THE REPORT

The Journal of The International Institute of Marine Surveying

JUNE 2014

BACK IN TIME:
THE IRAWADDY FLOTILLA COMPANY

2014 CONFERENCE:
FULL REPORT

SHEMARA: A SUPERYACHT REBORN

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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 Member

Welcome to the June issue of The Report magazine published quarterly for members of the International Institute of Marine Surveying and others operating in the marine field.

Since the publication of the last issue in an e-reader format it has sparked something of a debate amongst members. It is evident (and not surprising) that members have a desire to take and read the publication in a variety of ways. Many applauded the introduction of the magazine e-reader and said they liked the format. But there are those who still prefer a pdf (which is always available to download from the website). And contrary to what many believe, we do still publish a few paper copies of each edition. These are available for purchase from the IIMS head office at a reasonable charge to cover the cost of print and postage.

It has been a busy time at IIMS head office and with the Institute in general. Much has happened since the last issue of The Report magazine was published in March. Your Institute has a new President, Capt. Bertrand Apperry. He officially took over at the helm from Capt. Satish Anand at the Annual General Meeting in early June. This issue carries a more detailed report with photos of the event itself. And you can read columns from both your incoming and outgoing Presidents.

The other major event in recent weeks was the 2014 IIMS Conference, which was held on 9/10 June at the Hilton Hotel Southampton. The two day programme was enjoyed by all who attended the event. Although numbers were not as high as anticipated (probably due to the south coast location), feedback has been highly encouraging. There was a mix of technical presentations, coupled with more general business related ones for delegates to enjoy and learn from. A full report on the proceedings can be found on pages 12 - 17.

One of the most interesting presentations on the second day at Conference was given by Guy Canovan, chief naval architect on the recent refit of the 1930's classic superyacht Shemara. He has also written a feature article for this edition of The Report about its history and the challenges he and his team faced in breathing new life into this lovely old vessel. This article is on page 20.

Of course we present you with the usual round up of member news and general marine news. In particular it is also worth noting that Paul Homer, Chairman of Standards & Administration, who has served as an officer of the Institute for 15 years, has announced his decision to step down (page 10).

Best wishes to you.

Mike Schwarz
Chief Executive Officer
International Institute of Marine Surveying

The President's Column

What is the future of Marine Surveying?

As your new President on a two year mandate, it is only logical to speak about the immediate future; but I also wish to offer some thoughts and projections for the longer term too.

Maritime transport, which ensures 90% of international freight and exchanges between countries takes place, is used perhaps because it is the least expensive of all the means of transport available to importers and exporters. Furthermore it can also adapt itself to the modern world in its research for the optimal use of resources.

Indeed, the maritime expertise is not just the observation and evaluation of damage, but it also looks for how the prevention of the same damages can be avoided. When we are seeking a greater effectiveness in our means of transport, the research of the control of the ships in full safety remains one of the paramount elements.

The operations of assessment and control are among essential prevention measures where, as experts, we can take part in the continuous improvement of safety and effectiveness of maritime transport. As specialists in maritime affairs, we must be involved in the management of safety and not leave the Recognised Organisations (RO) to invade the market in the search of a new monopoly... which will do nothing… but replace the precedent!

Our participation should thus be reinforced in the "business" of damage prevention and our legendary probity of independent surveyors could take us to a new job which starts to make its way - to control the controllers! Such a business cannot be done without a solid initial formation of course.

Traditionally, the great maritime nations ensured the training of their sailors, part of which migrated them towards the job of marine surveyors ... thus the loop is buckled! But today, even if the expertise and consultancy are not close to disappearing we nevertheless note in the manpower of maritime surveyors a slow but irremediable reduction of former sailors coming from traditional maritime nations and the arrival in force of former sailors from emerging countries. All things considered in a completely logical parallel with the progression of the number of their embarked sailors!

Just like STCW is ensuring an equivalent formation for all the sailors of the world, our training courses in the world of maritime expertise is taking the same direction and we can be proud today to have among our members the best experts in the Middle and Far East.

Our survival must therefore be developed by our expansion which can be carried out only by the consolidation towards this part of the world and very soon towards the South and North American continent too.

I look forward to meeting many IIMS members over the coming two years in my time as President.

Bertrand

Capt. Bertrand Apperry
President
International Institute of Marine Surveying

Master Mariner ISM and
ISPS surveyor and consultant

Immediate Past President's Farewell Message

Time flies and my 2 year tenure as your President is up and over. It had been a roller coaster ride in the initial year and somewhat mellowed towards the latter part.

In spite of the difficulties IIMS faced the last couple of years and the financial crunch, IIMS has still moved ahead on various fronts. We were finally approved by Edexcel for our HNC and HND education programme just in the last month (May 2014). The Edexcel representatives audited the HO of IIMS in the UK and we have been given a clean bill of health by the examining body for awarding the appropriate Certificates respectively. Our Education Programme seems to be absolutely on track.

My travels in 2012 started in August that year with the 'One of its kind' Conference on board the tall ship "James Craig" at Sydney, Australia, courtesy of IIMS Australia Branch. Over 100 delegates attended and the organization and hospitality were awesome, probably one of the best ever. The IIMS bar was once again raised by Australia.

Curtsey to the IIMS Pakistan Executive Committee spearheaded by Capt. Khalil Khan, IIMS Regional Director Pakistan. I attended a Seminar in September 2012 on "The Role of Shipping in Pakistan Economy", which was extremely well attended (around 125 + delegates) at Karachi. Yet again, a well organised and attended Seminar with hospitality to match.

An IIMS introductory presentation was made at the Marine Insurance Conference 2012 at Moscow on 12th October 2012, wherein I spoke at length about IIMS, its aims, education and training etc.
It was well received by all gathered from the response and interaction that followed. To bring an end to the IIMS activities of 2012, we had the IIMS India Branch Seminar at Chennai in December 2012, which was well attended by around 100 delegates and student invitees from two marine insurance training institutes. It was also a pleasant experience to see the Chief of the Coast Guard, Chennai HQ, gracing this Seminar. The Welcome, Seminar, Gala Dinner and the overall hospitality spoke well of themselves. Once again IIMS India raised the bar (having done so last in 2010).

Time called to travel to the Far East when Mr. Zennon Cheng (IIMS Regional Director China) joined his company's 25th Anniversary with an IIMS Mini-Seminar in March 2013 at Hong Kong. Quite a few prospective surveyor members were introduced to us and this too proved to be a grand success. A few memberships floated in thereafter though the inquiries were more. A hop, step and a jump from Hong Kong brought us to Shanghai, were a IIMS Members' Meeting was organised with invitation extended to some prospective surveyor members too. This gathering produced about 15 in all delegates. The Members' Meeting was followed by a visit to the Titanic Exhibition, another experience in itself. The Dinner that followed was a toast of true Chinese hospitality.

The IIMS Annual Conference 2013 was cancelled due to financial reasons and made biennial (from 2012 onwards). We really missed out on our annual Conference in London and meeting Members, the discussions, interaction and the networking and so on. A great miss but none the less required to stem the financial tide.

Attention moved to Dubai for the IIMS Biennial Conference in November 2013 hosted by IIMS UAE Branch. This too was reasonably well attended and marked a gesture of a grand farewell to our good Ol' CEO , Mr. John Lawrence. We do thank the IIMS UAE Branch Members and Capt. Zarir Irani IIMS UAE Regional Director aptly for honoring the outgoing CEO.

Ups and downs have always transitted the journeys of one and all, be it at sea, on land or in the air. IIMS's journey 2012 to 2014 has not been an easy one and there are many unsung heroes who made it possible to carry the heavy IIMS cross forward for us all. We salute them all and they know who they are! IIMS does owe its present well being status to you all. Thank you.

Lastly, though not the least by any measure, our hearty welcome to our new CEO, Mr. Mike Schwarz, who will now lead us forward in the years to come.

I handover the baton now to Capt. Bertrand Apperry, our incoming President and wish him all the best, as always.

My sincere message to the incoming President, Board Members, Office Bearers and Members is to endeavour to increase the membership of the Institute with a steady overall annual increase.

I bid you all adieu as your outgoing President but will very much be there to assist the Institute as always.

Thankyou all for your support throughout my tenure as President.

Warm regards

Satish

Capt. Satish Anand

Marine News

Belfast Harbour

BELFAST HARBOUR PROFITS SURGE TO RECORD HIGH

Belfast Harbour has posted record profits for 2013, which means they can commit more than £60m to capital expenditure projects for the future. According to Belfast Harbour's Annual Report, turnover rose strongly by 30% to £50.3m. Profit before taxation also increased sharply too by 42% to £26.2m.

The very strong performance is a reflection of a record year for tonnages handled, increasing by 16% to 22.7m tonnes. The growth in trade was particularly good in sectors such as Dry Bulk Cargo (up 45%). Growth in trades associated with the new and burgeoning offshore wind farm sector also rose from 3,000 to 200,000 tonnes.

Chairman of Belfast Harbour, Len O'Hagan, said," Much of 2013's growth was secured by investments totalling £100m by the Harbour in three sectors – renewables, dry bulk and freight. The single largest expenditure (£53m) was our development of the UK's first bespoke logistics and assembly harbour to support offshore renewables.

Record levels of profit have enabled the Harbour to commit £60m towards further projects to benefit the local economy. This is necessary to accommodate a projected 68% increase in trade over the next 15 years and ensure that Belfast Harbour remains forward looking as the island's most modern gateway to overseas markets."

The most significant port development project initiated in 2013 was the submission of a planning application to reclaim 60 acres of land from Belfast Lough at the seaward end of the Port to support long-term capacity needs. Other Port development projects initiated include preparatory works on a major new coal handling and storage facility. Belfast Harbour remains committed to supporting the ongoing regeneration of Belfast Harbour Estate.

RINA

RINA CLASSIFICATION SOCIETY TO TACKLE NOISE POLLUTION

IMO has recently published MEPC Circ. 833 'Guidelines For The Reduction Of Underwater Noise From Commercial Shipping To Address Adverse Impacts On Marine Life', which sets out to advise on design and operational solutions that could be adopted to reduce underwater radiated noise.

The International Organization for Standardization (ISO) has developed the (ISO/PAS) 17208-1 Acoustics, Quantities and procedures for description and measurement of underwater sound from ships. Part 1: General requirements for measurements in deep water and ISO/DIS 16554. Ship and marine technology. Measurement and reporting of underwater sound radiated from merchant ships and deep water measurement.

Paolo Moretti, Head of the Marine Business Line, RINA Services, said, "Noise is the new pollution. The international community has raised concern that the underwater noise generated by commercial shipping may have negative consequences on marine life, especially marine mammals.

RINA is tackling that with a new voluntary notation, DOLPHIN, which gives shipowners a clear option to specify commercial vessels which have implemented solutions to minimize radiated underwater noise."

RINA has combined the standards into the DOLPHIN notation, which will be applicable from 1 July 2014. It has been developed in response to demand from clients who operate in sensitive marine areas and who wish to demonstrate that they have acted to mitigate the impact of their vessels.

However, the notation will only be granted to vessels which comply fully with both sets of regulations. The notation will give requirements on instrumentation, site and procedures to carry out the measurements, and will describe the information and post processing activities necessary for reporting.

HJB HOLLAND JACHTBOUW

EXPANSION BEGINS AT HOLLAND JACHTBOUW'S YARD

The next stage in the history of Holland Jachtbouw started when the foundations for its new site were laid, which will comprise three halls and offices. The occasion was officially marked by the Lord Mayor of Zaandam.

The first phase, which is due for completion by the end of 2014, will see the completion of a 60 metre x 26 metre x 18 metre shed and extension of the main construction hall to 55 metres.

This first stage of the project will allow for the arrival of two upcoming projects for Holland Jachtbouw, a 46 metre sailing yacht and the 51 metre Rainbow II.

Holland Jachtbouw's Managing Director, Roeland Franssens said about the project: "This new construction in the shipyard is in part due to our new build projects coming into the shipyard later this year. We need more space to accommodate further refits and additional new build projects in 2015 and this also provides a 'bird's eye view' for the managing project teams".

PORT OF DOVER PLANS UNVEILED

UK Shipping and Ports Minister, Stephen Hammond, has set out a plan for the future of the Port of Dover that he believes will strengthen community involvement, boosting commercial development and unlocking the potential for regeneration.

Discussions facilitated by the minister over how the port should best be run have resulted in a major step forward, with Mr Hammond setting out a plan that will enable the community and port to work together effectively, providing a catalyst for regeneration which will benefit the port, the people who use it, and the town of Dover.

Stephen Hammond said: "Dover is a thriving port with a proud history and I have set out changes to the port's constitution and financial powers that will help it grow in the future, and put the community at the heart of decision-making at the port. I believe these steps are what is needed to secure a shared and enduring future for the port. I now urge the town and the port to work together to deliver its full potential".

The agreed plan for the way forward will give greater community involvement in the strategic leadership of the port, with community non-executive directors being added to the board. It will also give the harbour board greater financial powers, to provide it with flexibility by allowing it to enter joint ventures and borrow against its assets. These changes will allow the board to raise substantial funds to invest in the future.

PANAMA CANAL TO TRAIN PILOTS AND TUG CAPTAINS

Ahead of the offical opening of the new third set of locks, the Panama Canal Authority (ACP) has announced it will charter a Post-Panamax vessel to be used for training purposes in the locks.

The Executive Vice President of Operations Esteban Saenz reported that the Panama Canal will charter a Post-Panamax ship to train pilots and tugboat captains that will assist in transits through the new lane. Saenz went on to add that the vessel will be used several months before the opening of the expanded Canal to test the new locks.

"This is one of the best ways to train our pilots and tug captains in the joint effort required to transit through the two new lock complexes of the expanded Canal," said Saenz. He added that since 2011 the Panama Canal has promoted workforce training for the operation of the expanded waterway.

Since 2012, a total of 186 of the approximately 280 Canal pilots have been trained at the Panama Canal's Centre for Simulation, Research and Maritime Development (SIDMAR) using Post-Panamax model ships. "SIDMAR's mathematical modelling and simulations have been updated and parts of the expanded Panama Canal such as the locks, navigational channels and Culebra Cut have been added to train our pilots and captains in such manoeuvres," added Saenz.

SOHAR PORT REACHES MILESTONE

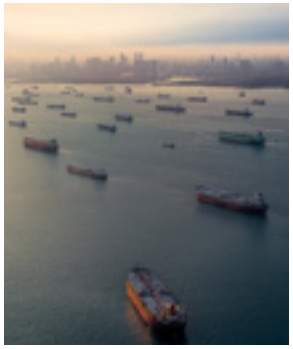
SOHAR Port and Freezone, a deep sea port in the Middle East have reached a milestone with the arrival of the first 10,000 TEU ship at the newly expanded Oman International Container Terminal (OICT).

Under the watchful eye of His Excellency Dr Ahmed Mohammed Salem Al-Futaisi, Minister for Transport and Communication, SOHAR, the first 10,000 (TEU) ship, APL shipping line's Savannah, to dock in the Port was welcomed.

OICT signed the development agreement early last year for expansion of a 70-hectare container terminal. The development will increase capacity from 800,000 TEU to 1,500,000 TEU and will also see yard space more than double from 28 hectares, installation of seven post-panamax quay cranes and 14 rubber-tyred gantry cranes.

The investment in the new expansion totals USD 130 million, and the current maximum vessel size will increase from 6,500 TEU to in excess of 10,000 TEU. These recent developments enable shipping lines to bring their mainline vessels directly into Oman.

Maersk Line was the first to embrace the move of commercial activity from Muscat and announce their commitment to SOHAR. SOHAR Port and Freezone Chief Executive Andre Toet was reported as saying, "We are committed and geared towards catering for, and creating growth in container traffic. We're in prime position to attract shipping lines to channel their North Oman specific boxes through SOHAR rather than Jebel Ali or other neighbouring ports".



HUMAN ERROR THE CAUSE OF SINGAPORE ACCIDENTS

The Maritime & Port Authority of Singapore (MPA) conducted investigations to determine the causes of the three collisions resulting in oil spills in the Singapore Port waters and Singapore Strait earlier this year.

MPA also formed a Safety Review Committee (SRC) to review the overall system of navigational safety in Singapore Port waters and Singapore Strait. SRC was comprised of experts from MPA, Ministry of Transport, the local academia and shipping industry. The findings of the investigations showed that human error and poor judgment of the situation were the main causes of the three collisions. There was a lack of situational awareness of the bridge teams, including the pilots, although MPA's Port Operations Control Centre (POCC) had provided advisories and warnings of the traffic situation to the bridge teams. The bridge teams also did not make use of all available means at their disposal, such as the Automatic Identification System (AIS), Automatic Radar Plotting Aid (ARPA), Radar, and Electronic Chart Display and Information System (ECDIS) in order to to avoid the collisions.

MPA organised a dialogue session with the shipping community to update them on the investigation findings of the incidents. More than 150 representatives attended the dialogue session, including shipowners, ship managers, ship charterers and shipping agents, who all have direct channels to convey the safety messages to the ship masters and officers.

Mr Patrick Phoon, Chairman of the Safe Navigation and Environment Committee of the Asian Shipowners' Forum and President of the Singapore Shipping Association (SSA),said: "We welcome the efforts taken by MPA and the Safety Review Committee to look at the causes to these incidents holistically".

SUEZ CANAL DEVELOPMENT PLAN TO BE PRESENTED

The Egyptian government will present its plan for the development of the Suez Canal in January 2015 to both local and international financial institutions and a number of companies, Mahmoud Rizq, director of the department of planning at the Suez Canal Authority (SCA), said.

The plan will be presented at an international conference organised to attract funding for the implementation of the project. The government will begin receiving and screening offers as early as February 2015, according to Rizq. Fourteen consortia competed to prepare the plan for the development of the Suez Canal and an independent local committee was formed comprising international expertise in order to evaluate the bids and choose the winning consortium.

Rizq added that he expects the contract with the winning consortium to be announced within days, and that the consortium will finish and present the plan to the cabinet within six months after the announcement. According to Rizq, "additional bids for civil works for infrastructure will be proposed in February 2015."

The project will include the ports of Port Said, Al-Arish and Ain Sokhna, in addition to the economic zone in the northwest Gulf of Suez, according to Risq, and a wide variety of industries will be included.

Prime Minister Ibrahim Mehleb said an agreement was reached with the Suez Canal Company for fish farming, that this project would generate jobs and good revenues, and would be set up along a 100km area east of the Suez Canal. Benefits are to be expected in food security and employment of fisheries.

UK GOVERNMENT LAUNCHES NATIONAL STRATEGY FOR MARITIME SECURITY

The UK's first ever National Strategy for Maritime Security has been published by the Shipping and Armed Forces Minister.

The maritime sector is vital to the UK and it is said that the publication is a "a major step forward for the shipping industry and demonstrates the UK's commitment to seafarer safety and securing world trade." Click to read the National Strategy for Maritime Security in full.

The UK maritime sector accounts for over 2% of the entire economy and supports one in every 50 jobs. It is a simple fact that as an island nation, most of the UK's connections to the wider world are provided by sea with and over 90% of our trade is carried by ship.

"The safety of our seafarers is therefore a priority of international importance, and work is also needed in the promotion of regional growth and the stability of international trade." the UK Chamber of Shipping press release states.

UK Chamber of Shipping CEO, Guy Platten, said: "Piracy may not be making as many headlines this year as it has before, but it is still a major threat to the safety of seafarers in many parts of the world, particularly in West Africa, in the Gulf of Guinea, where it is increasing – reducing these risks must be a priority.

"This is why we are pleased to welcome today's publication. The strategy will not only make an immediate impression on the safety of UK ships and seafarers, but also demonstrates the UK's approach to addressing some of the root causes of piracy in other parts of the world, including capacity building on land."

He added: "Increasing awareness and finding solutions for the complex problems of maritime security are crucial. The NSMS will allow industry to share its specialist knowledge across government to develop better joint responses to threats and we look forward to continuing this work together."

Members' News

IIMS Indian Branch Seminar and Conference Date Set

Milind Tambe writes to confirm that the IIMS Indian Branch will hold their next seminar and conference on 14/15 November 2014 at Kolkata, India. Entitled 'Synergies in Marine Surveying', Milind is actively seeking speakers to present on any aspect of interest to marine surveyors. If you are interested in speaking, or attending this seminar and conference, please email Milind directly at: milind@troupe7.com for further information and details.

Certifying Authority Training Day Held

Twenty plus IIMS Certifying Authority examiners met for their twice yearly training day at Portchester Sailing Club in mid May.

With the many changes now in place as a result of the implementation of the Maritime Labour Convention 2006 (MLC 2006) legislation, it was an opportunity to review the procedures and to learn more about the convention. Mark Towl from the Maritime & Coastguard Agency (MCA) was the key presenter in the morning session. During his talk he stressed that the MCA is still reviewing many aspects of MLC 2006 and further changes were inevitable. He also said that, in his view, the MCA has taken the most liberal view in how MLC 2006 is being interpreted compared to some other worldwide authorities. As part of his presentation, Mark answered a number of questions and points of clarification from the marine surveyors who were present. After lunch, Mark gave a short overview of the work that is going on with the new work boat codes.

Fraser Noble, Chairman of the IIMS Certifying Authority, then spent some time running through the IIMS obligation as stipulated in the MCA contract, including the duties and obligations of the IIMS Certifying Authority and its members. Mike Schwarz, IIMS Chief Executive Officer, brought proceedings to a close by giving a presentation to remind delegates of the IIMS Certifying Authority documented procedures and their responsibilities in relation to it.

CA members at the Certifying Authority training day.

The UK SCWG surveyors who met at Grafham in May.

UK Small Craft Working Group

In early May the IIMS UK Small Craft Working Group held one of its regular meetings at Grafham Water Sailing Club near Huntingdon. Although not as well attended as previous meetings, those who could not get to the event missed a thoroughly informative and educational day. Three speakers were invited to present at the event, all covering a similar theme relating to metals in the marine environment.

Consultant metallurgist to the Copper Development Association and Nickel Institute, Carol Powell covered the marine applications for copper-nickel, stainless steels and high nickel alloys. John Sharland, Sales & Marketing Manager of Tritex NDT Ltd spoke about Ultrasonic Thickness Gauges. And finally Alan Broomfield, a member surveyor specialising in steel craft, gave an overview and presentation on corrosion.

The event was chaired by Elliott Berry. Since then Elliott has been unwell and we wish him a speedy recovery and quick return to work.

Paul Homer Steps Down

The IIMS Chairman of Standards & Administration, Paul Homer, has decided to stand down with immediate effect. After 15 years on the IIMS management board and 10 years as a board member of IIMS Ltd, Paul Homer announced his intention to step aside at the executive meeting earlier this month. Over his time in office, Paul has seen the Institute develop into what it has become today. However, Paul has agreed to continue to handle complaints made by the public about Institute members.

Existing management board member, Capt. John Noble, has agreed to take over Paul's role as Chairman of Administration. The IIMS owes a debt of gratitude to Paul for his unstinting work on behalf of the Institute over a considerable period of time.

NEWS FROM IIMS UAE BRANCH

Capt. Zarir S. Irani, Regional Director of IIMS UAE Branch writes.

The dust had settled after the success of last November's conference in Dubai, and it was the UAE branch AGM in February 2014, where the change at the helm of branch affairs took place with Captain Gopal Khanna handing over the con to incoming Branch Chairman Mr. Uday Moorthi at the Dubai Marine Beach Resort and Spa.

Captain Khanna has been a founder member of the IIMS UAE branch and on the committee since 2009. During his tenure as IIMS UAE BRANCH chair (2012-2014) the branch has achieved a lot of positives some of which are:

- Branch website **http://www.iimsmideast.com**
- Incorporation as IIMS FZ LLE and our branch bank account.
- Dedicated emails to all office bearers of the branch committee
- The most successful conference in the Middle East region which was held in November 2013 on the theme "Offshore, Marine Insurance and Claims"

Other changes to the office bearer's roles were - Capt Peter Valles handed over the role of treasurer after 4 years in the role and he goes on to take over responsibilities as Vice Chairman of the UAE Branch.

Mr Mohammed Renno takes on the role of Treasurer after proving his credentials as a committee member in 2013.

No new committee members were elected at the AGM although the consensus was to induct more at the committee to assist with the branch affairs. No objections were however raised to the current committee to continue running the affairs of the UAE branch.

Capt Daraius Antia, who had in the past been part of the conference organizing sub-committee in 2009, came forth to support our efforts. The existing committee unanimously agreed to include him.

The first Bi-Monthly meeting of 2014 was held with the central topic being "A FOCUS ON MEDIATION IN SHIPPING". The meeting held on 2nd April 2014 was a very well attended evening by 42 participants with a marathon two hour engagement of two eminent speakers.

Mr. Tony Swinnerton, visiting speaker from London, spoke on Mediation as a means of settling shipping disputes. Highlighted points during his presentation included:

- A flexible process conducted confidentially in which a neutral person actively assists parties in working towards a negotiated agreement of a dispute or difference, with the parties in ultimate control of the decision to settle and the terms of resolution.
- Cross-Border Disputes
- Enforceability of agreements resulting from mediation
- Confidentiality of Mediation
- Advantages of Mediation
- Problems with Litigation
- Mediation -v- Litigation

Second speaker for the evening was Mr. Rovine Chandrasekera who spoke on Challenges within International Mediation (with a focus on UAE region)

Rovine is the Managing Partner of the law firm Stephenson Harwood in their Dubai office and a commercial litigation specialist advising on a broad range of disputes. He has particular experience in sanctions advice (relating to Iran, Syria, Ivory Coast), tracing and asset recovery, enforcements, injunctions, as well as negotiating and litigating on contracts relating to offshore oil and gas construction projects.

Rovine with his extensive experience of working with clients based in the Middle East, particularly in the UAE, Iran and Syria, including offshore contractors, oil and gas operators, traders, shipowners, shipyards and financial institutions highlighted the following points during his presentation:

- Cultural Complexities effecting Mediation in the GCC
- Familiarity with how cultural differences manifest themselves is crucial to become a skilful mediator
- Mediation - Currently being used by the Gulf Co-operation Council to end the political crisis in Yemen
- Mediation will take off in the GCC, particularly Dubai – question of how long!
- There may be a role to play for experts on the ground either
- As mediators themselves – for technical disputes
- Or to play an independent role to assist the mediator with the issues which are particularly complex

In conclusion both speakers were able to convince the attendees that mediation is usually the better option to go with (if not the best), provided it works and both parties give it their whole hearted go. The latter is most of the times highly desirable due to numerous excuses by either parties.

IIMS UAE branch extends their thank you to M/s Stephenson Harwood, Dubai was the generous sponsors for the evening's canapés and both speakers for their excellent preparation which engaged the forty two attendees.

FELLOWS ANNOUNCED

At the Annual General Meeting held at Hilton Hotel, Southampton, six new Fellows of the IIMS were announced and certificates presented to those present by the new President, Capt. Bertrand Apperry. Congratulations go to these individuals who have made an outstanding contribution to Institute life over a period of time: John Excell, Fraser Noble, Milind Tambe, Zia Alam, Anthony Fernandez and Parimal Bhattacharyya.

OBITUARY ANNOUNCEMENT

It is with great sadness that we have to announce the sudden and untimely death of Len Kennedy at the age of 66. One of the founding members of IIMS, Len joined Mcauslands in 1978 and had only just retired in 2013 having enjoyed a 35 year career as a surveyor. Len leaves a wife, Linda and two sons, Morgan and Ewan. He will be missed greatly by all who knew him.

International Institute of Marine Surveying

2014 Conference, Dinner & AGM Report

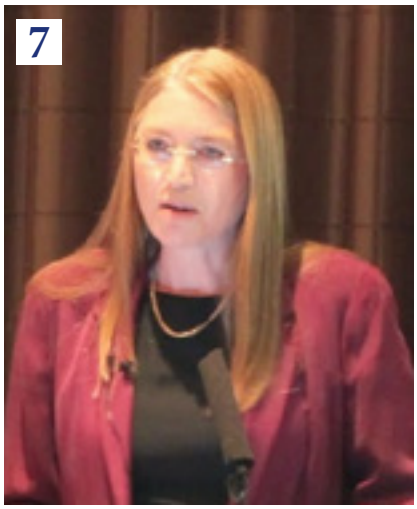
Over the next few pages, we report on the three days from 8 to 10 June when members of the IIMS came together at Southampton for the eagerly awaited Conference.

Sunday 8 June 2014 Board Meetings

Proceedings opened up on Sunday with a board meeting of IIMS Ltd. Although a quick meeting, it was notable for the fact that Paul Homer resigned his position as an IIMS Ltd Director after 10 years. He also announced his decision to stand down from the management board after a 15 year spell. Paul has agreed to continue to arbitrate and handle consumer complaints against member surveyors. Capt. John Noble officially takes over as Chairman of Administration. Members will want to wish Paul all the very best and to say thanks for his hard work over many years.

After lunch, the full management board convened for their quarterly meeting chaired by President Satish Anand. It was pleasing to note that additional to the usual contingent, Milind Tambe (Regional Director IIMS India), Capt. Zarir Irani (Regional Director IIMS UAE), Zennon Chen (Regional Director IIMS China) and Barry Thompson (Regional Director IIMS New Zealand) were also present.

1. *Delegates listening intently.*
2. *President Capt Satish Ananad welcomes delegates to the Conference.*
3. *Mark Patterson, Lloyds Agency delivers his Key Note talk on the first day.*
4. *Capt Zarir Irani delivers his presentation 'Employees first and customers second'.*



5. *Dr Ajay Asok Kumar, Principle Surveyor, CLASS NK talks classification societies.*
6. *Niamh Cullen, Hoot Marketing, delighted the audience about how to look good on the web.*
7. *Karen Brain from Matrix Insurance Services Ltd presented 'The Need for PI cover'.*
8. *Uday Moorthi delivering his technical presentation on catalytic fines.*
9. *President Satish Anand looking calm and composed at the start of the second day.*
10. *Paula Finch n.b. Marketing Ltd caused a stir with her LinkedIn presentation.*
11. *Jan Cox and Sam Legg from IIMS Head Office.*

12. *Paula Finch, n.b. Marketing explaining how to increase sales and profit.*
13. *Colin Gillespie fascinated the audience on the subject of liquefaction.*
14. *Milind Tambe tackling the subject of pre salvage casualty surveys and their execution.*
15. *Jim Cutts from C Truk presenting talks about the advances in vessel construction for offshore wind farm boats.*
16. *Steve Huckvale presents an overview of electrical installations for small craft surveyors.*
17. *The scene at the door to the conference room.*
18. *Left to right: Incoming President Capt Bertrand Apperry, Capt. Zia Alam, Mike Schwarz and outgoing President Capt Satish Anand.*
19. *Guests at Dinner proposing a toast.*

20. The President presenting Drew Korek with the certificate of incorporation of for the new IIMS Canada branch.

21. Mike Schwarz presents the outgoing President with a gift.

22. Chloe Bruce, IIMS head office, painted this striking watercolour as a gift for Capt Satish Anand.

23. Stuart Rivers speaks about the work of the Sailors' Society.

24. Peter Morgan brings the Dinner to a close with stories from his youth.

Monday 9 June 2014 Dinner

The IIMS dinner was a great success comprising fine cuisine, excellent wines, presentations and anecdotes. Before Grace, the evening started on a sombre note with a two minutes silence being held for the recently lost crew of the Cheeky Rafiki, those who perished in the Korean ferry disaster and all others lost at sea.

Presentations followed the meal. Mike Schwarz announced five awards in total. Drew Korek was presented with a plaque by the President in recognition of the formation of the IIMS Canada branch, incorporating the Association of Marine Surveyors of British Columbia. John Kilhams, recently retired from head office, responsible for the education programme, was presented with a decanter by Paul Homer. Former retired CEO, John Lawrence, was given the Blue Water award for his work at the helm of the Institute for a ten year period. The President made the award to John. To mark his work over fifteen years as an IIMS management board member and director following his decision to retire, Mike Schwarz presented Paul Homer with a bottle of Scotch.

The President's chosen charity was the Sailors' Society, whose Chief Executive Officer, Stuart Rivers, attended the Dinner as a guest of honour. Those at the Dinner gave generously to this particularly worthwhile cause and Stuart gave an informative and humbling speech. Past President, Peter Morgan, then rose to bring the evening to a close with some tales from his misbegotten youth.

25. Bridget Hogan, Nautical Institute, chairing the Conference with distinction.

26. Guy Canovan warning delegates about taking on the restoration of a 65m classic superyacht.

27. Capt John Noble explaining how to handle the media.

28. Adam Allen delivered a thought provoking talk on enclosed spaces.

29. Raal Harris supporting Adam Allen.

30. Capt Satish Anand looking pensive.

31. Peter Morgan speaking on the President's panel

32. Paul Homer speaks for the last time as a member of the management team.

33. Bridget Hogan being presented with a gift by Mike Schwarz.

Tuesday 10 June 2014
Annual General Meeting

Matters that were voted on at the AGM included:

It was proposed to change the firm of auditors with immediate effect. The new auditors, FAB Accountants, are a local company. Changing auditors will make a significant saving for the Institute. This decision was discussed and accepted by the Board of Directors at the meeting on Sunday 8 June2014. It was then voted on by members at the AGM.

In favour: 30 | Against: 0 | Abstentions: 0

The outgoing President, Captain Satish Anand, stood down and welcomed our new President, Captain Bertrand Apperry. The President's chain of office was handed over. Then Bertrand Apperry presented Satish Anand with his Past President's Medal. Following the inauguration of the new President, Adam Brancher moves up to the position of Vice President. Captain Zarir Irani has been invited to become Deputy Vice President and a vote was taken.

In favour: 30 | Against: 0 | Abstentions: 0

The Management Board, with the exception of Paul Homer, who has decided to stand down, agreed to remain on the Board.
Paul remains as a Director of the Marine Surveying Academy Ltd.
The rest of the management board were voted in en bloc.

In favour: 27 | Against: 0 | Abstentions: 0

34. The IIMS management board lined up for the AGM.

35. Capt Satish Anand formally hands over the Presidency to Capt Bertrand Apperry.

36. Capt Zia Alam is amongst the first to congratulate the new President.

37. Thanks to the two Conference Platinum sponsors.

38. Paul Fahy representing sponsors Cygnus Instruments Ltd.

39. Marco and Jeff from sponsors Cordstrap deep in conversation.

Conference sponsors

Our thanks go to Constellation Marine Services and Henderson International Asia Pacific Group, both joint Platinum sponsors of the event. We also thank our other supporters Cygnus Instruments, Matrix Insurance, Cordstrap and Lincoln University for their generous support.

Readers of The Report may be interested to know that the presentations were filmed and will be issued as individual videos on YouTube in the coming weeks. Members will be notified of how and where they can access the videos.

NOT FERRY SAFE

BY **JOHN GUY**

ABOUT THE AUTHOR

John served on merchant ships and warships for sixteen years before becoming a ship inspector and then a journalist. He uses his experiences of maritime disasters to make his novels truly realistic. The Reluctant Pirate and The Golden Tide are his first novels.
www.johnguybooks.com

Why didn't the captain of the Korean ferry Sewol order the lifeboats to be launched? That's easy. The Sewol has no lifeboats.

That's right, the ferry which sank claiming the lives of around 300 school children did not have any lifeboats. International rules require passenger ships to have lifeboats, but the Sewol was licensed only for the Korean coastal trade, so had to comply only with local rules. That appears to mean it needed only inflatable liferafts. Which are very much harder to deploy and get into than lifeboats.

A lot of the kids who died were around 16 years old. I can still remember when I was that age, trying to board a liferaft in the freezing waters of the Solent. That was a drill from a sail training ship, under more or less controlled conditions. It convinced me never to use a liferaft in an emergency unless I had to.

The reason why coastal ferries don't have lifeboats is because rescue craft can get to them quickly. The captain of the Sewol is recorded as saying he did not want to order the evacuation of the ship until there were enough rescue craft close to the ship.

When you know there were no lifeboats you begin to see his reasons. He could have ordered the children to begin abandoning ship into the rafts, knowing that he was sending a fair few of them to a certain death in freezing cold water and strong currents, because they would certainly not have been able to board the rafts safely. There is no practical way to launch liferafts from high up on a high-sided ferry then get them close to the ship and board them, not unless you have a sophisticated and expensive system of chutes. So the master wanted to see rescue craft close before ordering abandon ship. He thought he had enough time to wait for rescue craft to evacuate safely.

We know now he made the wrong choice. But before you rush to condemn him, think what choice you might have made under the same circumstances. An international passenger ferry would have had other options. The coastal safety standards were wrong, and many of those kids died because they were too close to home.

Just in case you think this is a Korean problem, consider what an experienced mariner in the USA told me. His experience working aboard ferries and other passenger craft in the Northeastern US made him wonder how evacuations would go in rough weather. "In the depths of winter when air and water temperatures were low and wave heights might be 3 metres, just exactly how long would it take rescuers to reach us? Would helicopters manage the load of passengers? Would the vessel remain upright?" he asked himself.

All over the world coastal ferries rely only on liferafts. Which would be fine if due consideration has been given to how you are going to get a ship load of frightened passengers into the rafts. In North Europe the modern ferries have sophisticated evacuation systems, and they test them, albeit with fit young troops rather than typical passengers. That doesn't happen in the Mediterranean, it doesn't happen in the Middle East and it doesn't happen in Asia, and these are the three areas of the world with a lot of busy ferry routes operated by ageing tonnage. Many of the ships have been bounced from European trades because of age or not meeting stricter safety criteria. All the more reason to have a way to evacuate them safely, you might think.

To date the Korean authorities are reported to be considering tightening coastal ferry rules to require better boarding controls, speed monitoring and black boxes. All very nice, but none of those help in an emergency. All you want then is a safe way off the ship, and you want the master to have safe options to order an evacuation without having to wait for helicopters and rescue craft.

As people know I work in shipping they ask me what they should tell their gap year kids who are off travelling the world. Have fun, is my advice. And remember that ferries are a very safe way to travel. But just in case, when you get on board, check out where the lifejackets are stowed, stay sober and stay close to the open deck. Above all, get outside when anything happens. That way you have the chance those kids on the Sewol didn't.

Leaving aside all the other questions as to why the incident happened, the enquiry into the Sewol has to ask one big question: Is it safe to have a ship which relies only on liferafts? Anyone who has ever tried to board one knows the easy answer. No. So let's deal with that before any more kids get killed.

*"Is it **safe** to have a ship which relies only on **liferafts**?"*

"International rules require passenger ships to have lifeboats, but the Sewol was licensed only for the Korean coastal trade, so had to comply only with local rules. That appears to mean it needed only inflatable liferafts. Which are very much harder to deploy and get into than lifeboats."

The Trials & Tribulations OF RESCUING A SUPERYACHT

BY **GUY CANOVAN**

> “This article is a personal account of my role in the refit of Shemara, a 65m motoryacht. In the course of writing it, it has morphed into my experience of designing a 65m ship without the usual infrastructure associated with designing a 65m ship and doesn’t conform to the more common, but no less worthy, technical account.”

3D rendered model of M.Y. Shemara

ABOUT THE AUTHOR

Guy Canovan arrived in the world of naval architecture following gaining a degree from Southampton Institute as a mature student in 2000. Initially he worked for BMT Defence Services in Bath where he supported the Royal Navy by carrying out inclining experiments, stability analyses and structural capability tasks. After gaining his CEng status in 2004, he moved to Fleet Support in Portsmouth naval base where he became head of the design office. In June 2011, he received an offer from the Shemara project to lead the design team on the rescue of a 65m superyacht. It was an offer he couldn’t refuse and shortly afterwards, armed with a lot of enthusiasm but little else, he arrived on the Shemara project. This is his story.

Guy Canovan presenting M.Y. Shermara at the IIMS 2014 Conference.

M.Y. Shemara was built for Sir Bernard Docker, the chairman of BSA, in 1937 at the Vosper Thornycroft yard on the east side of the River Itchen.

She was launched in April 1938. Within 18 months Britain was at war and Shemara was requisitioned by the Admiralty as a training vessel for anti-submarine warfare based on the Clyde.

She was demobbed in 1946 and after a sumptuous re-fit at the expense of the tax payer, Shemara went to 'work' as a yacht. In the hands of Sir Bernard and Lady Docker, she was a regular visitor to the haunts of the rich and famous.

After the death of Sir Bernard in 1978, ownership passed to Harry Hyams, the property developer responsible for the Centre Point building in London amongst other things. Mr Hyams is a private individual and what he did with the yacht during his ownership is a bit of a mystery. What we do know is that the yacht was laid up in Lowestoft with a skeleton crew to maintain her.

In 2008 whilst the yacht was languishing in Lowestoft she was discovered by Sir Charles Dunstone. Whilst this article is about his boat rather than the person, I would like to say that any preconceptions I had about very successful businessmen gained from the press, Dragon's Den and The Apprentice were immediately blown away. He does however relish a challenge and he lives much of his business life zagging whilst everyone else is zigging.

The easiest solution, at the point of finding the boat, would have been to give the restoration to an established yard, probably in Germany or Holland, then part with a vast quantity of cash and, other than a few styling choices not be involved in the work until the boat was delivered some time later.

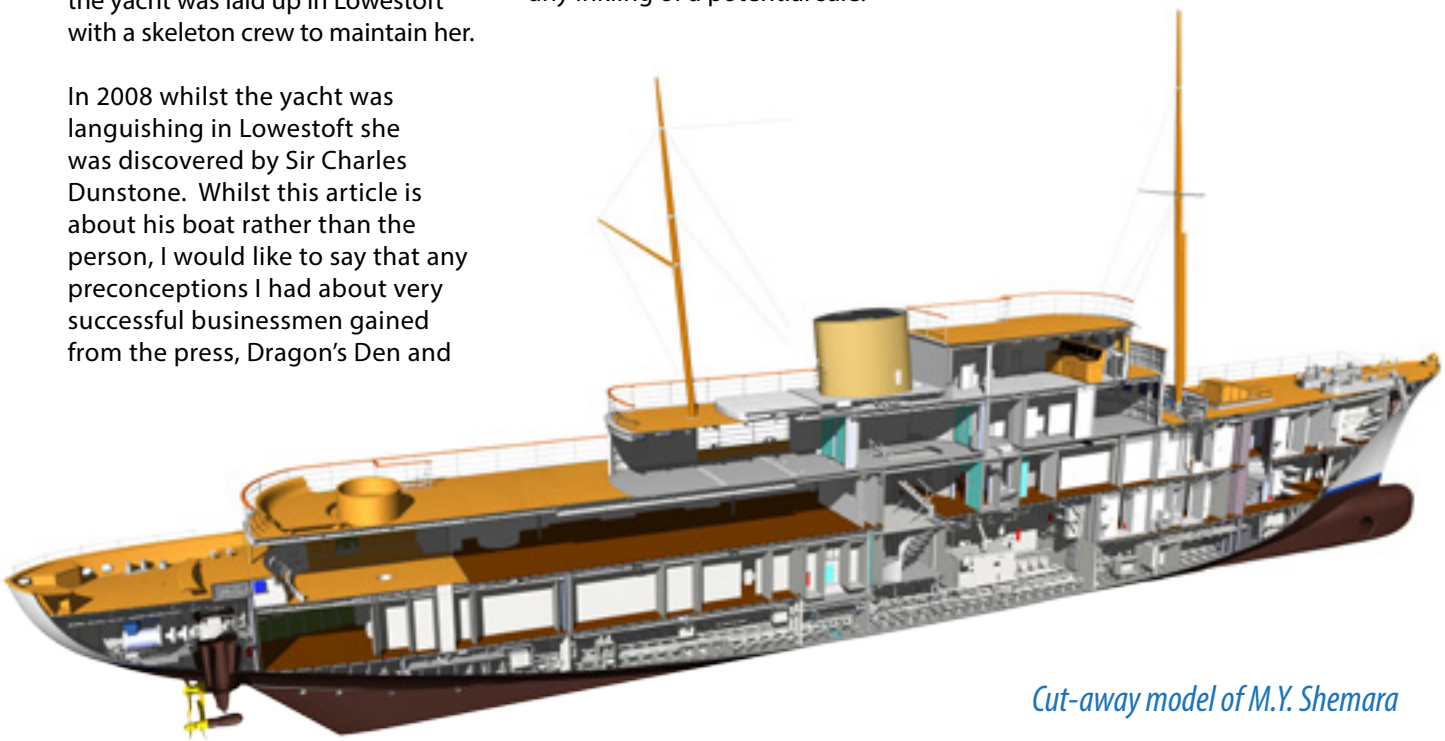
However it was the love of challenges and the desire to avoid the norm that led him to decide that he wasn't going to go down the traditional route.

My first exposure to the project was in 2008. I was the head of the design department on the in service support side of life in Portsmouth dockyard. We were contacted by the, at the time prospective owner's team, as one of the options was to re-fit the vessel using the naval base infrastructure and labour. I found myself with a couple of others driving up to Lowestoft to have a look at this boat. It was a bit of an undercover operation as the crew didn't have any inkling of a potential sale.

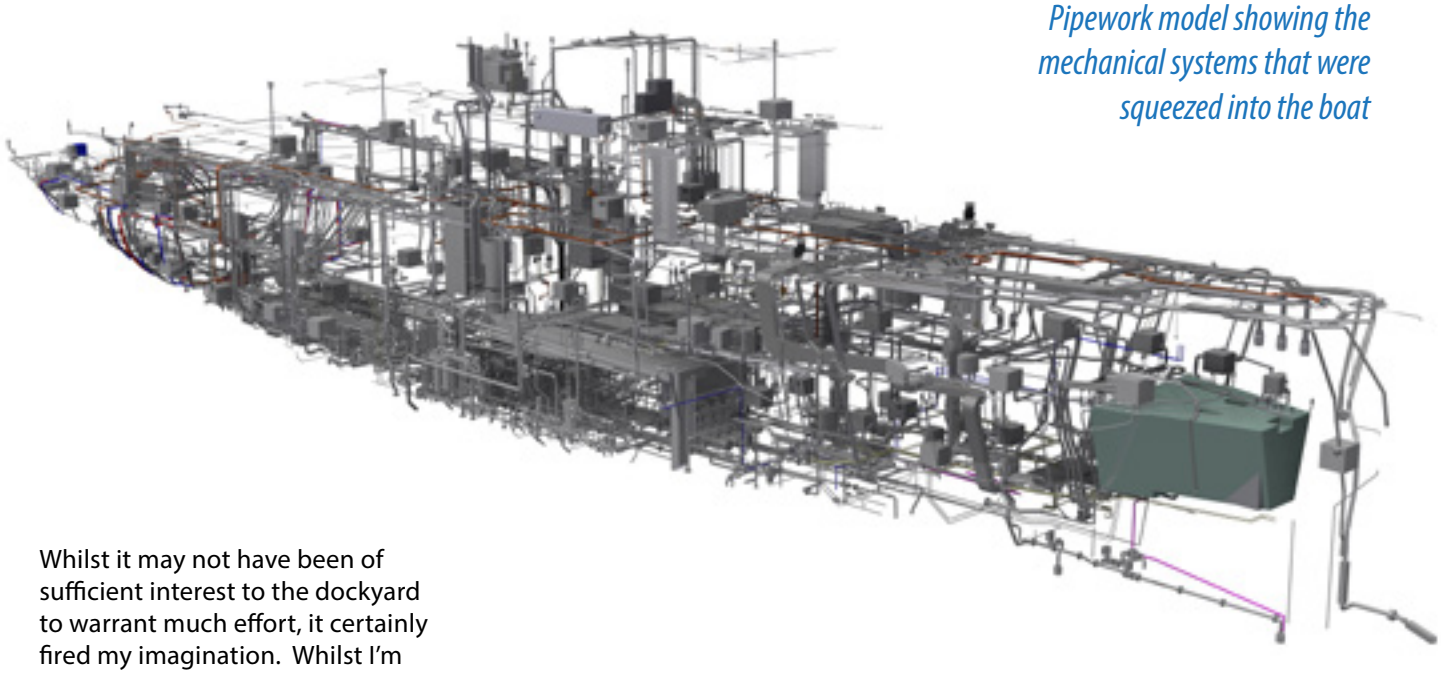
Whilst slightly tired, the main structure of the hull didn't look too bad although we didn't do anything other than a non intrusive visual survey. The machinery was either in a state of being repaired or had been mothballed. The crew that were on board were doing the best they could but they were only slowing the rate of decay rather than preventing it.

With one thing and another, the dockyard didn't manage to pull its finger out sufficiently quickly enough to turn the work from a prospect to a reality.

"Whilst slightly tired, the main structure of the hull didn't look too bad although we didn't do anything other than a non intrusive visual survey."



Cut-away model of M.Y. Shemara



Pipework model showing the mechanical systems that were squeezed into the boat

Whilst it may not have been of sufficient interest to the dockyard to warrant much effort, it certainly fired my imagination. Whilst I'm in my mid forties, I still suffer from childish fantasies and the idea of getting involved in a superyacht floated my boat for possibly all the wrong reasons.

By a stroke of good fortune, it transpired that I knew the head of the owner's team from a previous life. As a result I felt less uncomfortable sending the occasional e-mail to ask about progress. This approach paid dividends when, in mid 2011, I received a phone call from the project manager with an invite out to dinner. Their sales pitch was that with someone like me as head of the design team, they could progress the design without the inefficiencies of an external company being involved. At the time I was becoming involved in design authority duties for the Type 45 Destroyer that was entering service with the Royal Navy so I was slightly coy about the opportunity during the meal.

Afterwards I realised that this type of opportunity wasn't going to present itself on a regular basis or possibly ever. It was in Portsmouth so it didn't need any family upheaval. Overall it presented a fantastic opportunity. The following morning I rang up the project manager and said if the terms and conditions were right I was their man.

My only problem at this stage was I had no idea what the right terms and conditions were. I had always been employed by a large organisation and the idea of going out on my own was entirely alien to me.

I visited the project office and was met by what I can only describe as a brown field site. There were a few people writing requirements, discussing general arrangements and the material for the curtains but in terms of design, it was basically bereft of anything.

My first task was to recruit the beginnings of a design team. My initial port of call was a couple of colleagues within the design office at the dockyard. Whilst one of them declined the offer, the other jumped at the opportunity. I likened the whole process to having to navigate a car down a steep slope at night, without lights and with old Land Rover levels of steering and brakes. To add to the sense of responsibility I was now joined by a passenger. It was an interesting journey that I approached with 51% excitement and 49% trepidation and, to be frank, almost 100% ignorance. The two of us arrived at the office in Portchester in June 2011.

One of our initial tasks was to set up some infrastructure. We needed CAD but which package? I'm an exponent of 3D CAD and whilst I can't use it, I recognise the benefits of being able to model in 3D. It enables clashes to be identified and resolved earlier, it allows for easier visualisation from both a design team and a customer perspective and it can apparently save time. Many of the surfaces we deal with in the marine world are curved, often in both directions and that can be quite difficult to interpret properly in 2D.

We ended up settling on the Autodesk range of software partly due to the hope that is better the devil you know than the one you don't. We used Inventor for our ship modelling and whilst it isn't a marine specific package and there were a few teething issues, it worked well. One lesson identified is that when selecting software, take notice of what the local labour pool is using. It is much easier to find software to match people than the other way around.

To facilitate the 3D modelling we had a laser scan of the hull carried out. It was at this point that we discovered a certain amount of asymmetry in the hull. This ignited a debate about where the centreline was – a straight line between bow and stern, the mid

point of each deck beam, through the centroid of the section areas? It also put a kybosh on any idea of modelling half the hull and then mirroring it.

Whilst the 3D modelling of the hull proved useful, I often consider the whether structural side of the modelling was a necessity. The majority of the structural items can be broken down into flat components – webs, flanges, bulkheads, to reflect the steel plate material they are fabricated from.

Where the 3D did more than pay for itself was in the routing of mechanical systems. When the boat was built, air conditioning consisted of opening a window. Now we have an all singing all dancing HVAC system with all compartments being served by at least one air conditioning unit. The boat has three HVAC zones with all ducting led back to one of three air handling units. All the ductwork has been fitted into a void between the deckhead panelling and the deck above in a space that was never intended to accommodate much pipework. Add in to this the firefighting, grey water, black water, chilled water, scuppers plus other mechanical systems and a huge quantity of cabling and the result is a mass of pipework that can only be successfully 'ravelled' by resorting to 3D. Whilst transiting between structure is relatively straightforward, it is when you reach structure that life becomes difficult. As a result you really do need the structure to be accurately modelled to get the benefit of going down the 3D route.

The project had started out using a cloud based storage system known as the jungle although as the project went on, it was quite often preceded by what is grammatically called an intensifier. As we were potentially dealing with a lot of data I bought a server and we set up a hard wired network. This became the official repository for information and whilst we suffered from people storing stuff on the desktop or C drive, it did work quite well. We did struggle with the management of the IT infrastructure and our backing up process was a bit hit and miss but with a couple of IT savvy people in the team, we coped.

Recruiting a team proved less difficult than I anticipated largely helped by the exciting project that was on offer to the candidates. We used a recruitment agency to source people and this worked well once I'd managed to put together a job specification. In total I recruited ten people - five CAD orientated design engineers, three naval architect dealing with stability and structures, and two mechanical engineers.

I mentioned earlier that the sales pitch to get me through the door

Main Particulars

Length Overall	64.41 m
Length Waterline [1]	58.84 m
Breadth (hull moulded)	9.22 m
Depth Overall (excl. masts)	14.4 m
Full Load Depart Draught [2]	3.96 m
Full Load Depart Δ	957 te
Half Load Draught [2]	3.87 m
Half Load Δ	921 te
Lightship Δ	851 te
Max Deadweight (excl. ballast)	108 te
Fixed Ballast	158 te
Cruising Speed [4]	14 knots
Long Range Speed	11 knots
Range @ Cruising Speed [5]	2950 nm
Range @ Long Range Speed [5]	4200 nm
Class	DNV ✠1A1 LC Yacht E0
Flag	LY2, UK MCA
Gross Tonnage	831 GRT

Principal Auxiliary Equipment & Tenders

1 x Rolls-Royce TT1100AUX CP Tunnel Bow Thruster
2 x Rolls-Royce 4m^2 Aquarius SAR Fin Stabilisers
1 x 6m Rescue Boat / Tender
1 x 7.5m Tender
1 x Luff and Slew Stern Passerelle
2 x Luff and Slew Side Boarding Ladders

Principal Capacities

Guest Berths	20 Berths	(6 Doubles, 2 Twin)
Crew Berths	19 Berths	(3 Doubles, 5 Twin)
Fuel Oil Capacity	91.6 m³	
Fresh Water Capacity	24.3 m³	
Lube Oil Capacity	5.6 m³	
Grey Water Capacity	12.8 m³	
Black Water Capacity	8.0 m³	

Structure

Arrangement	Transverse framing spaced @ 609.6mm
Hull	Steel
Deckhouse	Aluminium

Propulsion & Electrical System

Type	Diesel Electric
Voltage System	400 Volt 50 Hz AC
Propulsor	2 x Rolls-Royce US 105P9 CRP Azimuthing Thrusters
Generators	2 x SCANIA DI16-55M @ 450 bkW 3 x SCANIA DI12-62M @ 199 bkW 1 x Sabre-Perkins 4.4TW2-GM Emergency Gen @ 93.4 bkW
Total Installed Power	1497bkW
Harbour Load (crew only)	167 kWe
Harbour Load (crew & guests)	260 kWe
At Sea Load (crew only)	972 kWe
At Sea Load (crew & guests)	1373 kWe
Emergency Power	87 kWe

[1] At full load depart draught.
[2] Draughts measured from baseline.
[3] Displacement corresponds to vessel floating at freeboard mark (4.24m ABL).
[4] At 85% MCR with crew and guests on board, half load displacement.
[5] With full operational margins, 10% sea margin, 10% bunker on arrival, 5% ullage, 5% SFC.

Principal Characteristics

M.Y. Shemara

included the phrase "progress the design". A design had been started by an external company and much of the concept / feasibility design had been carried out. This also included some quite detailed structural arrangements and system schematics. My initial role was to run with the production design and to take the design drawings and translate them into production information sufficient for the production staff to build the boat.

It quickly became apparent, to me if not the project manager, that the design wasn't really complete. The challenge was to now finish the design and produce sufficient production information to keep the rapidly growing army of welders, fabricators and people equipped with hammers employed. It was a challenge that we met head on and almost immediately sank without trace.

As we started to produce drawings, what drawing numbering system did we use? I'd always been used to an organisation where the drawing numbering had started with the ark and had been fine tuned from there. We had about five minutes to create a system that was easy to use, accessible to all and secure. We had identified a numbering system called SWBS which was also in use by the company responsible for the feasibility studies. Unfortunately they had modified the established system which resulted in a significant quantity of nonsensical numbering. We took the difficult decision to re-baseline all the numbers in accordance with the standard system. We also devised a document numbering database to record and track the drawings.

Whilst during earlier visual surveys the yacht looked to be in reasonable condition, following thickness gauging it became abundantly apparent that a significant quantity of repairs were required. Along the wind and waterline, plating diminution was in excess of 50% in some areas. The area below the waterline wasn't in much better condition. In the end at least 90% of the steelwork was replaced. Much of this 90% was forced upon us but in some areas the difficulties of joining up two distant pieces of original structure was too great to warrant try to save it so it was replaced.

The steelwork design should have been relatively straightforward with the exception that we had adopted bits from two sets of rules to enable us to avoid having a restricted service notation. This threw up a number of challenges and resulted in a wholesale redesign of large parts of the structure.

Image © Copyright Mike Schwarz

We had chosen to go with DNV as our class society. This was largely based on the reasoning that their surveyor had been instrumental in putting together the Large Yacht Code or LY2 as it is known. This worked very well until after only a few months into the project he moved to Lloyds. We then had a couple of different surveyors in quick succession until settling down with the one we still have.

Our relationship with DNV has been one of love and hate and has resulted in a number of lessons identified, hopefully on both sides. From my perspective I don't think DNV understood what they were letting themselves in for and then didn't ask the relevant questions early on to identify the potential pitfalls. In dealing with an established yard, the boundaries between the two organisations overlap. In our case, our expectations of the service DNV were going to provide significantly exceeded the level of service DNV ordinarily provide to a yard. This did make the journey with DNV more difficult but not half as difficult as it would have been without the endeavours of our DNV surveyor who often went above and beyond to help us towards the finishing post.

Interestingly this gap between the boundary of our ability / knowledge and the level of service provided by a supplier was common across the piece. Whilst it is understandable, I would suggest if anyone else is going down a similar route, make sure that your boundaries are understood and accepted.

This article hopefully provides an insight into some of the background activity associated with being involved in this type of project.

> "It was a brave move by Sir Charles to support what was, in effect, a DIY superyacht project and whilst I didn't feel it sometimes, I will be eternally grateful that he gave me the opportunity to be involved."

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 two of this four part series, Luc Verley introduces us to The Nicaragua Canal...

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 II: THE NICARAGUA CANAL

BY **LUC VERLEY** MIIIMS

Competition for the Panama Canal is coming from the Latin American country of Nicaragua, but the project funding is actually coming from China.

The Inter-Oceanic Nicaragua Canal is an ambitious mega-project to create a waterway through Nicaragua to connect the Atlantic Ocean with the Pacific Ocean, just like the Panama Canal.

The **Hong Kong Nicaragua Canal Development Group** (HKND-group) a Chinese investment company has received from the Nicaragua government a 50 year concession for building and operating the canal. This concession can be extended with another period of 50 years. During this concession period HKND will compensate Nicaragua with 10 million USD annually during the first 10 years and in the following years Nicaragua will receive a percentage of the canal revenues. At the end of concession period HKND will return the canal and its entire infrastructure to Nicaragua. The investment required to build this canal is estimated at 40 billion USD (an equivalent to twice the country's GDP) and construction of the canal would take 6 to 10 years according to HKND-group. It is estimated to create 40,000 jobs for construction workers. HKND will lead a consortium that might include international partners and will operate its business fairly, impartially and openly.

The idea of constructing a navigation channel through Nicaragua is not new. In the 19th century the American industrialist Cornelius Vanderbilt planned to build a waterway across the country, the project however was not materialized due to political turmoil. Eventually the US completed the Panama canal in 1914 after taking over the French attempt that was started in 1881. The Panama canal expansion project started in 2007 and involved the construction of a third set of locks to be completed in 2015 (however, the project is currently faced with some major delays due to major budget issues).

Picture Source: Southern China Morning Post

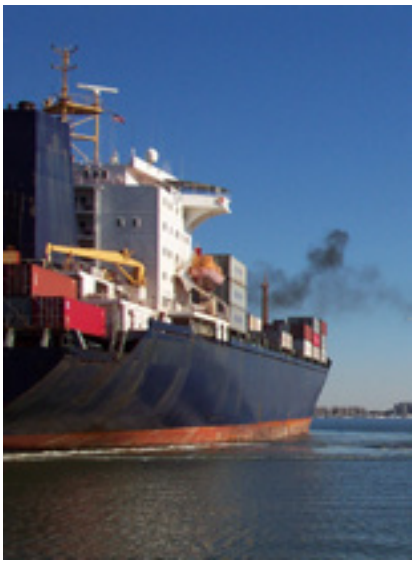
The final route that the Nicaragua canal will take is not yet finalised. Feasibility studies have indicated different option across the country, however most likely the canal would be connected to Lake Nicaragua in the West of the country. The ambitious project would mean digging a more than 200 kilometre waterway through Nicaragua. The Nicaragua canal will have a length of 286 kilometres compared to the Panama canal with a length of 82 kilometres (Suez canal is 195 kilometres long).

Size-wise the existing Panama canal allow ships with a length of 294.13 metres, a beam of 32.31 metres and a maximum draft of 12.04 metres, the air draft is limited to 57.91 metres. This ship size is called a **Panamax** vessel (equivalent to a 5000 TEU container vessel). After the expansion of the Panama canal with the third set of locks, the new allowance for ships will be 366 metres in length, 49 metres beam and 15.2 metres draft, the air draft remains 57.91 metres. This ship size will be called the **New-Panamax** (equivalent to a 12000 TEU container vessel). The Nicaragua channel would give access to much bigger ships than the Panama canal, however a **Nicaragua-max** size is not yet known. For sure the largest container vessels, the so-called Super-post-panamax vessels (13000 to 18000 TEU) would be able to navigate the waterway.

The main drive for the investment in a second canal connecting the Atlantic with the Pacific Ocean is a result of the continued growth in container shipping for the transport of manufactured goods from China. This continued expansion of container traffic between Asia and the US has resulted in shipping companies investing in bigger container vessels up to 18000 TEU.

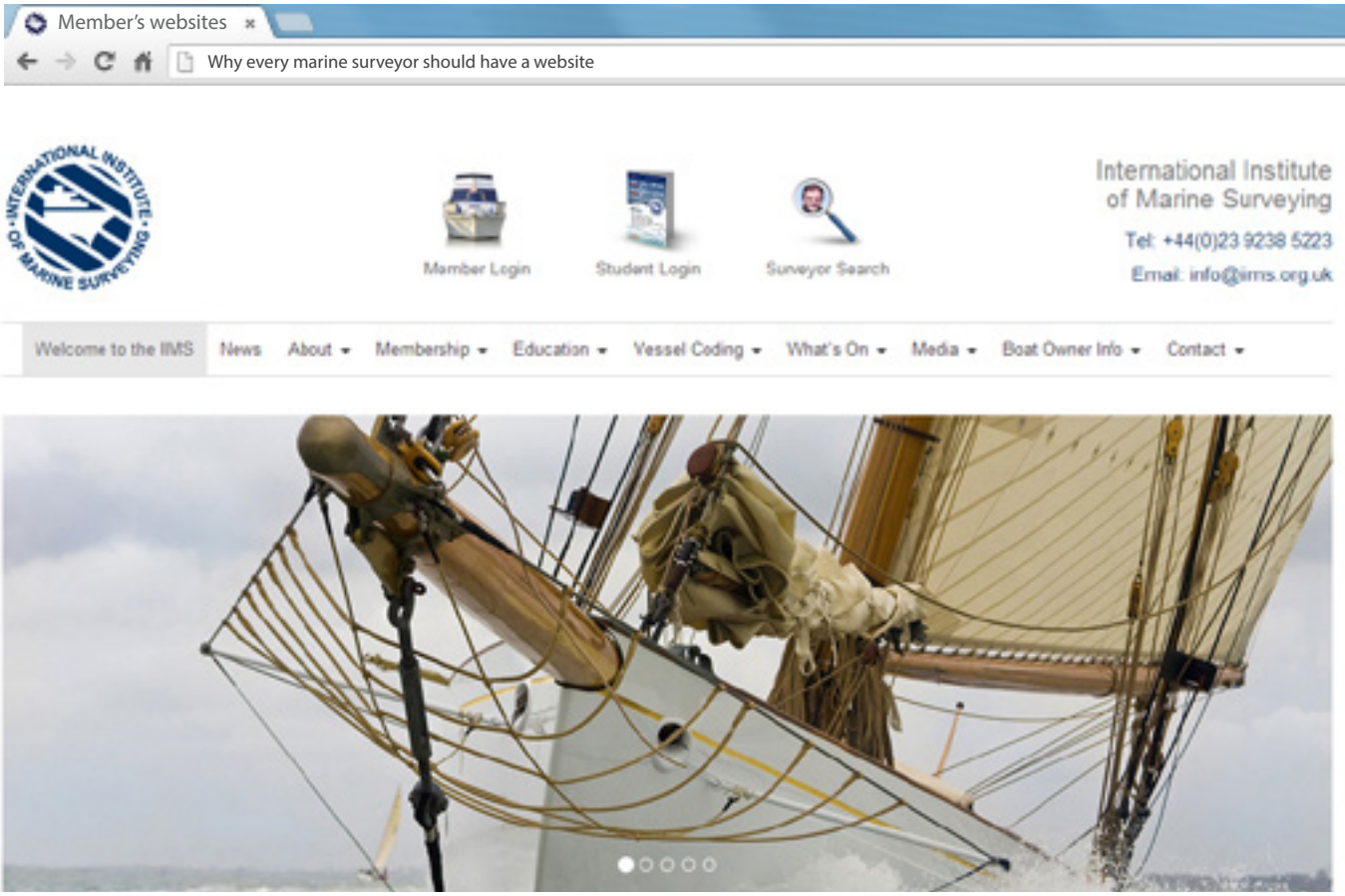
Traditionally, the trade between Asia and the US East coast takes place by vessels travelling from Asia westwards through the Malacca Straits and the Suez canal. However possible alternative routes for large container vessels could be going East from Asia and crossing the Pacific Ocean to the US West coast.

For US domestic shipping from East to West coast the Nicaragua channel would also reduce the transit time.



The Nicaragua canal could have a major impact on international trade and on the shipping industry.

The canal will have a length of 286 kilometres.



WHY EVERY MARINE SURVEYOR SHOULD HAVE A WEBSITE

Now before your eyes glaze over and you skip through this article, stay a while. The simple truth is that only around one third of IIMS members have an active presence on the web. In this day and age when the internet is so widely used by businesses and consumers alike, that is a slightly alarming statistic. Of course there may be sound reasons why that is the case, or simply a belief that to create a website is difficult, to maintain it a hassle and it will cost a small fortune into the bargain. But as Mike Schwarz, IIMS Chief Executive explains and argues, none of these things could be further from the truth.

It is surprising in this day and age to see just how many small and medium sized businesses in all industry sectors do not have a website or online presence. And this is especially true as far as marine surveyors are concerned. A website is far more than just an old fashioned 'calling or business card' and any marine surveyor who does not have one is certainly missing out on one of the most powerful and cost effective marketing tools that is available to their business right now.

The days of old fashioned business directories are history and long since gone. When was the last time you looked at a printed directory to find something? More likely you used the internet and relied on a search engine to find what you were seeking. The internet is how the majority of people are likely to find out about your business these days and whether you like it or not – it is a fact! Of course word of mouth remains vital and many marine surveyors derive new leads that way. But if your business is not online then you are missing out on potential leads and ultimately new business too.

There is also firm belief from those in the know that a website helps your business to establish further credibility in the market place and gives you a competitive edge. If you do not have a presence online that your customers and potential customers can access, perhaps they are likely to take your business less seriously than one that does? A website will not only give you enhanced credibility, but it can give the impression that your organisation is bigger than it may actually be. On the internet the size of your business does not matter and you can use the medium to punch well above your weight. Additionally, there are no geographic boundaries either. Once you become proficient, or use a company that is, there is absolutely no reason why you cannot get your site ranked by Google (and other search engines) ahead of competitors and even larger rivals. Essentially if you play by the rules, the internet tends to level the playing field for everyone.

As I said in the introduction, many smaller businesses still have no website. So why is this? Let me deal briefly with those myths mentioned earlier. If you are brave enough, creating a website needs only some basic knowledge that can even be acquired from online tutorials. Maintaining a website is far easier than you realise these days and most web platforms have a sophisticated back end where you can amend, add and delete content and photos with ease. Finally the cost can be minimal. Using a platform such as Wordpress is very inexpensive and can produce dramatic results. And let's face it, surely even a simple six page site that tells customers and potential customers about your business and services is better than nothing?

So have I lost you yet?

Let's explore a couple of the tangible benefits of having your own website:

1. Having your own website will be far cheaper, more cost effective and efficient than print advertising as a general rule to attract new business. Used properly, it is the most cost effective way to promote your business. The internet behaves very differently to print advertising. Even once published, the content can be regularly changed and you will undoubtedly reach a far wider audience than print ever could. However, having a website is not the only form of promotion your business should use, but it is a key weapon in developing new customers.

2. Your business continues being promoted and advertised as you sleep. Your website is a 24/7 marketing initiative that works for you 365 days a year, even when you are closed or away, or buried deep inside a ship or beneath a yacht!

3. Use your website as a place to offer tips, case studies and advice to your customers and potential customers. If you are feeling adventurous, you can even add interactive video, or podcasts to make your site 'sticky' and highly attractive and entertaining to visitors.

A few key tips for looking good and relevant on the internet:

The architecture of your website is really important. Think about the logical way to steer people around your website. Ensure that it is easy for people to contact you by including at least your telephone number and email address on every page clearly visible in an easy to read typeface. Make sure your site navigation is logical and simple. Use clear headings that accurately describe the content people will find on that page and the same with drop down menu headings too.

Make sure the content is always relevant. Populate each page with the keywords associated with the subject of that page, but resist 'keyword stuffing' as search engines really dislike that. If the page header suggests one will find something on a particular page about marine surveying, make sure that the content reflects that and this is indeed the case.

You must look at your website regularly. Make sure that the content is still current. Have a look at any links and ensure yourself that they go where they are supposed to. Many websites have broken links, which is a big no no for visitors.

Keep your site topical. If you can load some relevant news content on a regular basis, then do so. It is valuable content and the search engines will reward you too for topicality and fresh content.

Remember you only have a few seconds once someone lands on your site to persuade them to stay and look around. So whilst your website must be user friendly and easy to navigate, good content and high impact images play a big part too.

As you become more proficient with a website, the phrase search engine optimisation (SEO) is one you will come to love – well tolerate at least. SEO work can be done by you easily enough, or there are plenty of firms who specialise in this activity. They charge a fee of course, but it does not have to be expensive.

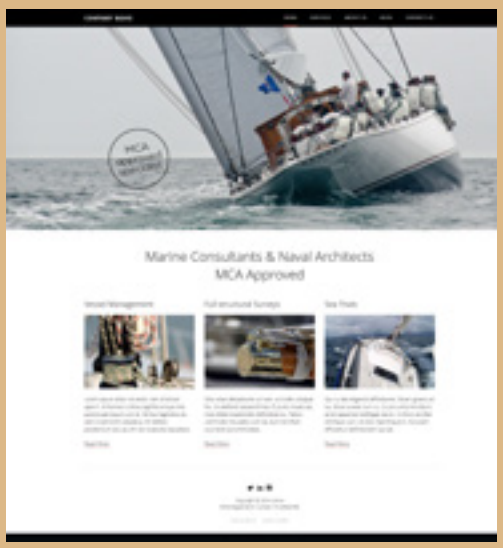
So what is SEO? It is more than mere jargon. SEO will help you position your website properly and will get it found at the most critical time when people or companies need, or are looking for a marine surveyor. The essential aim of SEO is to communicate to the search engines your services and intentions so they can, in turn, recommend your website for relevant searches that are made.

Google et al need to do their job to the best of their ability by referring users to websites and content that are the most relevant to what the user is seeking. After all, think about how many times a search engine has sent you to a meaningless or not very helpful site. It happens. In making their decision how to rank your website, search engines will consider your website content, the text on the page and the page titles and descriptions of the content that are available to them. Even captioned photographs can enhance your ranking. They will assess how fast your website loads and will make sure that it functions properly; furthermore they will look at the ease of navigation. Search engines will analyse your website content to ascertain there is enough relevant content to link to.

One final tip. Think about the websites you like to visit and go to on a regular basis. Have a think about why you go to them. Is it because the images are nice? Is it because the website is easy to navigate – content easy to find? Perhaps it is because they have speedy delivery? Or is it simply because the relevance of the content is exactly what you are looking for? The chances are it may be a mix of all of those things. But studying sites that you use, rate and admire is a great way of incorporating aspects of what they do into your own website.

Of course your website should ideally integrate with social media, including Twitter, Facebook and LinkedIn, but that as they say is a topic for another day.

Website IIMS member offer:



There is a new IIMS website coming. As a consequence, IIMS Head Office has arranged a special initiative and package with Steve Welsh (Wordpress developer) for any Institute member anywhere in the world who would like a new website developed.

All you need to do it to provide the basic content for your web site and Steve with his team will build and deliver a simple, but captivating 5 page site that you can manage, optimise for search engines and update yourself (more straightforward to do than you would imagine). Steve will provide the completed web site to you, including one year's free web hosting (worth about £40), plus free registration of your chosen web site address (if you do not have one).

Steve has gone to the trouble to produce an example of what your new site could look like. To view the demo site go to: **http://demo.lahive.co.uk**

The cost for building the site, including web hosting and domain name registration is £575 + VAT (where applicable). This is far cheaper than one would normally pay for a site of this quality. IIMS will handle any orders from members and will bill you for the work directly. If you would like to discuss this matter further, or would like to order a new website, please contact Sam Legg at Head Office by email: **info@iims.org.uk**

IIMS gets active at Seawork International

The annual Seawork exhibition took place at Southampton Docks in June. IIMS were pleased to be present and benefited from a much larger stand this year. This event is the leading UK showcase for the workboat sector and draws thousands of visitors.

The show itself continues to grow both in terms of the number of exhibitors it attracts and the actual volume of workboats moored up at the pontoons outside the exhibition halls. The organisers had even managed to lay on sunny weather for the duration of the event!

Apart from welcoming many IIMS members to the stand, it gave the team an opportunity to chat with some potential new members as well as some possible new students for the HNC/HND programme. The team took the opportunity to meet and network with various organisations during the three days.

As part of the event, the organisers also ran a series of seminars. This year, Mike Schwarz chaired the Small Craft Surveyors Forum which attracted an audience of about 50 people. He introduced three interesting presentations in the afternoon. First up was Mark Towl from the Maritime & Coastguard Agency, who gave an informative talk on the new, long awaited workboat code, which looks very different to the one it replaces. Second to speak was Adam Allen, who delivered the same presentation he had given the day before at the IIMS Conference on the issues of working in enclosed spaces. This thought provoking presentation once again ensured a sombre mood amongst the audience. In this day and age there is no excuse for marine surveyors dying in enclosed spaces and Adam highlighted some of the issues. The final speaker was David Gray, who gave a presentation about operational stability. This technical presentation was followed intently by those present and was brought to an interesting conclusion with several short videos of workboats capsizing to serve as a reminder of the perils faced.

Seawork is launching Seawork Asia in November at Shanghai in China. IIMS is in negotiations to have a presence at this inaugural event.

Seawork International: www.seawork.com and Seawork Asia: www.seaworkasia.com

IIMS head office staff left to right: *John Kilhams, Craig Williams and Sam Legg on the IIMS stand at the 2014 Seawork International show.*

Montage below: *A selection of workboats and the IIMS stand as seen at the show.*

Fifty Shades of Insurance: Chapter Two

Amanda Ridd works for Matrix Insurance Services Ltd. In her seconnd article in this series, Amanda asks:

DO YOU KNOW YOUR "APPLES FROM YOUR PEARS"!

Who are your insurers?

Few know the history of insurance but it is fundamental to the understanding of the structure of the current insurance market to know how underwriters view risk, why they underwrite certain risks and not others and no doubt most important to the readers of this article why your premium is what it is!

We will expand on these issues in future articles but let's now take a journey back through time.

Back in ancient times there had been various methods of transferring and distributing risk but we will start with a concept that is more recognisable to our modern insurance mechanism.

So for the purpose of this article we start with the commercial concept of insurance that appeared in response to the Great Fire of London in 1666 when "London burnt to sticks". As a result of the immense personal loss to ordinary citizens a company was set up that would not only rebuild homes that burnt down in any subsequent disaster but would also offer compensation to people in order for them to replace their possessions. All you had to do to take advantage of this new scheme was to pay an annual amount of money to the company which has become known as a "premium". This idea was so successful that it spread like wildfire to other areas of daily life to insure against general loss. The first fire insurance company was set up in 1681.

The real growth in insurance, however, began in the early 1700s at Edward Lloyd's coffee house in the City of London. There were more than 80 coffee houses within the city walls each specialising in a different area of commerce. Lloyd's particular area of interest was shipping and the lucrative trading routes upon which the wealth of the emerging British Empire depended.

He began to amass crucial information about the transport of goods by sea to disseminate among his customers making his coffee house an important centre for those with shipping interests.

But it wasn't only cargoes that were at stake, the defence of Great Britain depended upon her navy. Edward Lloyd knew that the ships and their cargoes were at the mercy of the weather, privateers and war. If a ship was in peril the cargo would be the first thing to be thrown overboard without a thought for any losses that would be incurred by the owner of that cargo. If, on the other hand, a ship fell prey to conditions outside the control of the crew there would be harsh financial implications for her owners.

Back in the City of London, and thanks to Lloyd's wealth of information, such eventualities and the way to mitigate against them were being discussed in his coffee shop. Wealthy members of Lloyd's clientele were asked to pay a subscription which, together with the premiums paid by traders and ship owners, would be invested to provide high returns in order that compensation could be paid to those who lost ships or cargoes, but the investments had to reap profits for the members or there would be no attraction for the members to invest in the ventures. All they had to do was write their name under the risk information on the Lloyds slip for the venture they had agreed to back. The first underwriters were born. These underwriters became "selective" in the risks they wrote to try to ensure there was always a pool of money to pay out when claims arose and also to ensure the concept remained attractive to investors, the names. In 1774 long after Lloyd's death the members formed a committee moved to the Royal Exchange on Cornhill and the Society of Lloyds was formed.

So from these humble beginnings mutual societies, insurance companies and Lloyd's syndicates developed.

But it is not that simple! There are also brokers, independent insurance intermediaries, agents that deal solely with one insurer, underwriting agencies and intermediaries with schemes as well as binding authorities. So in some cases risks are bound for insurers by other entities with the authority of insurers. Their role will be explained in future chapters.

The information on your insurance that you receive should comply with the Financial Conduct Authority rules (the regulatory body of insurance) and should state who the insurers are that are underwriting your risk; sometimes it may just state underwritten by various Syndicates at Lloyd's.

Unless you deal direct with an insurer there is normally, between you and the insurer, an intermediary such as an insurance broker or independent insurance intermediary that arranges the insurance cover for you. They may approach a selection of insurers; mutual, companies and Lloyds syndicates as well as underwriting agencies and other insurance intermediaries that may have specialist schemes arranged with insurers. Not all insurance intermediaries will approach the same insurers and there may be more than one intermediary involved in the placing of your business.

If you require further clarification or wish us to address an insurance matter please contact either me or one of my colleagues.

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

INSIGHT INTO DRAFT SURVEYS:

BY **CAPTAIN REAZ SHAHID**
AffiIIMS, AssocAIMS

THEY ARE NOT ONLY A SCIENCE BUT A SOCIAL SCIENCE!

It is more than two years; I have been working as Marine surveyor. Before curving my career as Marine Surveyor, I had sailed as Master on board car carrier for more than 6 years and 7 years as chief officer on board bulk carriers. I was always under the impression that draft survey is purely a science and the rationale behind this hindsight is that it deals with positivism. Draft survey does not necessitate more than visual draft reading, measure various liquid quantities, perform calculations using ship specific data and get the fruition of your activity.

Despite serving as Marine Surveyor for two years, my involvement with draft survey significantly increased only after I had started working in one of the largest bulk cargo exporting port. At the initial stage of my involvement with draft survey activity, ontology which was firmly entrenched in me influenced my behaviour in action. Consequently, my interaction with ship's staff responsible for loading used to culminate with disagreement to some extent about actual draft and or cargo quantity.

After repetition of similar incident, I thought of changing my approach toward draft survey and therefore tried to modify my interaction with ship staff. However, before doing so, I tried to evaluate various scenarios I did come across as Marine Surveyor as well as Chief Officer (especially on board bulk carrier).

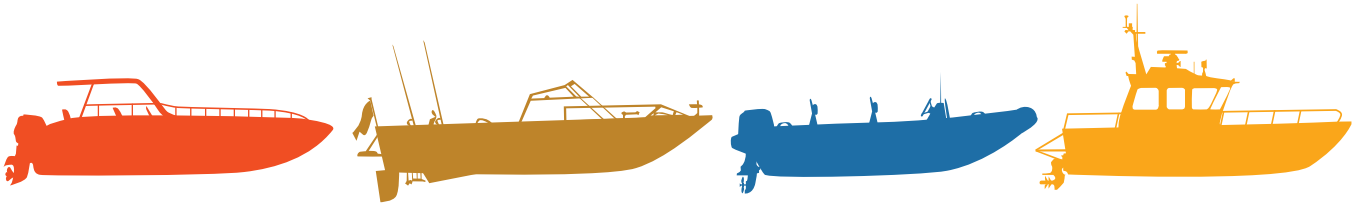
Obviously my past experience on board bulk carrier was more conducive toward understanding an individual's reaction in a particular context.

No doubt, mathematical calculation has to be correct for the denouement of a successful draft survey. However, in addition to sea condition there are several other factors which influence draft survey calculation and few among those factors primarily emanate from human perception. These perceptions instilled among those involved in draft survey due to their past experience and an individual's interest. For instance, a chief officer who visited certain discharge ports in the world, where there is propensity of reading less than the actual draft by the local draft surveyors there with consequent short landing of cargo; often tries to read ship's draft less than actual on completion of loading at load port. Chief Officer's such action is usually to forestall possible short landing of cargo at discharge port by loading more cargo but declaring less than actual draft at loading port.

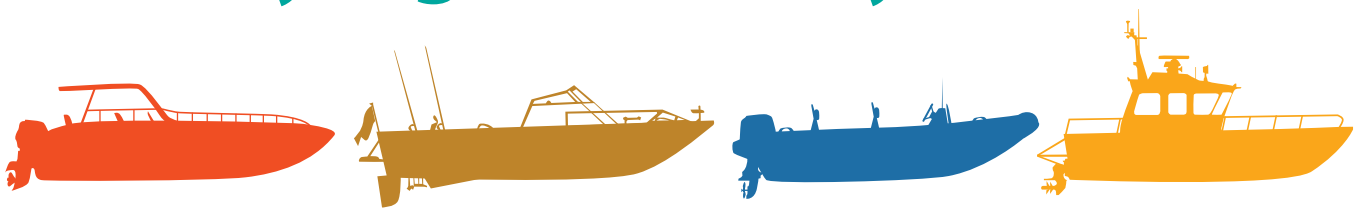
Sagging of a Cape size bulk carrier loaded with multiple parcel of specific nomination is a usual phenomenon. Per se very seldom, but I found Master of the vessel requesting me to show less sag or chief officer try to read mid ship draft less than actual to avoid depicting large sag on draft survey report after completion of loading. This type of reaction or request is more frequently encountered where ship staff with less experience on board bulk carrier did not take account of cargo loss due to possible sagging of vessel while calculating cargo lifts for a particular sailing draft or arrival draft of discharging port. On the other hand, if a surveyor is involved from the trimming stage of loading, he feels the pressure of reading draft congruent to maximum sailing draft applicable to the port of loading or the draft to which the vessel can load due to the draft restriction at the discharge port. If there is no general acquiescence between ships staff and surveyor in regard to actual draft of vessel, either of them may have to face the consequence resulting from dead freight claim by Master or overloading of the vessel. Both the situation may lead to serious commercial implication which is not at all a desirable phenomenon.

What is the solution? The solution lies mainly with surveyor's clear conception not only about draft survey procedure but about the trade, vessel and the people he is dealing with. This is a clear refutation of my earlier perception about draft survey and a hypothesis which subsequently followed is:

"DRAFT SURVEYS ARE NOT ONLY A SCIENCE BUT A SOCIAL SCIENCE"



An INTERVIEW WITH the Certifying Authority Chairman



Fraser Noble is the Chairman of the IIMS Certifying Authority (CA). In conjunction with his fellow committee members Fraser plays a key role in ensuring the Institute delivers its commitments to and contract with the UK Maritime & Coastguard Agency (MCA) successfully. The Certifying Authority is an important revenue stream for the IIMS, but in recent times, the processes and procedures have been subject to scrutiny and much change. To give IIMS members, (particularly overseas ones), a better idea of the importance and complexity of the work that the CA carries out, Mike Schwarz posed the questions directly to Fraser.

Q1.

Fraser, by way of introduction, can I ask about your background as a marine surveyor, the type of work you generally undertake and how long you have been Chairman of the CA?

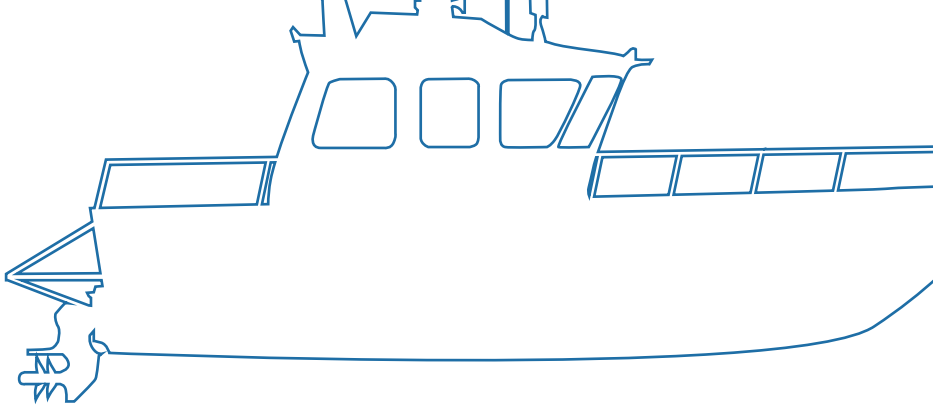
FRASER NOBLE, FIIIMS

I have been a full member of the IIMS since March 2002 and was appointed as a Certifying Authority Surveyor, including stability testing in December 2002. I have been on the CA Committee more or less continuously since that time in a supporting role. I was appointed Chairman in November 2011, taking over from Tony McGrail.

In terms of background, I grew up in a family business initially building traditional wooden boats, including successful Admiral's Cup contenders in both carvel and cold moulded construction and later moving on to build commercial craft in GRP and steel. I used to come home from school and go straight into the drawing office, or to help out on the loft floor, or in the building shed.

From the mid 70's to 1984 I managed various parts of our business including brokerage, new boat sales, repair and maintenance, plus new vessel construction. From November 1974, with the introduction of 25% VAT on yachts as luxury goods, we focused more on workboat construction and from 1980 to 1984 I managed the build of pilot boats, hydrographic survey craft, workboats and numerous UK MoD vessels as well as some cruising yachts in GRP and steel, all under the close scrutiny of owner's representatives and often under Lloyds survey.

In 1984 I moved to the south of England and spent 10 years with two of the UK's leading commercial workboat and fast ferry builders. For 4 years I specialised in rigid inflatable boats for RNLI, European Lifeboat Organisations, UK Royal Marines and a variety of military forces around the world. These vessels



had Lloyds certification, complied with UK DtP or Norwegian North Sea Rescue Boat Rules, or the SOLAS 1973 Convention and were often self-righting. Moving on I managed the design and build of pilot, patrol and passenger vessels mostly in GRP with GRP or aluminium superstructures – the passenger boats were built to DtP Class IV, V or VI.

Returning home to Scotland in 1994 I established a Lloyds approved GRP mould shop at McGRUER & Co Ltd, producing commercial vessels up to 20 metres LOA in GRP and FRC foam sandwich and alongside this set up an aluminium construction facility. In 1998 we built a 16.5m Landing Craft under Revision 8 of the about to be introduced Code of Practise for the Safety of Small Workboats and Pilot Boats – the original Brown Code. This design required a significant increase in freeboard to meet the new rules and required detailed stability calculations to ensure code compliance on completion. Difficulty in meeting freeboard requirements is still not uncommon with coding of small workboats today.

Since 2000 I have operated a full time survey and consultancy practise, undertaking coding examinations on all types of vessels including multi-cats with cranes, pilot boats, general workboats, charter yachts and RIBs in GRP, wood, steel and aluminium. I provide expert witness services, undertake stability assessments and assist finance companies and insurers.

I own a classic wooden day racer built by my family in the 1920s and an Ohlson 38 cruising yacht and have raced at international level in Fastnet, Commodores Cup, Half Ton Cup and in the US Onion Patch. Until recently I had a share in a Princess 65 based on the South coast.

Q2.

Please explain for readers of The Report magazine exactly what the CA is, what its main purpose is and how we derive an income.

On Sunday June 3rd 1984 the Marques, a 117' barque, competing in the Cutty Sark Tall Ships Race from Bermuda to Halifax, Nova Scotia, was struck by a sudden, violent squall that knocked her down, buried her bow and sank her. Although the ship had been converted to a sail training and charter cruise ship, she had retained the main cargo hatch from her days as a commercial vessel. When she was knocked down the main hatch was breached and water flooded into the interior of the ship. She sank in less than a minute, with the loss of 19 of her 28 crew members.

At approximately 01:46 hrs on 20 August 1989, the passenger launch MARCHIONESS and the aggregate dredger BOWBELLE, both bound down river, collided in the River Thames. As a result the MARCHIONESS sank. A search and rescue operation was swiftly mounted under the co-ordination of the "Thames" Division, Metropolitan Police, but despite this 51 of those on board MARCHIONESS lost their lives. There were 80 survivors.

These two very sad and unfortunate incidents led to the introduction first of a Code of Practice for the Safety of Sail Training Ships and later to the Codes of Practice for the Safety of Small Commercial Motor Vessels (The Yellow Code) and Small Commercial Sailing Vessels (The Blue Code), followed by the Merchant Shipping (Pilot Boats) Regulations 1991 which itself was replaced in 1998 by the above mentioned original Brown Code.

So, Codes of Practice were introduced to enhance safety. These Codes apply the Merchant Shipping (Load Line Rules) 1968 to Small Commercial Vessels up to 24 metres Load Line Length. The Yellow and Blue Codes are acceptable Codes of Practice for application in accordance with regulation 16 of the Merchant Shipping (Vessels in Commercial Use for Sport or Pleasure) Regulations 1993, while the Brown Code is an acceptable Code of Practice in accordance with the Merchant Shipping (Small Workboats and Pilot Boats) Regulations 1998 as an equivalent to Merchant Shipping Regulations.

These Codes require the inspection and certification of many thousands of small vessels and the Maritime and Coastguard Agency has authorised Certifying Authorities to undertake this work on their behalf. Certifying Authorities are in turn able to appoint Competent Persons from their membership of commercial marine surveyors to undertake the Coding work.

Certifying Authorities, including the IIMS CA, operate under the terms of a detailed and legally binding contract with the Maritime and Coastguard Agency governing the Authorisation of Survey and Certification of Small Commercial Vessels (Motor, Sailing and from a Nominated departure Point) Workboats, Pilot Boats and Police Craft under the relevant Codes of Practice. This contract places specific responsibilities on the CA Chairman and the CA Committee.

Q3.
Please explain how the CA administration head office function and committee operate.

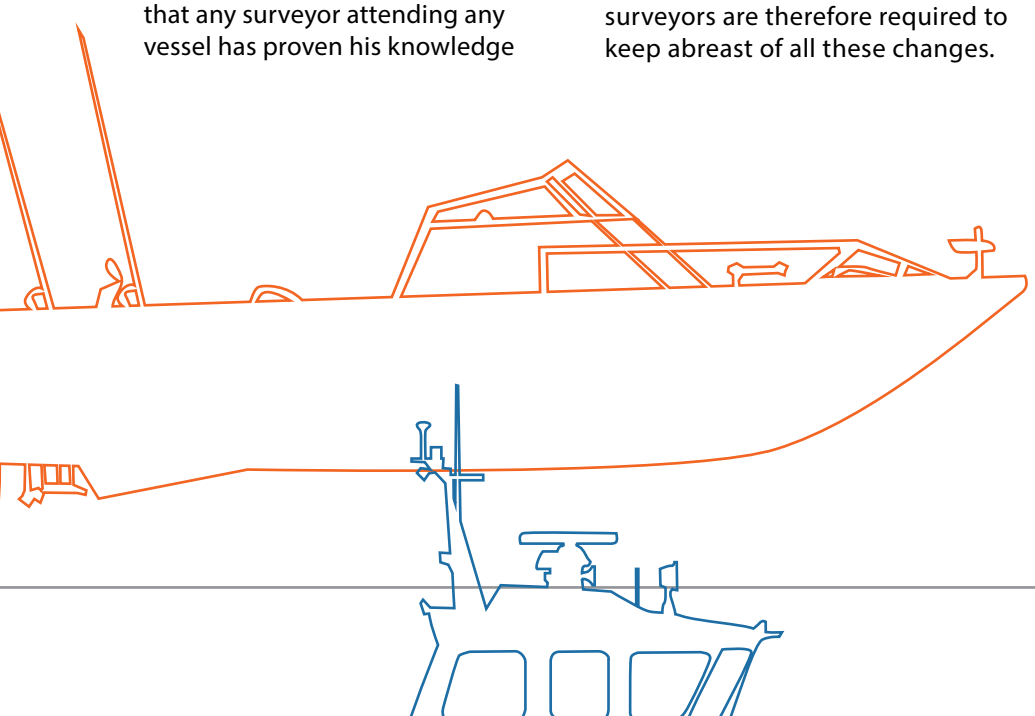
Operation of the CA is governed by our contract with the MCA. This requires that we have a Committee of not less than 6 persons with both technical and administrative representatives and a chairman who must serve for 5 years. The Committee is legally responsible for management of the coding processes. We have a set of documented procedures based on the principles of Quality Standard ISO9001:2008, against which the MCA audit our performance twice a year both in the office and on a vessel with a selected surveyor.

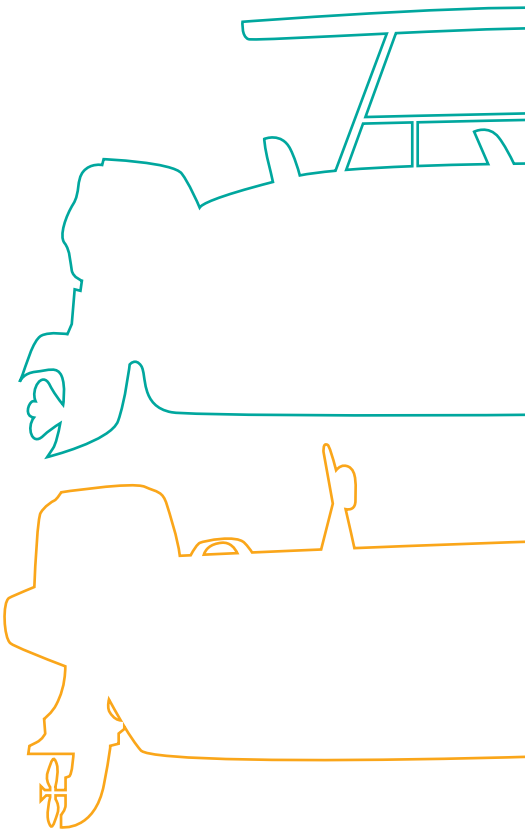
The Procedures cover initial assessment of initial surveyor assessments, training and monitoring surveyor's performance in practice, detailing methods for coding examination, providing the checking, or scrutineering as it is called, of every report submitted by an authorised surveyor by a suitably qualified scrutineer, what to do if a vessel is sold, damaged or sinks or for a transfer to or from another CA. There are standard report forms to record vessel compliance that must be signed by surveyor and owner and must stay with the vessel.

It is all in all a complex business. In terms of surveyor assessment alone we are required to demonstrate that any surveyor attending any vessel has proven his knowledge and experience with the hull construction materials and vessel type, i.e. sail, motor, workboat with more or less less than a ton of cargo, vessels with cranes, undertaking towing, or pilot vessel, RIB etc. Different rules exist within the various Codes for all of the vessel types and the surveyor must know exactly which are applicable and which are not.

If the existence of four individual Codes were not complicated enough, the MCA, in an effort to introduced an Alternative Standard (MGN280) in 2004 for all Vessels coded to existing Small Vessel Codes. This Marine Guidance Notice was initially known as the "Harmonised Code" and was intended to replace the coloured Codes but has never been passed as an Act of Parliament and therefore remains an alternative. It has therefore been possible since 2004 to code a vessel using either the Coloured Codes or MGN280 as an alternative but not to cherry pick between the standards.

Finally, in terms of the CA operation, it should be mentioned that the MCA issue M-Notices on a regular basis, that is Marine Safety Notices (MSNs), Marine Guidance Notices (MGNs) and Marine Information Notices (MINs) as well as the rather more difficult to access Surveyor Advice Notes (SANs) that may amend, or clarify aspects of the Code for all or specific vessels. The CA and our surveyors are therefore required to keep abreast of all these changes.



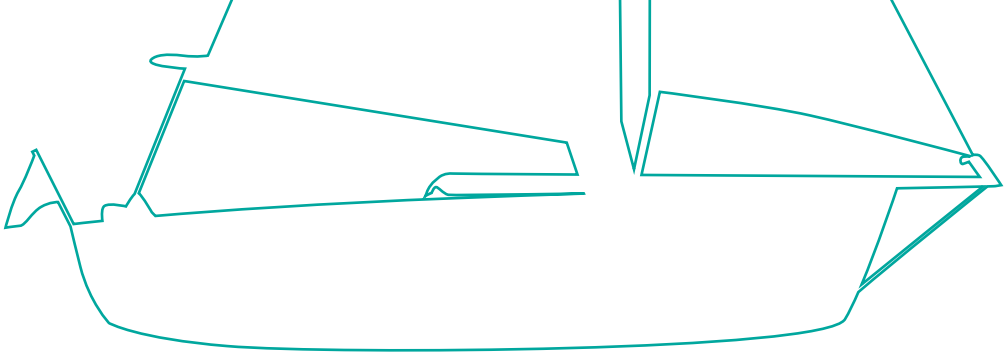


Q4.
How does the IIMS CA differ from other UK Certifying Authorities and how many are there?

At November 2011 there were 13 Certifying Authorities listed in MIN421-3; the MCA List of Certifying Authorities. This did not include the MCA themselves who are also a Certifying Authority.

None of the CA's should differ insofar as the requirements actually applied to a given vessel, however there are differences in administration. When MGN280 was introduced the MCA encouraged all CA's to adopt its use in place of the coloured codes and the IIMS followed this advice while other CA's continued to use the coloured codes, or to allow both.

Perhaps, however, the key area where we differ from other CA's is that our surveyors contract directly with the vessel owner or managing agent, negotiating their own fees whilst we as the CA charge the client a separate administration fee for processing the documentation and issuing the certificate. This we believe is fair to all and maintains fees at market rates.



Q5.
How many IIMS members are also CA examiners and how does one become one?

We currently have some 38 CA surveyors in the UK, Europe, the Caribbean and further afield. The process for acceptance as a CA surveyor is a tough one. Surveyors are required to have been a full member of IIMS for at least a year and then to submit condition survey reports for vessels in all the construction materials they wish to be approved for and for vessels of the types they wish to examine. They are required to submit example reports of actual CA surveys on a live vessel using the IIMS CA report forms. If they wish to conduct stability testing they must submit evidence of their experience in this area and examples of IIMS Heel Test Forms that they have completed themselves. If all these documents pass muster they will be invited for interview, normally by two CA Committee members.

Q6.
How many vessels does the IIMS currently code?

We have something of the order of 350 coded vessels, compared to 24 in 2002 and 38 in 2003. The numbers fluctuate as new boats arrive and some cease to be coded or move on. It is a right of vessel owners / operators to choose the certifying authority they wish to use and to change CA's if they so wish, possibly for example if the vessel changes hands or moves to a different area where another CA has a more local representative.

Q7.
There have been a number of changes in recent months, perhaps most telling the need to ensure compliance with the Maritime Labour Convention 2006 convention. How is this likely to impact on the work of the CA?

Key changes right now are The Maritime Labour Convention 2006 (MLC) and the introduction of yet another new Code – the new Brown Code or more correctly The Safety of Small Workboats and Pilot Boats – A Code of Practice 2nd Edition.

As regards MLC, the International Labour Organisation has introduced legislation applicable to all ships carrying paid seamen – this includes vessels under 24 metres. The Convention covers such matters as the seaman's employment agreements, hours of rest, standards of accommodation, repatriation from overseas, hygiene and food, medical and first aid services, payment of wages, complaints procedures and recreational facilities. Some aspects are difficult to apply to small vessels, but the rules exist and compliance is necessary. Our MCA has issued Marine Guidance Notices to define as far as possible at this time what is required and has accepted that the rules will not apply to vessels on bareboat charter or those remaining within 60 miles of UK safe haven and not entering an overseas port. Equally it does not apply to pleasure vessels with no paid crew. Small Commercial Vessels based overseas however must comply or face possible arrest.

The new Brown Code is a positive development and a complication at the same time. It is intended to toughen up the Codes as they apply to the workboats and to ensure that appropriate structural standards for example are applied to vessels undertaking more onerous duties. However it seems likely that, legally, compliance with the existing Codes will still be acceptable. The hope here is that operators chartering in commercial vessels for offshore duties such as wind farm support duties will drive a move towards the new Code by demanding that vessels they are prepared to charter should comply.

Q8.
What do you think are the key challenges facing the IIMS CA in the coming months?

The challenges in many ways remain the same. We wish to increase our share of the Code Vessel Fleet whilst ensuring that vessels we code are fully compliant, surveyors we authorise are effectively trained and competent and as someone said recently "we on the Committee want to have a life at the same time"!

Jesting aside we aim to deliver the best service to owners and operators through a thorough and in depth knowledge of the rules, regulations and procedures surrounding them, thereby offering the most cost effective solution for compliance with the relevant parts of the relevant Codes.

Editor's note: As a result of Fraser's outstanding work as Chairman of the CA, he was recently awarded a fellowship of the International Institute of Marine Surveying.

A LOOK BACK IN HISTORY

The Irrawaddy Flotilla Company

The Irrawaddy Flotilla Company (IFC) was a passenger and cargo ferry company, which provided services on the Irrawaddy River in Burma. The IFC operated from 1865 until the late 1940s. At its peak in the late 1920s, the IFC had the largest fleet of river boats in the world, consisting of over 600 vessels carrying some 9 million passengers annually.

The ships, all of which were paddle steamers, were built in Scotland, before being dismantled and transported to Burma for reassembly. When the Japanese invaded Burma in World War II, John Morton, manager of the IFC's Burma fleet, ordered almost the entire fleet to be scuttled. This supreme act of denial prevented the Japanese from having a usable, local fleet for transport up the Irrawaddy River.

This article, reprinted and slightly edited from The National Gas & Oil Engine Co Ltd's in house magazine dating from the late 1950s, recounts how the new fleet was started and reviews the technical specifications used at that time.

HISTORY OF BURMA'S INLAND WATERWAYS

During the invasion of Upper Burma in the late 1880s, three Royal Indian Marine paddle steamers were used to transport troops up the Irrawaddy River to Mandalay. These three troop transporters were the beginning of what became known as the Irrawaddy Flotilla Company.

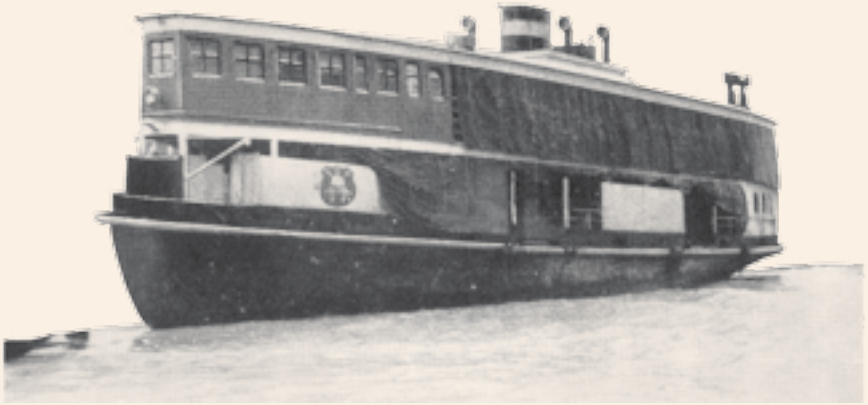
Traffic was, in the first instance, confined to the main river, but as Burma was opened up and deep sea steamers began making regular calls at Rangoon, it was necessary to collect cargo, mainly rice, from all of the delta villages.

When existing orders are completed, a total of 88 National engined vessels will ply the rivers Irrawaddy and Chindwin. 78 single-screw vessels will be in service between Rangoon, Bassein and Frome; 9 twin-screw push-tow tugs between Rangoon, Bassein, Frome and Yenangyaung; and 8 quarter-wheel vessels between Monywa and Homalin-Mandalay and Bhamo.

This necessitated the formation of what was termed 'The Mosquito Fleet', ie. Small dumb barges towed by powered craft. Through custom, a standard size craft came into being, two dumb barges each carrying 120 tons of rice, being towed by one powered barge of the same capacity.

In the meantime, with the discovery of oil and before the building of the pipe line from Yenangyaung to Syriam, it was necessary to construct oil tankers. Once again this took the form of large dumb barges towed by paddle steamers, naturally much larger and more powerful than The Mosquito Fleet. It should be mentioned that one reason for the limitation in size of The Mosquito Fleet was the extremely winding rivers and creeks that had to be navigated. This restriction did not apply to the main river, hence the difference in size. However with the extension of traffic to the upper reaches of the rivers, draft restrictions came into being and for these services stern wheelers had to be employed.

With the development of trade there followed passenger traffic. By 1940 there was a fleet of around 640 craft, including both powered and dumb, mail, passenger and cargo services which ran from Rangoon to Bhamo on the Irrawaddy and from Monywa to Homalin on the Chindwin.



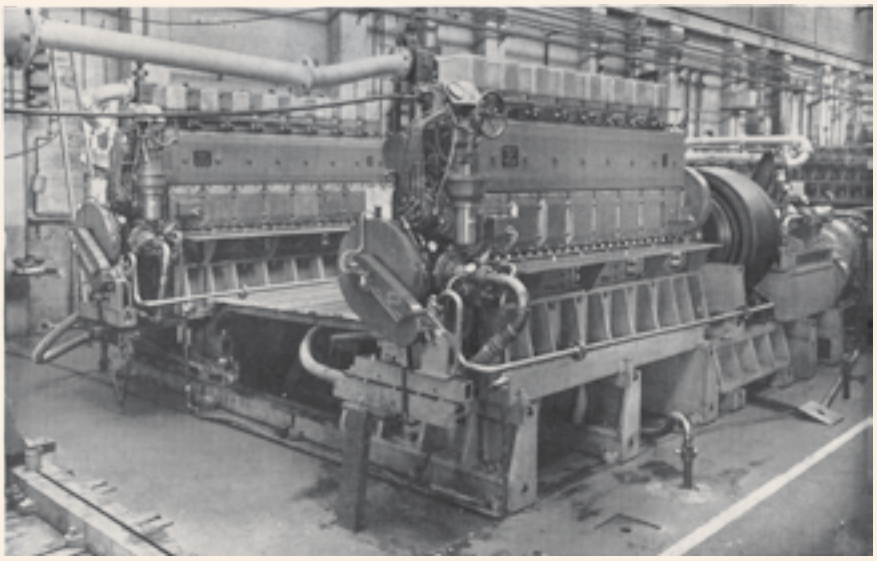
One of the launches plying between Rangoon and Prome.

During the rainy season there was plenty of water in the rivers for navigation, but during the dry season when water was short and channels continually shifting, special duty craft were acquired for buoying purposes. Many kinds of buoys were tried, but the most effective was the simplest, this being a sack filled with sand, tied to the bottom of a bamboo pole and dropped in to the river at the edge of the channel. For night navigation, small tin plates were tied to the end of the bamboo pole protruding from the river and these, twinkling in the searchlight's beam, made a perfect marker.

When the Japanese invaded Burma, this fleet rendered invaluable service to the Army in transporting troops, stores and equipment. Its last job was to ferry the evacuating troops across the rivers and finally, on military instructions, all but five percent of this huge fleet were denied the enemy.

Following on from the re-occupation of Burma, the beginning of a new fleet was a collection of military craft which were designed, not on a basis of marine suitability, but with the primary considerations of ease of production and of erection on the river banks. However, planning had been proceeding in the UK and in 1946 a start was made with a totally new fleet, consisting mainly of powered and dumb barges, plus single screw launches.

Until 1935 all powered vessels had steam propulsion, but in that year several makes of diesel engines were installed in six similar vessels, and after twelve months running, taking into consideration the time required for maintenance, reliability, ease of manoeuvring, cost of fuel, lubricating oil and spares, National engines were found to be the best solution. However, owing to National's other commitments at the time, they were only able to supply



Two National "R4AM8" type 440 b.h.p. engines and Hindmarch/M.W.D. gearboxes on test at Ashton-under-Lyne before despatch to Messrs. Yarrow and Co. Ltd., for installation in quarter-wheel vessels for Burma Inland Water Transport.

their RAM4 type 4-cylinder 140shp engines for fifteen powered barges, nine of which were built by Messrs A & J Inglis Ltd, Glasgow and six by Messrs James Lamont & Co Ltd, Port Glasgow.

Since then, the Irrawaddy Flotilla Company has been nationalised and had become the Irrawaddy Section of the Inland Water Transport Board of Burma. This Board was naturally anxious to build up the fleet to meet the ever increasing demand being put on it. In 1953 orders were placed covering the first stage of its requirements which included fifty three single screw launches, all engined by RAM4 type engines, each having an output of 200bhp. The first of these launches was put into commission in January 1955.

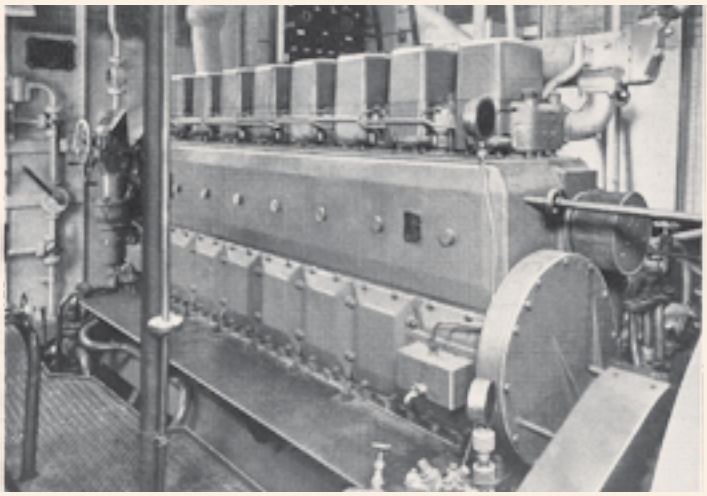
These launches were used in the main on all the delta rubs with some going as far up the river as Prome. They carried a heterogeneous collection of cargo and up to 240 passengers on deck. There was a small saloon forward on the upper deck accommodating not more than ten higher class passengers.

Since the launches went into commission further orders had been placed for five National engines as the main propulsion units for quarter wheelers to be built by Messrs Yarrow & Co Ltd, Glasgow. These vessels were to operate on the upper reaches of the Irrawaddy and Chindwin rivers, where shallow draught was of primary importance. The principal particulars of these quarter wheel vessels were:

Length overall: 148 feet and 6 inches
Length hull ex tongue: 134 feet
Length waterline: 130 feet
Breadth moulded: 34 feet
Depth moulded: 5 feet 6 inches
Draught load: 4 feet
Passengers: 310
Speed on trial: 11mph
Deadweight: 170 tons

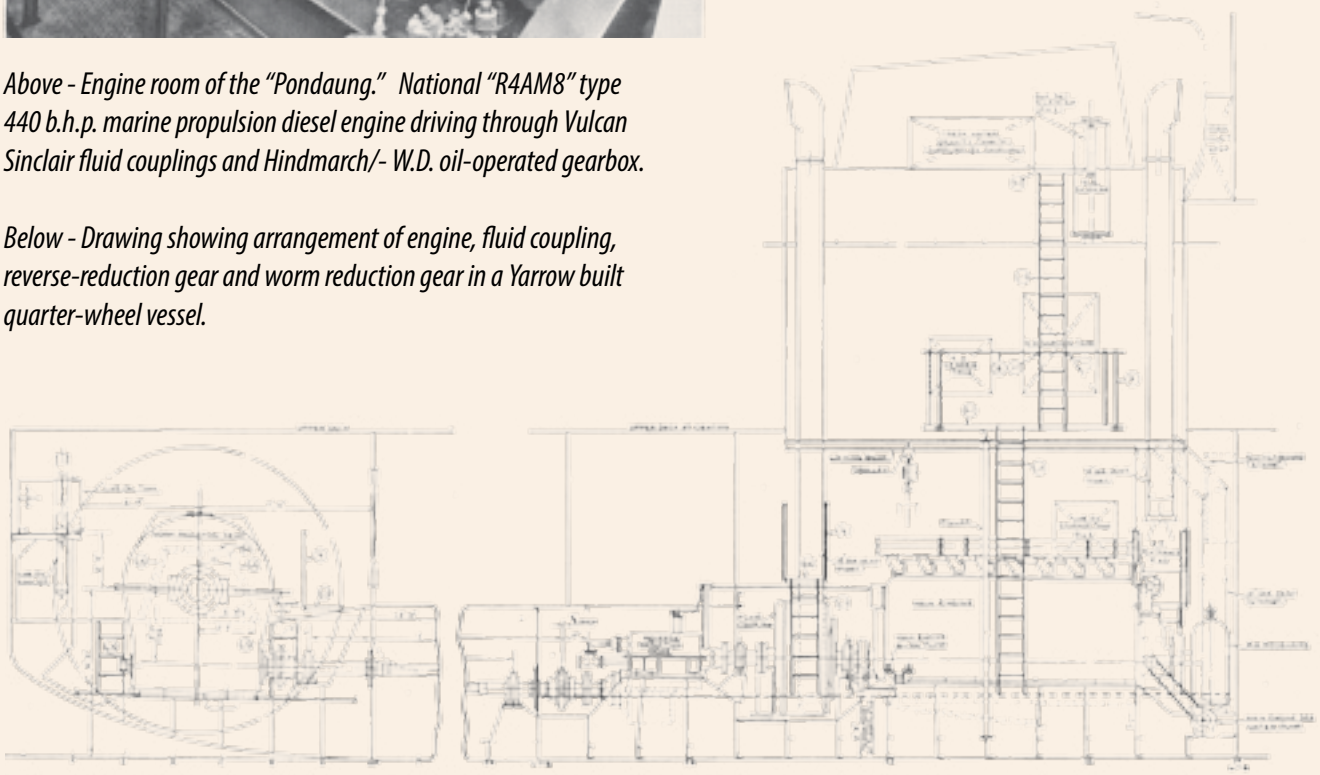
To ensure good manoeuvrability in restricted waterways, four suitably balanced steel rudders were fitted for operation from the steering station forward, by hand powered steering gear. Deck machinery included a hand anchor windlass which had a warping drum each side and geared to ensure rates of power and speed were suited to service.

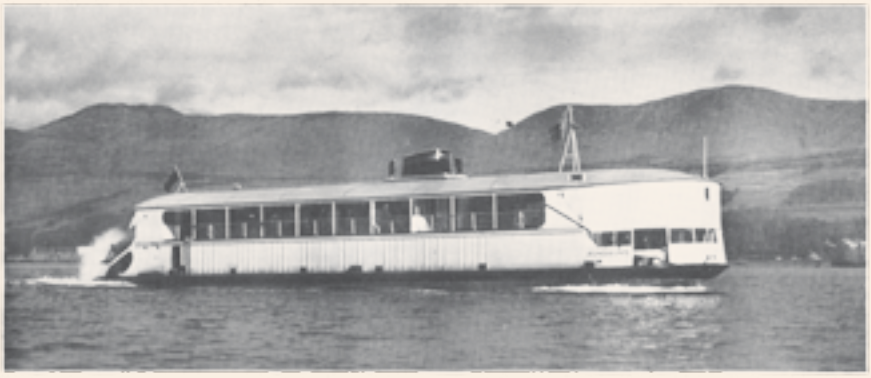
Propelling machinery consisted of an 8-cylinder R4AM8 type 440bhp marine diesel engine working through a Vulcan Sinclair fluid coupling a Hindmarch/MWD oil operated reverse reduction gear



Above - Engine room of the "Pondaung." National "R4AM8" type 440 b.h.p. marine propulsion diesel engine driving through Vulcan Sinclair fluid couplings and Hindmarch/- W.D. oil-operated gearbox.

Below - Drawing showing arrangement of engine, fluid coupling, reverse-reduction gear and worm reduction gear in a Yarrow built quarter-wheel vessel.





"Pondaung." The first of the five quarter-wheel vessels designed and constructed by Yarrow and Co. Ltd., Glasgow. This picture shows the vessel boarded up for voyage to Burma.

and a David Brown worm Reduction Gear, all driving the paddle wheels to give a ship speed of 11 miles an hour. The engine was arranged with a heat exchanger for fresh water cooling and had fresh water, river water, fuel oil, lubricating oil and bilge pumps.

The stern paddles were built as two separate wheels, each supported in two bearings and fitted with feathering gear operated by an eccentric carried on brackets attached to the hull structure.
Two diesel engines driven combined auxiliary sets by Petter were fitted in the engine room, each set comprising air compressor, general service pump and a 5kw generator. The general service pump was of a self-priming design for bilge pumping and was arranged for wash deck, sanitary and fire services. Also fitted in the engine room was an electrically driven float switch controlled sanitary pump and three hand operated pimps, two of the latter being used for filling the diesel tank and one for pumping lubricating oil from the storage tank. In order to produce top weight, aluminium alloy was used for the funnel structure.

Pondaung, the first of this group of quarter-wheelers and her four sister vessels, *Ponnya*, *Padashin*, *Padamya* and *Padapyan* were towed out to Burma, the necessary temporary stiffening and boarding up having been carried out by builders to the UK Ministry of Transport requirements.

Three smaller quarter-wheeler vessels had also been ordered from a German shipyard, each engine by a National R4AM7 type 385 bhp diesel and Hindmarch/National gearbox.

Before the Japanese invasion oil was piped from the oil fields in the Yenangyaung district through a pipe line to the refinery at Syriam and this pipe line was destroyed before the evacuation. At that time the production of oil in Burma did not warrant rebuilding this pipeline and the Government of Burma decided that a number of push-tow units would satisfy their requirements. Consequently some thirty oil barges were ordered from Hong Kong and nine twin screw and three single screw tugs from Continental shipyards. The twelve tugs were under construction and the main propulsion engines specified were National R4AM8 type each capable of delivering 440bhp and three R4AM4 type producing 220bhp all fitted with Hindmarch national gearboxes.

VESSEL		ENGINE			YEAR (App.)	Shipyard
No.	Type	No.	Type	b.h.p.		
15	Single-screw Power Barges	15	R4M4	200	1946	Scotland
53	Single-screw Launches	53	R4AM4	220	1954/55	Japan
6	Twin-screw Push-Tow Tugs	12	R4AM8	440	1956	Germany
3	Twin-screw Push-Tow Tugs	6	R4AM8	440	1956	Belgium
5	Quarter-wheelers	5	R4AM8	440	1956	Scotland
3	Quarter-wheelers	3	R4AM7	385	1956	Germany
3	Single-screw Tugs	3	R4AM4	220	1956	Germany
88		97				

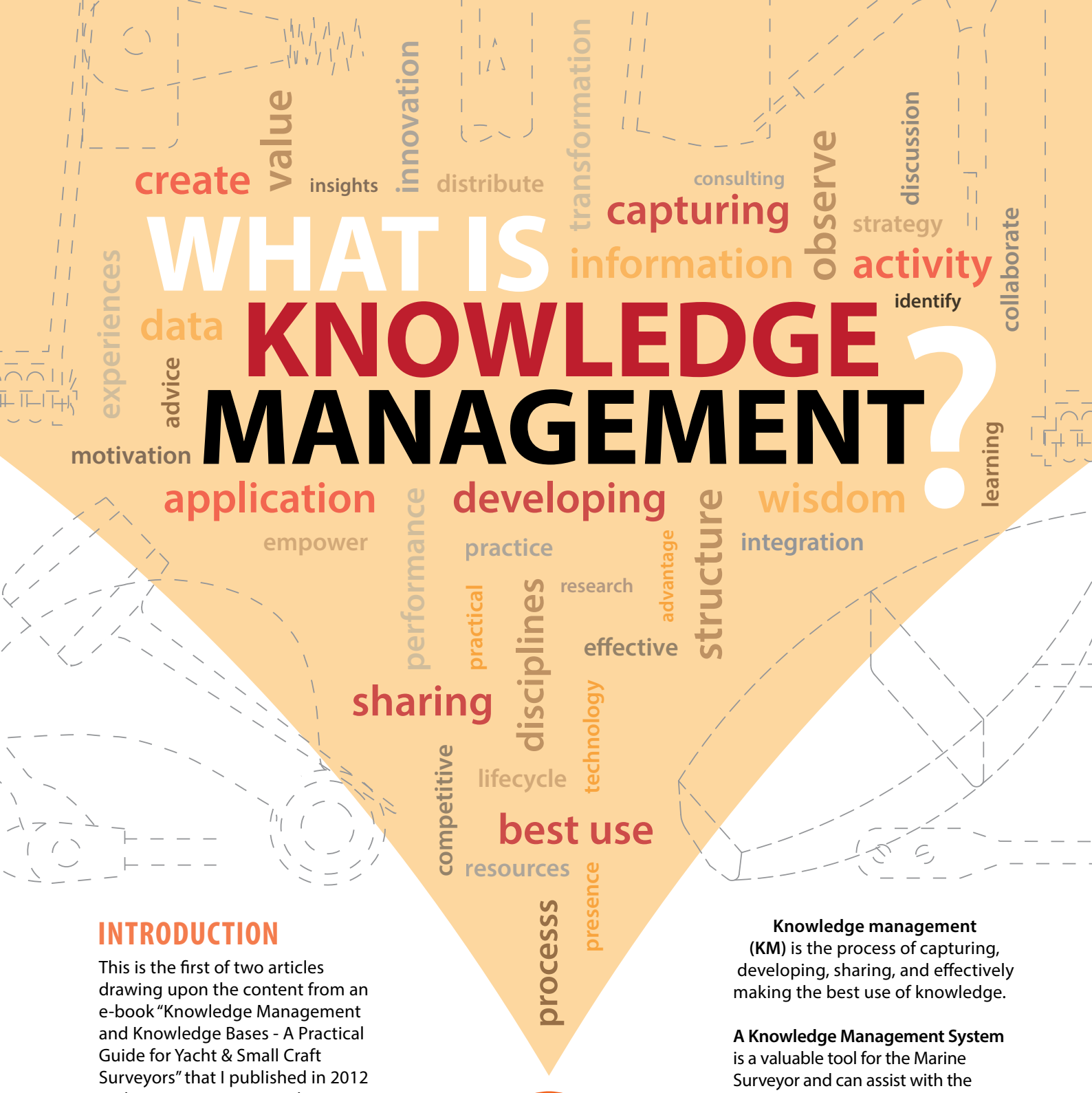
The first pusher-tow tug sailed from the German Shipyard of Christof Ruthof, Mainz Kastel, during April 1956 arriving in Rangoon in June.
It is said that around 8,500 nautical miles were covered at an average speed of 8.35 knots. On April 17 the weather was so bad that in spite of hugging the coast it was necessary to put in at Cherbourg and they remained there for three days. Further heavy seas were encountered but the hull and machinery withstood the inclement weather.

The pusher-tow tug was delivered under contract by Messrs Unterhorst & Olbrich, Hamburg.
The vessel did 11.7 mph on light trials in the Rangoon River and exceeded the specific speed when pushing four barges loaded with 2,200 deadweight.

In conjunction with other recent contracts at that time, another member of the brush Group (Messrs J & H McLaren Ltd of Leeds supplied marine auxiliary sets for installation in the Burma river craft.

The auxiliary units were McLaren M2 engines developing 44bhp at 1,000 rpm. The engine was flexibly coupled at the flywheel to a generator, the generator shaft extended and clutch coupled to a compressor. Two auxiliaries were installed in each vessel and provided lighting and compressed air for the main engines. History shows that the Brush Group played an important part if the redevelopment of Burma's national economy at a time of great need.

WHAT IS KNOWLEDGE MANAGEMENT?



INTRODUCTION

This is the first of two articles drawing upon the content from an e-book "Knowledge Management and Knowledge Bases - A Practical Guide for Yacht & Small Craft Surveyors" that I published in 2012 and a presentation given by me at IIMS Marine Conference, August 2012 in Sydney, Australia.

This article provides a background to the subject, for Marine Surveyors. A subsequent article Knowledge Management in Marine Surveying will provide practical insight into personal knowledge management which is management of knowledge at the individual level. This subject and the content of these articles are applicable to all disciplines of Marine Surveying.

BY
NICHOLAS PARKYN

Knowledge management (KM) is the process of capturing, developing, sharing, and effectively making the best use of knowledge.

A Knowledge Management System is a valuable tool for the Marine Surveyor and can assist with the data to information, to knowledge transformation lifecycle. It is a key factor in additional value creation and competitive advantage. A common approach to knowledge structuring facilitates the sharing of knowledge and collaboration with others based on knowledge sharing which increases the value proposition of organizations like the IIMS.

"The transformation of information into knowledge is a critical one, lying at the core of value creation and competitive advantage" - Stewart 2001

The sharing of knowledge using Knowledge Networking by organizations like the IIMS can serve to maximize value by empowering the members and providing "Local Presence, supported by Global Knowledge"

WHAT IS KNOWLEDGE?

Knowledge by definition is a fluid mix of framed experience, values, contextual information, expert insight and grounded intuition that provides an environment and framework for evaluating and incorporating new experiences and information. Knowledge often becomes embedded in documents and repositories.

FROM DATA TO WISDOM!

- Data: being discrete, objective facts or observations, which are not organized and not processed and therefore have no meaning or value because of lack of context and interpretation.
- Information: organized or structured data, which has been processed in such a way that the information now has relevance for a specific purpose or context, and is therefore meaningful, valuable, useful and relevant.
- Knowledge: a fluid mix of framed experience, values, contextual information, expert insight and grounded intuition that provides an environment and framework for evaluating and incorporating new information. It is a familiarity, awareness or understanding of something, such as facts, information, descriptions, or skills, which are acquired through experience or education by perceiving, discovering, or learning. Knowledge can refer to a theoretical or practical understanding of a subject.
- Wisdom: making the best use/ application of knowledge.

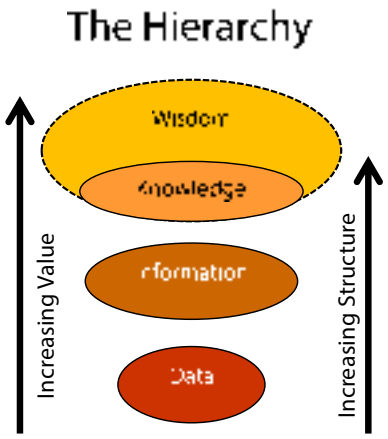


Figure 1: Hierarchy from Data to Wisdom

The diagram, figure 1 above, illustrates the hierarchal relationship between data, information, knowledge and wisdom. As we move up the stack from data, to information and then knowledge the structure of the initial data is being increased and along with that, the value is being increased. At the top of the "value chain" is Wisdom which can be considered as a "wrapper" around knowledge which assesses and enables its best use.

"To acquire knowledge, one must study; but to acquire wisdom, one must observe." *[Marilyn Vos Savant]*

THE KNOWLEDGE MANAGEMENT PROCESS

So much for the theory, if we consider the typical activities of a Marine Surveyor, we can see how these relationships and value propositions are realised in practice.

The diagram, figure 2 below, relates the typical survey task and activities (shown on the left) to the knowledge management process (shown on the right). The survey task has both top down and bottom up aspects, which "meet in the middle" at the reporting activity. With reference to the diagram above, during the survey task:

1. Data and Context are captured during the physical survey (Activity 1).
2. The data and context is structured and combined into Information (Activity 2).
3. The Information is further interpreted (structured) into Structured Information (Activity 3)
4. The structured information is reported [the Survey Report] (Activity 4).
5. This structured information is further structured and categorized and stored in the knowledge base as knowledge (Activity 5).

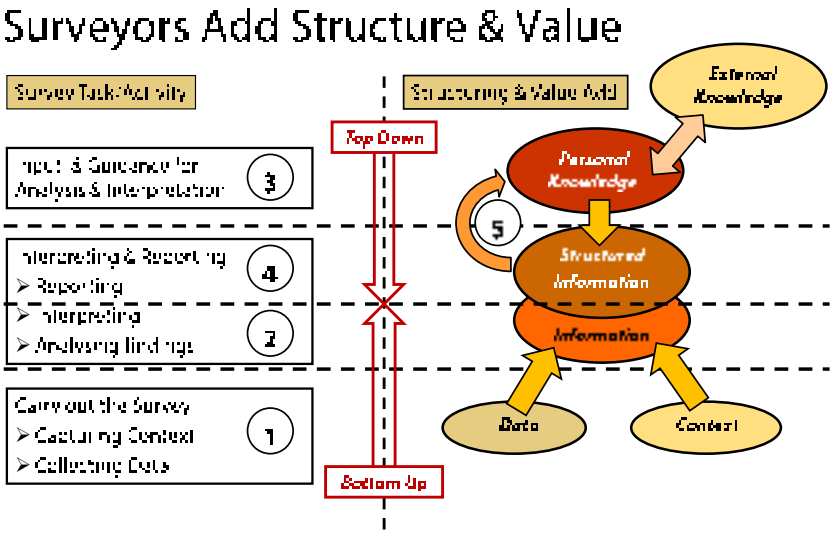


Figure 2: The Survey Activity related to the Knowledge Management Process

A report is a textual work made with the specific intention of relaying information in a widely presentable form. Therefore to produce a report, we have structured data to obtain information. The process of reporting by the surveyor is by definition using the data and context captured during the physical survey and converting it into information for reporting purposes. Later additional structure is added to this information to enable it to be stored as structured information (knowledge) in the Knowledge Base. It is clear that the process of Marine Surveying naturally relates to the "data to knowledge" lifecycle.

"Knowledge and timber shouldn't be much used till they are seasoned."
[Oliver Wendell Holmes (1809-1894)]

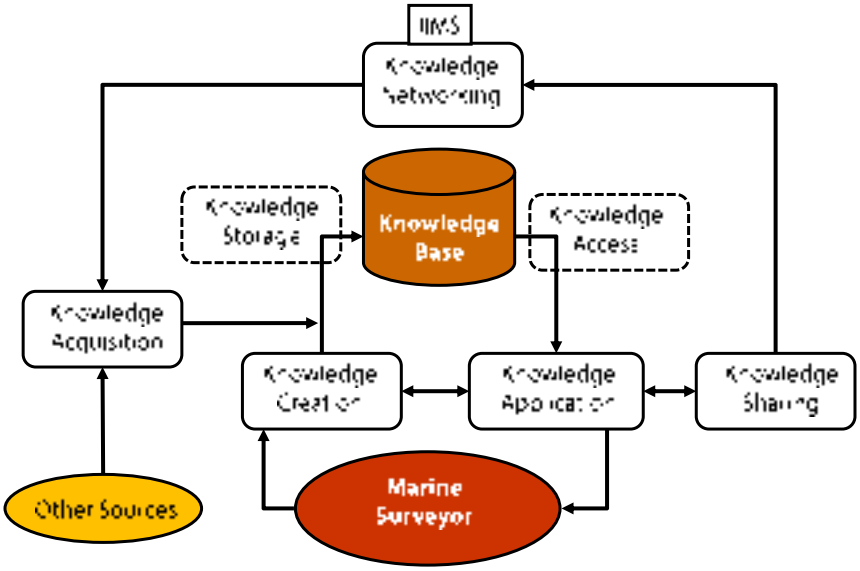


Figure 3: Aspects and Use of Knowledge

KNOWLEDGE MANAGEMENT SYSTEM

Knowledge Management System (KM System) refers to a system for managing knowledge of individuals or organizations. A KM System can comprise a part, or all of a Knowledge Management initiative.

The diagram figure 3 above right, captures the different aspects and use of a Knowledge Management System in the domain of the Marine Surveyor. The main aspects relate to:

- Application of Knowledge
- Creation of additional Knowledge
- Sharing of Knowledge
- Acquiring additional Knowledge

If we analyse the diagram in figure 4 below, we will note that the Marine Surveyor as part of their job apply knowledge as they carry out their duties and create knowledge as more is experienced and learnt. This is a feedback loop where the more you learn, the more knowledge you have to apply and in turn the more you can learn and apply.

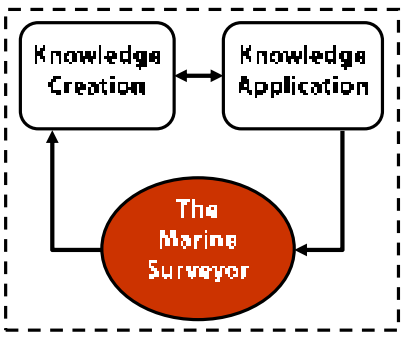


Figure 4: Knowledge application / creation

In order to manage knowledge it often becomes embedded not only in documents and repositories but also in organizational routines, processes, practices and norms. If we expand the view still further, see diagram figure 5 below, you will note the concept of the Knowledge Base. We all "store" large amounts of Working Knowledge in our heads, which enables us to operate, manage, solve and troubleshoot problems related to our work (Marine Surveying). There is however a wealth of other information gathered by us or from other sources, which if structured represents knowledge. This knowledge is outside of our set of Working Knowledge and is best stored in a repository where we can access it effectively on an "as required" basis. The logical place to store it is in the Knowledge Base. We can note that in the diagram figure 5 above that we use the Knowledge Base for Knowledge Storage and Knowledge Access. The Knowledge Base is typically enabled by software and computer based storage.

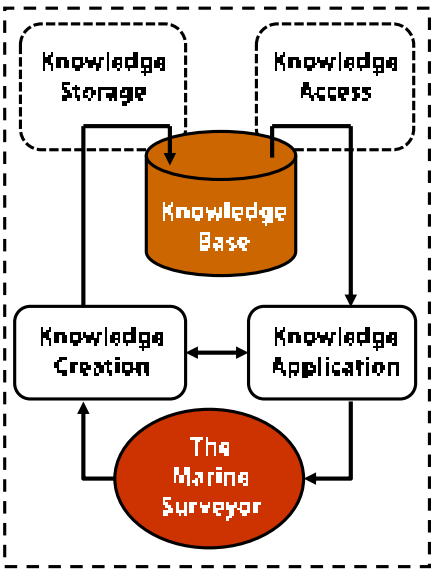


Figure 5: The Knowledge Base

The second article will explore the implementation and use of the Knowledge Base and other aspects of the Knowledge Management System.

THE PAKISTAN SHIPBREAKING INDUSTRY

or as it is also known

THE GREEN SHIP RECYCLING INDUSTRY

BY **CAPT. KHALIL U KHAN**

Shipbreaking is a hazardous industry for (a) the workers and (b) the environment. It is a fact that at present Pakistan is one of the world's largest shipbreaking countries and it ranks fourth by volume in the annually scrapped ships around the world. Until now only minor attention has been paid to this important sector in Pakistan, both by the Government as well as other business sectors. Although dangers are presented in shipbreaking, workers in Pakistan are still not protected or trained to reduce the risks associated with the hazardous nature of shipbreaking.

The industry has been shaken by frequent accidents and the death of its workers. Hazardous wastes recovered from the ships are not handled, stored and disposed of in accordance with international standards and guidelines, but they are dumped around the shipbreaking yards, or sold in the local market without any consideration of the effects on the environment. This is because of the lack of adequate technology, equipment and legal framework as to proper waste handling procedures. Presently this sector does not prevent pollution and is reselling hazardous materials in the local market with the risks and occupational diseases associated with such waste.

In other South Asian countries, ships are dismantled far away from the management offices of the shipping companies. The basic responsibility for clean and safe ship recycling lies with the ship owners who benefit commercially from their vessels over several years and by selling their ships in to the world ship dismantling market.

As per international legislation a ship must be hazard free prior to commencement of demolition. The cost to make it hazard free is very high. Therefore end of life vessels are sold to South Asian countries, where they encounter no resistance by the buyers and a good price is achieved by the sellers. Buyers also get them cheap because of the sellers saving on the cleaning cost.

More than 20 years of discussion at international level on how to make shipbreaking a cleaner and safer operation has helped develop the necessary expertise which is available to change the current practice to a more effective and safe one. Pakistani authorities together with the local shipbreaking industry can, by way of joint efforts with international organisations, initiate the change needed to turn the 'industry green'.

In order to accomplish this goal, the shipbreaking industry needs to adopt more modern methods, as practised in other advanced parts of the world. It must move its activities of breaking ships directly on the beaches to areas specified for this purpose for containment of pollutants, proper handling of hazardous wastes, safe use of heavy lifting equipment and the rapid emergency response in case of accidents. Pakistan is a Signatory State to the 'Basel Convention' and therefore it must ensure an environmentally sound management of hazardous wastes, if it allows the import of end of life vessels. New legislation such as the EU Regulation on Ship Recycling and the Hong Kong Convention is available, but neither has yet been implemented. It is a good idea to upgrade legislation in the sector if Pakistan wishes to compete with countries offering 'green' ship recycling. The pressure on Governments in ship-owning countries, for instance the European Union, as well as on the shipping industry, to ensure that end of life vessels are recycled in compliance with international standards, is constantly growing. More and more ship owners seek clean and safe solutions. A competitive ship recycling industry must therefore be based on high standards of environmental protection and workers' safety.

Global Perspective

Presently, the shipbreaking industry globally dismantles far more than 1,000 large ocean going vessels, such as container ships, bulkers, oil and gas tankers and passenger ships, every year to recover steel and other valuable metals from recycled ships. Recycling activities are concentrated in five countries. There are three South Asian countries (India, Bangladesh and Pakistan), China, and Turkey. There is a good capacity available in North America (US, Canada and Mexico) and within the European Union amongst others Denmark, Belgium and the UK. No doubt at present, South Asia is the global centre for shipbreaking.

In the year 2012, the World's Shipbreaking Sector recorded a total of 1,254 large commercial vessels dismantled. 68% of these vessels were broken in South Asian shipbreaking yards. China attracted 17% of the ship recycling market (209 ships), whereas Turkey did just 12% (153 ships). Around 3% of end of life vessels were recycled elsewhere. The EU represented 2.2% of the total share in 2012 with 28 dismantled ships. Pakistan is

fourth in the global Ship Breaking industry, both in terms of scrapped volume as well as in absolute number of ships scrapped.

Ships broken around the world in 2012

South Asia:	68%
China:	17%
Turkey:	12%
European Union:	2.2%
Rest of the world:	0.8%

The intensity of ship breaking activities varies and it depends on various economic factors globally and nationally. The main factor is the supply of end of life vessels which directly depends on the global economy. In the present economic recession for example, the ship owners sell older vessels for scrapping. Maintaining idle ships may prove less economical than selling them for demolition. At the same time the demand for scrap steel on the other end of the process also influences scrapping activities. The growth of the shipbreaking sector in South Asia is linked to the growing demand for steel depending on local and global steel prices, the scrap steel recovered in the shipbreaking yards is sold on the domestic markets in India, Bangladesh or Pakistan, but can also be re-exported for example to the European Union.

The main reason behind the present global scenario of shipbreaking is the comparatively low cost of labour, environment protection, hazardous waste management, and workers' health and safety in South Asia. There are so many factors that have led to the current sharp

increase in the number of vessels breaking every year. On the one hand, it is ship owners modernising their fleets in order to comply with environmental standards or to increase their operating efficiency. Another main factor is the phasing out of single hull oil tankers, which is to be completed by 2015. The current global economic crisis led to a reduction in global freight rates. Ship owners developed new tonnage during the sea trade boom that took place between 2004 and 2007 and now face an overcapacity of ships. So, phasing out by scrapping the growth of the supply wins the race of growth in demand.

The stakeholders in this business determine the fate of the global ship recycling industry, market developments and practices. The ship owners make decisions when to sell a ship for breaking and the price at which they should sell it. Present market conditions dictate that ship owners wish the highest profit for their vessels when selling to yards with the lowest safety standards. However, it is the ship owner who can set the standard for the recycling of his fleet. Cash buyers (sometimes also brokers) identify a ship recycling facility for the ship owner. In general they buy the ship before its last voyage (often renaming and re-flagging it) and deliver it to the scrap yard. Scrap ships cash buyers advise ship owners on ship recycling practices and therefore play a crucial role in providing the ship owners with a real choice. These cash buyers will typically gain a percentage in the overall profit made from scrapping, so they have a direct interest in increasing the ship owners' profits. Lastly, the shipbreaking or ship recycling yards need to apply standards for shipbreaking activities. All the stakeholders generate revenue from the ship recycling business and therefore share the responsibility for making the industry clean and safe.

Regional Perspective (South Asia)
Traditionally, in the past, ships were scrapped where they were built, mainly in European and North American shipyards. Due to rising labour costs, strict regulations for environment protection and a backlog of old vessels, the bulk of shipbreaking was moved to East Asia, in particular to Taiwan and South Korea in the 1970's. Another drastic relocation of the business towards South Asia occurred over the last 25 years. The World Bank report reflects the reasons: 'A large labour supply, low labour costs, and a relative lack of environmental and occupational health'. It is also important that in Bangladesh and Pakistan some of the largest ships were scrapped and also demand in future for the Shipbreaking Industry outputs due to requirement of relatively low grade mild steel bars and rods for use in construction.

South Asia currently is the globally centre of the shipbreaking industry with 70% share of the international market. India is the single largest shipbreaking country in the world.

As per the figures according to the Shipbreaking Platform for the year 2012, covered 40% of the ships dismantled in 2012 (497 ships) in India.

Bangladesh scrapped 230 ships in 2012, or 18% of the global activity. Pakistan dismantled 124 ships, or 10%.

Not now the Pakistan but the Bangladeshi yards have a higher profit margin mainly due to comparatively low taxes and low labour costs.

The Indian shipbreaking industry is mainly located at Alang-Sosiya, Gujarat, about 50 km from the port city of Bhavnagar, where yards were first set up in 1983. There are also shipbreaking yards in Mumbai and in Sachana.

In Bangladesh, the yards are on a beach stretch in Sitakunda located to the north of the port of Chittagong in the south-east of the country.

In Pakistan, the industry is situated at Gadani in Balochistan, about 50 km to the west of Karachi.

The variety in geographical features of the shipbreaking beaches leads to differences in how the yards operate. The Alang beaches have a tidal range of 13 meters and during high tide the ships are moved further up the beach. Both in Sitakunda and in Alang, beaches are wide and muddy. In Gadani, the beaches are shallower, sandy and dry, due to a low tidal range.

The Shipbreaking Industry is heavily dependent on following factors:

1. the regulatory framework,
2. the political conditions and
3. the economy.

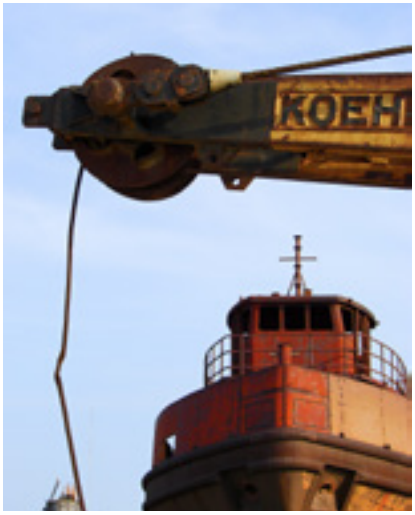
There are considerable differences between the three shipbreaking countries. However, the yards operate under comparable conditions as far as environmental protection, health and safety provisions and working conditions are concerned. The ships are beached and dismantled directly on the shore. The method used for beaching which makes it impossible to make a fool proof, pollution and hazardous waste material free. For example no asbestos units are set up next to the vessel. Moreover, emergency response, for instance ambulances and fire fighters, can hardly reach the vessels on the beach. Even if lifting equipment can be installed on a beach, adequate heavy machinery can only be set up on stable ground such as on the pier or in a port area.

Quite a good number of workers in all these three countries consists of migrant workers from poorer parts of the countries. Workers are mainly recruited on a daily wages basis without a permanent contract. Generally they usually live in shanties next to the yards. Many of the workers are illiterate and not properly trained for hazardous work such as asbestos removal. Regular happening of severe accidents in the shipbreaking industry follow similar patterns: falling from great heights, steel parts striking workers, fires and explosions, and workers exposed to hazardous materials such as asbestos or toxic fumes. Accidents and casualties are not fully recorded and there is no systematic more than health screening of the work force.

Over the last ten years, following continuous international and national criticism on working conditions and environmental degradation, some of the yards have invested in upgrading their facilities. It is observed that improvements only happened in the Indian shipbreaking yards, where, for instance, a landfill site has been constructed and the Gujarat Maritime Board (GMB) has established a hospital next to the scrapping yards. However, this is not publicly documented as there are no updated independent reports substantiating the claimed improvement in yards is not open for public scrutiny. Further, the standards used for such working condition – as ISO 30.000 – are not reliable as the certification procedure is reportedly dubious, or certificates are obviously worthless (a so-called "Green Certificate" is provided without a proper procedure).

National Perspective

Likely it is learnt, shipbreaking in Pakistan started in 1947, before the country's independence, in the port area and on the Gadani coast the sandy beach (compared to the muddy beach in Bangladesh) and a deep water level allowed for the easy beaching of vessels. The ship breaking industry grew after independence and was most active in the 1970's and 1980's. At that time, the Gadani shipbreaking yards employed over 30,000 workers directly and Gadani was then considered the largest ship breaking yard in the world. For different reasons, amongst other countries the introduction of comparatively high taxes on this sector in 1997, the Pakistani shipbreaking industry lost its competitiveness and business to India and Bangladesh. Over some years there has been a revival of the industry. According to the Chairman of the PSBA, Dewan Rizwan Farooqi, the year 2012



brought more business to the yards again, which reflects the global peak in the total number of ships scrapped in 2012.

According to PSBA, the industry pays taxes of about 5 billion Pakistani Rupees (4.7 million USD) annually out of which 30 percent go to the Provincial Government of Balochistan. People of the business fraternity in favour of the shipbreaking industry argue that it plays an important role in reducing import burdens for scrap steel for the iron industry in Pakistan, which in turn contributes to the GDP. It also provides employment for workers from Balochistan, which is the country's poorest province. The Planning Commission of Pakistan intends to revive the industry based on "Green" Ship recycling standards in order to increase its contribution to the GDP.

It will not be out of place to mention here that during the years 1970's I was a beaching master and during that period, the largest passenger ship "Safina-e-Hujjaj" was beached by me. On this historical occasion, other Captains were onboard such as Capt.K.S Sultan, Marine Superintendent of the Pakistan Islamic Steamship Co, Karachi (owners of the vessel) Capt. Siddi, Capt.A Saeed of my ex Company M/s United Oriental Steamship Co. Karachi, who were there as the buyer's representatives onboard.

TO BE CONTINUED IN SEPTEMBER.

The new CTU Code of Practice

How can the surveyor and the industry use the CTU Code of Practice to help improve securing of cargos in freight containers?

One big question after all the work put into developing the new IMO/ILO/UNECE CTU Code of Practice is: Will it improve the way in which freight containers are packed and secured and will it help the surveyor?

Certainly there is a need for improvement as can be seen in the figures presented by the TT Club during the October ICHCA CTU Code seminar in London; one third of all freight containers carrying dangerous goods are improperly secured and 30% of incidents reported can be traced back to poor container packing. As the Code is not yet legislation, the answer to the question depends on how all parts of the logistic chain realise their responsibility and the need for improvement.

David Parrin, Senior Advisor for Cordstrap, the leading global manufacturer and supplier of container cargo securing systems, was asked how working together with surveyors using the CTU Code can help. "It's a great step forward.

In The Netherlands, Germany and increasingly in the UK we work closely together with marine surveyors. If they block a container for insufficient securing or there is a danger of damaged packaging they send us a photo. We are then able to contact the shipper or packer and together we work out better solutions for them. The nice thing now is that we have a clearly written code with defined responsibilities and good practices. We don't need so much discussion now based on personal preference. All parties now have a clear code to abide to."'

A second major question is how to make sure the new CTU Code reaches the right people i.e. those at the sharp end of the chain and actually doing the container packing. David Parrin was clear on this. "We as suppliers of cargo securing solutions to the industry have a major role to play in making customers aware of the Code and how to use it. This we do face to face with our customers at their own loading dock or together with them in our training center in Oostrum, The Netherlands. In a couple of days we can take them through the new Code and provide them with the practical insights and develop the skills needed to tackle the job.

Cordstrap is looking to hold special seminars in the UK that bring Surveyors and their export packing customers together to go through the new guidelines and see how and who they affect.

The more closely we work together with the packer and the surveyor the safer cargo securing will become."

Does the new Code provide all the answers the industry needs to ensure proper cargo securing? David Parrin again; "It goes a long, long way which is a tremendous improvement on the old CTU Guidelines. However, rules and regulations do differ from one part of the world or cargo type to the other. Also, specific transport modes like rail transport in the USA do require specific solutions. With our worldwide based organisation we can tap in to local requirements and provide expert advice and the optimal solution. These solutions are tested and certified meeting the new CTU Code requirements and match national standards such as the EN 12195:1-2010 recommended for dangerous goods transport. For example our new FloorLash System has been developed especially for this purpose and with a minimum of effort we can ensure that hazardous cargos in IBCs, drums and big-bags remain where they belong; in the container, in the same place they started from and undamaged on arrival."

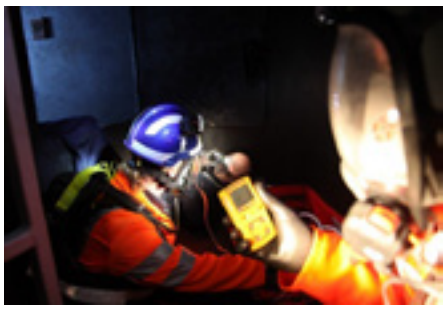
"The more closely we work together with the packer and the surveyor the safer cargo securing will become."

For more details: www.cordstrap.net

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

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