transparency in Maritime Accident<br/>Investigation - Allan Graveson</b> |
| <b>Annex 3</b> | <b>Realities of Risk - Michael Grey</b>   |

### **40th AGA Proceedings PART B**

With the Compliments of  
The Secretary General

202 Lambeth Road, London SE1 7JY  
Tel.: +(44) 20 7261 0450  
Fax.: +(44) 20 3468 2134 Email: [hq@ifsma.org](mailto:hq@ifsma.org)  
Web Site: [www.ifsma.org](http://www.ifsma.org)

# MINUTES OF THE 40<sup>th</sup> ANNUAL GENERAL ASSEMBLY

## Sandefjord, Norway

The 40<sup>th</sup> Annual General Assembly was held in the Rica Park Hotel, Sandefjord, Norway, on Thursday 5<sup>th</sup> and Friday 6<sup>th</sup> June 2014 at the invitation of the Norwegian Maritime Officer's Association (NMOA).

### LIST OF DELEGATES

#### EXECUTIVE COUNCIL (Outgoing)

Christer Lindvall (Sweden)	President
Koichi Akatsuka (Japan)	Deputy President
Remi Boissel Dombreval (France)	Vice President
Bjorn Haave (Norway)	Vice President
Hans Sande (Norway)	Vice President
Willi Wittig (Germany)	Vice President

#### EXECUTIVE COUNCIL (Incoming)

Hans Sande (Norway)	President
Willi Wittig (Germany)	Deputy President
Koichi Akatsuka (Japan)	Vice President
Fritz Ganzhorn (Denmark)	Vice President
Jorgen Loren (Sweden)	Vice President
Dominique Perrot (France)	Vice President

#### FROM MEMBERS OF ASSOCIATIONS (Listed by country)

Cuyt, Jef	KBZ	Belgium
Dimitrov, Dimitar	BSA	Bulgaria
Turner, Peter	CMMC	Canada
Gamper, Juan	Nautilus	Chile
Djurhuus, Eyostein	FSN	Faroe Islands
Gardalid, Annfinnur	FSN	Faroe Islands
Bjorkell, Martine	FSOU	Finland
Bougeard, Michel	AFCAN	France
Toft, Bernard	IIMM	Ireland
Kojima, Shigeru	JCA	Japan
Spridzans, Jazeps	LSMA	Latvia
Wijnen, Fredrik	NVKK	Netherlands
Gallis, Roar	NMOA	Norway
Hornthvedt, Claus P.	NMOA	Norway
Kveim, Morten	NMOA	Norway
Siddiqui, Haleem Ahmad	MMSP	Pakistan
Foo, Robin	SMOU	Singapore

Pearson, Simon	SMMA	South Africa
Batrakdar, Mehmet Birol	TOGSM	Turkey
Graveson, Allan	NautilusInt	UK
Linington, Andrew	NautilusInt	UK

### INDIVIDUAL MEMBERS

Fleming, Kevin	Australia
Peer, Reinhard	Germany
Subhedar, Sudhir	India
Dickie, John	UK (Ind Mem & Secretariat)
Owen, Paul	UK (Ind Mem & Secretariat)

### Honorary Members

Grey, Michael	UK
---------------	----

### GUEST SPEAKERS

Dyrkoren, Eric	SARINOR	Norway
Doksrod, Anne	Midgard Hist. Center	Norway
Odegard, Kjell	Prof.	Norway

### SECRETARIAT

Captain John Dickie	Secretary General
Captain Paul Owen	Assistant Secretary General

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

### AGENDA ITEM 1 – Welcome

Captain Hans Sande, President of Norwegian Maritime Officer's Association, welcomed all present to Sandefjord, Norway, on this very special 40<sup>th</sup> Anniversary of IFSMA shows the strength of IFSMA and that we must ensure that it continues to flourish for the next 40 years. He added that there are some excellent presentations scheduled, including the first which takes place after lunch, on the history of the Vikings. He concluded by saying that he would leave the background of Sandefjord to Christer Lindvall who he knew included this subject next.

Captain Lindvall, President of IFSMA, thanked Captain Sande for his warm welcome and for his hospitality the previous evening. He gave a special welcome to Michael Grey, Honorary Member and then proceeded to give his opening address (see page 3 in the IFSMA Annual Review). He then declared the 40<sup>th</sup> Annual General Assembly formally open.

**AGENDA ITEM 2 – Adoption of Agenda**

The President announced that there would be a drinks reception at 18:30 before the Annual Dinner in the evening.

The Agenda was adopted with this addition.

**AGENDA ITEM 3 – Adoption of the Minutes to the 38<sup>th</sup> AGA.**

The Minutes to the 39<sup>th</sup> Annual General Assembly held in Melbourne, Australia on 16-17 April 2013, were adopted without amendment.

**AGENDA ITEM 3a – Matters Arising from the Minutes to the 39<sup>th</sup> AGA.**

No matters were raised.

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

The Drafting Group was established and comprised: Willi Wittig (Chairman), Peter Turner and Kevin Fleming.

At this time the President requested the establishment of an Election Management Committee to be responsible for counting the votes during the elections. Bjorn Haave and Remi Boissel Dombreval, not being candidates for the elections, were selected.

It was further agreed that Bjorn Haave would act as the Individual Members representative during this Assembly.

**AGENDA ITEM 5 – Secretary General’s Report and Hon Auditor’s Report****SECRETARY GENERAL’S REPORT**

The **Secretary General** (John Dickie) gave his report, which is reproduced in the IFSMA Annual Review 2013-2014, starting on page 7. He expanded on various matters covered therein.

He reported that we signed a new office lease agreement which included a significant increase in rent to between £16,000 and £17,000 per annum. His investigations revealed that our current office space still provides the best economical option. A decision was taken to refurbish the office space to make it more functional and attractive for a prospective sub-tenant. The Comité International Radio-Maritime (CIRM), who is also an NGO at IMO, was approached and took up the offer to sub-let half of the office space. The refurbishment costs were shared with CIRM and had a one off cost of £8,452 to IFSMA which is included in last year’s accounts. The arrangement with CIRM is working very well.

He further reported that Roberta Howlett retired at the end of last year. Although we were looking for a new office manager in conjunction with CIRM, they changed their mind so we are rethinking the situation and in the meantime John and Paul are managing the office administration. The Assistant Secretary General has been paid for the additional work he is carrying out.

## HONORARY TREASURER'S REPORT

**John Dickie** (acting as Honorary Treasurer) reported that, only two association had outstanding subscriptions this year adding that these were being followed up for early resolution. See Part A document, back three pages for the figures and Hon. Auditors report.

He continued by outlining the figures in the Profit and Loss Account for 2013 and the Balance Sheet for 31 December 2013, both of which were presented in the AGA Part A document, together the Honorary Auditor's Report. He took the delegates through the various figures produced in these documents.

The Budget for 2015, which included an allowance for the rent increase and the income from CIRM, was presented and **approved**. He reported that, although the rent increase mentioned above took effect from August 2013, we did not receive an invoice from our landlord for the back payment until March 2014.

Christer Lindvall read out the Honorary Auditor's Report.

The Secretary General's Report and Hon Treasurer's Report were both **approved**.

It was proposed and agreed to reappoint Rodger MacDonald as the Hon Auditor for another year.

## Q&A

Fritz Ganzhorn asked about advance payments and if this would reflect on the following year's income. John explained how this is handled.

Allan Graveson thanked John for the presentation of the accounts and the excellent results from the refurbishment of the office which he felt would give an excellent impression to any visitors.

Fritz Ganzhorn suggested that the new Executive Council be asked to look at using the projected £10,000 surplus in the budget to update the IFSMA Website, including a Mobile site, and also on the Newsletter. John said he agreed with these proposals but cautioned that we should have the money in our accounts before we attempt to spend it.

Allan Graveson suggested that the new Executive Council be tasked with looking at this suggestion.

Christer added that this is mostly already in progress. Willi Wittig said that progress made so far will be demonstrated during his presentation tomorrow. Hans Sande said that as long as any surplus funds are used to the benefit of IFSMA with no negative cash flow, he did not see any problem.

Bjorn Haave, on the subject of the NGO Group, said that he felt it appropriate that those who represented IFSMA at IMO, when available, should also attend.

Peter Turner asked is we work with others at IMO. John replied that we work with anyone to meet the aims of IFSMA including the Nautical Institute where we have a common interest.

Willi asked why HCMM and Nautilus Int UK attend these NGO meetings when they are not recognised by IMO as NGOs themselves. Allan Graveson clarified the position of their member Charles Boyle who attended to provide legal advice. John added that HCMM are invited to attend due to their influence over the industry including their incredible world-wide mentoring programme for cadets to bring them forward as potential new IFSMA Members for the future. Allan Graveson added that they are an influential body due to their wide membership reach to 51 former UK Commonwealth countries and the EU countries.

#### **AGENDA ITEM 6 – Executive Council Elections**

The elections were to choose a new President, Deputy President and seven Vice Presidents for a four-year term of office.

**Paul Owen** was invited to brief the meeting on the procedures, agreed with the President, to be adopted and the ballot papers provided to enable the voting to take place in full compliance with the Statutes and Byelaws.

Christer Lindvall announced that no further nominations had been received for the President other than Hans Sande. Therefore **Hans Sande** was elected, agreed by acclamation.

**Willi Wittig** was elected as the Deputy President.

The seven members elected as Vice Presidents were as follows:

**Koichi Akatsuka**  
**Marcos Castro**  
**Marcel van den Broek**  
**Fritz Ganzhorn**  
**Calvin Hunziker**  
**Jorgen Loren**  
**Dominique Perrot**

#### **AGENDA ITEM 7 – Changeover of President and Executive Council (ExCo)**

**Hans Sande** addressed the meeting –

“Thank you for the trust you have placed in me, it is with great humbleness I take over from Christer who has shown such commitment and knowledge for our industry.

We had challenges in the past and I’m sure we will have new challenges for the future, the only way we can be successful as an organisation is to keep ourselves relevant. Our slogan is ‘Unity for Safety at Sea’ – over four decades we have gone from ship owners to owning companies, where is the owner, is it the hedge fund in Zurich or the hedge fund in Europe? Where does the Master now get his support from when accidents occur, the Master is becoming increasingly criminalised. Industry changes rapidly and we have to change rapidly as well. The success of IFSMA in the future is not the vision of one man but the vision of everyone involved. Need authority to be a master, which is often lacking. Confident that can take on this task; if we can have the commitment of masters around the world we can be successful in the future. Welcome to the new team onboard (ExCo) and I look forward to close cooperation.”

Fredrik van Wijnen – having worked closely with Christer over the years, proposed that Christer Lindvall be made Honorary Member.

Hans Sande – proposed that following his long support, especially at IMO meetings, over many years that Bjorn Haave be made Honorary Member.

Both were agreed.

### **AGENDA ITEM 8 – Selection of Venue for 41<sup>st</sup> AGA in 2105**

**Hans** announced that we had only received one invitation for the AGA in 2015 from Nautilus Chile, he reminded that a presentation was given during the last 39<sup>th</sup> AGA in Melbourne and invited **Juan Gamper** to provide any updates.

**Juan** informed of the progress with booking the small cruise ship to travel from Punta Arenas during the 2105 Easter Holiday, for a 5 days onboard. He added that the final decision has to be taken during Sept/Oct this year. 25 double cabins had already been reserved by his members, the costs are US\$1,000/US\$1,200 for 5 nights all inclusive per person for double occupancy for 100 cabins. The alternative is a Hotel meeting for 2 days (month?) close to Valparaiso at Vina Del Mar.

**Hans** summarised that the option is a cruise or a hotel. The Assembly agreed to Chile and further agreed that the final decision should be taken by ExCo as to whether to choose a cruise or hotel venue.

### **AGENDA ITEM 9 – The Vikings**

**Presented by Ms. Anne Doksrod**

On the conclusion of the presentation the President thanked her for a very interesting talk.

See - <http://tinyurl.com/odt3q4f> - for the presentation document.

#### **Q&A**

Did the Vikings fight each other – Yes

Did religion mark the end of the Vikings – Yes.

### **AGENDA ITEM 10 – A Human Factors Perspective on Human Error and Near-Miss in Dynamic Positioning**

**Presented by Kjell Øvergård, PhD, Professor of Maritime Human Factors, Head of Research at the Department of Maritime Technology and Innovation.**

See - <http://tinyurl.com/lv6m4bj> - for the presentation document.

**Q&A**

In response to a question from **Christer Lindvall** the speaker replied that removing one of the factors after an accident, such as dismissing a master, does not remove the systemic cause of the accident. **Kevin Fleming** commented that accidents are often an accumulation of small mistakes and asked how the speaker would handle such situations, Kjell replied that you have simple systems and complex systems, for a simple system you can see the failure pathway, for complex systems it is impossible to identify one single failure pathway and may be caused by a lot of single unexpected events that suddenly come together. **Fred Van Wijnen** commented on near misses, Kjell replied that he had observed that in the maritime industry it is not acceptable to have errors. Accepting error is not culturally acceptable, whereas the airline industry is moving away from this.

**AGENDA ITEM 11 – SARINOR – Search and Rescue in the High North**

**Presented by Erik Dyrkoren, MSc, Project Manager**

See - <http://tinyurl.com/nayqcwa> - for the presentation document.

**Q&A**

**Peter Turner** what about rescues where big passenger ships are involved. Erik replied that in such cases there will inevitably be some casualties due to the very large numbers of passengers and crew.

**AGENDA ITEM 12 – Resources and Transparency in Maritime Accident Investigation**

**Presented by Allan Graveson, Nautilus International UK**

See Annex 2 for the paper

\*\*\*\*\*

The President welcomed all delegates to the start of day two; there was a round of applause for the excellent Annual Dinner the previous evening.

**AGENDA ITEM 13 – The New IFSMA Publications Standard**

**Presented by Willi Wittig, VDKS and IFSMA Deputy President**

Hans introduced the presentation by saying that we have been focusing on the type of layout we will use, a uniform standard, to make us look more professional. Willi has done an excellent job in providing some documents to use. These include the following IFSMA documents:

- Guidance for Delegates Representing IFSMA



- Compilation of IFSMA Resolutions and Statements
- About the IMO
- Statutes and Bye-Laws

He went on to say that this information is essential when IFSMA delegates attend meetings representing IFSMA, so that you what IFSMA stands for, what to say and which decisions to support.

Copies were distributed for debate.

Following the introduction Willi presented the four documents by explaining the contents.

He then continued with the proposed new website layout, including a mobile phone layout. It will include a member's only area. The new facilities will include links to IFSMA's Facebook and Twitter accounts. He commented that the webmaster responsibilities need to be agreed for the future for sharing the workload.

He reported that ExCo decided not to continue with the old Newsletter which was published four times a year, it will be replaced with a bi-monthly publication with about four pages of news on the website, members requiring a paper copy can request a copy from the Secretariat.

**Peter Turner** asked if the 'Members' area was only to be accessed by the Executive of the Member Associations, Willi replied that all association members are also members of IFSMA. He also confirmed that the documents presented today will also be published on the website.

**Allan Graveson** thanked Willi for an excellent presentation and asked if links to the other NGOs will be included in portals and gave the example of his Association's members (Nautilus International UK) being able to login to there site and the use a portal to gain access to the IFSMA Website. Willi saw no reason why this could not be arranged. Regarding after IMO Meetings Allan asked if up to date information on the IFSMA activities could be made available for members immediately, the answer was yes.

## **AGENDA ITEM 14 – Maritime Spatial Planning Related to Safe Distances to Multiple Offshore Structures**

**Author – R. J. Scherpenzel, NVKK**

See Annual Review, page 20, for the paper.

**John Dickie** explained the author was unable to attend to present his paper. **Fred van Wijnen** provided some commentary on this subject and requested any feedback on the paper which he would pass on the author.

\*\*\*\*\*

As we had some spare time the Video "Bridge Team Management: Pilot Onboard", kindly provided by KVH Media Group was shown to delegates.

A link to the product pages for KVH Media follows:

<http://traininglink.kvh.com/public/catalogue.12.194.php>

KVH Media have offered a 30% discount to any member who wishes to purchase copy.

### **AGENDA ITEM 15 – The Realities of Risk**

**Presented by Michael Grey, Honorary Member**

See Annex 3 for the paper

### **AGENDA ITEM 19 – Anchoring Operations and Accident Prevention Measures (Video Presentation)**

**Presented by Japan Captain’s Association, introduced by Shigeru Kojima**

Following the introduction the video was shown for delegates.

#### **Q&A**

**Kevin Fleming**, asked ½ knot coming astern putting anchor out at 90° to ship had been considered? Answer not on this occasion – **Fredrik van Wijnen**, is anchor problems taught in colleges? Answer no. There was some discussion on the use of simulators to practice anchoring. There was further discussion on this subject

Please contact Japan Captains’ Association for information on buying the video.

### **AGENDA ITEM 18 – Coastal Shipping in Indian Waters**

**Presented by Sudhir Subhedar, Individual Member**

See Annual Review, page 14, for the paper.

See - <http://tinyurl.com/nahacgq> - for the presentation document.

#### **Q&A**

**Hans** stated that Norway has not succeeded with coastal shipping. The EU is constantly extending its borders. Lorries on the quay may be charged to take a container from a ship but are not charge when delivering a container to the ship. There are 32 different types of taxation for coastal trades in Norway. 80% of all roads in Norway are paid for by the users, for coastal trades it is 100% paid for by users. He agrees that there is great potential to take cargo off the roads and by doing so protect the environment, in Norway we have around 22,000km of coast, e referred to ‘shortseashipping.com’ to show what extra infrastructure is required if shipping is to take more of the cargo off the roads. When considering international standards he raised the subject of local ferries and the number of accidents they have because they are not regulated properly. He did not believe that international standards were a problem, it was more that when you look at the infrastructure of road deliveries it is difficult to compete with a costal service. **Friz Ganzhorn** said that in the EU, with increasing road congestion, in a few years more traffic will change to short sea services regardless of the cost.

**Fred van Wijnen** mentioned the programme ‘motorways of the sea’ in the EU to increase coastal shipping. **Sudhir Subhedar** added that the purpose of his paper was to see what can be done in the shipping industry. Discussion continued of the standards required and appropriate for coastal crews.

## **AGENDA ITEM 21 – Multi National versus One Nationality Crew**

**Presented by Dimitar Dimitrov, BSM**

See Annual Review, page 17, for the paper.

See - <http://tinyurl.com/pvuykhm> - for the presentation document.

### **Q&A**

**Allan Graveson** reported that research had been carried out on this subject at the Seafarers International Research Centre (SIRC) at Cardiff University. **Jef Cuyt** stated that we underestimate the problems associated with this subject. **John Dickie** reported that when he inspected ships with multinational crews everyone lived in their cabins, and that groups of nationals can keep to themselves and act independently of other groups. **Fritz Ganzhorn** said that for many years now multinational crews have been the way ahead. Masters can host social events to force crew to participate in such events. **Jorgen Loren** added that this is not a new subject and very common for the last century. Swedish companies are working to solve this problem and the ships work well. **Kocihi Akatsuka** commented that, as mentioned earlier, SIRC had published a book on this subject, he recalled that one of the conclusions was that multi-national crews worked much better than a two nationality crews where discrimination and segregation. **Peter Turner** concluded that, as seafarers we look at this from the point of view of isolation, in Canada we are a country of immigrants, he believed we are putting too bigger light on too small an issue, we need to train the crew no matter what their nationality. **Jef Cuyt** added he wondered how much time is left for social activities with the tight schedules ships have to work to today. **Willi Wittig** said that multinational crews are a question of perspective, after the Second World War all German seafarers were sailing on foreign ships, they really liked it, now that we have a German Merchant fleet once again, they are now complaining that they have to sail with multi-national crews! We have always had a multi-national environment onboard. In his own experience, when he went to sea his crews were made up of three or four cultural groups. In the past this was just accepted. **Hans** added that on Norwegian ships you do not find any open cabin doors on ships today due to the insane working conditions. **Allan Graveson** stated that the STCW overrides the MLC unless the administration says otherwise. He concluded discussion on this subject by further stating that in his research he had never found any other group workers working more than 14 hours a day.

## **AGENDA ITEM 8 & 9 – Maritime Labour Convention 2006**

**Author: V. Georges Havelka. Presented by Dominique Perrot, ACOMM**

See Annual Review, page 17, for the paper.

See - <http://tinyurl.com/ogq2wnn> - for the presentation document.

## Q&A

**Hans** started this subject by stating that he had travelled the world to discuss crew agreements with various Administrations, the meaning of 'substantial equivalents' came up. Normally the company is required to repatriate the seafarers, at the same time the shipowner is required to pay the costs of visas. One shipowner no longer wanted to pay the costs of visas for Philippine seafarers, they considered that the costs of transporting the seafarers across the world, and charging them nothing, so they asked the Bahamas to accept this as substantially equivalent, the Bahamas agreed to the request. So even though we think we have a Maritime Labour Convention we see different interpretations from different Administrations. **Allan Graveson** added that, considering this is what happens with SOLAS this is what we would expect. Peter Turner asked what happens with an Administration that has not accepted the MLC. **Dominique Perrot** replied that a ship must have all the necessary documents to comply with MLC 2006 when visiting a country that has ratified the convention. **Peter Turner** asked who administers the MLC 2006. The reply was that control will always lie with the ILO. **Fritz Ganzhorn** added that once ratified by sufficient countries it will apply to all ships. **Jef Cuyt** stated that he does not necessarily agree that all on board should be classed as seafarers. **Fritz Ganzhorn** replied that the Danish definition is that a person who has the majority of his professional duties to the ship are seafarers, therefore armed guards could be included. **Hans** added that discussions need to take place between flag state parties as each may have different interpretations of the MLC. **Allan Graveson** stated that there is a Tripartite Committee that can deal with these issues at ILO, flag states can be taken to the standards committee. **Jef Cuyt** said that in Belgium private armed guards are specifically excluded (Norway as well). **Koichi Akatsuka** raised the subject of hours or work for the Master, which had also been raised in Melbourne, Japan Administration says that he can be exempted in parties agree. **Hans** replied that if they are taken to the Tripartite Committee and will be told if their decision is in the spirit and intention of the MLC.

## AGENDA ITEM 23 – Approval of Resolutions

Willi Wittig thanked Peter Turner and Kevin Fleming for their assistance in producing the Resolution.

### *Res 1/2014 Port of Refuge*

After discussion adopted

### *Res 2/2014 Criminalization of Shipmasters*

After discussion adopted

### *Res 3/2014 Marine Accident Investigations*

After discussion adopted.

### *Res 4/2014 Domestic Ferry Safety*

After discussion adopted

All four proposed AGA Resolutions were adopted – see Annex 1.

The Drafting Committee were thanked for their excellent work and given a round of applause.

### **Close of 40<sup>th</sup> Annual General Assembly**

The President, Hans Sande, briefly summarised what the speakers had presented to us. He had enjoyed presenting the AGA in Sandefjord and wished everyone a safe journey home.

The Secretary General, John Dickie, on behalf of all present, thanked Hans for the excellent arrangements for this AGA and also for looking after the wives.

Finally the President congratulated the Singapore Maritime Officer's Union (SMOU) on the opening of their new Simulator in Singapore

The President then closed this 40<sup>th</sup> Annual General Assembly.

## ANNEX 1

### General Assembly Resolutions

(Also available in separate publication)

IFSMA RES 1/2014 (40<sup>TH</sup> AGA)

#### Port of Refuge

The 40<sup>th</sup> IFSMA General Assembly held on 05-06 June 2014 in Sandefjord,

Norway **Noted with great concern** the report about the case of the Hong Kong registered chemical tanker MARITIME MAISIE where the MARITIME MAISIE was seeking a safe haven after a collision;

**Noted further** that the MARITIME MAISIE was not allowed to enter either South Korean or Japanese waters for 113 days before Korea finally gave permission to enter the Port of Busan;

**Recalled** IFSMA RES 4/2002 and IFSMA RES 1/2005; **Recalled further** IMO Resolution A.949(23) Guidelines on Places of Refuge for Ships in Need of Assistance;

**Strongly urges** all Coastal States to take into account IMO Resolution A.949(23) and to determine without any further delay places of refuge for ships in need of assistance. ■

IFSMA RES 2/2014 (40<sup>TH</sup> AGA)

#### Criminalization of Shipmasters

The 40<sup>th</sup> IFSMA General Assembly held on 05-06 June 2014 in Sandefjord, Norway

**Noted with greatest** concern the sinking of the South Korean ferry MV SEWOL on 16 April 2014 off Donggeocha Island;

**Noted further with grief** that at least 290 people – mainly children – lost their lives in this tragic marine accident;

**Noted with great concern** that the President of the Republic of Korea, Ms Park Geun-hye, referred to the Master of the ill fated MV SEWOL and his senior officers as murderers only 6 days after the accident; criminalizing the Shipmaster and his crew;

**Insists** that government officials should refrain from premature accusation and penalization;

**Recommends** again that Shipmasters should ensure that they have appropriate independent legal protection. ■

IFSMA RES 3/2014 (40<sup>TH</sup> AGA)

#### Marine Accident Investigations

The 40<sup>th</sup> IFSMA General Assembly held on 05-06 June 2014 in Sandefjord, Norway

**Noted with great concern** the findings of a paper by Nautilus UK on the short-comings of the current system of marine accident investigation;

**Recalled** the provisions of Article 94 of UNCLOS;

**Further recalled** Resolution MSC.255(84) "Casualty Investigation Code";

**Agreed** that changes of the present situation can only be achieved by means of a mandatory IMO instrument;

**Strongly urges** IMO to take action and progress the development and implementation of an effective mandatory instrument to ensure that all marine accidents are investigated properly and independently, and that documentation of accident investigation is made public. ■

IFSMA RES 4/2014 (40<sup>TH</sup> AGA)

## **Domestic Ferry Safety**

**The 40<sup>th</sup> IFSMA General Assembly held on 05-06 June 2014 in Sandefjord, Norway**

**Noted with great interest** the address delivered by the Secretary General of IMO, H.E. Mr. Koji Sekimizu, at the opening of the 93rd session of the Maritime Safety Committee;

**Noted further** that the requirements of the passenger ship safety provisions, as laid down in the SOLAS Convention, be extended into the coastal states' legislation;

**Welcomed** the initiative of the IMO Secretary General;

**Requests** that the IFSMA Executive Council ensures that the IFSMA policy reflects this initiative. ■

## **ANNEX 2**

### **Resources and Transparency in Maritime Accident Investigation**

By Allan Graveson, Nautilus International UK

#### **Introduction**

Society has become accustomed to aviation accidents being thoroughly investigated. Many countries also commit considerable resources to the investigation of accidents on their roads and railways. In merchant shipping, however, the picture is often very different.

Historically, difficulties associated with geographical location and what were regarded as insurmountable difficulties in locating wrecks in deep water have limited the scope of many marine accident investigations.

While there have been many technological impediments, it can be reasonably argued that the unwillingness of the industry and flag states to seek out the root causes of incidents – and to take appropriate action to prevent their recurrence – has been the prevailing constraint on the resources devoted to investigation.

This constraint has been exacerbated by a marine insurance sector which has been structured to spread risk rather than to reduce risk. Furthermore, the recognition of ‘proximate cause’ in English law and the undue weight given to it may also be considered a factor. However, certainty about the cause of loss would potentially reduce litigation and raise knowledge about underlying safety developments, while the prime purpose of an investigation would surely be to prevent similar incidents from taking place in future, to save lives and to protect the marine environment.

Disappointingly, international marine accident investigation is still remarkably inconsistent and the manifest shortcomings in the current system create profound problems – limiting data, restricting early detection of trends and undermining any attempts to develop effective formal safety assessment processes based on the cost-effectiveness of risk control options for changing regulations.

The lack of desire for change demonstrated by many flag states, classification societies, designers, builders and other vested interests inhibits the creation of more effective investigative processes. This paper examines these factors and addresses the measures that are required to deliver change that will ensure adequate investigation and analysis in the best interests of maritime safety.

#### **History**

Historically, the complexity of often remote locations and the limitations of available technology have prevented many shipping casualties from being examined. It has taken many years to arrive at the situation in which the location and exploration of underwater wrecks can be routinely achieved.

Throughout the late 1980s and 1990s, the issue of Voyage Data Recorders (VDRs) was debated by the International Maritime Organisation (IMO) against the background of rapidly increasing marine losses – and notably the significant casualty rate involved bulk carriers.



Many of these were written off as ‘mysterious’ or unexplained losses – such as the UK-flagged OBO Derbyshire in September 1980.

In the late 1990s, Nautilus International – then NUMAST – campaigned in the face of sometimes intense opposition from many parties for the introduction of VDRs to protect maritime professionals from inappropriate criticism and criminalisation following incidents, and to ensure that information could be gathered to help address underlying issues of design, construction, operations and manning.

An IMO Performance Standard was adopted on 27 November 1997, as Resolution A.861(20) which stated that ‘...it would be desirable that ships, in particular passenger ships, be fitted with voyage data recorders (VDRs) to assist in investigations into casualties...’ and invited governments to ‘encourage shipowners and operators of ships entitled to fly their flag to install VDRs on such ships, as soon as possible...’

Despite the obvious advantages, there was considerable opposition throughout the maritime community, and especially from flag states with questionable records. However, ultimately phased introduction – with appropriate amendments to SOLAS – was accepted by the IMO’s maritime safety committee on 6 December 2000, with completion set for 1 July 2010.

VDR technology has been able to assist accident investigators in methodical appraisal and analysis of the causes of incidents which can then be translated into improved regulation covering the design, construction, operation and manning of merchant vessels. Information obtained from VDRs has also reduced the cost and time required to complete investigations – and has also cut the cost of incident-related litigation.

The aviation industry has more than half of century of experience with various forms of ‘black box’ flight data and cockpit voice recorders. The technology has unquestionably improved aviation safety – although its limitations are accepted by the sector. In certain cases, only recovery of the wreckage or survey of the wreck site will yield sufficient information to ensure effective and proportionate regulatory measures to prevent similar incidents from occurring in future.

In the maritime sector, the work to locate and explore the wreck of the Titanic off the coast of Newfoundland, at a depth of around 3,800 m in 1985, and the subsequent project to locate and investigate the wreck of the bulk carrier Derbyshire at a depth of around 4,200m in the South China Sea demonstrate that no vessel loss should be beyond investigation, given the will and appropriate resources.

### **The case for change**

Thorough and independent investigation of marine casualties is essential – not only to determine the cause and circumstances of individual accidents but also to examine whether common patterns exist, and to produce recommendations that seek to prevent similar incidents in future.

Article 94 of the United Nations’ Convention on the Law of the Sea (UNCLOS) states that it is the responsibility of the flag state to institute an ‘inquiry’(investigation) into accidents on the high seas. While the flag state retains responsibility to carry out an investigation – depending on the location of the incident -- into ‘every marine casualty or incident of navigation on the high seas involving a ship flying its flag and causing loss of life or serious

injury to nationals of another State or serious damage to ships of another State or to the marine environment' where it is in the public interest to do so, this responsibility may shift to the coastal state in the case of accidents occurring in territorial or inland waters.

Currently, there is something of a 'get-out clause' in the IMO obligations for flag states to conduct investigations. Under IMO instruments, a flag state is effectively required to institute an investigation into a marine incident of significance only where there is likely to be an amendment to a Code or Convention. Each administration should 'conduct an investigation of any casualty occurring to any of its ships subject to the provisions of the present Convention when it judges that such an investigation may assist in determining what changes in the present Regulations might be desirable'.

Nautilus believes that all cases of serious and very serious casualties should be investigated. However, there is considerable concern within the maritime community about the variation in the quality of marine accident investigation around the world. This has resulted in the development of the IMO Code for the investigation of marine casualties and incidents and the subsequent creation of a working group to suggest solutions for the implementation of a mandatory code.

The European Union has sought to address the lack of uniformity in marine accident investigation by developing a directive providing for a mandatory framework for independent investigation of serious marine casualties involving the 'substantial interests' of member states. However, global uniformity will be achieved not by regulatory solution – in Europe or elsewhere – but by a universally applied Convention through the IMO.

A change is necessary, so that all accidents are properly investigated where there is loss of life and/or loss of a vessel. Such an investigation should be independent of the regulatory authorities, as is already the case in some flag states. This is essential to avoid unwarranted criminalisation of the ship master, officers and other related parties by the flag or coastal state.

At present, when some accident investigations take place they can be of a questionable standard. When posted on the IMO's Global Integrated Shipping Information System (GISIS), external third party access may be restricted by the flag state conducting the investigation and hosting the report. A recent example of this involved the investigation into the livestock carrier Danny FII, which capsized and sank off the coast of Lebanon in December 2009 with the loss of 44 lives – including the master, an IFSMA member. The rudimentary and grossly inadequate report on the investigation into the ship's loss was posted on GISIS, but download was prohibited by the flag state. Panama defended the non-disclosure of the report by reference to national legislation.

There are other cases where accidents are not investigated properly or the results of investigations not disseminated widely. One example of this is the case of the Costa Europa, in which three crew members died when the ship struck a quay in Sharm el-Sheikh, Egypt, in February 2010. The Italian flag state authorities were reported to have refused to release the report of investigation into the incident on the grounds that the findings were 'strictly confidential'. This non-disclosure prevented a potentially valuable opportunity from being taken to highlight the vulnerability of large passenger ships following damage to the hull.

Another example is the case of the bulk carrier Christopher, which sank in December 2001 during a storm off the Azores, with the loss of all 27 crew. In the final message to the

authorities ashore before communications were lost, the ship reported that water was entering the holds, forward sections were flooded by heavy seas and that there was hatch-cover damage. However, the circumstances of the ship's loss generated significant concern – notably in respect of issues associated with corrosion, fatigue cracking and structural strength. But despite extensive discussions on the possibility of an expedition to the wreck, 150nm off the island of Graciosa – including the offer by the International Transport Workers' Federation of financial support for a mission and an agreed contribution of €300,000 from the Cyprus Council of Ministers - an underwater survey of the ship never occurred.

It was interesting to note that the then head of the International Association of Classification Societies, Alan Gavin of Lloyd's Register, stated at the time that cameras should be sent down to survey the wrecks of ships that have sunk in mysterious circumstances as standard practice of maritime investigations. Noting the scale of the costs that would be involved, he suggested that classification societies should table a proposal on the issue to the International Maritime Organisation to gain the necessary support of governments.

For many years it was technologically unfeasible to study wrecks in thousands of metres of water, leading to the public perception that the shipping industry was not unhappy that the causes of such tragedies went unexplained. Advances in subsea technology in recent years driven by offshore and military applications have made such missions feasible, and the evidence gained from the survey of the wreck of the Derbyshire was sufficient to persuade the UK to reopen the official inquiry into its loss and to subsequently deliver important recommendations for the safety of bulk carriers. If such underwater wreck surveys were to become a standard part of maritime casualty investigations, they could produce significant evidence to fill gaps in understanding to help improve the safety of life at sea and the protection of the marine environment.

However, the question of funding full-scale investigations needs to be addressed. It could be undertaken by a flag state – but this would require that flag states should only take vessels onto their registers if they have the capacity to properly investigate losses. As an alternative, investigations should be an essential part of the insurance process – either by way of a compulsory insurance requirement or through an international fund similar to the ITOPF.

Nautilus considers it is essential to ensure that flag states – who have the ultimate responsibility for accident investigation – have the necessary resources, or can guarantee that the necessary resources are made available through insurance, to conduct appropriate accident investigations. Furthermore, transparency should be mandatory for all flag states (or coastal states, where relevant) and investigation reports must be made publicly available. Independent accident investigation should also include representatives of other interested flag states, where appropriate. There have been cases where the obligations of the flag state to properly oversee the operation of ships on its register and the rights of other flag states or of coastal states to exercise oversight have led to tensions.

Nautilus is concerned that in the absence of decisive global action by the IMO, it will be increasingly necessary for regulatory bodies and individual flag states to take independent action to ensure proper investigation and publication of reports.

We therefore seek these changes in the context of the continued international shortcomings in the standards of marine accident investigation and reporting. Analyses of accident and casualty databases have shown extensive evidence of significant under-reporting – by as

much as 50%, according to one study – and this is further compounded by the failure of some flag states to make the results of accident investigations public.

The consequence of such under-reporting and lack of transparency is many missed opportunities to improve maritime safety, reduce shipping losses and to save seafarers' lives. The resulting gaps in knowledge and understanding inhibit awareness of developing trends or emerging causes. It took many years before there was an adequate consensus about the existence of fundamental safety problems affecting this type of ship. The recent case of the containership MOL Comfort, which broke apart and sank in the Indian Ocean in 2013, has raised considerable concerns over such issues as containership design, construction and operating practices. However, these should not be seen in isolation and a better and more coherent system of investigation reporting and analysis would help to ensure that such concerns are viewed in a more holistic way.

The shortcomings of the existing international accident investigation and reporting system also raise questions about the process by which new regulations are produced. The shift to the use of Formal Safety Assessment (FSA) principles to formulate new rules has been embraced by the IMO, but the reliability of this process is jeopardised by the patchy availability of underpinning information. FSA depends upon structured and systematic evaluation of risks and without an adequate depth of data to support decision-making, there is a risk that analysis and assessment may be severely compromised by erroneous or incomplete knowledge. These shortcomings can be particularly acute in the areas of seafarer health and safety.

Whilst the aspiration for shipping to move to a more proactive and holistic means of developing new regulations is sound, the current shortfalls in the scale and depth of accident investigation present a profound challenge to its basic philosophy and threaten to undermine the aims of improved safety and environmental protection.

## **Conclusion**

Lack of effective accident investigation is indicative of an industry and regulatory process that has little regard for safety. The process is not so much corrupt as bankrupt. There is insufficient financial incentive to conduct proper investigations and bring about change to the quality of design, construction and operation of ships. This is especially so when seafarers - usually the master and/or officers - can so easily be blamed for the immediate cause of the accident as a consequence of errors that humans are prone to make.

Meanwhile those who profit from the industry's disregard for safety continue to exploit an ineffective accident investigation process and bankrupt regulatory system. There is a need for change – now – and not when the level of loss becomes so unacceptable that public and political pressure can no longer be ignored.

## ANNEX 3

### **Realities of Risk**

By Michael Grey, Honorary Member

What do we mean by “risk”? My dictionary tells me that it is “to expose to hazard”, “the chance of loss or injury”, but also to “venture”. We live today in a risk averse society, where calumny awaits anyone who has strayed outside without his hard hat and something heavy has fallen on him. My daughter in law, a school teacher by the seaside has to undertake a formal risk assessment when she takes her class to the beach to look in rock pools, even though it is the safest beach you could imagine. Some years ago I had to provide a 10 page written risk assessment to the headmistress of a school, whose 16 year old pupil I was allowing in our office for a week’s work experience. My pension provider is required to formally discover the level of risk I am prepared to take with my investments, every time we meet. Fear of hazard is just part of the climate our times and we cannot be remotely surprised when we see such attitudes exported afloat

You might suggest that we have been far too careless with lives and limbs in the past and you are probably right. I am of a generation who never wore any personal protective clothing, didn’t bother with lifejackets when in boats, or lifelines when working aloft. It is not something I am particularly proud of – it was just what we did. You might say we didn’t know any better or understood the error of our ways.

But at the same time we did understand something about risk mitigation in that we looked before we leaped, we kept one hand for the ship and one for ourselves and we understood the meaning of caution and prudence. We knew not to stand in a bight, sit on the rail, or enter an enclosed space that might not be gas free. We didn’t do silly things, because we had been trained not to, not because it was prohibited in some gigantic rule book or by regulations. We knew that ships could be hazardous places and that an understanding of this fact was drummed into us from day one of an apprenticeship.

You could perhaps argue that in our absolute horror of any sort of risk, we have gone from one extreme to the other and we have attempted to make safety management an arm of the bureaucracy, rather than something founded upon common sense and seamanship. Funnily enough, in much of this enhanced safety regime we today insist upon, I wouldn’t say we are wrong, if you look at the reduction in casualties and personal accidents, although paradoxically the cost of the both has soared. There were fewer than one hundred total losses last year and that’s something we should be rather proud of, rather than constantly beating ourselves up over some sort of decline in safety. Surely it says something about the professionalism of those at sea today. But what these accidents cost is something else, and I will return to it later.

There is another way of looking at risk with its alternative and more positive definition of a “venture” and we ought to remind ourselves that an “adventure” was the ancient and accurate term for a sea voyage. The merchants of Phoenicia and Athens, who financed voyages 500 years before Christ, knew all about the risky nature of their investment and demanded a massive return on their investment in the event that their adventure was concluded profitably and their ship came safely home.

Sadly we have given up using the word “adventure” to describe a sea voyage, which leads many people to believe that the risk which once accompanied such a venture has been completely eliminated, and is quite unacceptable anyway. This belief, which has been firmly ingrained in 21<sup>st</sup> century society, goes alongside the assumption that if there is an accident in a supposedly risk-free operation which goes wrong, this is quite intolerable, somebody must be to blame and needs to be punished, preferably by criminal sanctions.

But everyone here knows that risk is an accompaniment to every sea voyage and that every floating body, even lying securely alongside the quay, is to a greater or lesser extent at risk. It can never entirely be eliminated, in a dynamic, hostile and sometimes a very violent environment, where the conduct of the ship is subject to human experience and judgement. From the abortive first voyage of the “unsinkable” *Titanic*, to the interrupted passage of the 8000teu *MOL Comfort*, man has constantly been reminded of both the element of the unexpected one can meet at sea and his inability to eliminate the frightfulness of what failure – for whatever reason – may throw at him.

But we constantly try to look on the bright side, and to make light of risk in our faith of technology, whether it is the confidence we gain from the sheer size of ships to the precision of their performance, from their enormously powerful machinery to the sophistication of their navigation equipment. We publish schedules that pay no heed whatsoever to the vagaries of the weather, the fact that a ship can get held up by head winds and seas, or really ought to slow in fog. I used to make cruel jokes about shipbrokers – who believe that a 15 knot ship steams 360 miles a day and runs on rails like a tram. It is no longer very funny, because everyone who has anything to do with that 15 knot ship (apart from the people who sail in her) believes the same and will see the owner in court if their expectation is not realised.

The really curious thing I have seen in my working life (which I better tell you began in 1956) is that while our fear of risk and the need for its mitigation has in many respects grown tremendously, we are asking people who operate ships to do more and more risky things with them. I might suggest that this is out of their ignorance, you might more generously conclude that it is just the pressure people are under to deliver.

You know exactly what I mean by this. Nobody, fifty years ago, would have even dreamed to ask the master of a big ship to bring her into port with 18 inches of water under the keel. If somebody had asked the master of a 40,000ton crude carrier to bring his ship into port on the top of the tide, up a twenty mile estuary, to sit in a hole which you hope somebody had dredged off a refinery jetty, the master would have probably demanded this person was certified as insane. And yet within just a few years we were asking people to do exactly this with fully laden VLCCs. We today expect masters of colossal cruise ships, with thousands of passengers embarked, to get as close to the shore to afford their passengers a bit of visual excitement, in a calculated risk that leaves very little leeway if something goes wrong.

Most masters I sailed with knew that it was a whole lot more hazardous to enter and leave port during the hours of darkness and would time their arrival at the pilot for first light. It was regarded as sensible risk mitigation, even if we didn't call it that. Yet these days if a master decided through his natural prudence that it was too risky, he would probably be sacked at the first opportunity. So somebody between then and now has decided that even though risk-taking is intolerable and hazards must be eliminated by absolute precision in navigation, and more and more regulation, some risks which are deemed commercially acceptable must be ..er accepted.

Somebody has decided that it is perfectly safe to operate big, complicated ships, with just a fraction of the crew that was deemed necessary in far smaller ships a long time ago. I would like to think that a whole lot of professionals sat around a table and conducted a full risk assessment of sailing without a radio officer on a ship packed full of electronics, giving all the Purser/Chief Steward's work to the Master, or whether it was hazardous to ask the Old Man to keep a watch and watch with the mate on a ship operating a tight schedule in highly congested waters. Do you think that any rational assessment of the possible increased hazard actually took place? If there was anything resembling a cost benefit analysis undertaken, I would suggest that the conversation revolved entirely around money and the savings per annum which could be realised by the elimination of each post aboard ship.

In our risk-averse society, we don't seem to have any compunction about pushing ship designs to their very limit, cheerfully commissioning naval architects to always build the biggest ship that can possibly fit into whatever situation we want – the “max” – Panamax, Supramax, Kamsarmax etc. A few years ago some bright spark suggested that the biggest containership that could be squeezed through the Malacca Straits was 18,000teu – now we are talking about 22,000teu and 450m in length!

But we don't want to build ships that have any reserve power in them, returning, with the “eco-ships” of today, to the underpowered “low-powered steamer” of the interwar years that was designed for fuel economy as the absolute priority, and would be driven onto lee shore by storms in their dozens. Now we are being driven by the new absolute priority of minimising emissions, which largely means restricting power. I have a very vivid memory of Captain Nick Cooper, former NI President, telling a group of engine manufacturers a few years ago about his experience trying to nurse an underpowered capesize through an Atlantic storm, when he was driven astern some 70 miles, almost overnight. It was just as well, he reflected, that he had plenty of sea room and that the coast was not 69 miles astern when the storm began.

Certain types of ships have always had inherent vulnerabilities, but we don't help ourselves, I maintain, when we refuse to look at the realities of these. We don't really know what might be in containers, or how much they weigh, but it doesn't stop the designers piling more and more on deck, or shutting their eyes about what will happen when the boxes manifested as “household goods” turns out to be fireworks and explodes, taking half of the ship with it. We don't really know, apart from the information given us by computer modelling, how we will evacuate 5000 people, half of them elderly and disabled, from a very large cruise ship on fire. We are prepared to take the chance that it won't happen, playing what you might describe as a percentage game with people's lives. Then we are constantly surprised by untoward events, that nobody seems to have even considered, like blackouts in embarrassing places, balconies catching fire, containers being found to be three times the manifested weight, which some shipmaster finds that he has to deal with.

Masters and pilots point to the way in which they are expected to squeeze bigger and bigger ship envelopes into ports where there is only just room to swing, or only just enough water under the keel, with some reptile in the office making disapproving noises because an extra tug was requested. Where is the understanding of “risk” in this brilliant decision making – We are risk averse, Captain, they will say, but it is you who will be taking the risks with your job and reputation, possibly even your liberty, should it all end up pear-shaped.

So let me repeat – we are more risk-averse than we ever have been - witness the thickness of our safety manuals – but we are prepared to take bigger risks than ever before.

It is also fair to say that the expectations of those people directing the conduct of ships from ashore are becoming ever more realistic. Think of the charterers, people down the logistics chain, the terminal operators, all of whom have been sold the idea of a perfect out-turn, precise delivery, timely arrival, an obliging master who will accede to any daft change in the stowage or loading plan.

They will create holy hell if their expectations are not met, demanding the head of the master who hasn't arrived on time, or has refused to let 160,000 tons of ore to be loaded in a single pass, or who has refused some late cargo. There are, it seems, plenty of people around who will second-guess the master, and over-rule him but of course they will shrink from assuming any of the master's responsibilities for the conduct of his ship, which remains absolute and unchanging.

I think it is a legitimate complaint that masters have too few champions in the offices of their employers who will support them in their operational decision-making. Once there was probably a powerful superintendent or marine adviser, who would intervene if he saw the management proposing silly or risky things with ships. Now the chartering department call the shots, the ship managers are told what the score is and they pass it on to the ships. Not all companies are like this – there are those which will back their masters and their decisions to the hilt, but there are many who won't.

None of this is helped by casual employment, agency staff and contracts lasting no longer than the present voyage. But that is another matter I'm not going to go into, even though it does have a direct relationship to risk and current attitudes to this. Neither it is helped by our learned friends invariably, it seems taking the charterers' part in their judgements over operational decisions made in good faith by experienced masters, shown as wrong, with the perfect wisdom of hindsight (aided by hindcasts) when the voyage took longer than expected or the weather was not that which was anticipated. "I have been at sea for forty years, half of them in command" commented a shipmaster a couple of years ago, "but there is always some shore side expert who knows better than me how to run a ship!" It is a very understandable complaint and a sentiment that will be well understood in this company. Who knows, its author may be in this very room as I speak!

So to reprise, we are risk averse, intolerant of accident, we know better than the master and we expect him to do riskier things with his ship, we have demoted experience, we have forgotten about prudence, we accept that some designs are more vulnerable than others, but society also thinks it perfectly fair that those who make errors of judgement, or who might be overtaken by events should be subject to criminal sanctions.

People have always been overtaken by events, the untoward has always happened at sea and always will, but shipmasters have always been required to make difficult decisions and they deserve a bit more understanding if things go wrong, not hauled into court to stand in the dock in front of a judge who has never made an operational decision in his life. I'm sure lots of people here read the results of court cases and casualty investigations and ask themselves "how would I have done anything different?" And many of you will rage against the absolute unfairness of the judgement and the lack of understanding of the realities of what that master was facing.

The realities of risk ought to require everyone concerned with the operation of ships – not just the master - to consider what the consequences of their decisions might be if it all goes badly wrong. We can rationalise with our statistics that comfort us with the rarity of



accidents, and look approval at those triangles which weigh the frequency of accident with their severity. But we also need to think about lives lost and the colossal insured values and attendant costs.

There may be fewer than 100 serious losses racked up in 2013, but these will include the costs of the *Costa Concordia* - \$2bn and still counting, the \$1bn of loss conservatively estimated after the *MOL Comfort* took her full load to the bottom of the Indian Ocean, the \$600m costs of removing the *Rena* from the NZ coast. Look at the potential for even the world's biggest companies being wiped out by some decision-making subsequently judged to be in error. The Macondo spill – which could cost BP \$56bn is the granddaddy of them all – so far, but gives a lot of encouragement to the lawyers!

You might think that all of this is a reason to return to some old-fashioned values in which prudence, seamanship, expertise and professionalism might be accorded rather more respect than they are today. Maybe we will only get there if instead of thinking we can reduce our exposure to hazard by endless regulation and persecuting those who make mistakes, we acknowledge some of these realities.