

RINA AFFAIRS

JUNE/JULY 2017

The Newsletter of the Royal Institution of Naval Architects

CHIEF EXECUTIVE'S COLUMN



hroughout its existence, the Institution has sought to be a forward looking professional institution, "seeking to identify and respond to the continuing and often fast changing professional needs of its members and the profession it serves". I believe that the Institution has been successful in this aim but is very much aware that such success must not lead to complacency. It has no right to expect or assume that those who are involved in the design, construction or maintenance of marine vessels and structures will automatically become or remain members of the Institution.

The Institution must continually ask if it is providing the service which its members want today and in the future. It is as necessary for a professional institution as it is for a commercial company to ask if it is providing value for money to its members and what they expect from their Institution. Does membership provide value for the membership fee?

Identifying the changing needs and expectations will come largely from the feedback of its members. Such feedback may be informal, such as the comments I receive from the many members I have the opportunity to meet at conferences, maritime shows, Branch meetings, or visits to university and industry. In a more structured way, it may come from the new Maritime Group Forums or through the Institution's standing committees.

Later this year, the Institution will be conducting a major survey of the members, asking for their views on the activities of the Institution and the benefits which they receive or would want to receive from their membership. The survey will start by reminding members of the Objectives of the Institution and how they are achieved, and by asking if those objectives will be relevant or appropriate in the future. It will then seek members' view in more detail on how members rate the Institution's current activities and benefits of membership. But, just as importantly, it will seek members' views on what it should be doing differently "to better identify and respond to the continuing and often fast changing professional needs of its members and the profession it serves".

When the survey is published, I would urge all members, regardless of how long they have been members, to take the time to complete it. But of course, I welcome members' views at any time, in any form – they do not need to wait for a survey!

Trevor Blakeley

THE INSTITUTION LIBRARY

The Denny Room houses the Institution collection of 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 Sally Charity at 020 7235 4622 or scharity@rina.org.uk to check its availability.

IN THIS ISSUE

2017 AGM

Elections to Council were announced at the AGM. Medals and Prizes for papers published in the 2016 Transactions were also presented at the AGM.

2017 Annual Dinner

Over 300 members and guests attended the Institution's Annual Dinner.

Awards

The 2017 Maritime Safety Award and 2017 Maritime Innovation Awards were presented at the Annual Dinner.

Student Awards

The Institution congratulates Student Members in Australia, and Singapore whose achievements were recognised bt the 2017 Student Awards.

Letters to the Editor

Letters include requests for information about naval architecture in 1854. Can you help?

Corporate Partners

The Institution welcomes new Corporate Partner members. Would your company meet the requirements for election?

New Members

The Chief Executive publishes an open letter to all members, inviting them to identify new members.

Quote of the Month

Who said

"When you want to know how things really work, study them when they're coming apart."

2017 Annual General Meeting

The 2017 AGM was held on 19 April at the Institution's Headquarters.

Resolutions adopted at the 2017 AGM

The following Resolution was adopted at the 2017 Annual General Meeting: **Resolution**: To re-appoint haysmacintyre as the Institution's auditors.

2018 AGM

The 2018 AGM will be held on 26 April at the Institution's Headquarters.

Medals and Prizes

Institution Medal of Distinction

The Institution's Medal for papers of distinction, published in the 2016 Transactions, was awarded to:

M Haase, J R Binns, N Bose, G Davidson, G Thomas and S Friezer for their paper Hydrodynamic hull form design space exploration of large medium-speed catamarans using full-scale CFD.

X-Q Zhou, S Sutulo, C Guedes Soares for their paper Ship-ship hydrodynamic interaction in confined waters with complex boundaries by a panelled moving patch method.

Z Q Leong, D Ranmuthugala, I Penesis, and H D Nguyen for their paper Transient analysis of hydrodynamic interaction effects on an autonomous underwater vehicle in proximity of a moving submarine.

H J Phillips, H F J Fogarty and P J Sheppard for their paper *The development* of a high speed inshore lifeboat for the River Thames.

V Kumar, D Boote, T Pais, and G Penco for their paper Development of a parametric model for analysing temperature effects of solar radiation on yachts.

Jeom Paik Prize

The Jeom Paik Prize for the best paper on the subject of structures published by an author under the age of 35 in the 2016 Transactions was awarded to **G Vergassola** and **L Strano** for their paper *A numerical determination of effective breadth of grp stiffened plates*.

W H C Nicholas Prize

The W H C Nicholas Prize for the best paper on a design related subject published by an author under the age of 35 in the 2016 Transactions was awarded to **Dr Zhi Quan Leong** for his paper *Transient analysis of hydrodynamic interaction effects on an autonomous underwater vehicle in proximity of a moving submarine.*

David Goodrich Prize

The David Goodrich Prize for the best paper presented at the 2016 Warships Conference was awarded to A Kana, C P F Shields and D J Singer for their paper *Why Is Naval Design Decision-Making So Difficult?*

Small Craft Group Medal

The 2016 Small Craft Group Medal was awarded to **Robert Curry** in recognition of his lifetime contribution to the small craft sector and particularly to the improvement of safety.

2017 Elections to Council

he number of vacancies being equal or less that the number of nominations, the following members are therefore deemed to have been elected as members of Council:

Vice-Presidents

A Marsh

Fellows

R A Shenoi

J De Rose

R Pudduck

P G Wrobel

J K Paik

R Cripps

C L Savage D Vassalos

C Hunter

Members

P B L Coley

D V Whittaker

I D Grant

D Spinney

C de Marco

P Crossland

Associates

G Smyth

Associate Members

I Whitlam

L Santini

AGM Photographs

Photographs taken at the AGM may be viewed and downloaded from Dropbox at:

www.dropbox.com/ sh/013su4184ydim2d/AB77l7nryLQ4iIv UCGZbQpwa?dl=0.2018

2017 ANNUAL DINNER

he President welcomed over 300 members and guests to the 2017 Annual Dinner of the Institution which was again held at the London Lancaster Hotel. The principal speakers were Martin Stopford, Clarkson Research Services Limited, and the Rev Colin Hall-Thompson, Senior Chaplain to the Mission to Seafarers in Belfast.

In his first Annual Dinner speech, the President welcomed members and guests. He thanked those companies who had taken tables at the Dinner for their support. He also thanked the Chairmen and Secretaries of Sections and Branches, and of the Institution's standing committees for their support of the Institution over the past 12 months, saying that it was due in no small part to their efforts that the Institution enjoys its international standing. He went on to describe the Institution's achievements over the past year and what he expected over the next 12 months.



The President

Guests at the 2017 Annual Dinner





Rev Colin Hall-Thompson, the Mission to Seafarers (top); Martin Stopford, Clarkson Research Services Limited (bottom)



Annual Dinner Photos

Photos taken at the Annual Dinner may be viewed and downloaded from Dropbox at: www.dropbox.com/sh/p0ojal0ryiql1hp/AAAhikTbInNPidjZFuJYKnsFa?dl=0

2018 Annual Dinner

The 2018 Annual Dinner will be held on 26 April at the London Lancaster Hotel.

AWARDS

RINA - QinetiQ Maritime Innovation Award

t the 2017 Dinner, the President announced that the Institution's Maritime Innovation Award, presented in conjunction with QinetiQ, had been awarded to Hull Vane BV. This annual Award recognises outstanding scientific or technological research in the areas of hydrodynamics, propulsion, structures and material, and which offers the potential to make significant improvements in the design, construction and operation of marine vessels and structures.

Hull Vane BV

The Hull Vane consists of a hydrofoil-type appendage fixed at the stern of a ship. It works by generating lift out of the upward flow under the aft ship. This lift is angled forward, and therefore has a horizontal thrust component pushing the vessel forward. It introduces a pressure field which reduces the stern wave, and therefore the wavemaking resistance. This is why it's sometimes called the bulbous bow of the stern. The vertical component of the lift reduces the running trim and keeps the

vessel more at even keel at higher speeds. In waves, the Hull Vane dampens the pitching and yawing motions and therefore reduces the added resistance caused by these ship motions, also improving comfort.

The Hull Vane was invented by the Dutch hydrodynamicist, Dr Peter Van Oossanen, and first fitted to a sailing yacht in 2003. Following extensive development, the first commercial application came in 2014 when fitted to a Fast Supply Intervention vessel and a motor yacht when reductions in power of over 20% were achieved.

The Hull Vane is suitable for ships designed for relatively high displacement speeds, such as superyachts, patrol vessels, corvettes, frigates, certain offshore vessels, ferries, cruise ships, RoRo-vessels and container ships.

The simplicity and low cost of the hull vane is in marked contrast to the significant impact which it can have on operating costs and emissions.

The Maritime Innovation Award was presented by Ron Finlayson, of QinetiQ Maritime, to Peter Van Oossanen, the founder of Hull Vane BV.



Peter Van
Oossanen of Hull
Vane BV receives
the Maritime
Innovation Award

RINA – LR Maritime Safety Award

t the 2017 Annual Dinner, the President also announced that the Institution's Maritime Safety Award, presented in conjunction with Lloyd's Register, had been awarded to the SEAHORSE Project. This annual award recognises the significant contribution to the improvement of safety at sea, made by either an individual or an organisation. The President noted that as with the Maritime Innovation Award, individuals and organisations are nominated by members of the global maritime industry, and there can, of course, be no finer recognition than that of one's peers.

SEAHORSE Project

The Maritime Safety Award was awarded to SEAHORSE Consortium for their work in enhancing safety by transferring best practices in one mode of transport to another mode of transport.

SEAHORSE is an EU-funded project which seeks to improve maritime safety by focusing on human factors and organisational issues and by the transfer of well proven practices from air transport to marine transport. It has developed methodologies, design procedures and tools which will significantly support IMO's human element activities, and also the human centred design and operation of ships. It has also developed an innovative software platform and training materials which are available to shipping companies and maritime education establishments for free. These are now being utilised in more than 100 ships ranging from ferries, container ships, offshore heavy lifting vessels, LNG, oil, chemical tankers and bulk carriers.

The SEAHORSE project was the first project in the world trying to enhance safety by transferring best practices in one mode of transport to another mode of transport. It has clearly demonstrated that different transport modes can and should work together to share the best practices with practical impact on



Professor Osman Turan receives the Maritime Safety Award

maritime safety. In doing so, the Project has made a significant contribution to the improvement of maritime safety.

The Award was presented to Professor Osman Turan, Strathclyde University, who received the Award on behalf of the Consortium.

Appointments to the Board of Trustees

Following the resignations of Professor David Andrews and Mr Alex Marsh from the Board of Trustees, Professor Richard Birmingham and Professor Catriona Savage have been appointed as Trustees.

Student Awards

RINA - DSTG Award

UNSW

The 2017 RINA – DSTG Award for the best thesis presentation at the University of New South Wales was awarded to **Adela Greenbaum** for her presentation on Investigation of Ship Standards Non-compliances in Heritage Vessels.

AMC

The 2017 RINA – DSTG Award for the best Design Project at the Australian Maritime College was presented to:

Aaron Ailwood Adam Neville Daniel Langat Hui Sheng Lim

RINA – Keppel Award

Ngee Ann Polytechnic

The 2017 RINA – Keppel Award for the best Ship & Machinery Design Project was presented to:

Ryan Wong Jia How Marcus Lim Jia Yu Iqbal Singh Gill Ong Wu Hong

The 2017 RINA – Keppel Award for the best Main Machinery Arrangement Project was presented to:

Zhang Zhen Kenneth Choo Yong Howe

Reporting of Continuing Professional Development

The Institution's policy and requirement for CPD is stated in the Code of Professional Conduct, i.e:

Competence to Practice

"Every member shall only undertake work which he/she has sufficient competence, time and authority to perform."

Implicit in this requirement is that every member should maintain his or her professional competence.

"Every member shall take all reasonable steps to maintain and develop his/her professional competence in relation to new developments relevant to his/her field of professional activity...."

Implicit in this requirement is that a member need only maintain professional competence to undertake work which he or she carries out, and not across the whole spectrum of activities in which a member might be engaged. Therefore, where there are no new developments, there would be no requirement to engage in any CPD activity. Neither would members not undertaking work, whether permanently e.g. retired, or temporarily, e.g. full time study (unless contributing to maintaining their professional competence), maternity leave, be required to undertake CPD.

Every member should maintain a record of his/her Continuing Professional Development activities and keep it available for inspection by the Institution on request.

Such inspection of all members' CPD Records will be by exception, eg when applying for election as Fellow, or when disciplinary action is being considered. However, the Engineering Council also requires that the CPD achievement of registered members (as CEng, IEng or EngTech) be routinely reported.

CPD Report

Registered members will selectively be required to submit a report of their CPD achievement during the previous 12 months, giving details of their CPD objectives for the period, and the type and quantity of CPD activity as defined in the Institution's Guidance on CPD.

The data provided by the CPD Reports will be analysed and published to provide information about the average times spent in each of the identified categories of CPD achievement. Whilst recognising the individuality of CPD, and therefore not setting individual or collective targets for CPD activity, it is considered that such information may be useful to members in assessing the adequacy of their own achievement.

A proportion of registered members will be required to submit CPD Reports each year.

CODE OF PROFESSIONAL CONDUCT

The By Laws require 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

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CORPORATE PARTNERS Letters to the Editor

The Institution welcomes the following companies and organisations as Corporate Partner members of the Institution:

- Faculty of Ocean Engineering & Ship Technology (Gdansk University of Technology)
- SENTIO Supervacht Consultants Ltd
- IMRANDD Limited
- Design Automation Associates Inc
- Tonsai Marine Services Co Ltd
- Flots Marine FZC

1854 Naval architecture

Sir: I am an author writing a book about steamships that left Glasgow in the 1850's and I am looking for a contact to help me understand the engineering behind steam engines aboard propeller driven ships of that era. The engines were built by Tod and MacGregor in Glasgow.

Any suggestions would be most helpful.

Tom Clark thomasclark1234@gmail.com

CORPORATE PARTNERS

Does your company or organisation, be it large or small:

- help and encourage its naval architects and other engineers involved in the design, construction and maintenance of marine vessels and structures to achieve professional recognition through membership of RINA in the appropriate class of membership
- assist its naval architects and engineers to achieve the standards of professional development and responsible experience required for Corporate membership of RINA
- require and assist its naval architects and engineers to continue their professional development

If so, your company or organisation may be eligible to become a Corporate Partner of the Royal Institution of Naval Architects and enjoy the following benefits:

- The right to show this "corporate professional qualification", including the RINA Corporate Partner logo, on company literature, thereby providing an internationally recognised demonstration of the professional quality of the company's employees and its commitment to maintaining that quality.
- Advice on the development on Company Professional Development Schemes and free accreditation of Schemes
- A discount on RINA international conferences and training courses attended by all employees of the company or organisation, giving them the opportunity to network with other professionals in the global maritime industry.
- Use of the Institution's headquarters facilities at preferential rates, including the meeting rooms, lecture theatre, conference facilities and library.
- Complementary copies of the Institution's leading technical journals, and a discount on the purchase of other RINA publications
- Listing on the Corporate Partners page of the Institution's website with a link to the company's website.
- 'Welcome' advertisement in journal of choice. Other PR and promotional opportunities through RINA conferences and publications.
- · Opportunity to present technical papers at RINA conferences or publish them in technical journals.
- Discount on exhibition stands and sponsorship at RINA conferences.
- · Access to national branch meetings, giving opportunity to meet with professionals in the local maritime industry.
- Complementary invitations to the Annual Dinner and President's Invitation Lecture.

In addition to these benefits, Corporate Partner membership of the Royal Institution of Naval Architects will enhance the reputation and image of a company with its customers and the industry generally. Also, both prospective and existing employees will value more highly an employer who is committed to the high professional standards and personal development demonstrated by Corporate Partner membership, thereby benefiting both recruitment and retention.

Further information on becoming a Corporate Partner may be obtained from the Chief Executive at hq@rina.org.uk or tel: +44 (0)20 72354622

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DIVISION, BRANCH AND SECTION NEWS

New South Wales Section

Trevor Blakeley, Chief Executive of RINA, gave a presentation on The Route to Chartered Membership to a meeting attended by 14 on 1 March in the Harricks Auditorium at Engineers Australia, Chatswood.

Robin Sandell, Principal of Sandell Consulting, gave a presentation on Making Ferries More Useful and more Efficient to a joint meeting with the IMarEST attended by 34 on 1 March

in the Harricks Auditorium at Engineers Australia, Chatswood.

Brenton Fischer, Director and General Manager at Sydney City Marine, gave a presentation on Shipyards Adapting to Changing Markets to a joint meeting with the IMarEST attended by 19 on 3 May in the auditorium at Royal Prince Edward yacht Club, 160 Wolseley Rd, Point Piper.

Phil Helmore

UAE Branch

RINA UAE organised a branch meeting and technical paper presentation for members and invited guests on 15 May 2017. The event was held at Ball Room of the Grand Excelsior Hotel, Bur Dubai, UAE. Two papers were presented during the event.

Ken Ogle, Director of Engineering, Thordon Bearing Inc., Canada presented the paper Thordon product presentation and Conversion from Oil to Water Lubricated Seals which dealt with Thordon products in the marine sector and emphasis on the TG 100 mechanical shaft seal. With increasingly stringent environmental regulations, Thordon's seawater-lubricated propeller shaft bearings are replacing oil-lubricated, metal bearings.

The second paper was presented by Mr Robert Schmaus, Managing Director, PRUFTECHNIK Middle East FZE, and covered condition monitoring for machinery in ships and spoke about basics of condition monitoring, tools used, application examples and cases.

The evening was attended by an over 50-strong crowd consisting of branch members and invited guests. Mr Ashik Subahani, Chairman of RINA-UAE Branch welcomed the attendees and introduced the speakers and topics. After the presentation, Mr Ashraf Mansour, FRINA, presented a memento to Mr Robert Schmaus; and Mr Rajesh Babu, FRINA, presented a memento to Mr Ken Ogle.

Rajesh Panicker Hon. Secretary



Robert Schmaus, PRUFTECHNIK



Chairman of RINA-UAE Branch, Ashik Subahani



Ken Ogle, Thorndon Bearing Inc



Guests at the presentations

QUOTES OF THE MONTH

"To the optimist, the glass is half full, to the pessimist, the glass is half empty. To the engineer, the glass is twice as big as it needs to be."

Anon

"First rule of engineering; beware prototypes. Along with, avoid anything made by an engineer who doesn't have all his own fingers"

Simon R. Green

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EVENT NEWS

Norshipping 2017

Members and non members were welcomed by staff of the Secretariat the Institution's stand at the Norshipping 2017 Maritime Exhibition in Oslo.

The Institution at Norshipping 2017



Warships 2017 – Naval Submarines and UUVs

ver 100 speakers and delegates from 13 countries attended the Warships 2017 – Naval Submarines and UUVs Conference, held in Bath from 14-15 June, when 20 papers were presented and discussed.

Warships 2017 - Naval Submarines and



UNIVERSITY NEWS

Newcastle University

ewcastle University has achieved a Gold Award in the Teaching Excellence Framework (TEF).

The TEF to address four main objectives: better informing students' choices about what and where to study; raising esteem for teaching; recognising and rewarding excellent teaching; and better meeting the needs of employers, business, industry and the profession. It assesses against three main criteria: Teaching Quality, Learning Environment, and Student Outcomes and Learning Gain.

A Gold Award in the TEF is the highest possible rating and Newcastle University is one of only eight Russell Group universities in the UK to achieve this.

Newcastle University has campuses in the UK and Singapore, teaching the common Maritime Technology degree.

NEW MEMBERS WANTED

An open letter to all members:

Dear member,

As a member, you will be aware of the benefits and service which membership of the Royal Institution of Naval Architects provides. In particular, you will be aware that membership provides a professional qualification which is recognised throughout the global maritime industry as demonstrating the achievement of the highest standards of professional competence and integrity. You will also be aware that membership provides access to information on developments in all aspects of the maritime industry through the Institution's international conferences and publications which members receive free or at a reduced cost.

I am therefore writing to ask for your support in encouraging your colleagues to follow your lead in becoming a member of the Royal Institution of Naval Architects and enjoying the benefits of membership of the world's leading professional institution for those involved in the design, construction and maintenance of marine vessels and structures at all levels. I would be grateful if you would let me know (by email to hq@rina.org.uk) the name, position and email address of any of your colleagues who you would wish to introduce as a member. Such potential members could include those at any stage in their career, whether newly graduated or more senior and experienced.

Chief Executive

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USE OF THE RINA CREST



The Council has agreed that members may display the RINA crest on literature, website etc, under the following strict conditions:

 Members must request permission to use the crest, and state where it will be used.

- Only the version of the RINA crest provided by the Institution may be used. No variation or addition may be made to the crest.
- Members displaying the RINA crest are also require to display their membership of the Institution in text and by the use of the appropriate post-nominals.
- The RINA crest may only be displayed on a comp any website where the company is owned by the member or is a Corporate Partner member of the Institution.
- The RINA crest must not be used in a way as to state or imply the Institution's endorsement of a product or service provided by the member.

Applications for permission to use the RINA should be made to RINACrest@rina.org.uk

Transactions papers now free to members

Since 2015, the Transactions – International Journal of Maritime Engineering; International Journal of Small Craft Technology; International Journal of Marine Design – have been published as both printed and digital editions which can be read on PC, iPad and other touchpad / tablet devices. Digital editions can be fully searched online, printed out or annotated with personal notes and bookmarks.

All papers published in the digital editions are now freely available to members from May 2017. Email notification will be

sent when new issues are available, and members will have access to the archived issues.

To access the digital editions, click on

- www.rina.org.uk/ijme_digital.html
- www.rina.org.uk/ijsct_digital.html
- www.rina.org.uk/ijmd_digital.html

Members will require to log on using their Membership Number and email address.

QUOTES OF THE MONTH

"The behaviour of ships on stormy seas is so hard to be understood and so important to be predicted, that it is worth any amount of hard thinking, and painstaking observation, and subtle reasoning we can expend on it"

J. Scott Russell, 1863

"When you want to know how things really work, study them when they're coming apart."

William Gibson

KINA AFFAIRS

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

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