

RINA AFFAIRS

JANUARY/FEBRUARY 2016

The Newsletter of the Royal Institution of the Naval Architects

CHIEF EXECUTIVE'S COLUMN



ay I take this opportunity of the first issue of RINA Affairs in 2016 to wish all members a belated Happy New Year (less belated for Chinese members!)

Over the past year I have again had the pleasure of meeting members (and some soon to become members) in some of the countries where the Institution is represented at all levels in universities, industry and maritime organisations. My visits to some of the 60+ universities where the Institution has links and the many companies in all sectors of the maritime industry where members work has left me in no doubt as to the standing which the Institution enjoys in the international maritime community.

The Institution has members in 97 countries, demonstrating conclusively that the Institution is truly an international organisation. The decision of those involved in the design, construction, maintenance and management of marine vessels, from Australia to Azerbaijan, to become members is confirmation that membership provides an internationally recognised demonstration of the highest standards of professional competence. Their membership also confirms the value which they place upon the Institution's international publications and conferences, providing the relevant and up-to-date information on developments across all sectors of the global maritime industry which is essential to maintaining that competence.

Few members of the maritime industry would deny the standing which the Institution's journals enjoy amongst the many similar publications which serve the industry worldwide – some better than others in terms of their accuracy and independence. The credit for that must go to the editorial staff and contributors, ably supported by the advertising teams. (I wonder how many members are aware that all editorial, advertising sales and production is done in-house, leaving only the printing and distribution to be out-sourced). The internationalism of the Institution's journals is reflected in their distribution in over 100 countries, giving them a truly global circulation. As I hope you are aware, all journals are now published in printed and digital formats for reading on PCs, Tablets and Smartphones.

The Institution's conferences also continue to enjoy a high reputation for their quality of both content and organisation. The global location of the conferences also serves to demonstrate the internationalism of the Institution.

I believe that the Institution enjoys a standing in the international maritime industry which is unmatched by any professional society serving the professional needs of those involved in the design, construction and maintenance of marine vessels and structures. This is demonstrated by the number of companies which recognise corporate membership as meeting their requirements for professional recognition, seek the Institution's assistance in developing and accrediting their Graduate Training Programmes or become Corporate Partner members.

I make no apology for beating the drum for the Institution, and I invite all members to do the same in whatever way they can. Membership is surely something to be proud of.

Finally, on your behalf, I would like to thank the other members of the Headquarters team for the contribution they have made to the success of the Institution over the past year.

Chief Executive

IN THIS ISSUE

2016 Annual Membership Fees

Annual Fees Renewal Notices have been sent by email, with posted copies only to members for whom no email address is held. The Chief Executive asks members to review their standing order for journals and the Transactions, and their personal details on their page at www.rina.org.uk/MyRINA before making their payment online. Members are reminded that those opting to only receive the digital version of The Naval Architect (Warship Technology + Offshore Marine Technology) will receive a reduction in their membership fee.

2016 annual general meeting

The Annual General Meeting of the Institution will be held at 8-9 Northumberland Street, London, WC2N 5DA, on 20 April 2016 at 1100

First International Workshop on Waterjet Propulsion in China

Ten papers were presented at the first one-day International Workshop on Waterjet Propulsion in Shanghai, organised jointly by the Royal Institution of Naval Architects, the Shanghai Society of Naval Architects and Ocean Engineers, and the Maritime Research Institute of China.

Message from the Secretary General of

In his letter, the outgoing Secretary General states his appreciation of the Institution's contribution to the work of IMO.

RINA Awards

The achievement of students in France, Australia, Singapore and the UK are recognised by the presentation of RINA Student Awards

The Institution Library

The Denny Room houses the Institution collection of 3000 books covering a wide range of topics in the design, construction and management of marine vessels and structures. The library catalogue may be viewed online. 2015 CEMT Award

2016 Annual General Meeting

NOTICE IS HEREBY GIVEN THAT IN ACCORDANCE WITH BY-LAWS 39 AND 42, THE ANNUAL GENERAL MEETING OF THE INSTITUTION WILL BE HELD AT 8-9 NORTHUMBERLAND STREET, LONDON, WC2N 5DA, ON 20 APRIL 2016 AT 1100 FOR THE FOLLOWING PURPOSES;

- 1. To receive the Annual Report and the Financial Statement for the year ended 30 September 2015.
- 2. To consider and, if felt fit, approve the following Resolutions:

Resolution 1: To elect the President

Resolution 2: To appoint the Institution's auditors

NOTE

- 1. All members have the privilege to attend the above meeting, but only Voting Members are entitled to vote on the Resolutions.
- 2. Members entitled to vote on the Resolutions may appoint the Chairman of the meeting as their proxy to vote on their behalf. Proxy Forms will be posted online in due course.

2016 Annual Membership and Registration Fees

By now members who are liable for membership and registration fees—should have received an email forwarding their 2016 Fees Renewal Notice. If you have not received the Notice (and it is not in your spam folder) please contact accounts@rina.org.uk.

Membership and registration fees may be paid online by all major credit cards. Payment can also be made by bank transfer or personal cheque drawn on a GBP, Euro, A\$, NZ\$, Can\$ or US\$ account, but members should remember that the bank will make a charge for transfer and ensure that the full amount due is transferred. Members in China can pay directly into the Institution's account in Shanghai.

You can either complete and return the Membership Fee Notice with payment details, or pay online by visiting your personal membership page at www.rina.org.uk/MyRINA (using your email address as your username and membership number as your password). A receipt will be forwarded within two working days of your payment being received.

All members are entitled to receive the printed and digital issues of *The Naval Architect* (+ *Warship Technology* + *Offshore Marine Technology*). Members have the option to receive the digital version only, with a corresponding reduction in membership fee. The financial saving apart, many members find this to be the most convenient method of receiving and reading the journals, whether on a PC or tablet. Members receiving the digital issue have access to all archived issues.

You are requested to check your personal membership record page at www.rina.org.uk/MyRINA before paying your 2016 Membership Fee, to ensure that you are receiving the correct journal version or to opt to receive the digital version only.

Early payment of your 2016 Membership Fee would be much appreciated. Experience has shown that the longer members leave it, the more likely they are to receive an email from me informing you that your technical journals have been stopped and ultimately, that your membership has been lapsed – something I am sure neither of us would wish!

2016 Annual General Meeting

Agenda

- President opens the AGM
- 2. Annual Report of Council
- 3. Financial Statement for 2015
- 4. AGM Resolutions
- Election of President
- 6. 2016 Elections to Council
- 7. 2015 Medals and Prizes
- 8. President's Report
- 9. General Discussion
- 10. President closes the AGM

Following the presentation, a buffet lunch will be available for those attending the AGM. To assist is catering, members are asked to let Sara Phillips sphillips@rina.org.uk know if they would like lunch.

The Institution Library

he Denny Room houses the Institution's collection of 3,000 books covering a wide range of topics in the design, construction and management of marine vessels and structures. The library catalogue may be viewed online at https://cloud.collectorz.com/rina/books.

Books are not available on loan, but members are most welcome to visit the Denny Library at any time when not in use for meetings, conferences, etc. Please check with Sara Phillips at 020 7235 4622 or sphillips@rina.org.uk to check its availability.

The Denny Room

The Denny Room is the main public room at the Headquarters is the Denny Room, named after Sir Archibald Denny.

Archibald Denny was a member of the Denny family who had been involved in shipbuilding in Dumbarton from the early 19th century. William Denny & Sons of built over 1,500 ships at their Dumbarton yard between 1844 and 1963. They built all types of ships but were particularly well known as builders of fine cross-channel steamships and ferries. Always innovators

The Denny Room, housing the Institution's library

they were responsible for a number of firsts, including *Rotomahana* (1878) - the first all steel merchant ship; *King Edward* (1901) - the first commercial turbine steamer; *Robert the Bruce* (1834) - the first all welded vessel. Denny's was the first commercial yard to use a Ship Model Experiment Tank. In charge of technical developments at the shipyard,

Archibald Denny was closely associated with Denny's international reputation for innovation and high quality ship design.

The Denny Room may be hired by members for meetings, conferences etc at a discounted rate. For details of availability and cost, contact Sara Phillips at sphillips@rina.org.uk



2015 CEMT Award

The 2015 Confederation of European Maritime Technology Societies (CEMT) Award for outstanding contribution to the European maritime industry was



presented by Trevor Blakeley, Chief Executive of RINA and Chairman of the Council of CEMT, to Dr Ingrid Marie Vincent Andersen from the Technical University of Denmark (DTU) and Dr. Marie Lützen from the University of Southern Denmark (SDU) for their work in improving higher maritime education in Denmark.

The Award was presented at a Seminar of the Danish Society of Naval Architecture and Marine Engineering.

Dr Ingrid Marie Vincent Andersen, Chief Executive, Trevor Blakeley, and Dr Marie Lützen The Confederation of European Maritime Technology Societies (CEMT) is an independent confederation of 16 professional institutions and learned societies in 14 countries of Europe which are involved in education and professional development, and learned societies, and in facilitating the exchange of information in the field of maritime technology. CEMT is recognised by the European Commission.

CEMT is able to call upon the knowledge, skills and experience of over 30,000 professional naval architects, marine engineers and others in the field of maritime technology, involved in all aspects of the European maritime industry.

News from the Divisions, Branches and Sections

New South Wales Section

Roger Neill and Martin Rowan of the Defence Science and Technology Group (formerly DSTO) gave a presentation on *The 2014 Maritime Archaeological Assessment of the Sunken Submarine HMAS AE2* to a joint meeting with the IMarEST attended by 41 on 1 July in the Harricks Auditorium at Engineers Australia, Chatswood.

Selwyn Oliveira, Marine and Diesel Manager at Alfa Laval Australia, gave a presentation on *PureDry: Reducing a*

Ship's Fuel Costs by Re-using Waste Fuel Oil to a joint meeting with the IMarEST attended by 19 on 2 September in the Harricks Auditorium at Engineers Australia, Chatswood.

Phil Helmore

Southern Joint Branch

Over 300 members and guests enjoyed the 2015 Annual Dinner of the Southern Joint Branch.

Long service certificates were presented by the Chief Executive,

Trevor Blakeley, to Tony Molland, Keith Thatcher and Ray Harvey.

The Chief Executive also presented the Tom Paradise Award for the Outstanding Engineer at BAE Systems Maritime – Portsmouth to Voy Westphal, the SJB Award for the Top Final Year Student on the Ship Science Degree at Southampton University to Henry Hickson, and the SJB Award for the Top Final Year Student on the Yacht & Powercraft Design Degree at Southampton Solent University to Caspar Potter.

Message from the Secretary General of the IMO

The following message has been received from the Secretary General of the International Maritime Organisation:

Dear Mr Blakeley,

As I conclude my term of office as Secretary-General of the International Maritime Organization, I write to thank you for

your support throughout my tenure. I have appreciated your contribution to the work of IMO and your understanding of the complexities surrounding an international organisation striving to deliver on its work programme.

I trust that my successor, Mr Kitack Lim, will enjoy the same support and encouragement from you in the years ahead.

With best wishes for the approaching Festive Season and for a Happy New Year.

Yours sincerely, Koji Sekimizu Secretary General

ICSOT India 2015

The 4th International Conference on Ship & Offshore Technology was held at IIT Kharagpur, India from 10-11 December. Twenty-four authors and invited speakers presented papers on the subject of Coastal

and Inland Waterways.

The Chief Executive, Mr Trevor Blakeley, gave a presentation on the "Role of the Royal Institution of Naval Architects in Achieving Innovation in the Maritime Industry"

The Chief Executive gives his presentation on the Institution and Innovation





HMCA Medical Plans

The Royal Institution of Naval Architecture has negotiated with HMCA to offer discounted rates for medical plans, dental plan, hospital cash plans, personal accident plan, travel plan, life cover, income protection and vehicle breakdown products.

Are you paying too much for your present private medical plan? Why not take a look at the HMCA plans and compare the benefits and subscriptions offered? You may transfer to HMCA at any age and without a medical examination; there will be no break in protection and there is a 30 day money-back guarantee.

HMCA only offer medical plans to membership groups and can offer up to

a 40% discount off the underwriter's standard rates. This is a comprehensive plan which provides generous cash benefits for surgery and other charges

Who are HMCA? - HMCA has specialised in providing benefits and services to associations and professional groups since the 1970s. HMCA is authorised and regulated by the Financial Conduct Authority.

For further information and quotations contact HMCA by telephone on 01423 799949 or visit the exclusive HMCA Royal Institution of Naval Architects website here: https://www. hmca.co.uk/rina.

QUOTE OF THE MONTH

ENGINEERS AND ENGINEERING

"Engineers ... are not superhuman. They make mistakes in their assumptions, in their calculations, in their conclusions. That they make mistakes is forgivable; that they catch them is imperative. Thus it is the essence of modern engineering not only to be able to check one's own work but also to have one's work checked and to be able to check the work of others",

Dr Henry Petroski.

Where to stay in London

Members and their guests visiting London on business or pleasure may take advantage of the Institution's membership of Club Quarters to stay at its Trafalgar Square Hotel, situated at 8 Northumberland Avenue – less than one minute's walk from RINA Headquarters.

fixed lowest rate of £159 per room which is always available to conference delegates, regardless of the varying higher rates throughout the year for non members. An even lower rate is available only for Institution members and guests at weekends

The Institution's membership provides a (Fri, Sat and Sun) and holidays (£69). Guests do not need to be accompanied by the member. Other benefits include access to the

Club Living Room with complimentary refreshments, WiFi and unlimited chilled, purified bottled water, and a Rewards Programme offering a "Night on the House" after just one stay.

Members may find details of the facilities offered by Club Quarters Trafalgar Square or book online at http://clubquarters.com/ royal-ins-naval-architects, using the login "RINA" (without the quotes) on their first visit and selecting Trafalgar Square from the choice of hotels.

Members and their guests who wish to take advantage of the lower rate at weekends, which is not shown online, should contact ClubQuarters at +44 (0)20 7451 5800



QUOTES OF THE MONTH

ENGINEERS AND ENGINEERING

Engineering is not merely knowing and being knowledgeable, like a walking encyclopedia; engineering is not merely analysis; engineering is not merely the possession of the capacity to get elegant solutions to non-existent engineering problems; engineering is practicing the art of the organized forcing of technological change... Engineers operate at the interface between science and society...

Dean Gordon Brown

First International Workshop on Waterjet Propulsion in China

Ten papers were presented at the first one-day International Workshop on Waterjet Propulsion in Shanghai, organised jointly by the Royal Institution of Naval Architects, the Shanghai Society of Naval Architects and Ocean Engineers, and the Maritime Research Institute of China.

Speakers and delegates at the International Workshop on Waterjet Propulsion



RINA AFFAIRS

The Institution is not, as a body, responsible for opinions expressed in RINA Affairs unless expressly stated that these are Council's views.

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2016 EVENTS PROGRAMME

January

Smart Ships Technology, London, UK

February

Maritime Project Management, London, UK

March

Basic Dry Dock Training, London, UK Wind Farm Support Vessels, London, UK

April

Innovations in Small Craft Technologies, London, UK Annual Dinner, London, UK Contract Management for Ship Construction, Repair & Design, London, UK

May

Communications Skills for Engineers, London, UK Design and Operation of Ferries & Ro-Pax Vessels, London, UK

June

Warship: Advanced Technologies in Naval Design, Construction & Operation, Bath, UK Intellectual Property Rights, London, UK

September

Basic Dry Dock Training, London, UK Human Factors, London, UK Communications for Engineers, London, UK

October

Design & Construction of LNG Ships, London, UK

November

Contract Management for Ship Construction, Repair & Design Course, London, UK Energy Efficient Ships, London, UK President's Invitation Lecture, London, UK

December

Computational & Experimental Marine Hydrodynamics, India Historic Ships, London, UK

People in the News

RINA Bureau Veritas Awards

ENSTA ParisTech

The 2015 RINA – Bureau Veritas Student Award has been awarded to Jérôme Tisserat, whose thesis entitled "*Recherche et innovation sur l'immersion permanente d'un drone sous-marin*" was adjudged by the Royal Institution of Naval Architects and Bureau Veritas to have been the best Master's thesis on the Maritime Engineering course at the Ecole Nationale Supérieure de Techniques Avancées Paris Tech

ENSTA Bretagne

The 2015 RINA – Bureau Veritas Student Award has been awarded to Charlotte Julien whose thesis entitled "Side by side offloading availability analysis" was adjudged by the Royal Institution of Naval Architects and Bureau Veritas to have been the best Master's thesis on the Naval Architecture and Offshore Engineering course at the Ecole Nationale Supérieure de Techniques Avancées

Charlotte receiving her Award from David Thevenet of ENSTA



RINA - DSTG Award

RINA - Defence Science and Technology Group Award for the best presentation at the University of New South Wales undergraduate Thesis Conference by a Student Member on a naval architectural project has been awarded to Alistair Smith for his presentation on *Validity, Accuracy and Implementation of Inclining Methods*.

Other presentations were made by:

Alvin Lim

Automated Drawing of Ka Series Marine Screw Propellers using AutoCAD

Nazrin Mohd Fauzi

Methods of Estimation of the Overall Life-cycle Costs of Tankers

Molly McManus

Energy Efficiency and Emissions Prediction Methods for Tugs and Cruise Ships **Dov Sobel**

Design Methodologies for Newbuilding and Conversion of FPSO Vessels Mitchell Stubbs

CFD Analysis of the Freestyle Swimming Stroke

Elisa Taniputra

Investigation of Submerged Hydrofoils: Improving Vessel Efficiency and Performance

Alexander Walter

Development and Validation of a Crash-Stop Prediction Program

Bryce Waters

Investigation and Comparison of VPPs with Recorded Yacht Data

RINA - BAE Systems Awards

The following RINA – BAE Systems Awards were presented to students at Newcastle (Singapore) University:

Sim Yong Cheng Thomas

For the best Final Year Project in the BEng (Hons) in Marine Engineering course entitled *Engine Sound Signal Separation*

(continued page 8)

WISE SAYINGS

Beware of little expenses. A small leak will sink a great ship.

Benjamin Franklin

We did not all come over on the same ship, but we are all in the same boat.

Bernard Baruch

Ang Jian Wei

For the best Final Year Project in the BEng (Hons) in Offshore Engineering course entitled

Effects of slamming impact pressure history on the plastic response of stiffened panels

Tee Jackson

For the best Final Year Project in the BEng (Hons) in Naval Architecture course entitled

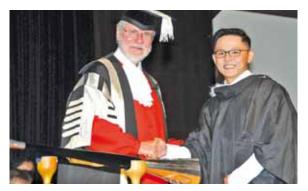
Response of ship side structures subjected ice impact loads

RINA - BMT Group Award

The 2015 RINA – BMT Group Award was presented to Samuel Jones, Archimedes Mulas, Matthew Venner and Annabel Vose whose project "Small Luxury Yacht" was adjudged to have been the best Group Engineering Applications Project at Southampton University.

The judges for the Awards were Giuseppe Gigantesco, RINA Professional Affairs Director, and Andrew Harris, BMT.

RINA - BMT Award winners and judges



Ang Jian Wei receives hs award



Tee Jackson receives his award



QUOTES OF THE MONTH

ENGINEERS AND ENGINEERING

The engineer is the key figure in the material progress of the world. It is his engineering that makes a reality of the potential value of science by translating scientific knowledge into tools, resources, energy and labour to bring them into the service of man ... To make contributions of this kind the engineer requires the imagination to visualize the needs of society and to appreciate what is possible as well as the technological and broad social age understanding to bring his vision to reality.

Sir Eric Ashby

Code Of Professional Conduct

The By Laws requires that "every member of the Institution shall so order his conduct as to uphold the dignity and reputation of the Institution and shall observe the provisions of the Charter and these By-Laws." Every member is further constrained to "order his conduct as to uphold the dignity and reputation of his profession and to safeguard the public interest in matters of safety and health and otherwise." A member is

required to "exercise his professional skill and judgement to the best of his ability and discharge his professional responsibilities with integrity."

The Council's rules governing professional conduct and disciplinary procedures are published in the Institution's Code of Professional Conduct. This may be downloaded from the Members' Only page of the RINA website at www.rina.org.uk/members

Designatory Letters

Members may signify their membership of the Institution by the letters FRINA, MRINA, AMRINA or AssocRINA after their names. In doing so, they demonstrate that they have achieved or are working to achieve the high standards of professional competence demanded by the requirements for membership, and which are recognised as such by the international maritime industry. By doing so, they also demonstrate their commitment to maintaining those standards through their continuing professional development, and their acceptance of the Institution's Code of Conduct. Membership of the Institution does not

come easily and is surely an achievement to be proud of.

However, when meeting members, I am surprised how many do not demonstrate their achievement by displaying the appropriate letters on their website, correspondence and business cards. This also serves to promote the Institution. May I therefore invite such members when next having stationary or business cards printed or updating their website to ensure that their membership of the Royal Institution of Naval Architects is proudly displayed.

Chief Executive

2015 President's Invitation Lecture

The annual President's Invitation Lecture is a major event in the Institution's calendar, which aims to present important and topical maritime themes and issues by leading individuals in their sector of the maritime industry. The 2015 President's Invitation Lecture was presented by Mr Peter I. Keller, Executive Vice President of TOTE Inc.

In his Lecture, presented to over 100 members and guests, Peter Keller reviewed TOTE's all encompassing LNG programme that includes the world's first dual fuel LNG Containerships, the major conversion to dual fuel LNG power of existing RoRo tonnage, LNG long term supply procurement, LNG liquefaction plant development to support the maritime projects and LNG logistics that includes truck, barge, and cryogenic pipeline transfer of LNG often using newly developed processes.

The President's Invitation Lecture was again sponsored by ABS.

Photographs taken at the President's Invitation Lecture may be seen and downloaded at http://www.rina.org.uk/PIL_2015.html



Kirsi Tikka, Vice President of ABS Europe, presents the ABS Eagle to Peter Keller



RINA President, Bruce Rosenblatt, welcome guests to the 2015 President's Invitation Lecture



Peter Keller presents the 2015 President's Invitation Lecture



Members and guests at the 2015 President's Invitation Lecture, held at One Whitehall Place, London

QUOTES OF THE MONTH

ENGINEERS AND ENGINEERING

"Engineering is the art of modelling materials we do not wholly understand, into shapes we cannot precisely analyse so as to withstand forces we cannot properly assess, in such a way that the public has no reason to suspect the extent of our ignorance", Dr A. R. Dykes, 1946.