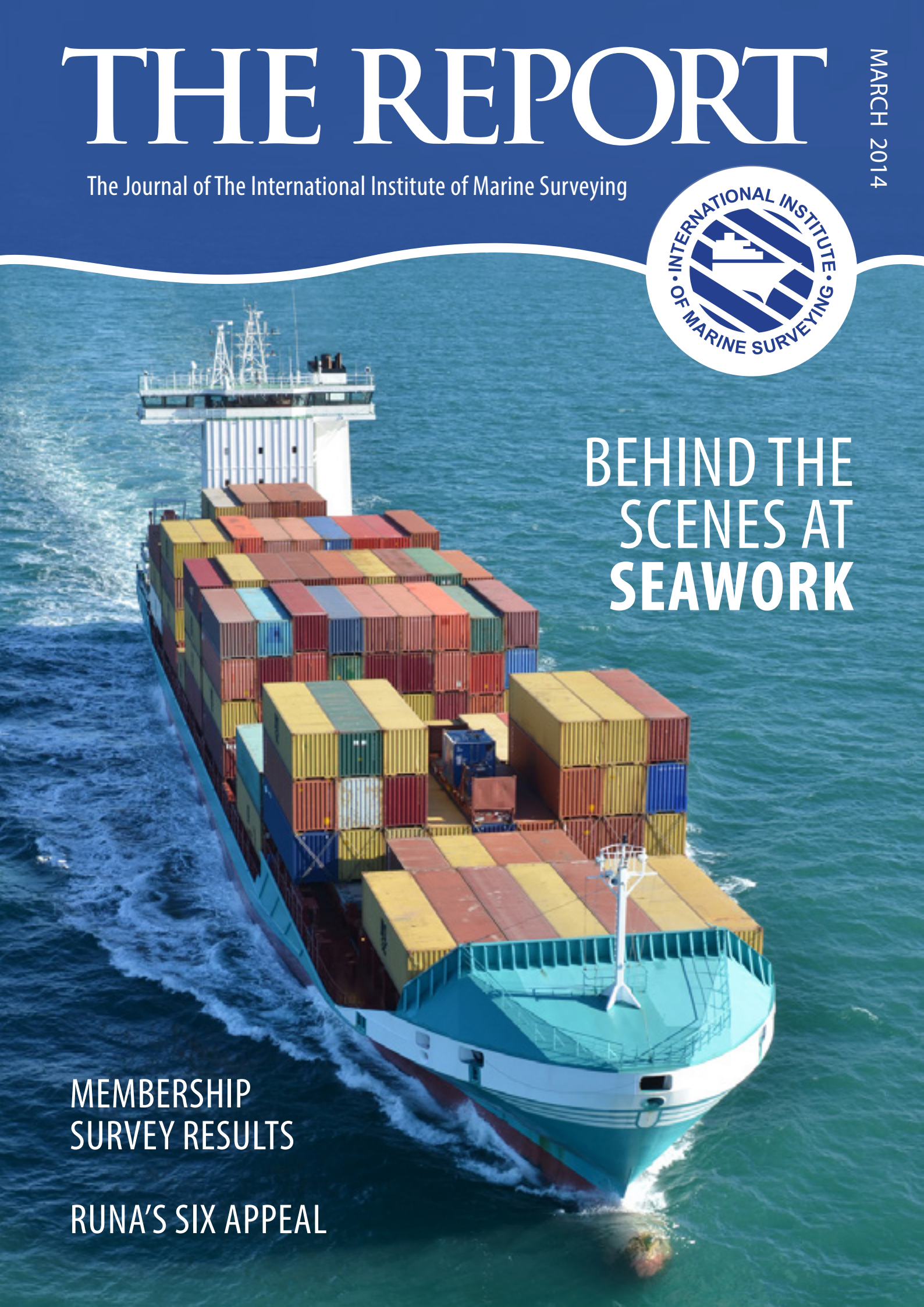
THE REPORT

The Journal of The International Institute of Marine Surveying

MARCH 2014



BEHIND THE SCENES AT **SEAWORK**

MEMBERSHIP SURVEY RESULTS

RUNA'S SIX APPEAL

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INTERNATIONAL INSTITUTE OF MARINE SURVEYING

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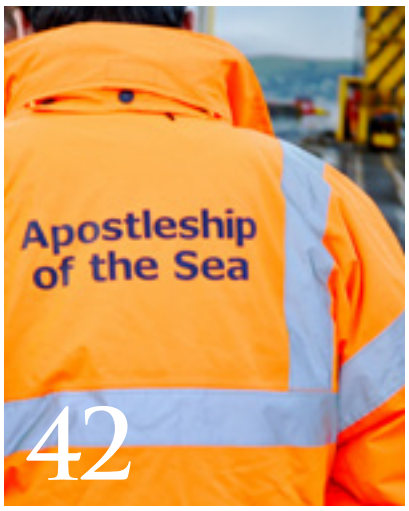
Contents



The International Institute of Marine Surveying
www.iims.org.uk
Murrills House, 48 East Street, Portchester, Hampshire, PO16 9XS, UK

Editor's Letter

Dear IIMS Member

It gives me great pleasure to write the Editor's letter in what is the first IIMS Report magazine I have overseen. It has been great fun to develop the contacts and content for this issue and I hope you will enjoy what you read.

I have taken this opportunity to have the Report redesigned with the help of Craig Williams at HQ. It is now more akin to a modern magazine and incorporates some interesting design features too. You are probably most likely to be reading this edition in a magazine e-reader format. The reason for delivering the magazine in this format is simple. It is more reader friendly than a PDF format. Using the online tools provided, you can turn the pages from the bottom corners and zoom in and out, thus making reading certain parts of an article easier. Furthermore, the web and email addresses are all clickable, which makes it easy to move seamlessly, if you wish, to view sites or send emails.

The content is the usual mix of stories and news from IIMS members and non-members alike. However, there is now a selection of general marine news that may interest you.

I would particularly like to draw your attention to the announcement of the speaker programme for the IIMS Conference and AGM (pages 13-15). You are encouraged to confirm your attendance at the Conference at your earliest convenience. To reserve your place at the Conference and AGM simply follow the on page instructions to access the booking form in Word format.

Also of interest to members are likely to be the results of the IIMS membership survey that was conducted in late January by HQ. These can be found on pages 16 and 17.

One of the key feature articles in this issue is a look 'Behind the Scenes at Seawork' (pages 18-21). I commissioned an article from the organisers to find out what goes on behind the scenes. This successful UK based commercial and work boat show is complex to put together and organise. So, I went in search of some answers from Lyndsey Sherriff, Head of Events at Mercator Media Ltd, who organises the event.

The other article that makes fascinating reading (pages 26-33) is the one entitled 'Runa's Six Appeal', no matter if you are a big ship or small craft surveyor, breathing new life into a timeless classic vessel from the early 1900's is a labour of love and an expensive one too! It recounts the tale of the former Louis Vuitton CEO, Yves Carcelle, to find and restore all seven Runa vessels.

And finally, for those of you seeking your 'technical fill', the articles on pages 34-37 ('What's Eating You') and page 45 ('Calculating Wire Rope Rigging Replacement Intervals') will surely not disappoint you!

Best wishes

Mike Schwarz
Chief Executive Officer
International Institute of Marine Surveying

The President's Column

It has given me immense satisfaction that the Members in Pakistan have fulfilled their commitment towards forming the IIMS-Pakistan Branch, which now stands officially registered as a society. My heartiest Congratulations to Capt. Khalil Khan, RD-Pakistan and, the Executive Committee and Members of Pakistan. We now eagerly looks forward to other IIMS Branches mushrooming in our IIMS World. My sincere request to members in areas where they are in reasonable numbers to endeavour their utmost to achieve the IIMS Branch status soon.

Sincere efforts are underway for the Biennial IIMS Conference in Southampton (9th & 10th June 2014) and we would definitely like to see a large IIMS members' delegation attending this prestigious conference of ours. Let us all make the effort and time to be there. The Conference is followed by the IIMS Conference delegation attending the SeaWorks Exhibition the next day i.e. 11th June 2014. This will be particularly of interest to Small Boats & Yachts surveyors and all of us who just love boats & yachts. Sounds interesting!! The 3 days Conference & Exhibition surely draws a lot of enthusiasm, excitement and a definite value for money attendance.

Following the last Board Meeting of 20th Jan 2014, it is encouraging to note that our Institute's membership is on the rise. During my tenure I am endeavoring my utmost to promote the IIMS membership numbers, which definitely needs to be pushed up further if we want our Institute to be a dominating force of international repute. We need to show NUMBERS and numbers themselves speak volumes. May I request all members to seriously and sincerely promote the membership in your individual areas. India, for one, is always showing a continuous inflow of members and I thank Mr. Milind Tambe, RD-India and the IIMS members in India for their continual support in encouraging the membership of our Institute.

We are also looking forward to encourage generating more interactivity between members in their individual areas/countries. It would be heartening to know that members get-togethers have taken place in areas/countries other than where the IIMS Branches are. Areas like Singapore, Indonesia and, Central, West and South Africa have quite a few IIMS members around to encourage such meetings on their own to take their areas/ countries forward. Let's see some interactive movement herein too !!!

I am pleased to know that IIMS-India has been conducting specifically structure Risk Management Courses for various giants in the shipping and maritime industry like ONGC, Reliance and INSA. They have also successful conducted a Public Seminar in the 3rd week of January 2014 on an H&M and P&I Related course. Self was one of the fortunate attendees for this latter seminar and am glad I did not miss it. Mr. A.W.J. (Tony) Fernandez, the facilitator, also the Chairman of IIMS-India Branch, was at his very best (sans the mike, as usual). My compliments to the IIMS-India Branch for reaching out to the shipping & maritime industry and them accepting IIMS as an educational and training Institute.

Once again, thank you all for your steadfast support for our Institute and may the membership increase steadily.

Warm regards to All and families too.

Satish

Capt. Satish Anand
President
International Institute of Marine Surveying

Marine News

THE COMMERCIAL MARINE WORLD ON SHOW AT SEAWORK SOUTHAMPTON

From countries across the globe, including Australia, Canada, the US and Europe, over 500 exhibitors will be at Seawork International, the commercial marine exhibition and conference, opening on Tuesday 10 June for its annual three day run in the ABP Port of Southampton, UK.

Over 7,000 visitors are expected to attend Seawork, which will feature products and services relevant to every sector of the commercial marine industry, including offshore wind farm construction and maintenance, safety and rescue, civil engineering, maritime security and a host of other applications and technologies.

Featuring a number of special interest zones, including 60 vessels afloat, the Innovations Showcase, the Ship Repair & Ship Building Pavilion, the Renewable Energy Pavilion and DiveWork, Seawork's unique location and layout enables easy navigation of the three halls, Quayside and pontoons.

For many commercial marine professionals, the 72 hours of Seawork, which include the presentation of the prestigious Innovation Awards, is a 'must-do' event in the diary. With so much of the industry concentrated in one place, it is established as an unmissable opportunity to see, compare, contrast, try and buy and also an excellent place to size up the competition and identify opportunities for new product development.

"This year, the extended exhibition will feature well over 500 exhibitors, including up to 60 vessels on the specially-built pontoons," says Andrew Webster, Managing Director of organisers Mercator Media. "The growing contingent of international exhibitors and visitors makes participation in Seawork a sound business decision, saving time and money travelling. Being at Seawork is a time and cost efficient way to update and expand commercial networks across the world."

Pre-registration to visit is now open online.
For more information:
www.seawork.com

BRISBANE CONTAINER TERMINALS OFFICIALLY OPENED

According to Hutchison Ports Holdings (HPH), the official opening of its Brisbane Container Terminals (BCT) in late January marks a seismic shift on Australia's waterfront.

Dr John Meredith, HPH Deputy Chairman, said he saw BCT as a significant player in Australia's developing trade and the HPH network that spans 52 countries.

"We intend to be here for the long haul and we intend to make a difference," he said.

BCT Chief Executive, Dr Stephen Gumley, said that the new terminal's strategic significance could not be underestimated.

"Brisbane Container Terminals is the first terminal operated by a third stevedore to service Australia's important east coast container trade. This is a dramatic and positive change on the waterfront. Until now this market was the sole province of two companies. Now it is one in which three companies vie for shipping line business. This has to be good for shipping lines and their customers with greater value and better service."

Dr Gumley said, "We are committed to bringing the latest in stevedoring operations to Australia. BCT is the first terminal in Australia to introduce the Automated Stacking Crane technology."
For more information:
www.hutchisonports.com.au

LONDON INTERNATIONAL SHIPPING WEEK CONFIRMS DATES FOR 2015

Following on from the inaugural event, which the organisers called a great success, the date for the next London International Shipping Week has been announced. London International Shipping Week 2015 is set to take place from 7 to 11 September 2015.

Sean Moloney, Director of London International Shipping Week organiser Shipping Innovation, said: "We are delighted to announce that London International Shipping Week will again take place. Following the success of this year's inaugural event we consulted widely throughout the UK and international maritime sectors and are pleased that the decision to run the event in two years' time has the total support of the shipping industry and government."

The first London International Shipping Week last year attracted thousands of delegates

to the city and gave them the opportunity to attend more than 70 maritime events, including a high-level government reception at Lancaster House, a Downing Street summit, conferences and a Gala dinner.

Speaking after last year's London International Shipping Week, UK Shipping Minister Stephen Hammond said: "Very simply, it was an outstanding success, creating a buzz well beyond expectations. I am sure this will resonate for some time to come."

For more information: **www.londoninternationalshippingweek.com**

FOLLOW UP CONTRACT FOR THE MOST POWERFUL HEAVY-LIFT JACK-UP VESSEL 'INNOVATION'

After the successful operation of INNOVATION at the project Global Tech I in the North Sea, the most powerful heavy-lift jack-up vessel has been continuing her work for a new project in the North Sea since January 2014. The shareholder GeoSea, holding a 50% stake of the shipping company HGO InfraSea Solutions, has secured a contract from the Danish company DONG Energy to install the English offshore wind farm 'Westermost Rough'.

The contract comprises the installation of 35 Monopiles and Transition Pieces for 6MW Siemens wind turbines. This is the first commercial project for the new 6MW turbines by Siemens.

CSL COMBINES FORCES WITH RISC INSURANCE SERVICES LTD

It has been announced that CSL is combining forces with RISC Insurance Services Ltd to provide an integrated global investigation service.

CSL and RISC are pleased to announce the launch of an integrated investigation service aimed at delivering specialist investigative survey services for global cargo and specie insurers. With crime and fraud – and associated criminal activity throughout the transit chain - continuing to grow on a global scale, the need for specialist, experience-based investigative services has escalated across all major trading regions.

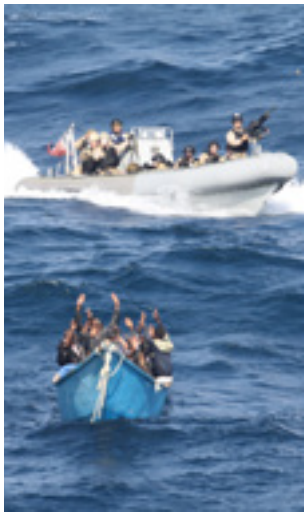
The newly created service will bring together CSL's global market access and product delivery channels with RISC's newly enhanced specialist investigation team which has recently expanded to provide additional support to grow the launched service.

The RISC investigation team, who are all ex British Police officers, will work alongside the CSL Global network in delivering in depth claims and risk control surveys and consultancy services.

By creating this collaborative service capability, CSL and RISC are supporting and building a stronger combined resource team with a diversified range of skill sets and experience. Additional features of the new service will include the ability to share and capture knowledge and experience of crime related cases across the wider CSL Group operations, and also the promotion of greater awareness and cross training between offices.

Through the course of 2014, the services offered by CSL and RISC investigations will be further enhanced by the integration of additional specialist resources in the US, Canada and Brazil.

For more information: **www.cslglobal.com**



SEA PIRACY REACHES LOWEST LEVEL FOR SIX YEARS

According to International Chamber of Commerce (ICC) International Maritime Bureau (IMB), sea piracy has reached its lowest level for six years. In 2013 there were 264 recorded worldwide attacks. This represents a 40% drop since Somali piracy peaked in 2011. Last year 15 incidents were reported off Somalia, down from 75 in 2012 and 237 in 2011.

More than 300 people were taken hostage at sea last year says IMB's annual global piracy report and 21 were injured, nearly all with guns or knives. The report goes on to state that 12 vessels were hijacked, 202 were boarded, 22 were fired upon and a further 28 reported attempted attacks. In particular, Nigerian pirates were very violent, killing one crew member and kidnapping a further 36 people to hold onshore for ransom.

Pottengal Mukundan, Director of IMB, said, "The single biggest reason for the drop in worldwide piracy is the decrease in

Somali piracy off the coast of East Africa."

IMB says Somali pirates have been deterred by a combination of factors, including the key role of international navies, the hardening of vessels, the use of private armed security teams, and the stabilizing influence of Somalia's central government.

"It is imperative to continue combined international efforts to tackle Somali piracy. Any complacency at this stage could re-kindle pirate activity," added Captain Mukundan.

Meanwhile, West African piracy made up 19% of attacks worldwide last year. Nigerian pirates and armed robbers accounted for 31 of the region's 51 attacks, taking 49 people hostage and kidnapping 36, more than in any year since 2008.

In Indonesian anchorages and waters, IMB reports a high number of "low-level opportunistic thefts, not to be compared with the more serious incidents off Africa". However, these accounted for more than 50% of all vessels boarded in 2013, and armed robbery increased for a fourth consecutive year. Attacks in India and Bangladesh are also described as "low-level and opportunistic". The incidents off India have increased year on year since 2010, reaching 14 in 2013, while IMB says active patrolling by the Bangladesh Coast Guard has kept the number of incidents off Chittagong in Bangladesh at around 12 for the last few years.

FAIRLINE SEEKS TO EXPAND ITS WORKFORCE

As a sign of the improving conditions of the UK economy, Fairline, the luxury UK motor yacht builder based in Northamptonshire, UK, is ready to hire 30 plus new workers at its sites in Oundle and Corby. This initiative will provide a welcome boost to jobs in this rural part of east Northants.

Due to what Fairline has called a 'significant uptake in orders' driven by its new 15m range – the Squadron 48, Targa 48 Open and the recently launched Targa 48 Gran Turismo, the company expects to hire up to 38 workers.

Fairline said that a constant stream of visitors to their stand at the 2014 London Boat Show in January saw the continuation of the upward sales trend. Sales have exceeded the previous year and strong forward order books now extend into late 2014.

Fairline Chief Executive, Kevin Gaskell, said "Sales were excellent at the show showing a strong growth over last year and our impressive stand was busy with visitors throughout the show. As a result of this excellent news, we are delighted to be recruiting for roles across the factory and have been able to approach previous employees. We are all very excited about what the future holds for Fairline."

For more information:
www.fairline.com

MARIETTE & THE HERRESHOFF SCHOONERS

This limited edition 536 page book charts the history of this famous schooner and the only fifteen other schooners designed by the "Wizard of Bristol".

Many passionate writers and personalities have collaborated with Jacques Taglang, the author. Maynard Bray has written the preface; Louis Boudreau, John Lammerts van Bueren, Thomas Eaton, Llewellyn Howland III, Luigi Lang, Claas van der Linde, Erik Pascoli and Charlie Wroe have made important contributions to the book too. The reader will discover the secrets of this wonderful yacht, a vessel designed by the celebrated Nathanael Greene Herreshoff, arguably the most brilliant and inventive naval architect of all time. Six consecutive victories in the America's Cup from 1893 to 1920 underline the outstanding talent of this larger than life character.

Mariette & the Herreshoff Schooners is beautifully illustrated with photography by Nigel Pert. In a separate folder that accompanies the book readers will also find large scale drawings of Mariette by François Chevalier, together with thirty five Nathaniel Greene Herreshoff construction drawings and sail plans, never before published! Mariette & the Herreshoff Schooners is available in English, French and Italian, but as the editions are limited, there are only 1,000 copies in each language available.

For more information or to purchase a copy please email Nigel Pert at:
contact@nigelpert.com

Members' News

IIMS India Branch Active

Milind Tambe reports that IIMS India has been very active in recent months. As he says, 'necessity is the mother of invention'. As that adage goes it was the necessity to be self sufficient that made the IIMS India Branch start its initiatives to spread relevant industry information and knowledge through its Risk Identification and Management seminars.

The IIMS India Branch, led by its Chairman Mr AWJ (Tony) Fernandez, designed and delivered seminars on Managing Risks for Ship Owners through H&M and PI covers. The entire idea was conceptualised by Tony, ably executed by Ms Asha Shetty, the marketing spearhead for the IIMS India Branch.

The first of its kind to be conducted in India by the Institute, the seminar was a customised programme for the ONGC employees attended by 30 delegates. The second seminar was conducted for members of the Indian National Ship Owners Association (INSA) headquartered in Mumbai. The seminar was presented on the 15 January 2014. The seminar was well attended by the representatives of the Indian Ship Owners' offices.

The seminar was very well received with a very positive feedback from the participants.

It was requested by the participants to hold more such Risk Management seminars, which the delegates thought would benefit the Industry.

Following on from the success of the first two seminars, another one was conducted for Reliance Industries (a Petrochem giant in India) at their Jamnagar Refinery premises on 17 January 2014. This seminar was more of an informal Question and Answer session moderated by Mr Tony Fernandez. This seminar also received a very good response with a demand to have more such sessions in the future conducted for Reliance. Plans are now afoot with their training directors to see how the Institute could be of assistance to them.

Commenting on the seminar, Mr Ramamurthy of Reliance Industries, said, "I thank you and Ms Asha for your visit to our office for the seminar at Reliance Jamnagar. The seminar was very well appreciated by the participants and all of them felt that they benefited immensely. Once again I thank you for the efforts taken by you to deliver such an excellent and highly informative seminar to our team."

Taking a cue from the three successful seminars, a Public Seminar was organised by the Branch at Mumbai on the 23 January 2014

at Hotel Mirador. This was well attended by 24 participants from the Ship Owning and Underwriting industries.

The Branch now has plans to conduct a seminar on 'Recent Developments in P&I Insurance in India' and feelers are now being sent to the industry to see how this could be delivered (via a public seminar or customised in-house sessions).

Said Milind Tambe, "I take this opportunity to thank Mr Tony Fernandez and Ms Asha Shetty for the tireless efforts put in by both of them in generating some revenue for the Branch. I am positive that as a team, we as the Indian Branch, would be able to make some good headway here to become self sufficient in managing the activities of the Institute in India (considering the vast geographical expanse that we have to cater for)."

SCOTTISH SCWG A GREAT SUCCESS

The IIMS held their annual Scottish Small Craft Working Group meeting and seminar in November 2013 at Silvers Marine, Rosneath.

Despite being known as the Scottish SCWG, out of the 25 marine surveyors who attend, many are from Ireland and the north of England.

Day one was spent updating skills and knowledge on certifying authority issues with dinner taken in a local Helensburgh restaurant nearby.
Day two was a more hands on proactive day. For this occasion, the IIMS had arranged to have well known Clipper 60 Clyde Challenger visit Silvers. The surveyors went aboard the yacht to learn about its history and to get a better understanding of the skills required to skipper a big boat. The IIMS also welcomed Chris Owen of sail Trim Coach, who discussed sail making, design and trim.

IIMS 2014 CONFERENCE UPDATE

The IIMS Conference 2014 sponsored by Henderson International and Constellation Marine Services is taking place on Monday 9 and Tuesday 10 June 2014. The venue is the splendid Hilton Hotel at Chilworth not far from Southampton city centre. The IIMS formal Conference Dinner is at the hotel on the evening of Monday 9 June.

The dates of the IIMS Conference have been chosen deliberately so that delegates can go to the important Seawork expo, which is taking place on the Wednesday and Thursday immediately afterwards, just ten minutes from the hotel by car in Southampton Docks.

Key note speakers include Mark Patterson from Lloyds Agency and with Tuesday's to be confirmed.

If you have not yet received details of the Conference, which were sent out by email recently, please contact head Office immediately by email at: info@iims.org.uk or be telephone on +44 (0) 23 9238 5223.

See pages 13 – 15 inclusive in this magazine for the full agenda.

UK SMALL CRAFT WORKING GROUP (SCWG) MEETING

On Friday 28 February, 27 IIMS members met at one of the regular UK Small Craft Working Group training days and meetings at Portchester Sailing Club close to the IIMS head office.

The day consisted of an interesting and informative lecture by Steve Huckvale of Marine Systems and Solutions on boat electrical systems.

Those of us like myself whose knowledge of electrical systems is manifestly inadequate, I am sure benefited greatly by Steve's matter of fact presentation avoiding much of the confusing jargon, which can be encountered in electrical problems. For example, I thought that a Busbar was some technical description of a piece of electrical apparatus. Not so. Steve explained that the term originated with the old trams and their electrical propulsion systems. Hence the word "Bus". How un-technical is that!

Steve had prepared for us a replica of a boat's electrical distribution system with a number of wired up electrical circuits.

Initially we were provided with simple explanations of the basics such as voltage, current, resistance and the application of Ohms Law as well as the differences between parallel and series circuits. Steve also gave us a practical demonstration on the use of Multi meters,

which I consider to be important in the surveying environment.

The day continued with detailed explanations of the different types of batteries and their most advantageous uses. Again a number of myths were disposed of such as the relative resistance of thicker or thinner wire. He also explained the effect of resistors in general. Steve demonstrated the effect of voltage drop in a number of scenarios, for example dealing with the merits of LED lighting over halogen and in particular the sensitivity of refrigerators to voltage drop.

Throughout the presentation Steve answered questions from the floor in a practical way, which added to the overall expansion of knowledge of the audience and his delivery was such that we all benefited and increased our understanding of what can be a very complicated subject.

Thanks are due to John Excell, Elliott Berry and Carol Allen for their organisation of the event. Following the lecture there was a meeting of the UK Small Craft Working Group chaired by John Excell and with his blandishments ringing in our ears we departed having had a most interesting and informative day.

by Bill Caselton

Editor's Note: *The next meeting of the UK Small Craft Working Group will be on 8 May 2014 and will be held at Grafham Water Sailing club near Cambridge. The subjects to be covered will be 'Behaviour of Metals in the Marine Environment', practical NDT testing by Tritex Instruments and knowledge discussions by senior members. Full details will be posted shortly on the IIMS website.*

IIMS PAKISTAN BRANCH OFFICIALLY LAUNCHED

IIMS Pakistan completed its 30 Members required for a Branch to be formed in June 2013. At the IIMS AGM in Southampton, UK on 26 June 2013 the Board of Directors voted in favour of the formation of the IIMS Pakistan Branch, the fifth Branch of the IIMS UK.

The IIMS Pakistan Branch was officially announced at the recently held Conference in Dubai, UAE on 28 November 2013. At that event an IIMS Plaque was handed over to Capt. Khalil U Khan by the President IIMS UK Capt. Satish P Anand and the former CEO of the IIMS UK, Mr John Lawrence.

The IIMS Pakistan Branch formally held its inaugural session at the National Sailing Centre, Karachi on 4 January 2014 to firstly share the views with the members and surveying fraternity and secondly to hold Elections of the Office Bearers for the Branch.

Capt. Khalil U Khan was pleased to announce the Management Committee, IIMS Pakistan and congratulated them. He said, "I hope that the IIMS Pakistan Branch will grow from strength to strength in the years to come."

The newly elected Management Committee of the IIMS Pakistan Branch is:

Capt.Syed Khalid Humail, ***Chairman;***

Capt. M.Zia Alam, ***Vice Chairman;***

Capt. Iftikhar Raza, ***Treasurer;***

Mr Mumtaz Alam, ***Office Secretary;***

Ms Madiha Naim, ***Committee Member;***

Dr Faiza Alam, ***Committee Member.***

At the end of the meeting the IIMS Plaque was handed over to the newly elected Chairman of the IIMS Pakistan Branch, Capt. Syed Khalid Humail.

TURKEY WORKSHOP A GREAT SUCCESS

The Antalya meeting and workshop that took place over two days in February was extremely successful. It was supported financially by the Antalya Free Zone Business Men Association and their President Levent Hilmi Unsal. The main organisation of the event was put together by Haluk Soygur, MIIMS, supported by Omer Koray, CEO of Alia Yachts.

The general theme of the educational workshop was 'Administrative and technical aspects of boat building and marine surveying' and attracted delegates from around the Mediterranean region. In all there were 70 participants ranging from naval architects, marine engineers and yacht builders to surveyors.

The seminar covered a wide range of marine subjects which was intended to bring about interest in order that a more specific requirement and subjects may be arranged for further seminars in the future in this area. Part of this seminar included an extremely enlightening talk given by Ullrich Manigel from IMCI on the RCD ISO standards.

In all the feedback from the delegates was very encouraging and I believe that IIMS will be a preferred organisation to support and assist the Turkish marine industry and its marine work force.

At the end of the two day workshop, John Heath was presented with a plaque in recognition of his work and contribution to help to make the event a great success.

LETTER TO THE EDITOR 22nd January 2014

Dear Sir

Draft Surveys. A question of difference in detail

Over the past couple of years I have been undertaking draft surveys on a number of a particular class of 35,000 DWT Chinese built log bulkers, all ostensibly built as a standard design, but with some key differences to their individual descriptions.

Taking a step back, Auckland has seen an ever increasing number of bulk carriers entering the Port, in many cases requiring the services of a draft surveyor. Most of the tonnage bringing in either full loads, or parcels of various bulk commodities ranging from coal to fertilizers and grains are of the 30 to 35,000 tonne range and consequently many of the ships in the past couple of years happen to have been this class of Chinese built standard design.

I was alerted early on when undertaking the draft calculations that there were a number of particular issues involving this class of Chinese built log/bulker. Essentially my questioning involved the following:

- Larger than normally accepted 'constant' figures for the size of ship - values between 400 and 500 tonne.
- Hydrostatic tables involving large interpolations.
- Hydrostatic tables entered using the 'moulded draft' as opposed to the standard practice of using 'extreme draft'.
- The above requiring a keel plate thickness correction.
- Note. Some later vessels now have a 'draft correction formula', which takes into account the keel thickness and the tables are read accordingly.
- Another more recent 'trap' involves the reading of the LCF (Longitudinal Centre of Flotation) — tabulated signs incorrect and the anomaly corrected by using a (-) sign in the formula shown in the hydrostatic tables!

All the above 'anomalies' could have been avoided if the relevant inspectors, surveyors, class societies, naval architects etc., had done their job correctly in the first instance. Why make life difficult out of a process that has been in existence for so many years?

It would appear that the corrections have been taken care of in the ship's computer programmes, as when undertaking the survey calculations 'long-hand', done with great care I might add, the results are (usually) comparable with the computer generated results.

To date what is not so easily answered are the large 'constant' values, the big differences in the light weights of supposedly sister vessels using similar loaded drafts.

Some differences in light weights could be explained where some ships are carrying their own grabs (usually 4) and maybe extra log lashing wires and chains. In most instances the hydrostatic data does not include a page showing the weights used or disallowed in the light weight calculations.

See the table showing the various ship details for the 6 vessels compared.

Maybe others are more able to explain why these Chinese built ships should be so different. A naval architect's problem possibly?

N.B. vessel details supplied and as calculated, believed correct without guarantee. Actual vessel names excluded to protect any liability issues.

Yours faithfully,

R J Hawkins
Marine Surveyor, Master Mariner.
Member, IIMS.

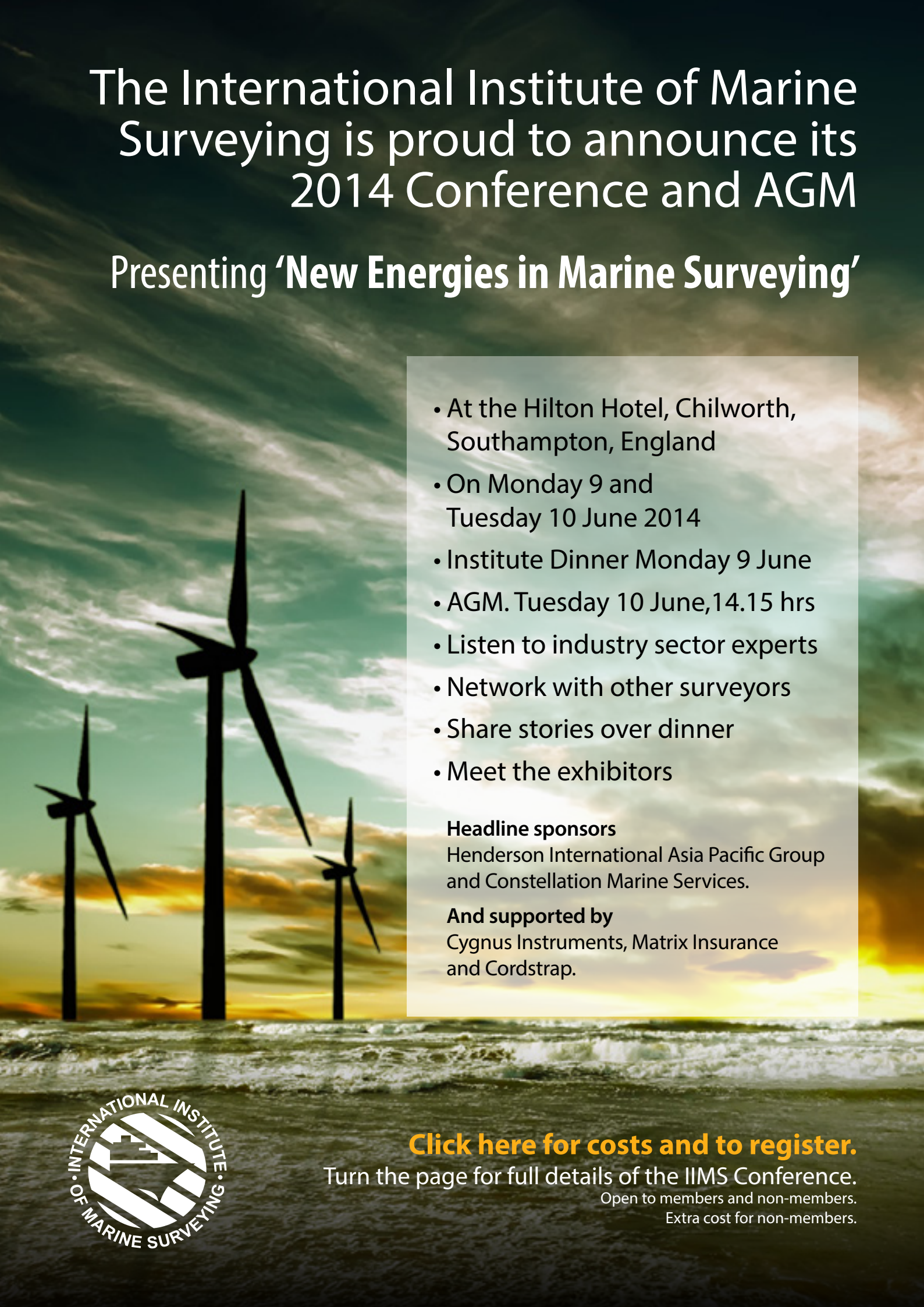
Vessel	A	B	C	D	E	F	G
Yard	Dongze	Nanyang	Taizhou	Hongguan	Taizhou	Dongze	Zhushan
Yr Blt	2011	2010	2012	2010	2010	2009	2012
Flag	Panama	Panama	H.K.	Panama	H.K.	Panama	H.K.
Class	KR.	BV.	NK.	KR.	CCS.	KR.	CCS.
LOA	179.9m	179.9m	179.9m	178.9m	179.9m	179.9m	179.9m
LBP	171.5m	171.5m	171.5m	171.5m	171.5m	171.5m	171.5m
Beam	28.4m	28.4m	28.4m	28.4m	28.4m	28.4m	28.4m
Draft (S)	10.80m	10.50m	10.15m	10.15m	10.15m	10.15m	10.80m
DWT(S)	35,196.42	32,500.00	32,394.00	32,588.80	32,544.30	32,701.70	35,103.90
Lt.Wgt	9,563.77	8,993.00	9,354.00	9,160.00	9,204.00	9,046.60	9,628.90
Constant.	274	168	384	490	505	164	
Cargo	Coal	Coal	Coal	Coal	Coal	Coal	Part Cgo.
Arr.Draft	10.731m	10.081m	10.094m	10.196m	10.232m	10.141m	-
Disch'd	33,427	31,069	30,854	30,908	31,766	31,743	-

Chinese 35,000 DWT Log-bulker study

One of the vessels used in the study

The International Institute of Marine Surveying is proud to announce its 2014 Conference and AGM

Presenting **'New Energies in Marine Surveying'**



- At the Hilton Hotel, Chilworth, Southampton, England
- On Monday 9 and Tuesday 10 June 2014
- Institute Dinner Monday 9 June
- AGM. Tuesday 10 June,14.15 hrs
- Listen to industry sector experts
- Network with other surveyors
- Share stories over dinner
- Meet the exhibitors

Headline sponsors
Henderson International Asia Pacific Group and Constellation Marine Services.

And supported by
Cygnus Instruments, Matrix Insurance and Cordstrap.

INTERNATIONAL INSTITUTE OF MARINE SURVEYING

Click here for costs and to register.

Turn the page for full details of the IIMS Conference.

Open to members and non-members.
Extra cost for non-members.

Monday DAY ONE 9th June 2014

	08:30 hrs	Day One Registration
	09:30 hrs	Chairman's opening remarks
	09:35 hrs	Welcome by the IIMS President - Satish Anand
Session 1	**09:40 hrs**	**Key note speaker: Mark Patterson, Lloyds Agency**
	10:00 hrs	**Zarir Irani: Employees first customers second. The changing phenomenon of professional deliverance**
	10:40 hrs	**Dr Ajay Asok Kumar: Changing role of Class from regulator to innovator of smart and green technology**
	11:10 hrs	Coffee
Session 2	**11:25 hrs**	**Karen Brain: Why the need for PI?**
	11:55 hrs	**Uday Moorthi: Catalytic fines in fuel oils and their repercussions**
	12:25 hrs	**Paula Finch: LinkedIn for marine surveyors**
	13:00 hrs	Luncheon
Session 3	**14:00 hrs**	**Colin Gillespie: Liquefaction and the marine surveyor**
	14:45 hrs	**Milind Tambe: Pre salvage casualty surveys and execution**
	15:30 hrs	Coffee
Session 4	**15:45 hrs**	**Jim Cutts: Innovation and advances in vessel construction for offshore wind farm boats**
	16:15 hrs	**To be confirmed**
	17:00 hrs	Networking session: Meet the exhibitors
	17:30 hrs	Close Day One

Workshops	**11:55 hrs**	**Niamh Cullen: Look professional on the web**
	14:00 hrs	**Paula Finch: More than 10 ways to increase sales and market share**
	14:45 hrs	**Steve Huckvale: Topic to be confirmed**
	15:45 hrs	**Peter Morgan: Registered Marine Coating Inspector, an advanced qualification for the Superyacht industry**
	16:15 hrs	**Cygnus Instruments: Overview of thickness gauges, ultrasonic and hatch cover test equipment**

Tuesday DAY TWO 10th June 2014

	08:15 hrs	Day Two and AGM Registration
	09:00 hrs	Chairman's opening remarks
Session 5	**09:10 hrs**	**Key note speaker: To be confirmed**
	09:30 hrs	**Guy Canavan: Trials and tribulations of rescuing a classic superyacht**
	10:10 hrs	**Adam Brancher: Overview of the Australian Commercial Vessel Surveyor Accreditation scheme**
	10:40 hrs	Coffee and networking session: Meet the exhibitors
Session 6	**11:15 hrs**	**Michael Lloyd: Managing your entry into enclosed spaces for marine surveyors**
	12:15 hrs	**Q&A Open Forum: Hosted by Capt. Satish Ananad**
	12:45 hrs	Seawork International live link
	13:00 hrs	Luncheon
AGM	**14:15 hrs**	**IIMS Annual General Meeting**

Workshops	**10:10 hrs**	**Marco Muilwijk: Topic to be confirmed**
	11:15 hrs	**Topic to be confirmed**

The Institute reserves the right to change the programme content and speakers.

Introducing some of the IIMS 2014 Conference speakers and their presentation content...

Zarir Irani:
Presenting '*Employees first customers second. The changing phenomenon of professional deliverance*' at 10:00 hrs on Monday.

In his presentation, Zarir will assess what is being done to raise professional standards among marine surveyors and to improve the services offered to marine insurers. In particular he will discuss the pros and cons of appointing a large recognised firm versus a qualified individual and why underwriters bother about the name and credentials of a marine surveyor. Zarir will also address the challenges associated with training on the job and how far today's employers should go to train and retain surveyors.

Guy Canavan:
Presenting '*Trials & Tribulations of Rescuing a Classic Superyacht*' on Tuesday at 09:30 hrs.

An experienced naval architect, Guy worked at BAE Systems until one day he was invited to take up a lead role on the refit of the Shemara, a 200 foot plus 1930's superyacht once owned by Lord and Lady Docker. After several years, this project has reached its conclusion. In what is sure to be a most interesting presentation, Guy will explain the trials and tribulations, as well as the not inconsiderable challenges faced in rescuing and restoring this classic superyacht.

Paula Finch,
n.b. Marketing Ltd:
Presenting on Monday at 12:25 hrs '*Linked in for marine surveyors*' and '*More than 10 ways to increase sales and market share*' at 14:00 hrs.

Paula has been an active member of LinkedIn since 2006 and has built a reputation for prolific networking on this social media platform having built her own network to 2000. Paula has benefited from direct sales as a result of her activities via LinkedIn and will walk delegates through the do's and dont's of this professional international networking platform. In her second presentation, Paula aims to ensure Conference delegates leave with more than 10 ways to make a real difference to their 'bottom line'.

Dr Abdul Rahim or **Dr Ajay Asok Kumar**,
ClassNK:
Presenting '*Changing role of Class from regulator to innovator of smart and green technology for the future of maritime industries*' at 10:40 hrs on Monday.

This broad ranging presentation will include a brief history of ship classification, entry of IMO conventions, the role of Class as a regulator, the challenging economic situation today, the need for innovation and the new role of Class as innovator.

Adam Brancher:
Presenting '*Overview of the Australian Commercial Vessel Surveyor Accreditation Scheme*' on Tuesday at 10:10 hrs.

Expat Brit, now resident in Australia, Adam Brancher of AMSA and Deputy Vice President of IIMS, returns to the UK to tell delegates in more detail about the ins and outs of the Australian Commercial Vessel Surveyor Accreditation Scheme.

Niamh Cullen,
Hoot Marketing Ltd:
Presenting '*Look professional on the web*' at 11:55 hrs on Monday.

Niamh has 18 years of sales and marketing experience, having operated at Director level for many years. With a successful track record of developing and leading marketing strategies, brand campaigns and sales initiatives, Niamh is particularly proud of the complex internet and web operation projects that she has managed. In this presentation, she will give you some simple tips about how to look professional on the web.

Milind Tambe:
Presenting '*Pre Salvage Casualty Surveys and Execution*' on Monday at 14:45 hrs.

Milind is well known to many IIMS members in his role as Regional Director IIMS India. As no two situations are similar, there are no standard procedures for a successful salvage operation. However, each salvage needs well thought out and organised planning. The success of the salvage, argues Milind, depends on how well the planning was carried out before the salvage.

In this presentation, Milind will outline the preparations a marine surveyor would have to carry out and also the physical survey aspects with real 'on job' examples and illustrations.

The IIMS 2014 Conference is in association with Platinum headline sponsors Henderson International Asia Pacific Group and Constellation Marine Services.

Henderson International Asia Pacific Group consists of the already well established and recognised individual Henderson International Regional Operating Offices in the Asia Pacific region providing Marine & Cargo Surveys, Marine Consultancy and Business Consultancy to the Offshore and Shipping Industry.

Constellation Marine Services is an international ship and marine consultancy and survey firm with offices in UK, UAE and INDIA. They specialise in off-shore marine warranty, ship and cargo inspections for principles, insurance companies and charterers.

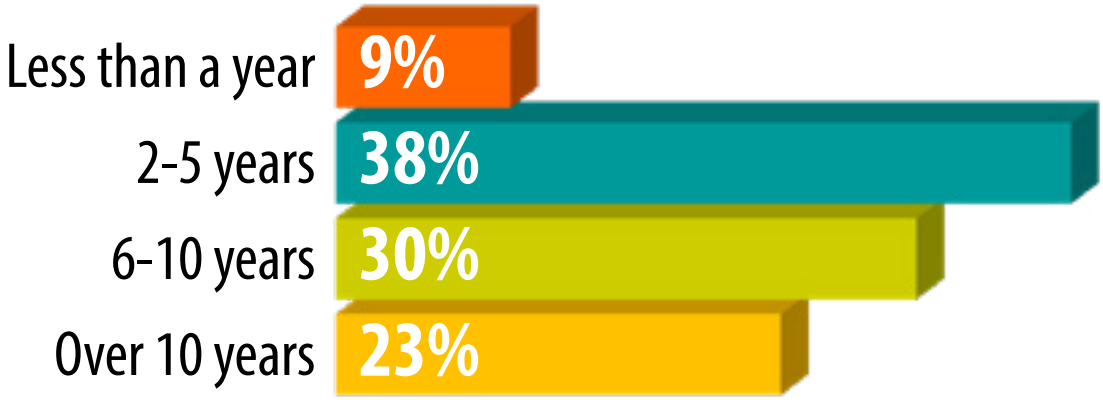
Also supported by Cygnus Instruments, Matrix Insurance and Cordstrap.

IIMS membership survey results and findings

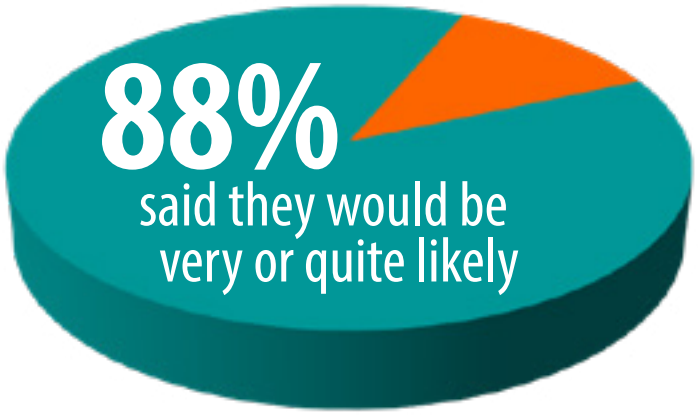
In January, an invitation was sent by email to IIMS members inviting them to participate in and complete the IIMS online membership survey. The response rate was 30%. This was most welcome and has provided the head office team in Portchester with some valuable information about the views of the membership.

Whilst the vast majority of verbatim comments were positive, the fact the survey drew out some less positive comments goes to prove that, whatever their views, members are very much engaged with their professional Institute.

Q1 How long have you been a member of the IIMS?



Q2 How likely and keen would you be to attend more IIMS events and networking opportunities in your local area?



Q3 What are your views on the quarterly IIMS Report magazine that is circulated to members?

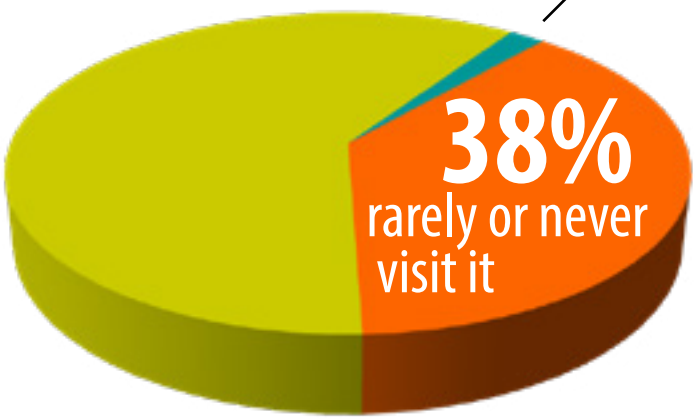
78% said it was either excellent or good

Q4 How valuable is the monthly membership News Bulletin as a reference and information source?

47% said it was either extremely or very valuable

Q5 How often do you visit the web site www.iims.org.uk?

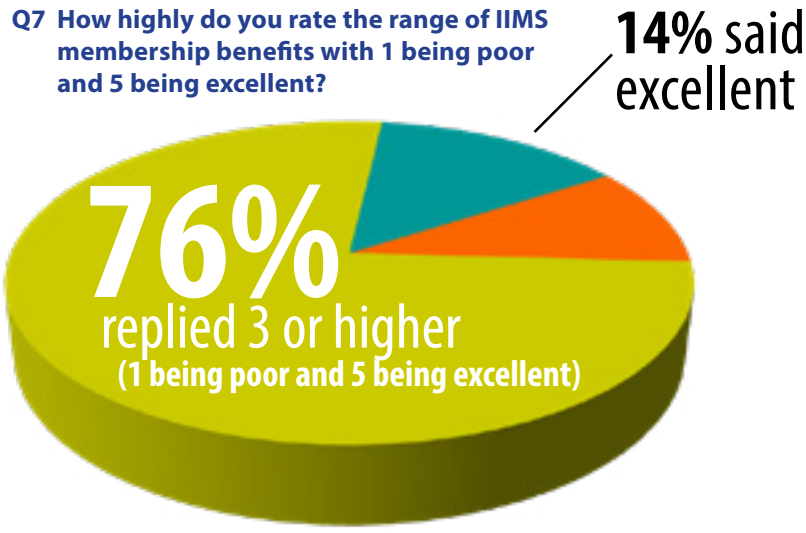
Astonishingly only **1 person** said they visit it daily



Q6 When you visit the web site www.iims.org.uk, what is it usually for?

For those who do visit it, **news** (27%) and **membership information** (25%) were the main reasons.

Q7 How highly do you rate the range of IIMS membership benefits with 1 being poor and 5 being excellent?



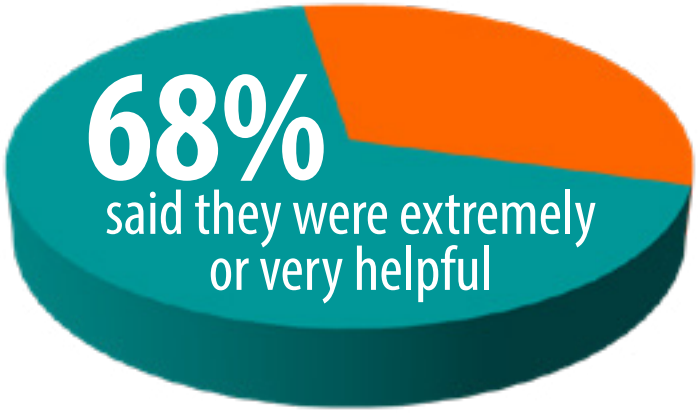
Q8 How important is being part of the international IIMS family to you?

65% said it was extremely or very important

Q9 Overall how valuable would you rate your membership of IIMS?

59% said it was extremely or very important

Q10 How helpful and efficient is the IIMS head office team in dealing with education, membership and other queries?



And here is a small selection of the hundreds of verbatim comments made by members when completing the survey:

'It is now recognized as one of 'the' surveying organisations which has taken a long time to build. This must be protected and built on.'

'Gives me a good chance to network and communicate with international peers.'

'Being a member of the Institute elevates the status of the marine surveyor.'

'Better training and marketing incentives for small businesses!'

'I think the website is totally under utilised, I'd like to see a lot more for members there, particularly things such as technical bulletins. It is key that industry knowledge is shared among the group in forms of lessons learned.'

'Superb institute to be a member of. Thank you for all your support in the past years.'

'Seminars for all forms of marine surveying, working groups for same and not just small craft.'

'I would like to be able to use the institute as a greater resource for technical and legal information.'

'It's a way of standing out as a marine surveyor, being recognised, working to a code of conduct.'

'I never took the training, but when I visited the IIMS HQ, I noticed that all the team are very professional.'

Behind the scenes at Seawork

Image from Walcon : The pontoons being installed at Seawork

The annual Seawork exhibition held at Southampton Docks in the UK, now in its seventeenth year, has grown to become an important show in the marine business world. The event attracts thousands of people from the wider marine industry and gets bigger each year. The team behind the show is now planning to launch Seawork Asia later this year. But what are the challenges of putting on an event of this kind? Mike Schwarz puts the questions to Lyndsey Sherriff, Head of Events at Seawork organisers Mercator Media Ltd.

Lyndsey Sherriff,
Head of Events at organisers Mercator Media Ltd

Q. Seawork International is now in its seventeenth year. From experience, what are the key logistical challenges you face as organisers each year in setting up and running the event?

The logistical challenge of Seawork increases every time, as we grow each year. Seawork is held in the working port of Southampton, which means it is busy on the land and on the water during build up. In fact, it is the busiest cruise port in the UK and, in 2013, its schedule had a direct impact on the exhibition: shortly after Seawork closed, the exhibition space had to be converted into a temporary cruise terminal.

As a result, the pontoons which accommodated Seawork's 60 vessels, had to be removed in less than 24 hours, by Friday afternoon. Thanks to the skilled team at Walcon, this was achieved by 1pm. We also had stands being taken down on the Thursday night and the cleaning team arrived at 6am the next day to ensure that the three sheds were empty by the deadline. Thanks to the Seawork team and the support of our excellent contractors, we handed over the keys at 2pm. Quite an achievement!

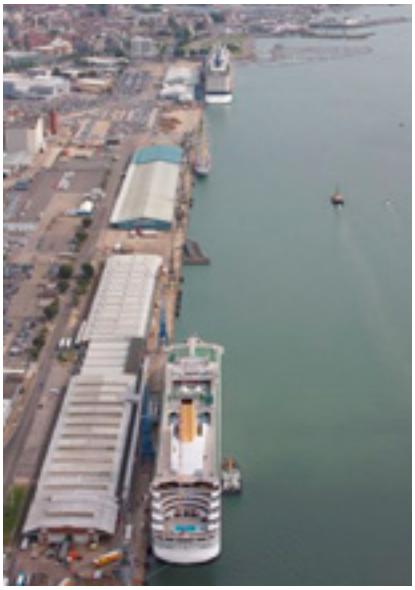
Q. How easy is it to transform the Fruit Terminal into a space fit for Seawork International?

The Fruit Terminals at ABP Southampton are wonderful; in fact, they are a blank canvas for us to work with. Normally, the three sheds house imported fruit; when we have on-site logistics meetings, we wear high viz jackets to avoid the fork lift trucks!

It takes six days to build the event fully, including, this year, two restaurants, two registration areas, 31 companies on the quayside, 60 vessels on the water, numerous large-scale exhibits and all the services that support the exhibition.

It's exciting when everything starts to happen: carpets roll in, stands are erected and it starts to look like a traditional exhibition venue. As for challenges, there aren't many, just the fact that we can't hang directional banners in any hall other than A. On the whole, the area is perfect and there aren't many other venues that would prove so flexible for our needs.

Below left and above right: Seawork's location - Canary Islands Fruit Terminal



Q. How do you cover off the significant health and safety issues that must surely surround an event of this type?

Health & Safety is key to Seawork and its ongoing success. Working closely with ABP, we ensure that other users of the port can access the road outside the exhibition throughout the event without obstruction.

Visitors must be able enter the Port safely and, to facilitate this, we run a free coach service from our free car parking at Ocean Village. For those visiting the Seawork conference, we offer a golf buggy service driven by our security contractor. Safety during build up is paramount and exhibitors and their contractors are given strict instructions, enforced by our security team, which is on-site to ensure no dangerous activities take place within the exhibition hall, on the quayside or on the water. Should anything happen during the exhibition, we have a first-aid team permanently available. Thankfully, the worst thing that happened in 2013 was a cut finger. At the end of Seawork we always review our Health & Safety policy to ensure it is robust and develops with the size of the event.

Q. What are the key reasons for visiting Seawork International would you say?

Seawork is a one-stop-solution for the international commercial marine fraternity. A visit to the exhibition saves time and travel expenses. Seawork offers professionals in the commercial marine industry a cost-efficient way of identifying ways to make money, save money – or both! For three days, nigh on 600 exhibitors from all over the world will be concentrated in one place, making it an ideal opportunity to see the very latest developments in the industry, compare prices, negotiate, assess the strength of the competition and make new contacts. There's also a programme of Events & Demonstrations, so visitors can see a whole array of products in action in their intended environment.

The diversity of what is on display - from products, to technologies, to applications, to vessels, to services – guarantees a worthwhile visit and an unparalleled opportunity to see existing contacts, network with new contacts and see where the industry's at. Add to that the free-to-attend conference sessions presented by leading spokespeople on the latest issues affecting the industry and you've got the main reasons why Seawork is heading towards attracting 8,000 commercial marine professionals over its three-day run. It really has become the exhibition the industry cannot afford to miss.

Q. Are there any special innovations that IIMS members visiting Seawork International 2014 should look out for?

There are always new vessels and floating plant, as well as equipment and services, to see at Seawork. Meeting environmental regulations and the pressure of energy costs means manufacturers are constantly looking for new and better options for operators. The exhibition is a great place to keep up-to-date with the latest offers in one place.

The Innovations Showcase, which was created in 2003, and its associated Awards recognises truly new approaches to creating better, quicker, more efficient, more economical and greener ways of doing things.

From a practical point of view, we have improved the layout of the exhibition this year to include two registration areas, so it will be much quicker to get in and get on with your visit, and added a new restaurant in Hall C, so there will be more choice and more places to recharge your batteries.

Q. What is behind your decision to launch Seawork Asia in Shanghai in November 2014 and what are the key issues you face by taking the event to China?

Seawork International's long running success has really been the catalyst for the launch of its sister event – Seawork Asia 2014.

Shanghai is at the centre of the fast growing East Asian commercial marine business, which has a vast coastline to develop and maintain. The demand for marine civil engineering, workboats and floating plant, together with the equipment and services that keep them in operation is forecast to grow at double figure rates for the next 20 years. This rapid increase in marine activity will also require a wide range of support services such as coastguard, patrol, safety and navigation.

This is the first dedicated commercial marine exhibition to be held in mainland China and Shanghai is one of the region's key destination cities. It presents an amazing opportunity for companies to create and research business in the heart of this fast growing, vibrant, East Asia marine market.

Below left:
Empty Seawork pontoons
Below right: Full Pontoons

The most obvious issue for any new event, wherever it takes place in the world, is building support both from your exhibitor and visitor audiences throughout the first show cycle. Every event has to start somewhere and the early years can be very challenging for the organiser!

Q. On a light-hearted note to close, can you remember the funniest thing that has happened at Seawork International?

I have to admit mistakes do occasionally happen and, when everything is time sensitive, it can make for rather frayed nerves. Every year, the carrier bags handed out to visitors at registration are sponsored and, as they are one of the first things our visitors are given, they are in demand. One particular year, the sponsor's logo to be printed on the bags was requested in plenty of time and the order went off to the printers. Whilst completing our pre-show checks, the team studied the carrier bags and, rather than the usual ones that carrier A4 literature, we realised we had 7,500 party bags! There was a suggestion of giving out sweets to all visitors but I think that was probably just the team looking for a sugar rush!

I can honestly say that the team at Seawork makes me laugh every day. As there are only four of us, it is quite a mammoth task to organise an 11,000 m² event with nearly 600 exhibitors and well over 7,000 visitors each year. The Seawork team is honestly the most good-hearted and they take the challenge in their stride and never lose sight of the high standard of customer service we demand.

Pre-registration to attend Seawork is now open at **www.seawork.com**

Above: Seawork halls under construction

Above: Seawork stands open for business

Above: Busy halls at the Seawork exhibition

Stevedores in Shipping • Part2

by CAPT.KAHLIL.U.KHAN, FIIMS - Regional Director – IIMS Pakistan

ABOUT THE AUTHOR

An Educationist and Scholar - Prof. Capt Khalil U Khan. He started to serve education from his childhood, he started tuitions in the night colleges/classes famous at that time in Karachi while he was in matric, for completion of his education and the same journey never stopped. He joined Merchant Navy in the year 1959 and sailed around the world till 1970, last 3 years he served as a Capt, a long and distinguished career in the service and left the profession to be with his family and started his business carrier from grass route level. Alongside his business activities he pursued higher education, a passion interrupted by seafaring, achieved LLM qualification with distinctions and was awarded Gold Medal from Karachi University. He continued imparting knowledge through teaching in various capacities as Nautical Instructor, Law Teacher and Dean of the Faculty of Law at a private University. He has been appointed as a visiting Professor in Federal Urdu University in the year 2012 and still delivering lectures. For last thirty years, he has been associated with national and international educational institutions. He is doing business as Consultant & Surveyors in the field of Marine, Insurance & Banking etc.

Capt. Khalil U Khan is a Senior Master Mariner. He is L.L.M (Master of Laws) position holder and has been the Dean of Law at the DIHE Karachi, Chartered by Govt. of Sindh. He is a Nautical & Insurance Consultant and Authorized Surveying Officer, Licensed by Govt. of Pakistan. He is the Chairman of Oceanic Group of Companies.

He is also Regional Director and Fellow of International Institute of Marine Surveying, U.K, (IIMS) since 1993, Fellow of Nautical Institute (NI), Fellow and Vice Chairman of Charted Institute of Logistic and Transporter (CILT), Fellow of Royal Institute of Navigation, U.K. (RIN), Fellow of Institute of Charted Shipbrokers, U.K. (ICS), Fellow of International Federation of Ship Masters Association (IFSMA) Founder Life time Member and has been Founder Treasurer of Master Mariner Society of Pakistan(MMSP) & Member of Pakistan Institute of International Affairs (PIIA). He is active in Karachi Chamber of Commerce and Industry particularly in Shipping & Education Committee. He is also the Member of Surveyors and Loss Adjusters Association – Pakistan.

Despite his multifarious activities in professional, business and social circles, Capt. Khalil U Khan authored a Book titled "The Shipping Scenario in Pakistan" besides his LLM thesis on "The Elements of Contract of Affreightment". He has presented many papers in International Conferences, Seminars & Meetings on Shipping, Surveying, Insurance, Law and Maritime subjects.

5. LOADING AND UNLOADING SHIPS

Loading and unloading ships requires know-how of the operation of loading equipment, proper techniques for lifting and stowing cargo, and correct handling of hazardous materials. In addition, workers must be physically strong and be able to follow orders.

In earlier days before the advent of containerization, men who loaded and unloaded ships had to tie down cargoes with rope, with a type of stopper knot called the stevedore knot. The methods of securely tying up parcels of goods is called *stevedore lashing* or *stevedore knotting*. While loading a general cargo vessel, they use dunnage, which are pieces of wood (or nowadays sometimes strong inflatable dunnage bags) set down to keep the cargo out of any water that might be present in the hold or due to cargo and ship's sweat. Presently, the vast majority of non-bulk cargo is transported in intermodal containers. The containers arrive at a port by truck, rail or another ship and are stacked in the port's storage area. When the ships arrives, the containers that it is offloading are unloaded by a crane. The containers either leave the port by truck or rail or are put in the storage area until they are put on another ship. Once the ship is offloaded, the containers loaded on truck brought to the dock . A crane lifts the containers from the trucks into the ship. As the containers pile up in the ship, the workers secure them to the ship and to each other.

The jobs involved include the crane operators, the workers who connect the containers to the ship and each other, the truck drivers that transport the containers from the dock and storage area, the workers who track the containers in the storage area as

they are loaded and unloaded, as well as various supervisors. Those workers at the port who handle and move the containers are likely to be considered as stevedores or longshoremen.

Because they work outdoors in all types of weather, these workers adopt a type of cap that has to be secured by fastening or lashing down fitting closely and comfortably warm, and is easily put away in a pocket. These are a type of beanie (knitted cap often wollen, leather & of silk panels) or watch caps called variously *stevedore's cap* or *stevedore's hat*.

Before containerization, freight was often handled with a longshoreman's hook, a tool which became emblematic of the profession.

Traditionally, stevedores would have no fixed job and turn up at the docks in the morning hoping to find someone willing to employ them for the day. London dockers called this practice "standing on the stones" while in the United States it was referred to as Shaping. In Britain, due to changes in employment laws, such jobs have either become permanent or have been converted to temporary jobs.

Dock workers have been a prominent part in the modern labour movements.

6. HOW TO BECOME A STEVEDORE?

There are no specific educational requirements for someone who wants to become a stevedore. Companies that hire stevedores, also known as dockers and longshoremen, typically require that they are physically able to lift heavy items. In addition, in order to become a stevedore, you will likely need a valid driver's license and be at least 18 years of age. Some companies also require that longshoremen have experience driving commercial trucks and vehicles or operating lifting equipment. You can become a stevedore by applying for jobs for stevedores online or in person.

If you want to become a stevedore, job listing websites are a good place to start. Use search terms like "stevedores," "longshoreman," or "docker" to find stevedore job listings online. You can also create an account on job search websites. Make sure to indicate that you are actively looking to become a stevedore in your online resume.

You can also apply in-person to become a stevedore. If your town has a port, drive down to the port and visit cargo companies and warehouses in the area to request a job application. If the port is large, find phone numbers for cargo companies at the port online or in the phone book and call to ask where to apply for a job as a longshoreman.

When you apply for the docker position, make sure to complete the entire job application. Include any details about your past experience moving or lifting boxes, packages, or cargo. If you have experience operating heavy equipment or if you have a commercial driver's license, make sure to include this information on the application. Provide names of references, including phone numbers, for past employers on your application to become a stevedore. Longshoremen often work late hours or on weekends, so make sure to indicate if you are available to work on-call and on the weekends on your application.

When you interview for a docker position, discuss your work experience in detail during the interview. Explain what role you held in related jobs and how your work experience will benefit you in your role as a stevedore. Express your willingness to work odd hours or weekend shifts, to lift heavy equipment and to work outside in bad weather. Since dockers occasionally have to crawl into small spaces or into cargo holds, make sure that the interviewer knows this won't be a problem for you. Follow-up after the interview to thank the interviewer for taking the time to interview you and to let him or her know that you still want to become a stevedore.

7. STEVEDORING SCENERIO IN PAKISTAN

Until the Karachi dock workers (regulating of employment) Scheme was promulgated through the ordinance no XXVIII of 1973 which was passed as an act no IX of 1974 on 1st march 1974. The employment of Dock workers was of a casual nature, which was on the principle of "No-Work – No pay". The stevedoring organization at the Karachi port used to engage casual labour for the wharves and ship, through their permanent employees i.e. Tindals and Serangs. The dock workers used to assemble twice daily on the road side near KPT head office building and the stevedores used to hire for daily work of loading/unloading of ships. Those not hired went home without any reward.

The stevedores companies had no direct concern with the workers and they took no interest in their welfare, resilling dock workers were not happy with this somewhat inhuman system and agitated for introduction of a Scheme for Registration of dock workers similar to the schemes in vogue at the ports of other countries.

When the Industrial Relations Ordinance, 1969, was promulgated it gave general awakening amongst the dock workers, then in 1970 in Islamabad a Labour Conference representing dock workers, and other stake holder was held.

This scenario generated unrest among the dock workers and resulted in lack of interest and go-slow tactics which caused an unprecedented congestion of ships at the Karachi port. The Karmahom Conference imposed 20% shipping surcharge on Pakistan and there was a threat that the other Conferences may follow this en-suit.

To handle the above series matter the Government responded to the dock workers demand by setting up a committee in Jan 1972 to verify and register the dock workers for

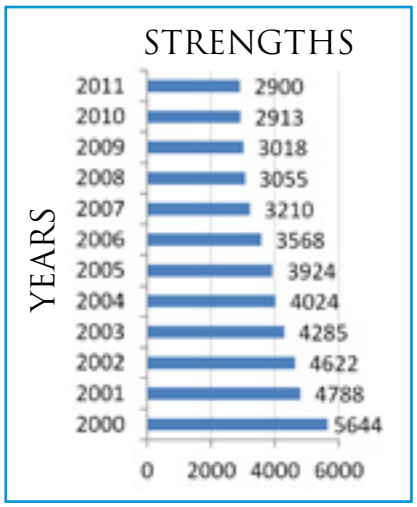
the purpose of regulating of their employment. Finally, Rotational system was introduced on 10th August1972.

When the KDLB Scheme was promulgated in 1973, the Board inherited registration of 8598 workers. This strength was considered surplus when compared to actual requirement of 4500 workers at that time.

- The gap between acquired and required strength could not be narrowed due to state of unemployment and political situation in the country.
- The Board has been ensuring minimum wages, medical facilities and other allowances to surplus workers on its roster by generating fund through cess.
- The working of KDLB Scheme was reviewed in 2000 and in order to improve economic viability,

  i) To impose ban on Son's registration in place of retired/ expired workers.
  ii) To rationalize the workers' strength gradually to 2500.

The workers' strength has been reduced to 2900 as on 31st December 2011 while Board in its meeting of 16th November, 2006 has fixed the target number of Registered Workers to remain on roster as 1700. Steps are being taken to rationalize the workers' strength to required level of 1700 workers.



The last state of employment recorded during the month of Dec-2011 remained as under:

Months	Dec' 2011
Registered strength	2900
Average daily employment	1114 38.42%
Average daily workers left unemployed	1472 50.77%
Average daily workers on leave or absent	314 10.81%
Highest number of workers employed in a day	1869

In order to summarise the requirements, it may be mentioned that stevedores should possess the following skills as much as possible,

- Load & unload vessels
- Operate heavy vehicles and machinery, such as straddle carriers, forklifters and ship cranes, to load and unload cargo from trucks, ships and rail transport services
- Position goods in the holds of the ship
- Secure cargo on ships using braces to hold it in place
- Carry out safety checks on equipments
- Secure and release mooring lines of ships
- Clean out ship's tanks and holds
- Knowledge of health and safety procedures
- Possess skills how to handle different types of cargo, particularly containers of dangerous substances
- Knowledge of basic customs and shipping company documents
- Ability to interpret ship loading plans.

8. STEVEDORING COMPANIES OF PAKISTAN

At the time of Independence in 1947 there were mainly Parsis in this business and liciencing procedure was not business friendly as such only few stevedoring companies were in the business. I believe there were three or four, handling all imports and exports of Pakistan.

By the time late nineties import / export tonnage was increased, therefore, it need far more stevedoring companies were felt, as such Karachi Port Trust issued four licences. Later more licences were issued. With the passage of time a change in policy to issue stevedoring licences were relaxed. As a result of this change at present 40 stevedoring companies have the licences, mainly are, A R Khan & Son P Ltd, Alhaushabi Stevedores P Ltd, Cowasjee & Sons, Modern Terminal Operators, Wiltrans Cargo Services and as such 35 more companies are operating.

When Port Qasim in 1979 started its operations, they approved cargo handling companies who were stevedores and most of the companies are working on BOT / BOO basis such as QICT, FOTCO, FAP, LCT, Engro Terminal & SSGC(LPG) and Port Gwadar in the year 1990 started its operations to a sizeable extent, they also started issuing licences and at present to work one have to have licenced issued by them.

The stevedoring companies have responsible of other operations such as handling all the deliveries to consignees and also surveys as and if needed . At present in Port Gwadar there are three stevedoring companies who are undertaking all discharging and loading in stevedoring work.

> "Companies that hire stevedores typically require that they are physically able to lift heavy items."

What's Eating You?

by ELLIOTT BERRY

Microbial Attack on Iron and Steel

In this absorbing, technical article, practising marine surveyor, Elliott Berry (Dip.Mar.Sur., RMS., RMC., M.I.I.M.S., MI.DIAG.E., A.M.C.M.S., G.RINA), presents the facts surrounding biological attack.

Boat owners and marine surveyors will, of course, be familiar with common iron rust whatever form it takes. All marine surveyors should not only be able to recognise the five different types of electro-chemical corrosion on sight and understand the conditions that cause the problem, but also how to deal with these conditions in order to minimise their deleterious effects on a vessel's structure. The literature on the subject of electro-chemical, or galvanic corrosion is enormous. Biological attack is not so widely understood, or recognised but generally takes one of two main forms:

- **macrobiology**
- **microbiology**

Macrobiological attack is the well known phenomenon of mussels, barnacles, slimes, grasses and seaweeds attaching to the hull. These items do not usually cause serious harm to the metal but they can and do slow the boat down and increase the fuel consumption for a given speed. They are more or less satisfactorily dealt with by scrubbing the hull clean and coating with a suitable antifouling paint. However, there is a different kind of corrosion which is also found on boat hulls, particularly those lying in water such as canals, or rivers containing decaying vegetable matter. Very few people are aware of the problem, or that it is caused by micro-biological attack. MIC is a highly unpredictable process, but the marine surveyor should realise that, under the influence of micro-organisms, corrosion processes can happen in a matter of months compared to the years it would take for ordinary abiotic corrosion to reach serious proportions. Further, also due to its unpredictability, it is often difficult to include microbiologically induced corrosion in risk analyses and, more often than not, its possibility is not even considered in a vessel's design phase.

The impact can be enormous and an estimated 20% of all corrosion damage is caused by micro-organisms leading to costs as high as 2-5% of GDP. Or, in other words, metal worm. There has been a very large amount of data published on this subject in the civil engineering field over the last twenty years or so. It is widely recognised that not only does microbially induced corrosion stimulate general, pitting, crevice and stress corrosion but that it is also capable of enhancing other related defects in steel such as corrosion fatigue, hydrogen embrittlement and cracking. Since micro-organisms are very wide spread in nature, most natural and man made environments are sufficiently contaminated to encourage bacterial activity to proceed to a greater or lesser extent. This type of corrosion is not a new form recently discovered, but it is only in the last three of four decades that its seriousness has been fully appreciated.

These organisms are commonly found in ballast tanks where the boat has ballasted by taking on muddy river water, or lying in the mud of harbours, or in the waters of canals particularly those running through farm land where surface water often deposits chemical fertilizers into the canal. A colleague of the author first came across the problem some forty odd years ago when employed as a superintendent engineer for a company running a number of general cargo Liberty ships, which often loaded ballast water for return trips from the West African coast. This ballast water was, from the nature of its loading from the rivers, often heavily polluted with vegetable matter and very muddy. On inspection of the ballast tanks at the classification surveys very severe pitting of a clearly defined and characteristic type was frequently found under mud deposits in the tanks and a great deal of time - and money - was spent in trying to find the cause of the problem. This was eventually identified as microbiological in origin when specimens of the corroded steel were sent for laboratory analysis. The *per diem* corrosion rates were often as high as 860 mg/dm^2 or, if it is easier to understand, pits several centimetres in diameter, 8 to 10 millimetres deep were often found in 18 millimetre thick mild steel plates in less than two years. Such microbiologically assisted reactions are well known in the big ship field to be an important factor in marine corrosion and there is, again, an extensive and increasing literature on the subject. This type of corrosion has been described for a number of different structures in the marine environment for aluminium and copper alloys and stainless steels as well as ordinary shipbuilding quality wrought iron and mild steel structures. The presence of such micro-organisms has many complex and inter-related effects and they can also generate environments favourable for the better known electro-chemical processes to occur. They can, for example, destroy anti-corrosion additives in coatings, depolarise cathodic processes and produce severe changes in local oxygen percentages that lead to differential aeration and concentration cells.

The micro-organisms that contribute to corrosion are many and varied and include aerobic bacteria, fungi, algae and diatoms, yeasts and other organisms. They

are able to colonise surfaces producing biofilms up to 100 mm thick and acquire the ability by genetic mutation to adapt easily to environmental changes. The system is thus dynamic and can, and does, change with time.

The bacteria themselves are invisible to the naked eye and fall mainly into four types: -

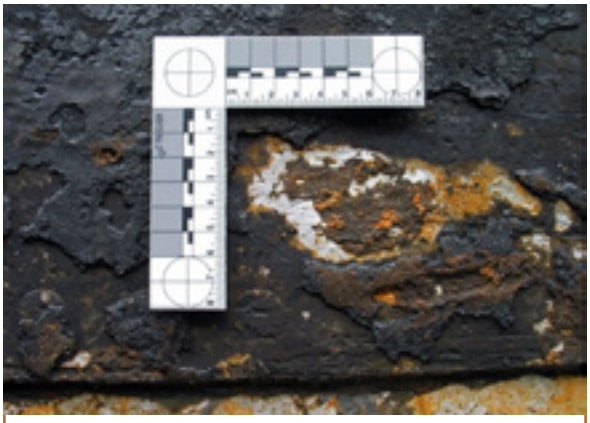
1 Slime formers which form slimy coverings over surfaces, reducing oxygen transport and trapping particles of debris.

2 Sulphur oxidising bacteria (SOB) which produce hydrogen sulphide from dissolved sulphates in anaerobic conditions. The bottom of the pit that results is black. Wet hydrogen sulphide is reported to corrode mild steel at rates that can exceed 2.5 mm/cm^2/year but does not corrode aluminium to any significant extent.

3 Sulphur reducing bacteria (SRB) which produce tetrahydrated ferrous sulphate and the highly corrosive sulphuric acid. The bottom of the pit that results is silvery white.

4 Iron oxidising bacteria (IOB) which oxidise soluble ferrous iron to insoluble ferric or ferrous hydroxide.

Although it can be assumed that microbial corrosion will ensue in any environment in which the micro-organisms can survive, the extent of the activity of any specific species may be limited and conditions favourable to one type may be quite inimical to another. The bacteria associated with the corrosion of metals are unicellular, possessing a thick, rigid cell wall, dividing by binary fission and some have a flagellum to enable them to swim and thus be mobile. These organisms can be either autotrophic or heterotrophic, aerobic or anaerobic. Autotrophs obtain their energy from light or by the oxidation of inorganic materials and their carbon by assimilation. Heterotrophs are those bacteria that obtain both their energy and their carbon requirements from organic sources and assimilate carbon dioxide to only a limited extent. Anaerobic microbes do not require oxygen for their growth whereas aerobic bacteria do. The unicellular bacteria have three basic shapes: rod like, curved or spirolid and spherical. They vary considerably in size with, typically, a maximum size of about 1 μm.



Attack on a Steel Narrowboat by Microbes of the Genus Thiobacillus

The white deposits are tetra-hydrated ferrous sulphate also known in its mineral form as rozenite [$FeSO_4$,4(H_2O)]. Note also the high surface area/depth ratio of the pitting. There are also signs (the small red-brown rusticles) of attack by microbes of the symbiotic species *Gallionella Ferruginea*. The presence of the sulphate prevents the steel underneath from rusting (oxydising). The vessel photographed was constructed of Siemens-Martin mild steel. The rivet point in the centre of the photograph and the edge of the plate seam are also showing galvanic pitting.

Sulphur Oxidising Bacteria

Of the four groups mentioned, however, the most important group associated with the corrosion of ferrous metals are those in whose metabolism sulphur and/or its compounds play an important part. The aerobic bacteria of the genus thiobacillus usually referred to as sulphur oxidising bacteria, or SOB, perform the oxidisation of sulphur to sulphuric acid. The acids produced can cause deep pits to appear in the ground metal though their involvement in the corrosion process is only slight compared to the sulphur reducers. The bacteria are autotrophic, acidophilic, short non-sporulating rods approximately 0.5 x 1.0 – 1.5 μm in size. They occur as single cells or in pairs and are motile. The optimum temperature for growth is 25-30°C but they die at temperatures above 55-60°C. *Thiobacilli* are colourless, rod-shaped, Gram negative bacteria with polar flagella. They possess an iron oxidase, which allows them to metabolize metal ions such as ferrous iron:

$$Fe^{2+} + 1/2\ O_2 + 2H^+ \rightarrow Fe^{3+} + H_2O$$

They are strictly aerobic bacteria and all species are respiratory organisms and are obligate autotrophic organisms, meaning that they require inorganic molecules as an electron donor and inorganic carbon (such as carbon dioxide) as a source. They obtain nutrients by oxidizing iron and sulphur with O_2. *Thiobacillus* microbes do not form spores; they are gram-negative proteobacteria. Their life cycle is typical of bacteria with reproduction by cell fission. The two main strains are *thiobacillus thioparus* and *thiobacillus ferrooxidans* which includes the strain *thiobacillus concretivorus*. *Thiobacillus ferrooxidans* affects the precipitation of ferric iron solids. The bottoms of the pits formed by their action are usually covered in white tetra-hydrated ferrous sulphate ($FeSO_4 \cdot 4H_2O$).

Sulphur Reducing Bacteria

In engineering, sulphate reducing bacteria can create problems when metal structures are exposed to sulphate containing water. The interaction of water and metal creates a layer of molecular hydrogen on the metal surface and the sulphate reducing bacteria then oxidize the hydrogen while creating hydrogen sulphide which contributes to corrosion. The completion of the sulphur cycle, the Type 2 bacteria of the genera *desulfotomaculum reducens*

and *desulfurovibrio desulfuricans* carry out the reduction of sulphate to hydrogen sulphide. *Desulfotomaculum reducens* is a sulphur reducing prokaryote and is more active than the *desulfurovibrio* genus of bacteria. The prokaryotes are a group of organisms whose cells lack a membrane bound nucleus or karyon. The word *prokaryote* comes from the Greek prefix πρό (*pro*) meaning before and καρυόν (*karyon*) meaning nut or kernel. The organisms whose cells do have a nucleus are called eukaryotes. The main genus *desulfovibrio desulfuricans* is a strain of Gram negative sulphate reducing bacteria and some species are capable of transduction. *Desulfovibrio* is a genus of Gram negative sulphate reducing bacteria commonly found in aquatic environments with high levels of organic material and sulphate. As the sulphate is reduced to sulphite, the latter interacts with the ferrous iron to generate a black medium. The insoluble new medium is ferrous sulphide and the blackening indicates that sulphate reduction is taking place and that the iron is acting as a detoxifier for the harmful sulphide thus enabling a higher growth yield for the sulphate reducing bacteria to grow. Like other sulphate reducing bacteria, *desulfovibrio desulfuricans* was long considered to be obligately anaerobic. This is not strictly correct as, while growth may be limited, these bacteria can survive in oxygen rich environments.

These types of bacteria are known as aerotolerant. *Desulfotomaculum desulfuricans* is a strain of Gram positive, sulphate reducing bacterium usually identified by the release of hydrogen sulphide gas with its characteristic rotten eggs smell. The bacteria are straight or curved rods, are highly heat resistant and a free living fixer of atmospheric nitrogen. They are motile with a flagellum and are commonly found in canal and harbour waters. These latter bugs, which can live in a lively partnership with the Type 3, are anaerobic in nature and obtain their requirement for sulphur primarily by dissimilatory sulphate reduction. It is not intended in this Chapter to go into the extremely complex biochemistry but basically the animal works by assimilating a small amount of reduced sulphur but the majority of that absorbed is released into the surrounding water as sulphide ions, these are then hydrolysed to form free hydrogen sulphide. In this manner the SRB provide a cathodic process to support and maintain the anodic dissolution of iron and steel. Once the bacterium has started to produce sulphides, the local conditions then become favourable to growth and this can result in a population explosion of the bugs all reproducing highly corrosive sulphides. Any source of water which contains soluble or decayed organic material makes an ideal environment for these bacteria and such water can have a very high expectation of contamination with SRB. The usual nutrients available are phosphates, sulphates and nitrates all of which are free flowing into the canal system which is a prime example of such water. This is particularly true if they are generally peritrichous polluted, or running through farmland where non organic methods of fertilization and the use of chemical fertilizers may be expected. Marinas fed by rivers are another such example and it is well known that harbour muds are highly contaminated by sulphides produced by these creatures. Sulphide films are, by their very nature, highly corrosive and the presence on steel surfaces of hydrogen sulphide can lead to corrosion rates as high as 12.8 millimetres per annum. One form of sulphide known as Greigite is even more corrosive and rates up to 120 millimetres *per annum* are not uncommon.

In the case of elemental sulphur even this rate can be multiplied by up to eight times. The water environment can be free flowing or stagnant, fresh, brackish or salt - it seems to make no difference. At sites with low oxygen levels the reactions are generally anodic and where there is reasonably high levels of oxygen the reactions are usually cathodic. Both the temperature and the pH value of the surrounding water also affect the activity of the organisms. The bugs normally prefer ambient water temperatures of between 5 and 50 degrees Celsius and a neutral pH for growth and, again, the canal system fulfils these criteria. They can, by a form of chemical and biological metamorphism, survive the coldest of English winters and, as the wreck of the *r.m.s. TITANIC* shows, survive under enormous pressures.

The discovery by a marine surveyor of such microbiological corrosion is very difficult and requires some experience because it is not always readily visible. It is usually found under muddy and slimy surfaces, sometimes even behind paint coatings and a very careful visual inspection is necessary to locate it and the marine surveyor to know exactly what he is looking for. It is not amenable to discovery by non-destructive testing such as ultrasonic thickness measurement, eddy current testing or the magnetic method familiar to most marine surveyors. Electro-chemical methods of identification such as the SIG sulphide test can be used under controlled conditions but the techniques are usually rather difficult to apply in the field, take a long time to run and are rather unselective. They are, therefore, not very reliable. Furthermore the bacteria are often found inside oxidised welds, or at areas which contain physical defects such as porosity, overlap or lack of penetration. The common practice of not blacking the underside of the bottom plate of narrowboats in the canals, for example, can only encourage this form of corrosion and, indeed, the author has often found it on such boats. If it is discovered, the only cure is to thoroughly clean the hull with high pressure fresh water, allow the hull to dry off, then to coat it with a good quality biocide, wash off again and afterward carefully recoat with a compatible paint. Within the author's experience the best paint to apply is a good quality tar epoxy with at least four coats and a minimum total thickness of at least 250 µ. An approximate method of identifying the particular bacterium found causing hull corrosion sufficient for most marine surveying needs is given in the Table.

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Gallionella Ferriginea or the Iron Bacterium

The so-called iron bacterium *gallionella ferruginea* is an iron oxidizing chemolithotrophic bacterium (IOB) that lives in low oxygen conditions and has been found in a variety of different aquatic habitats. It has been known for about 180 years (it was first named by Ehrenberg in 1836) that these bacteria play an important part in oxidizing and fixing iron but in order to get energy out of this process, they must live in a relatively specific environment that contains reduced iron, the right amount of oxygen and sufficient amounts of carbon, phosphorus and nitrogen.

The bacterium obtains its energy from carbon dioxide fixation by oxidising ferrous ions in solution to ferric ions with the consequent precipitation of ferric and, on normal shipbuilding quality mild (low carbon) steel, manganic hydroxides in the form of clearly visible tubercules on the underwater shell of the vessel. These encourage the co-accumulation of aggressive anions such as chlorides and the steel underneath will develop deep local pitting. This type of attack is often found on the lower sides and the underside of the bottom plates of narrowboats and, for example, Dutch barges used as houseboats. They were brought to public attention when Dr Robert Ballard found them on the wreck of the *r.m.s. TITANIC* and dubbed them 'rusticles' because they look like icicles made of rust. Despite the name, they are not true rust and must not be confused with it. As a direct result of the attack by the microbes which are reducing her iron at a rate of 0.30 grammes per square centimetre of area per year it is estimated that within the next one hundred and fifty years or so the remains of the *r.m.s. TITANIC* will have completely disappeared and turned into a mountain of ferrous and ferric hydroxide at the bottom of the ocean.

The iron bacteria are rather like living porous concrete and start with a threadlike polymer structure and then crystallise iron, calcium and a tiny bit of aluminium. The outer wall of the rusticle is heavy with iron that protects the resident colonies of bacteria. The outer skin grows harder and darker with age which fact helps the marine surveyor to spot newer growth. The young rusticle absorbs more and more iron from the parent source which is consumed into the communal structure. If they stop consuming they die but if they carry on consuming the ends of the rusticle becomes too heavy and breaks off and the microbes inside then die. The old ones fall off leaving a clean gap on which a new colony can start. Iron(II) hydroxide is poorly soluble (1.43×10^{-3} g/l). It precipitates from the reaction of iron(II) sulphate and hydroxide ions (from a soluble compound containing hydroxide ions). Common household bleach or sodium hyperchloride or common bleavh makes a good, cheap biocide.

$$FeSO_4 + 2OH^- \rightarrow Fe(OH)_2 + SO_4^{2-}$$

In 2010, scientists also isolated *halomonas titanicae*, a Gram negative, heterotrophic, aerobic, non endospore forming bacterial strain and motile by peritrichous flagella, designated strain BH1T, from a 'rusticle' sample collected from the wreck of the *r.m.s. TITANIC*. The pitting from microbiological sources has a high surface area/depth ratio the sides of the pits being stepped and the bottom of the pit flat. Sulphur reducing microbes leave the bottom of the pit coated with a soft black substance, easily cut with a penknife and giving off the characteristic bad eggs smell of hydrogen sulphide. Sulphur oxidising microbes leave the bottom of the pit coated with a bright silver coloured very hard substance. The 'rusticles' left behind by the gallionella microbes form a brown powder with a hard but brittle crust.

They are a mixture of ferrous $Fe(OH)_2$ and ferric $Fe(OH)_3$ hydroxides which are insoluble in water and are also known as ferrous or ferric hydrate or iron hydroxide. The steel underneath often has the black lustrous characteristic of ferrosoferric oxide (magnetite). If full identification is needed for, say, legal purposes, then a full laboratory test is necessary. The boat should also be fitted with an adequate number of properly electrically connected anodes whose material is suitable to the salinity of the water in which she lies.

Anodes should not, of course, be painted but it is surprising how often that, even these days, one finds on surveys that this reasonably obvious rule is totally ignored. A good practice when painting the boat is to clean the anodes all over right back to bright metal and then to coat them with soft soap or Vaseline before applying the paint to the hull. Any paint accidentally applied to the anode surface will then wash off with the soap when the boat is floated taking the unwanted paint with it. Experience has shown that, in the absence of sulphur reducing bacteria, adequate protection of mild steel is often achieved when there are sufficient anodes such that the electric potential is depressed by -0.85V with a silver/silver chloride reference anode. Where microbial activity is high or the risk is known to be present, however, the potential must be reduced to at least -1.00 V.

Bacterium Identification

Bacterium	Type	Identifier
Desulfovibrio spp *Desulfotomaculum spp*	Sulphur reducing bacterium SRB	Black hydrogen sulphide at the bottom of layered pitting
Thiobacillus spp	Sulphur oxydising bacterium SOB	White tetra-hydrated ferrous sulphate at the bottom of layered pitting
Gallionella ferruginea	Iron oxidising bacterium IOB	Yellow/brown crusted 'rusticles' of ferric and ferrous hydroxides.

Runa's Six appeal

Former CEO of Louis Vuitton, Yves Carcelle, and a friend are on a mission to find and restore all seven *Runa* masterpieces. Read more about this Danish design and the quest to bring *Runa VI* back to glory

STORY **JACQUES TAGLANG** PHOTOGRAPHS **NIGEL PERT**


DEN
1927

Clockwise from top left: **evidence of quality craftmanship abounds with the new blocks; fairlead; running backstay and the gaff span finished in leather and 'baseball glove' stitching.**
Left: **fully restored and back on the water**

The Danish architect, Gerhard Peter Rønne (1879-1955), only designed 10 yachts. One of these, penned for his friend Knud Degn, and six others, for himself, were all baptised *Runa*.

Nothing extraordinary, perhaps, yet a century after the first was launched in 1910, two friends, Yves Carcelle and Gregory Ryan, are collaborating to collect and restore all the surviving boats of the series to their original condition. This is itself an unusual ambition in the yachting world but, furthermore, of the seven *Runa* designs only one has disappeared, and that was during the 1950s.

Runa VI found her element again after an extensive reconstruction at Chantier du Guip in Brest on the 6 May 2013. On seeing the restored cutter in all her splendour, the owner, Yves Carcelle, exclaimed: "I feel like a kid before a new toy: feverishly impatient! Even though I am not a collector at heart, just to know that I own *Runa IV* and *Runa VI* fills me with joy. And I promised to share this joy with previous owners, five of whom have come from the USA, Portugal and the South of France to witness the comeback of *Runa VI*.

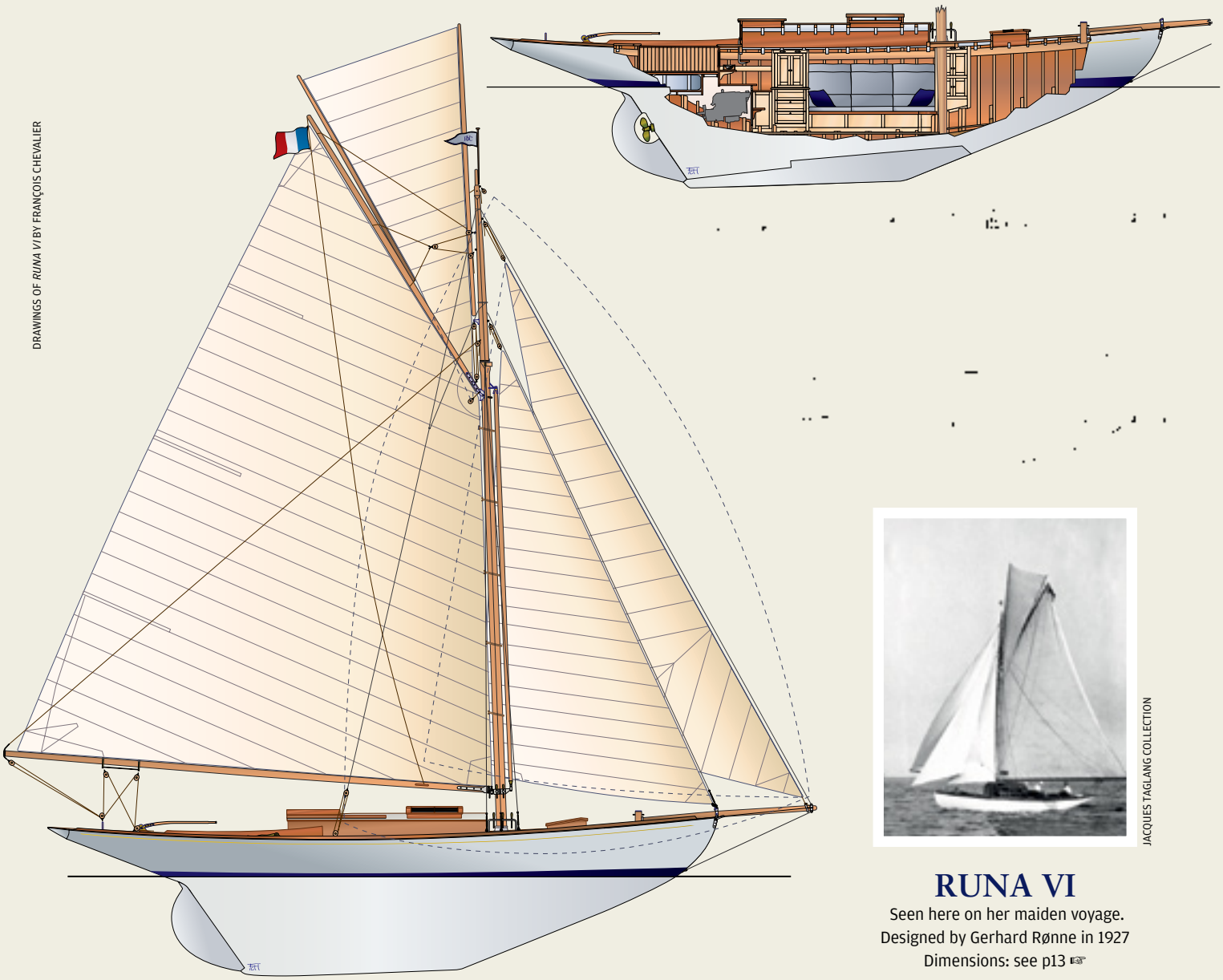
"The first time I saw her was half a century ago. She was a present from my mother for my 17th birthday in 1963!" Another former Portuguese owner, Manuel Champalimaud, said: "When I bought her a young Danish girl was living aboard with her two children and chartering in the Balearics. I raced *Runa VI* and she held her own against modern yachts. I kept her until 1970."

Since then, Manuel has sailed the 1952 67ft (20.4m) yawl *Sea Lion*, designed by Alberg & Brengle and built by Abeking & Rasmussen (CB289), which his mother owned at the time she gave him *Runa VI*.

Fernando Vozone then took over *Runa VI* from Manuel and his sons Jorge and José were amazed: "Every weekend we had a family outing from Lisbon or Cascais, sometimes competing in a race." Maybe it was aboard *Runa VI*, then, that Jorge first wanted to become a professional skipper. The two brothers looked at each other with a smile, reminiscing over taking girlfriends sailing, away from their parent's supervision!

Above: **sycamore brightwork down below gives the cabin a rich and luxurious warmth**

DRAWINGS OF *RUNA VI* BY FRANÇOIS CHEVALIER



JACQUES TAGLANG COLLECTION

RUNA VI

Seen here on her maiden voyage.
Designed by Gerhard Rønne in 1927
Dimensions: see p13 ☞

Finally Alain Lenôtre, who had come from the USA especially for the occasion, recalls *Runa VI* with the Marconi rig sported during his ownership, between 1974 and 1982. "In 1977 I sailed her from Portugal to Bandol, on the Côte d'Azur, via Morocco, Malaga and the Balearics. I did consider taking her to the USA, for a while, in 1982, when I settled in Houston, Texas!"

Although *Runa VI*'s owner from 1982 to 1996, Pierre Bayze, could not be present at the reunion, his successor, Eric Lapasset, came from Bandol to see the boat he had unsuccessfully attempted to restore. Eric owned *Runa VI* from 1997 until 2011. "She is even more beautiful than I had dreamed. If I had known, I would have done everything to finish the restoration!" he said.

Eric was not yet 30 when he acquired *Runa VI* and though his means were limited he decided to restore her alone. He had already restored a yacht that belonged to his father, but this time he underestimated what was involved. Eight years later he admitted: "I'd had enough. I was worn out and my visits were less and less frequent. Around 2004 to 2005, I stopped work on her altogether.

Above: **sail plan, lines and cutaway of *Runa VI*.**
Right: **not a bad place to store rope and sails!**
***Far right*: painting of the missing *Runa V* by Sigurd Kielland-Brandt, a friend of Rønne who cruised her in 1920**

Then, at the beginning of 2011, I contacted Yves Carcelle… The irony is that I have never sailed on *Runa VI* – today is a great first to be able to helm her!"

Yves Carcelle is well aware of these stories: "It is obvious that Manuel, Jorge and José, Alain and Eric are all experiencing the same emotions as I am. We've all fallen under the spell of *Runa VI*. What is strange, though, is that when you listen to them you get the impression that they are not talking about the same boat. But it is the same force of attraction that affects us all. She is a small boat seemingly unspectacular, but with a staggering beauty. Everyone who sees her regards her as a work of art. I always recall the words of Gerhard Rønne when asked about the significance of the name *Runa*. He said: 'It means *rune* – a small mystical thing!' Well, I believe this mysterious side to Rønne's creations. Just look at this: five ex-owners or their descendants, gathered together to celebrate the rebirth of this cutter."

Apart from this, what motivates Yves to reassemble most of the *Runa* family? "The seeds of this passion were sown during a wine-tasting evening in 2009," he says.

Gerhard Rønne and his designs

Gerhard Peter Rønne is remembered as an architect of buildings and he worked during the period inspired by neoclassicism and functionalism between the wars. He was student and collaborator of Albert Jensen (who was architect to the King) before working for the town of Copenhagen and subsequently creating his own practice in 1916. His masterpiece was Shell's Danish headquarters in 1932, unfortunately destroyed in bombardments of 1945.

Gerhard was born in 1879. His father Niels was a cabinetmaker and Gerhard learned woodwork at technical college before attending the Royal Arts Academy to study architecture, qualifying in 1907. Four years later he married Ines Jensen and they had a son, Torben. As a child Gerhard was fascinated by the stories of his grandfather, Henning Hansen Rønne, who had been a deep-sea captain and he freely admitted being already subjugated by the sea. By the age of 17 he was a member of the Copenhagen Amateur Sailing Club and then he joined the Royal Danish Yacht Club. In 1897, he undertook his first cruise on a small yacht, *Sirius*. Ten years later, to celebrate his graduation, he went on a cruise with friend Knud Degn, who won a silver medal in the 6-M event of the 1924 Paris Olympics, on his yacht *Ran*. Gerhard acquired *Ran* at this time.

> "Once my studies were finished I always found a way to devote two or three weeks of holiday to a long-distance cruise"

In 1910 the two friends drew up plans for sisterships *Runa* and *Ran II*, with a little helpful advice, it is believed, from celebrated Danish naval architect Alfred Benzon (1855-1932).

Rønne designed his nine later boats alone. Six of his 10 designs were for himself, and all apart from *Runa VII*, which was constructed by Knud Jensen in Roskilde, were built in Denmark at the Neptune Yard of NH Nielsen at Skovshoved.

Although Gerhard was a regatta man in his youth, he soon acquired the taste for cruising: "Once my studies were finished I always found a way to devote two or three weeks of holiday to a long-distance cruise." In 1910 his voyage with *Runa* of 1,100 nautical miles took him as far as Yarmouth, Isle of Wight, and back. In all, his *Runas* took him to Norway, Sweden, Holland, France, UK, Finland and even Lithuania.

Gerhard Rønne was deeply involved in the Royal Danish Yacht Club, sitting on many race committees and juries and generally participating on the development of Danish yachting. *Runa VII*, his last design, was built in 1946 and this Marconi cutter was sold in 1949. She later turned up in America after a brief passage in the UK.

Rønne died aged 76 in 1955. He once said, referring to his cruising: "I am not a romantic, but I love nature and the sea for their purity. And it is precisely this sentiment that is all important in yachting!"

"Gregory Ryan, an American sculptor, was talking of his three-year restoration of *Runa VII* at Mystic Seaport, in Connecticut, USA. I was moved by his failure to acquire *Runa IV*, which a friend had located in San Francisco. I don't quite know what went through my mind, but without seeing either of these yachts I decided to purchase *Runa IV* and have the master craftsmen of Chantier du Guip restore her."

Later, the decision was made to have Chantier du Guip reconstruct, to original plans, the wreck of *Runa VI* – just as they did for *Runa IV*. In 2012, Ryan acquired a second Rønne yacht, *Ran II* (sister ship of the first *Runa* and considered as *Runa II*, although no boat has ever carried this name) and has also started her restoration.

"I feel one of the strongest elements of this whole story is the involvement of a whole group of enthusiastic friends – Bruno Troublé, François Chevalier, Yann Mauffret and his team and Jacques Taglang [the author of this story], who is preparing a book on the *Runa* saga – who came together around *Runa IV*," adds Yves. "Discussions and historical research within the heart of this group have dictated procedures followed during restoration, such as the decision to put *Runa IV* back to a gaff yawl rig, rather than retain the Marconi sloop rig carried when she arrived in France. Similarly, decisions to lay a canvas deck on *Runa VI* and to give her a gaff rig are the result of the same process.

"It's true, between the two of us, Gregory and I have four of the seven *Runas* and the idea of collecting all seven has become something of an obsession," Yves says. "The first *Runa* belongs to the Yachting Museum of Svendborg, Denmark. Her sister ship, *Ran II*, belongs to Gregory – there was never a *Runa II* as Gerhard considered *Ran II* to fulfil this function. *Runa III* is in Germany; I own the *IV* and *VI*, and Gregory number *VII*, which is still in the States. This leaves *Runa V*, whose trace is lost after 1949. Maybe one day she will be rebuilt as she was," Yves concludes, his enigmatic smile directed towards his two beloved yachts.

The full story of the yachts of Gerhard Rønne will soon be available in the book *The Runa Saga* that Jacques Taglang and Nigel Pert are currently preparing to be published in the spring

Runa VI restoration

There is no doubt that Gerhard Rønne would have recognised the 'new' *Runa VI*, imagined in 1927, when she was refloated on 6 May last year.

Chantier du Guip's master craftsman, Gerd Löhman, explains the restoration process: "As with *Runa IV*, *Runa VI* underwent a thorough diagnosis and was classed, like her predecessor, as a "boat to be totally restored". So, rather than change things little by little - a choice that takes a lot of time, can prove quite challenging and is often very expensive - it was decided to undertake a reconstruction that was faithful to the original. In the long term, this was probably a more economical solution but, like any project of this magnitude, you have to know when to put sentimental attachment aside!"

Next, the form was taken and traced full size. Only a few things were disassembled so the team could measure certain parts. "From the outset Yves insisted that the restoration of this boat must be impeccable," explains Yann Mauffret, director of the restoration at Chantier du Guip. "Coming from the luxury world of Louis Vuitton where perfection and authenticity are the bywords, I guess it's second nature."

> "From the outset Yves insisted the restoration of this boat must be impeccable"

The main structure was reproduced as built: keelson, floors, frames, stem and sternposts. Bassam mahogany was used instead of pine for the planking to stiffen the hull, and copper fixings were substituted instead of the original iron ones to help reduce susceptibility to corrosion damage. The hull was also sheathed.

The interior was created by Bernard Mauffret: "Yves Carcelle wanted to retain the same spirit of *Runa IV*, so I created the furnishings in sycamore, selecting pieces with a wavy grain for extra detailing on the panelling. To keep within the same tonality, I used clear oak for elements such as the table and coffer in the companionway. The cabin sole is constructed in untreated teak."

1910

RUNA

DESIGN
Gaff cutter
BUILDER
NH Nielsen Fréres, Skovshoved
DIMENSIONS
LOA: 31ft 2in (9.5m)
Beam: 7ft 8in (2.4m)
Draught: 5ft 2in (1.6m)
Disp: 10,803lb (4.9t)
Sail area: 533sqft (49.5m²)
OWNED BY
The Danish Yachting Museum since 1992

1910

RAN II

DESIGN
Gaff cutter
BUILDER
NH Nielsen Fréres, Skovshoved
DIMENSIONS
LOA: 31ft 2in (9.5m)
Beam: 7ft 8in (2.4m)
Draught: 5ft 2in (1.6m)
Disp: 10,803lb (4.9t)
Sail area: 533sqft (49.5m²)
OWNED BY
Gregory Ryan since 2011

1912

RUNA III

DESIGN
Gaff cutter
BUILDER
NH Nielsen Fréres, Skovshoved
DIMENSIONS
LOA: 28ft 8in (8.8m)
Beam: 6ft 12in (2.1m)
Draught: 5ft 1in (1.6m)
Disp: 9,039lb (4.1t)
Sail area: 483sqft (44.9m²)
OWNED BY
Unknown - thought to be lying in Germany

1918

RUNA IV

DESIGN Gaff yawl
BUILDER NH Nielsen Fréres, Skovshoved
DIMENSIONS LOS: 49ft 2in (15m), LOA: 35ft 2in (10.7m) Beam: 8ft 1in (2.4m), Draught: 5ft 2in (1.6m), Disp: 10,582lb (4.8t), Sail area: 842sqft (78.2m²)
OWNED BY Yves Carcelle since 2009

Clockwise from above: planking in progress – her lithe, form is obvious even at this stage; complex dovetail joint; cockpit hatch sliding rail constructed from solid timber; securing the deck beams. *Bottom right:* Yves Carcelle (*far right*) and his team celebrating the completion of an epic project

1920

RUNA V

DESIGN
Gaff yawl
BUILDER
NH Nielsen Fréres, Skovshoved
DIMENSIONS
LOA: 27ft 8in (8.5m)
Beam: 7ft 5in (2.3m)
Draught: 4ft 7in (1.4m)
Disp: 11,244lb (5.1t)
Sail area: 819sqft (76.1m²)
OWNED BY
No more information since 1950

1927

RUNA VI

DESIGN
Gaff cutter
BUILDER
NH Nielsen Fréres, Skovshoved
DIMENSIONS
LOA: 34ft 1in (10.4m)
LWL: 26ft 5in (8.1m)
Beam: 7ft 10in (2.4m)
Draught: 5ft 2in (1.6m)
Disp: 16,535lb (7.5t)
Sail area: 848sqft (78.8m²)
OWNED BY
Yves Carcelle since 2011

1939

RUNA VII

DESIGN
Bermudan cutter
BUILDER
Knud Jensen, Roskilde Denmark
DIMENSIONS
LOA: 29ft 6in (9m)
Beam: 7ft 2in (2.2m)
Draught: 5ft 6in (1.7m)
Disp: 11,023lb (5t)
Sail area: 700sqft (65m²)
OWNED BY
Gregory Ryan since 2005

Maritime Labour Convention 2006:

Are you a "shipowner" under your charterparty?

Nick Wilcox, Senior Associate and Albert Levy, Partner, both of Ince & Co LLP, debate the vagaries and confusion surrounding one aspect of the Maritime Labour Convention.

The Maritime Labour Convention 2006 (MLC) has been in force internationally since August 2013 and, in that time, it has become clear that it has received widespread ratification, that enforcement is a reality, and that ships run the risk of detention if they are not compliant. However, there has also been a good deal of confusion over the question of "who is the '*shipowner*'?" under the MLC. The answer to the question is important, since it is that person who has the principal burden of ensuring MLC compliance.

In the MLC, the "*shipowner*" is defined to mean the owner of the ship or another organisation or person who has assumed responsibility for the operation of the ship from the owner and who in doing so has agreed to take over the duties and responsibilities imposed on shipowners under the MLC. This is the case even if another organisation carries out some of the duties of "*shipowner*" on its behalf. Therefore, the owner and the "*shipowner*" may well be different persons or organisations.

Note that "*shipowner*" does not necessarily mean the owner of the ship in the proprietary sense. Readers could easily be forgiven for being confused by the terminology.

Lewis Carroll put it well in ***Through the Looking Glass***:

"When I use a word,' Humpty Dumpty said in rather a scornful tone, 'it means just what I choose it to mean - neither more nor less.'

'The question is,' said Alice, 'whether you can make words mean so many things.'

'The question is,' said Humpty Dumpty, 'which is to be master – that's all."

So it is with the MLC, the word "*shipowner*" has a particular, not the common, meaning of the one responsible for compliance with the MLC.

The MLC definition gives as an example the bareboat charterer as one type of person who may assume the mantle of "*shipowner*" from the owner. This accords with the charterer's significant responsibilities under bareboat charterparty agreements whereby typically the charterer provides the crew and operates the vessel. By way of illustration, Barecon 2001 imposes extensive responsibilities on the bareboat charterer for the ship's operation and her navigation, maintenance, repair and manning.

By contrast, the charterer under a time or voyage charterparty agreement would not owe the same duties and responsibilities and thus day-to-day is unlikely to be the "*shipowner*". Rather, responsibilities for the ship's operation are likely to reside with the owner who on that basis will be the "*shipowner*".

A point of interest is that in English law, as is explained in Marine Guidance Note 471(M) issued by the Maritime & Coastguard Agency (MCA), the definition of "*shipowner*" is slightly different for the purposes of the domestic legislation enacting the MLC. The example of "*agent*" has been omitted from the definition of "*shipowner*".

The MCA explains that this is because of the specific meaning that the word carries in the English legal sense. In short, an agent acts on behalf of, and binds, its principal. If the "*agent*" in the definition of "*shipowner*" was the agent in this sense, it is difficult to see how it could accept personal liability for the "*shipowner*'s" responsibilities.

As "*shipowner*", the owner of a ship on time charter has *prima facie* responsibility for ensuring the MLC compliance of all seafarers' employment on board the ship. For example, the requirement that every seafarer has a seafarer employment contract containing certain minimum terms. Under the MLC, this is the case even if some of the seafarers on board are legally employed by a different organisation such as the charterer (e.g. in respect of a supercargo).

This raises a potential difficulty for the owner: how can he be expected to ensure that the charterer's employment of seafarers on board is MLC compliant? Furthermore, how can the owner avoid a scenario where the charterer asserts that the ship is off hire on the basis that she has been detained for MLC non-compliance, for which default the owner as "*shipowner*" is *prima facie* responsible, but where non-compliance is in reality the charterer's fault?

An answer is to draft the charterparty so that responsibilities for MLC compliance do not reside solely with the owner as "*shipowner*" but are apportioned between the owner and the charterer in order that liabilities attach where the responsibilities truly lie. For example, the charterparty could provide that it is the charterer's duty to ensure that its employment of seafarers on board is MLC compliant. This could be reinforced with an indemnity in favour of the owner in case there do prove to be MLC deficiencies. However, if "*knock for knock*" arrangements are desired in respect of other aspects of the charterparty, care would be needed in the drafting so that these are not prejudiced by the inclusion of the indemnity. Additional charterparty clauses could also provide for whether the ship will be considered to be off hire in circumstances where she is delayed in port for MLC deficiencies that are in reality attributable to charterer's non-compliance.

For further information regarding the drafting or amendment of charterparties to apportion liability for MLC compliance or in respect of the MLC generally, please contact the authors directly.

Nick Wilcox and Albert Levy. Ince & Co LLP.
Telephone: +44 (0) 20 7481 0010
Web site: incelaw.com

ANATOMY OF WOODEN CRAFT

BY **PAUL RUTHERFORD**, MIIMS

Paul, together with his son Duncan, run Quest Marine Surveys which is based in the North West of England.

I am rarely given the opportunity to survey wood water craft, probably due to the geographical area I am based in, however when recently researching an ageing Admiralty Publication from 1937. I was interested to find some very helpful and detailed drawings describing the construction of small wood craft. These have been reproduced here from the original plates and with the permission of the Admiralty.

BOAT CONSTRUCTION (WOOD CRAFT)

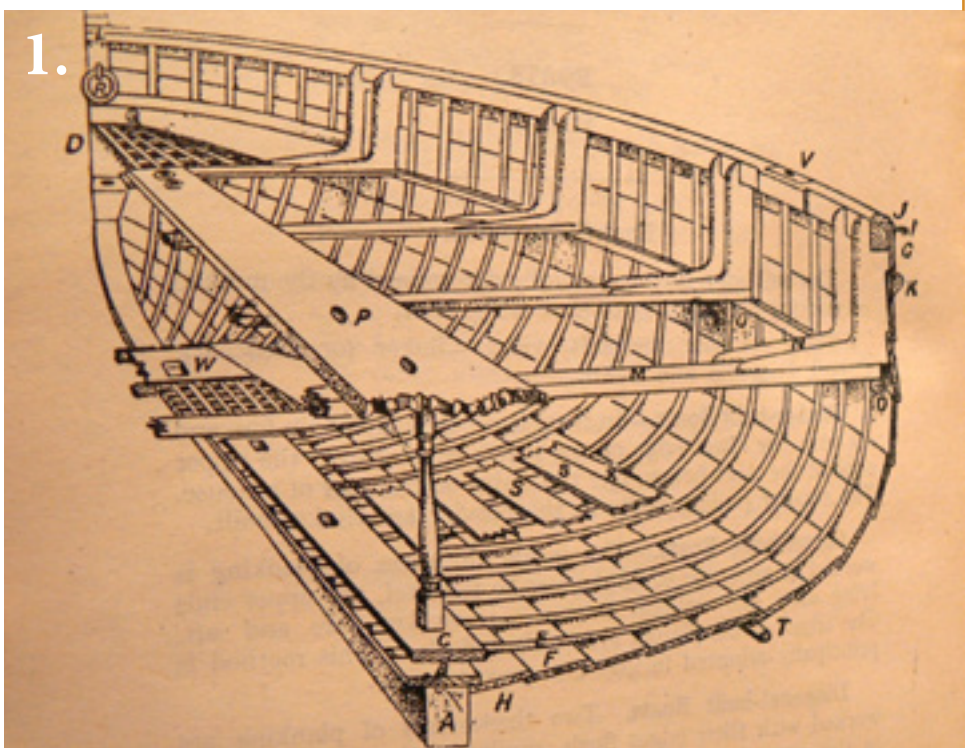
The build of a boat is generally determined by the method of working the planking or skin of the boat.

There are four methods, viz: **Clinker** (or **Clencher**), **Carvel**, **Diagonal** and **Sewn**.

1. CLINKER-BUILT BOATS

In these boats the planks run fore and aft with the lower edge of one plank lapping over the upper edge of the next below, like the slates on the roof of a house. The smaller pulling boats in the service are clinker- built.

1.

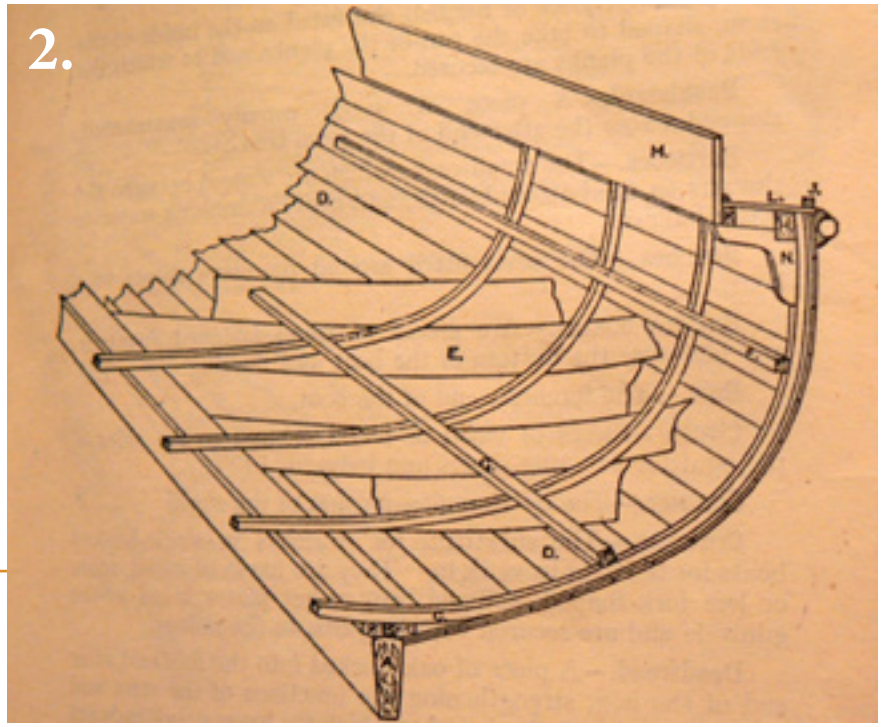


A: Keel
B: Hog
C: Keelson
D: Stem with Apron Pin
E: Timber or Floors
F: Planks
G: Top Strake
H: Garboard Strake
I: Gunwale
J: Capping
K: Rubber or Rubbing Strake
L: Breast Hook
M: Thwart
N: Knees
O: Risings
P: Sailing Thwart or Mast Carling
Q: Head Sheets
R: Ring Bolt
S: Bottom Boards
T: Bilge Rail with Hand-holes
V: Socket for Crutch
W: Fore Sheets
X: Stretcher Rail

2. CARVEL-BUILT BOATS

The inside thickness of the planking is worked at an angle of 45 degrees to the keel, the upper ends lying aft; the outside thickness is worked fore and aft. The edges of all planks are worked flush. This method is principally adopted in gigs and power boats.

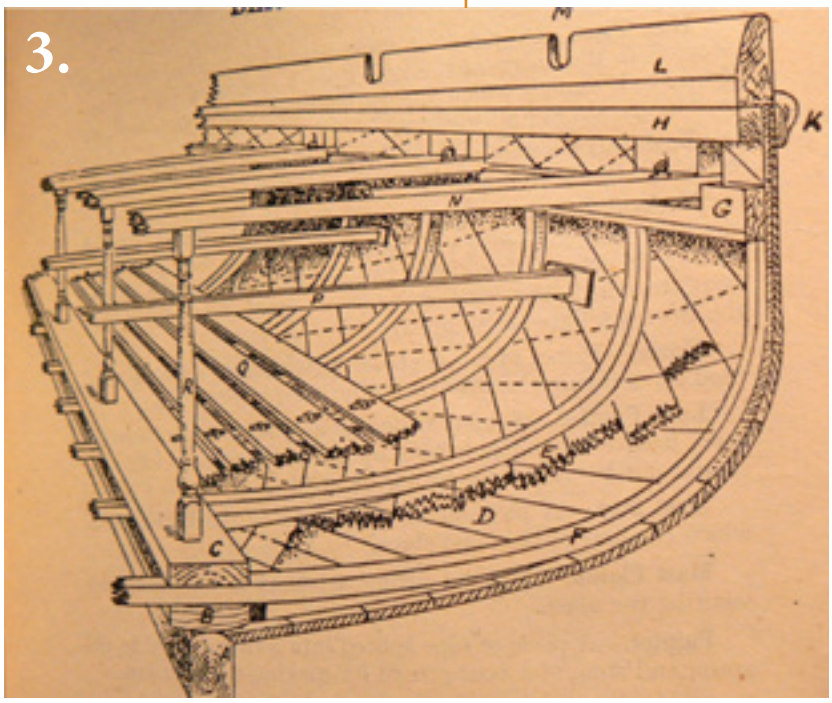
A: Keel
B: Hog
C: Timber
D: Outer Skin
Bottom Planking
E: Inner Skin
Bottom Planking
F: Rising
G: Bilge Stringer
H: Gunwale
J: Foot rail
K: Carling
L: Covering Board
M: Coaming
N: Hanging Knee
O: Rubber



3. DIAGONAL-BUILT BOATS

Two thickness of planking are worked with their edges flush, similar to the carvel system; in this case, however, each thickness of plank is worked at an angle of 45 degrees to the keel in opposite directions, the inner thickness having the gunwale ends falling aft. Sailing launches and pinnaces are diagonally built.

A: Keel
B: Hog
C: Keelson
D: Plank (Outer Skin)
E: Plank (Inner Skin)
F: Timber
G: Shelf
H: Gunwale.
K: Rubber
L: Washstrake or Solids
M: Rowlocks.
N: Thwarts.
P: Stetcher.
Q: Bottom Boards.
R: Pillar



4. SEWN BOATS

These boats consist of two thicknesses of Honduras Mahogany; the inner thickness is of 5/32 of an inch and is worked at right angles to the keel from gunwale to gunwale; the outer thickness of ¼ inch is worked longitudinally with the edges of planks flush; the three lower strakes, however, gradually increase to 3/8" in the rabbet of the keel.

These two thicknesses, as well as the timbers and floors, are fastened or sewn together with best annealed copper wire. The plank ends at the stem and stern and the fastenings at the keel are the same as for other carvel-built boats. Materials:- The skins of the smaller boats are generally of English elm or silver spruce, and those of the larger boats both pulling and power, are of teak or mahogany. The portions of the boat grown to form, viz., stem and knees, are of oak, the remainder of the structure, and also the fittings, are generally of Canada rock elm or fir.

Albeit, all of this information is available from various sources however coupled with the drawings and the key, along with the historical source, it is useful in particular to students but also as a reminder to all marine surveyors, as to the origin and use of terms used, many clearly lost on other materials used more frequently now in every day production. Also with the advance of epoxies now in use, that have lead to different methods of construction, a reminder of traditional skills I find quite refreshing.

THE MARINE SURVEYOR AND THE CHAPLAIN

As Managing Director of CTS Marine Consultants Ltd, Captain Simon Culshaw, a Master Mariner, brings together a wide range of seafaring experience with practical expertise in offshore operations, emergency response planning, hydrographic surveying, marine environmental boundary delimitation and oceanographic projects.
He is a recognised authority on a number of marine topics and is regularly called upon to provide expert witness in legal and insurance enquiries.

The seas and oceans have many uses. We fish the seas, sometimes over fish areas. Aggregates and other minerals are mined from the seabed. Oil and gas exploration activities are well-known offshore; in the past the seas have been a convenient defence barrier. The sea also provides a convenient transport system. None of the above operations are accident free and usually come to the notice of nations with a maritime interest. When there is a maritime indiscretion, the first person to arrive at the scene is usually a marine surveyor who has been called upon by the owner, insurance company, harbour authority or government. The qualified marine surveyor has a dual and complex role to play being a third party with no conflict of interest, but remaining loyal to their employer.

"When there is a maritime indiscretion, the first person to arrive at the scene is usually a marine surveyor..."

Many years ago in Singapore eastern roads, I was invited to escort a proposed buyer and on behalf of the buyer to commence a condition survey of the vessel, a small coaster. Against my advice the fellow he insisted on going down the engine room in the dark without a light. There was a yell and thud as he hit the bottom plates. When lighting was restored in the space, it was clear that he'd walked off the end of a walkway with a missing guardrail. That was his first lesson in health and safety.

In the case of the Exxon Valdez the accident has had a tremendous detrimental affect on Prince William Sound and surrounding areas. The vessel itself had to be repaired, but the environmental effect is still felt today. Although possibly not the immediate responsibility of a marine hull surveyor, most certainly a surveyor employed at cleanup stage must be able to understand cleanup methods, the cost and advise their employer on who might be responsible for such cost.

"...most certainly a surveyor employed at cleanup stage must be able to understand cleanup methods, the cost and advise their employer on who might be responsible for such cost."

Quite recently, I was invited to examine the seabed and coastline of a Caribbean island. The local government attempted to sue a shipping company whose passenger ship ran aground on a coral reef close to the shoreline. The government concerned was in the process of bringing a court action against the company for the loss of tourism revenue. A dive survey in the area quickly showed that a vessel had indeed grounded and the vessel's propellers had scoured the seabed in a successful bid to re-float and clear the coastline . However, it was clear that coral in the area for at least a kilometre either side and to seaward was dead, which is common in that part of Caribbean. Furthermore, there was a small cement factory on the coast. The spoils from the factory were pumped directly into the sea. It was clear that the shipping company had no claim to face.

"In the maritime industry it is often the case that the personnel involved in incidents, particularly when a ship is arrested, are the ones that suffer."

In the maritime industry it is often the case that the personnel involved in incidents, particularly when a ship is arrested, are the ones that suffer. Arrests occur for many reasons, but one common reason is that the ship owner/ship has run out of funds and is unable to pay or feed the ship's crew or employees of an establishment.

At different moments of my professional career I have been aware of the vital importance for seafarers of the support of the Apostleship of the Sea. At times of injury, bereavement and the other tragedies that can befall crew, the gentle presence of someone with no other interest than to help the crew is vital. In their own way, the chaplain of the Apostleship of the Sea will 'survey' the crew, listening more than talking and more often than not providing what is needed but often pretty hard to get hold of; a lift into town, access to the internet, a listening ear to let off some steam knowing that it will go no further.

"In their own way, the chaplain of the Apostleship of the Sea will 'survey' the crew, listening more than talking..."

In as much as the vital work of the marine surveyor will be needed for as long as shipping continues, I'm sure too that the work of the Apostleship of the Sea will too be needed and long may it continue!

CTS Marine Consultants Limited
email: **info@ctsmarine.co.uk**
Apostleship of the Sea web site:
www.apostleshipofthesea.org.uk

Fifty Shades of Insurance: Chapter One

Amanda Ridd works for Matrix Insurance Services Ltd, an independent insurance intermediary based in south east England. In this article, one of a series and not to be confused with *Fifty Shades of Grey*, Amanda explains why getting a 'quick insurance quote' is just not that straightforward and argues the necessity for form filling.

THE START OF SOMETHING WONDERFUL...

As an independent insurance intermediary one of our jobs is to arrange insurance for marine surveyors for their professional indemnity insurance and associated liabilities. In order for us to do this we require them to fill in a proposal form that will then be sent to insurers to obtain a quotation. Existing clients receive a renewal declaration from us six weeks prior to their renewal date for them to complete to inform us and insurers of any material changes that will occur in the forthcoming insurance year for, example change in income or activities. Insurers issue a renewal quotation based on the information provided in a renewal declaration form. This is usually, although not always, a relatively simple process.

We all dislike filling in forms and marine surveyors are no exception! We receive many email enquiries from those interested in professional indemnity insurance for their marine surveying activities asking us to give them a "quick quote" without having to go through the process of filling in a proposal form. The short answer, of course, is that we can't! Not because we can't be bothered to contact insurers, but because it is simply impossible to know what an individual surveyor's requirements might be. Marine surveying is varied and diverse encompassing many activities from pre-purchase surveys to post purchase inspections, cargo inspections, sea trials and the list goes on. Equally there might be a requirement for cover for Marine Coastguard Agency Code of Practice or Boat Safety Scheme work but without knowing the requirements of an individual or a firm, insurers cannot possibly guess whether these covers should be included. Nor can the limits of indemnity that a marine surveyor might require be conjured up out of thin air without an idea of what aspects of the profession they actually undertake and the risks involved.

In order for insurers to provide a quotation they need to know amongst other things how much income has been earned during the previous insurance year and what the income forecast is for the forthcoming year. All these facts are important to insurers so that they can properly rate a risk. So forms, alas, have to be completed!

The proposal form then is a necessity in order for insurers to be able to provide an accurate quotation and to ensure the correct cover is obtained for an individual or company.

For us it is important at an even earlier stage to know certain information. An important issue is where a marine surveyor is located and where they operate which is not apparent from a one line email enquiry signed only "John Smith" for example. We deal with surveyors from around the world and know from experience that there are some countries where we are unable to arrange cover without the involvement of a local agent and others such as North Korea where cover cannot be provided due to sanctions. So something as simple as an address is of paramount importance in the earliest stages for us to start the process of arranging insurance cover and a telephone contact number is always very useful.

So as soon as a proposal form is completed and returned to us we forward this to insurers, they issue a quotation and we pass this information to the surveyor for them to consider. The renewal process works in the same way but with most of the information with insurers the form filling takes less time! However you look at it form filling is an integral part of the insurance process, but once you've filled in the proposal form it gets much easier!

Contact: **Matrix Insurance Services Ltd**
Tel: 01892 724060
enquiries@matrix-ins.co.uk

Calculating Wire Rope Rigging Replacement Intervals

BY **NICK PARKYN**,
Yacht and Small Craft Marine Surveyor
(AffIIIMS)

A very informative article "Wire Rope Rigging Replacement" by Jeffrey N. Casciani-Wood was publish in the "The Report" March 2012 issue. As indicated in the article the only other guideline has been for wire rope rigging renewal after 10 years of usage. However a "rule of thumb" interval like 10 years which does not take into account type and amount of usage does not have much real value.

After reading the article I was convinced of its value and decided to revisit the concept later and create computer software to compute the values for rig replacement intervals using the formulae proposed by Jeffrey Casciani-Wood. While the calculations can be done on a calculator, a software based solution reduces the potential for error in calculation and makes calculation quick, easy and repeatable.

I contacted the author, collaborated with him regarding the approach and formulae. Based on my background in software engineering I developed the software.

There are three different computations which relate to the different type of craft and usage:

1. **Pure Cruiser**
2. **Cruiser/Racer**
3. **Pure Racer**

Each one of the above takes into account the type and amount of cruising and/or racing usage done by the craft per year and provides the interval at which wire rope rigging replacement is required. The cruiser/racer and racer computations also consider the average wind strength while engaged in racing.

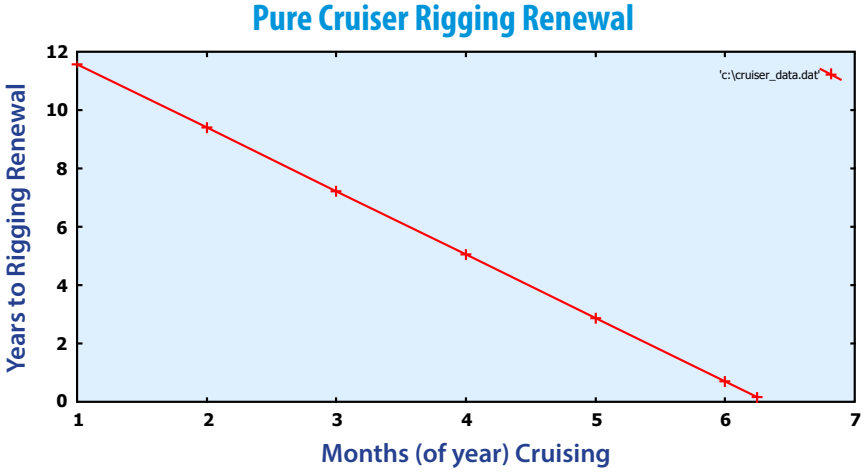
As an example, using the software I have developed, I computed and graphed the number of months of the year spent cruising and corresponding value of years to wire rope rigging renewal (below).

From the graph it can be deduced that after cruising for approximately 6.25 months in a year, that is time on the water and sailing, your wire rope rigging would need replacement or as suggested by Jeffrey Casciani-Wood "the rig including the mast and boom should be subjected to a full strip down survey by somebody who KNOWS what he is doing".

The software is also capable of calculating client specific scenarios of years still to run to rig replacement.

The calculation of rig replacement intervals has potential value to marine surveyors to provide guidance to their clients as well as to marine insurers who could possibly mandate rigging renewal based on these calculations. For clients who have surveys done at regular intervals the updated value of time to run before replacement can be computed. Many clients may not track this data or have it available, however to add value and provide a differentiated service I will collect this data from my clients and track it in a database along with their other data.

Capture and tracking of this data and experience will allow refinement of the formulae over time if this is necessary. The work done by Jeffrey Casciani-Wood is innovative, a significant contribution to this aspect of marine surveying and to the IIMS.



Over the coming months, the Report looks into the future of new shipping routes and canals that are in the pipeline. Some of them are very controversial and will probably never be developed, but others will go ahead. In part one of this four part series, Luc Verley introduces us to The Northern Sea Route, which has only been made possible in recent years due to changing climate conditions.

In this series of articles we will look into the future of new shipping routes and canals.

Part I: The Northern Sea Route
Part II: The Nicaragua Canal
Part III: The Istanbul Canal Project
Part IV: The Kra-canal in Thailand

PART I: The Northern Sea Route

BY **LUC VERLEY** MIIIMS

The Northern Sea Route is a shipping lane connecting the Atlantic Ocean to the Pacific Ocean through the Northern Russian Arctic Coast Line.

As a result of climate change the ice in the Arctic Sea has been melting considerably over recent years, resulting in the shipping lane being partly free of ice during the summer months. Ice free however means the absence of a frozen ice sheet, there will still be broken off ice sheets in various sizes in the Arctic Sea during the ice free periods. Therefore ships using the Northern Sea Route require ice strengthened hulls or in some case ice breaker support.

Source: INSROP International Northern Sea Route Program

For ship owners and charterers there would be a huge economic benefit for using the Northern Sea Route. For example a container vessel sailing from Tokyo to Hamburg via the Southern route through the Suez Canal would cover 13.949 nautical miles, depending on the ship roughly 48 days of sailing. The same vessel on the Northern Sea Route would cover only 8.077 nautical miles or roughly requiring 35 days of sailing. It is obvious that the Northern Sea Route would be fuel and time efficient and this cost saving will be the main drive for commercial shipping via this shipping lane. However, currently the number of transits made by commercial ships and the cargo volume passing via the Northern Sea Route is still rather limited, but it is slowly increasing over the past years.

Navigation in the Arctic Sea is nothing new, especially during the Soviet era big nuclear powered ice-breakers ensured navigation to the major ports such as Murmansk and many others for the supplies of fuel and goods to remote Arctic settlements.

What's new is commercial shipping companies using the Northern Sea Route to go from the Far East to Western European ports.

The first western shipping company that used the Northern Sea Route without real ice-breaker assistance was the German shipping company Beluga in 2009. Two of their ice-strengthened heavy lift vessels mv. 'Beluga Fraternity' and mv. 'Beluga Foresight' sailed from Ulsan in Korea to Rotterdam in Europe by using the Northern Sea Route. The voyage was shortened by 3.000 nautical miles compared to the normal voyage through the Suez Canal. this resulted in saving of 200 tons HFO380 bunkers per vessel, as the fuel consumption for a Beluga F-class vessel was in 2009 around 20.000 USD daily the entire saving was over 100.000 USD for bunker costs alone, not the mention all the other savings.

Compared to the Suez Canal passage there are no restrictions regarding beam or draft for vessels when using the Northern Sea Route.

Most of the Northern Sea Route is along areas controlled by the Russian Federation.

Several environmental activists have expressed their concerns regarding increased shipping activity in the Arctic's due to its marine life and the lack of infrastructure to deal with oil pollution and shipping incidents.

Another Arctic shipping route is the so-called Northwest Passage along the Northern coast of North America and the Canadian Archipelago connecting the Atlantic with the Pacific Ocean.

If I would have written this article 10 years ago, nobody would have believed that a Northern passage would be possible. Therefore we could ask ourselves the question "How will it be in the next 10 years?" Could it be that in 10 years time the Northern passage would be the preferred shipping route for ships transiting from the Far East to Europe? What would the effect be for the Suez Canal with it's yearly over 18.000 transits or for hub ports such as Singapore with yearly 120.000 vessels calling?

Time will tell us, but it is obvious that climate change is a fact.

TIME WILL TELL US, BUT IT IS OBVIOUS THAT CLIMATE CHANGE IS A FACT.

Forthcoming Boat Shows

3/6 April 2014 Poland Wind and Water Boat Show: Warsaw

10/13 April 2014 China International Boat Show: Shanghai

7/11 May 2014 Internautica International Boat Show Adriatic: Portoroz, Slovenia

22/25 May 2014 Sanctuary Cove International Boat Show: Sanctuary Cove, Australia

12/15 June 2014 Korea International Boat Show: Goyang, Korea

31 July - 4 August 2014 Sydney International Boat Show: Sydney

12/21 September 2014 PSP Southampton Boat Show: Southampton

17/22 September 2014 Grand Pavois de la Rochelle: La Rochelle, France

20/28 September 2014 International Watersports Exhibition: Friedrichshafen, Germany

23/28 September 2014 Turkey International Istanbul Boat Show, Turkey

24/28 September 2014 Barcelona International Boat Show, Spain

25/28 September 2014 Auckland On Water Boat Show: New Zealand

25/28 September 2014 Atlantic City In-Water Power Boat Show: USA

1/6 October 2014 Genoa Boat Show, Italy

25 October - 2 November 2014 Hamburg International Boat Show: Germany

30 October - 3 November 2014 Fort Lauderdale International Boat Show: USA

7/10 November 2014 China (Xiamen) International Boat Show: Xiamen, China

18/20 November 2014 METS Amsterdam: Netherlands

9/18 January 2015 London Boat Show: London

17/25 January 2015 boot Dusseldorf: Germany

6/15 February 2015 Helsinki Boat Show: Finland

27 February to 1 March 2015 Fredericia International Boat Show: Denmark

Major Forthcoming Shipping Exhibitions

9/11 April 2014 China Int'l Marine, Port and Shipbuilding Fair: Nanjing, China

9/11 April 2014 Sea Japan: Tokyo, Japan

2/6 June 2014 Posidonia: Athens, Greece

3/5 June 2014 Mast EurAsia, Istanbul, Turkey

10/12 June 2014 Seawork International: Southampton, UK

11/13 June 2014 SubSea Asia: Kuala Lumpur, Malaysia

9/12 September 2014 SMM: Hamburg, Germany

13/15 October 2014 India Shipping Summit: Mumbai, India

21/24 October 2014 ShipTec China: Dalian, China

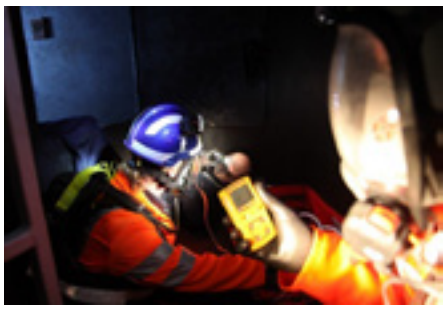
28/30 October 2014 Seatrade Middle East Maritime, Dubai, UAE

3/5 December 2014 The International WorkBoat Show, New Orleans, USA

NEW….Enclosed space training aimed specifically at Marine Surveyors..

Mines Rescue Marine

WHY HAVE MINES RESCUE MARINE CREATED THIS COURSE?



IIMS are committed to the safety of their people, therefore, this course was created to help marine surveyors become aware of the potential dangers associated with entering and exiting enclosed spaces on board ships whilst carrying out their routine work.

COURSE CONTENT…

This bespoke one day course is drafted inline with the requirements of the UK national occupational standard for entering an enclosed medium risk area (tank, double bottoms, cargo holds, void spaces etc.) and can be assessed to that standard. Included in the course will be a review of main procedural documentation such as risk assessments, action plan (SSOW), permit to work and emergency procedures.

It also identifies Personal Protective Equipment and offers a 'hands on' learning approach in relation to monitoring equipment, EEBD's and other entry & rescue equipment.

The course also discusses the involvement of personnel positioned outside the enclosed space who have designated responsibilities for controlling the entry and dealing with an emergency situation should that occur.

In line with the national occupational standard identified above, there is a practical element to the course which may involve self rescue techniques to be demonstrated from both vertical and horizontal entry points.

HEAD OFFICE:

HETTON ROAD

HOUGHTION-LE -SPRING

TYNE AND WEAR

Co DURHAM

UNITED KINGDOM

DH5 8PB

Tel: +44 (0)191 584 0144

For more information please call - +44 (0)191 584 0144

or Email: marine@minesrescue.com

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