



RINA AFFAIRS

JULY/AUGUST 2019

The Newsletter of the Royal Institution of Naval Architects

CHIEF EXECUTIVE'S COLUMN



Next month will see the start of the careers of many engineers with first-year students at universities and colleges in the northern hemisphere, joining those in the southern hemisphere who have already started their naval architecture or related courses. A large number of students at the 60+ universities and colleges where the Institution has links through membership of staff and students will benefit over the next 2 to 4 years from the Institution's policy of encouraging their membership and active involvement as Student Members.

As Student Members, most will enjoy free membership during their time at university or college and all will receive the Institution's magazines. They will also enjoy many other benefits such as the free places at RINA conferences, sponsored by both industry and the Institution. Some will receive the RINA prizes and awards, including the RINA Student Awards. These Awards, which are also sponsored by industry, recognise academic excellence of both undergraduates and postgraduates, and are now presented at 39 universities.

Having experienced the benefits of membership whilst at university or college, hopefully Student Members will recognise the value and importance of membership of the Institution to their professional development and future careers, and continue their membership when they start to receive annual fees notices as Associate Members. However, the Institution recognises the financial pressures on newly graduated members, and the first fee will not be due until 1 January of the year following graduation. Those who continue in full-time study as Associate Members will receive a 50% reduction in their membership fees.

Associate Members will find that employers worldwide recognise the added value which membership of the Institution as an Associate Member provides. They will welcome the early commitment to achieving the Institution's high professional standards which membership demonstrates, and in the longer term, both industry and the profession will benefit from members' implicit acceptance of the requirement to continue their professional development throughout their working lives.

The Institution's policy with regard to the younger members of the Institution continues to represent a significant investment in the future of both the Institution and the profession. However, I am sure that none would doubt its wisdom and necessity. The Institution is grateful to members of staff at the universities and colleges for encouraging students to become Student Members, and for their support of the Institution's various awards.

And finally, may I remind all members with sons and daughters (or nephews and nieces, grandsons and granddaughters) still at school and who may be contemplating a career in ship or boat design and construction, or just have an interest in maritime matters, that they would be most welcome as Junior Members. I am sure that their interest would be maintained by receiving the Institution's magazines each month. The Annual Fee of £42 can be charged to members.

Chief Executive

IN THIS ISSUE

Chief Executive's Column

In his Column, the Chief Executive looks forward to welcoming as Student Members those first-year students at universities and colleges in the Northern hemisphere who soon will be joining those in the Southern hemisphere who have already started their naval architecture or related courses.

Institution News

Elections for Council and the President will be held in 2020. Nominations will be invited in due course.

News from the Divisions and Sections

Phil Helmore reports on the recent activities of the NSW Section.

Letters to the Editor

Letters to the Editor include an offer of past Transactions and a request for information on an Inland Waterways paper. Can you help?

Members in the News

Women & Leadership International thanks the Institution for its assistance in obtaining development funding to support the advancement of women in the naval architecture sector.

Continuing Professional Development

Members are reminded of their responsibility as professional engineers and members of the Institution to maintain their professional competence.

News from the Technical Committees

The work of the Maritime Environment Committee, Maritime Innovation Committee and the IMO Committee are reported in this issue.

News from the Universities

The achievement of students at universities in the UK and Malta are recognised by the presentation of Student Naval Architect Awards.

INSTITUTION NEWS

2020 elections to Council

Following the changes to the By Laws in 2019, members' countries have been grouped by Regions, and the allocation of seats on Council allocated in proportion to the number of members in each Region. The grouping of countries by Regions and the allocation of Council places is shown at:

www.rina.org.uk/res/Regions%20and%20composition%20of%20Council%202019.pdf

Members will nominate and elect members from their own Region.

Invitations to nominate members for election to Council will be published in the September/October issue of *RINA Affairs* and forwarded by email.

Changes to the Secretariat

Recent changes to the Secretariat include Dmitriy Ponkratov who has joined from Lloyd's Registry Consultancy Services as the Institution's Technical Director, responsible for Publications and Events.

Also joining as the Technical Manager, responsible for the professional aspects of Events, is Jaime Pérez Martínez. Before joining the Secretariat, Jaime was a Project Engineer at Hidramar Shipyards, Spain.

RINA at the Shows

Members and others had the opportunity to meet with members of RINA staff at the Institution's stand at Norshipping in Norway.

The Institution's stand at Norshipping



Election of the President

The term of office for the President is two years. Therefore the election for the next President will be held in 2020. Invitations to nominate members for election as the President will be also be published in the September/October issue of *RINA Affairs* and forwarded by email.

2020 AGM + Annual Dinner

The 2020 AGM will be held on 14 May at RINA Headquarters, followed by the Annual Dinner at the Royal Lancaster Hotel, London.

THOUGHTS FOR THE MONTH

If my ship sails from sight, it doesn't mean my journey ends, it simply means the river bends.

Enoch Powell

One ship sails East, another West
On the self same winds that blow,
It's the set of the sails and not the gales
that determine the way they go.
Like the winds of the sea are the ways of time,
As we journey along through life,
It's the set of the soul that determines the goal,
And not the calm or strife.

The Winds of Fate
By Ella Wheeler Wilcox

LETTERS TO THE EDITOR

Transactions available

Sir: I am disposing of my late husband David I Moor's library, and would like to know if the Transactions of RINA, SNAME, NECI and IESS would be of any interest to anyone nowadays. Many date

back to the beginning of the 1900s and I am reluctant to just throw them away if they could be of any use.

Any of your members who might be interested in any of these Transactions

should contact me for further information and arrange collection (from St Albans, UK).

Valerie F Moor
vfmoor@virginmedia.com

Inland Waterways – “Craft design and erosion control”

Sir: I am wondering if any fellow members may be able to help me locate an old report prepared for the British Waterways Board in 1991. A set of three papers were produced by a consultancy associated with the University of Strathclyde and University of Glasgow concerning the efficiency of Narrowboat hulls which I am currently researching.

These papers were widely circulated in the late 80s and early 90s. The principal authors have passed away long since, their

consultancy is no more. An academic friend at the University of Strathclyde can find no copy of the report in their library, neither the BWB nor the Canal and River Trust have copies still – or they cannot find them. I found a copy of the Phase II report via the Inland Waterways Association but they are missing the Phase III report.

The source paper I am trying to find is: Ferguson/McGregor OSTEC (1991): “Craft design and erosion control; phase III; Full scale comparative trials of the

OSTEC improved and traditional narrow boat hulls” report no OS-91-01, Glasgow.

This is one of the very few full studies done on comparative hull shapes of narrowboats and its detailed results of the head to head tests are what I am trying to find information on.

Do you know of anyone who might know where this report is still in existence?

Simon Boyde
simon@stormforcemarine.com

MEMBERS IN THE NEWS

Women & Leadership International

The following correspondence has been received from Women & Leadership International.

“We are delighted to inform you the last round of leadership development funding to support the advancement of women in the naval architecture sector was a complete success and I wanted to thank Royal Institution of Naval Architects for a vital role in making this happen.

Through your support and vision for change, a number of members of your organisation have received the partial funding for participation in a leadership development course that was provisioned for women working in the naval architecture sector.”

Information about Women & Leadership International may be found

at: www.womenandleadership.org

Members Samantha Denyer of Pendennis Shipyard and Victoria Conway of BAE Systems are participating in the

Executive Ready program, details of which can be found at:

www.womenandleadership.org/executiveready.html

THOUGHTS FOR THE MONTH

No man will be a sailor who has contrivance enough to get himself into jail; for being in a ship is being in a jail, with the chance of being drowned ... A man in jail has more room, better food, and commonly better company.

Samuel Johnson, 1759

For a politician to complain about the press is like a ship's captain complaining about the sea

Linkedin

The following was recently posted on LinkedIn by a member:

"This week I had the honour of being informed that I have been elected a Fellow of the Royal Institution of Naval Architects. Having been a regular attendee of IMO for a number of years now I have long been impressed by the commitment and expertise of RINA delegates to IMO

meetings. On a wide range of issues RINA has consistently provided technical input of a very high standard, to the great benefit of other IMO delegations. As the industry goes through a period of rapid technological evolution and change, for example, the 2020 sulphur cap, entry into force of the BWM Convention and delivering the levels of ambition of the IMO initial strategy on reduction of greenhouse

gases, the contribution of learned bodies such as RINA to the regulatory process is more important than ever. By joining RINA, I hope to show my appreciation for their splendid contribution to making ships safer and cleaner, and in some small way to support their ongoing work!"

The Institution has Groups on LinkedIn, Facebook, Twitter and Instagram.

Lloyd's Register Technical Committee

Graham Wilson has been reappointed as the Institution's representative on the Lloyd's Register Technical Committee.

THOUGHT FOR THE MONTH

Ships that pass in the night and speak to each other in passing;
Only a signal shown and a distant voice in the darkness;
So on the ocean of life we pass and speak one another,
Only a look and a voice; then darkness again and a silence.

Henry Wadsworth Longfellow, 1807-1882

EILY KEARY AWARD

The Royal Institution of Naval Architects is committed to ensuring that all individuals, regardless of gender, faith or ethnicity, have equal opportunity to participate fully in all the Institution's activities. The Institution also seeks to encourage such equality of opportunity and involvement throughout the global maritime industry.

The annual **Eily Keary Award** recognises the contribution by an individual, organisation or part of an organisation to increasing equality, diversity and inclusion in their sector of the maritime industry. Such contribution may have been made by a specific activity or over a period of time. Individuals may not nominate themselves for the Award

Nominations are invited for the 2019 Eily Keary Award.

The Award will be announced at the 2020 Annual Dinner.



Nominations may be up to 750 words and should describe the contribution which the individual, company or organisation has made.

Nominations may be forwarded online at www.rina.org.uk/EilyAward

or by email to EilyKearyAward@rina.org.uk

Nominations should arrive at RINA Headquarters by 31 Jan 2020.

Queries about the Award should be forwarded to the Chief Executive at: hq@rina.org.uk

CONTINUING PROFESSIONAL DEVELOPMENT

“Who am I to take this decision?”

A view from a member

Every day we are confronted with decisions, some of great economic or safety importance. It is in the nature of professional engineering that as we get more senior there are fewer people with eyes on to what we are doing. Our accountability to others, whether senior managers, customers, or the general public, begins to translate into accountability to ourselves for ensuring that we are competent to address decisions we take.

How do we manage this accountability? Taking the lead from organisational systems like budgetary control, quality management and project management, it is about applying the plan-do-check-act model (PDCA) to our own competence. As we see the increasing demand by the Engineering Council and PEIs for recording Continuous Professional Development (CPD) among professional engineers, we should be mindful of the benefits it has of a ready-made system

of PDCA and a means of giving account of our competence to take a decisions, should it ever be called on.

The Engineering Council has produced a video on the importance of Continuing Professional Development. The video, which is applicable both registered and non registered members, can be viewed at:

<http://www.engc.org.uk/news/videos/continuing-professional-development-cpd/>

CPD Record

The Institution requires that all members in employment should maintain a Record of their Continuing Professional Development, which should include CPD Activities, a CPD Plan for future development and supporting documentation.

The Institution does not prescribe the format of the CPD Record which for some members it may be required to keep in accordance with a company's required format. The Institution's CPD Record in MSWord format is therefore not mandatory, but is recommended. It may be modified to meet a member's individual needs.

The CPD Record template may be downloaded at: www.rina.org.uk/res/CPDRecord.docx

An example of typical entries are at: www.rina.org.uk/p/1/CPDRecordExample.pdf

Reporting CPD Achievement

The Institution may request to see a member's CPD Plan and Record at any time. A member will also be required to provide evidence of CPD activity eg when applying for transfer to Fellow or subject to disciplinary action.

The Engineering Council requires that members registered as CEng, IEng or EngTech routinely report their CPD achievement over the previous 12 months to the Institution. Members will be advised when such a Report is due and they are required to complete and return the Report Form which will be forwarded. Alternatively, members may submit their Report online.

www.rina.org.uk/CPDReport (Online); www.rina.org.uk/p/1/CPDAchievementReportForm.docx (MSWord file)



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 required 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 company 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

REPORTS FROM THE TECHNICAL COMMITTEES

Maritime Innovation Committee

The Maritime Innovation Committee is tasked by the Council to make the collective technical expertise of the Institution available for the benefit of the profession and society by contributing to the development and use of innovative technology in the maritime industry. It will consider the impact of new and emerging technologies on the profession and the Institution.

The Committee has identified the following key disruptive technologies:

- Design and Manufacturing
- Materials and Coatings
- Hydrodynamics and Propulsors
- Power Generation and Energy

- Management
- Operations, Maintenance and Training
- Maritime Safety & the Protection of the Maritime Environment
- Autonomy, Data, Digital and Cyber
- Business and Economics
- Education, Research & Professional Development

Each technology is considered by a separate Working Groups (WG). A summary of the work of the Maritime Innovation Committee and the work of each WG is presented in online Forums at www.rina.org.uk/Maritime_Innovation_Group.html. Comment on and contribution to the work of the WGs by members through the online

Forums is welcomed.

Future Workshops to consider key topics such as digitalisation and autonomy are planned to develop and disseminate the work of the WGs are planned. Members of the Committee will the work of the Committee to local Branches, and similar presentations will be made University Industrial Advisory Boards.

At a recent meeting, the Committee considered the UK Government's Maritime 2050 – Maritime Strategy for the UK. It was appreciated that this was a strategy for the UK, but it was considered to have applicability worldwide and might assist the Committee in its future work.

RINA - Lloyd's Register Maritime Safety Award

The safety of the seafarer and protection of the maritime environment begins with good design, followed by sound construction and efficient operation. Naval architects and engineers involved in the design, construction and operation of maritime vessels and structures can make a significant contribution to safety and the Royal Institution of Naval Architects, with the support of Lloyd's Register, wishes to recognise the achievement of engineers in improving safety at sea and the protection of the maritime environment. Such recognition serves to raise awareness and promote further improvements.

The Maritime Safety Award is presented annually to an individual, company or organisation that in the opinion of the Institution and Lloyd's Register, is judged to have made an outstanding contribution to the improvement of maritime safety or the protection of the maritime environment. Such contribution may have been made by a specific activity or over a period of time. Individuals may not nominate themselves. Nominations are now invited for the 2019 Maritime Safety Award.

Nominations of up to **750 words** should describe the nominee's contribution to:

- safety of life or protection of the marine environment, through novel or improved design, construction or operational procedures of ships or maritime structures
- the advancement of maritime safety through management, regulation, legislation or development of standards, codes of practice or guidance
- research, learned papers or publications in the field of maritime safety
- education, teaching or training in maritime safety issues



The closing date for nominations is
31st December 2019.

The Award will be announced at the Institution's
2020 Annual Dinner.

Nominations may be made by any member of the global maritime community and should be forwarded online at:
www.rina.org.uk/maritivesafetyaward

or by email to:
maritivesafetyaward@rina.org.uk

Queries about the Award should be forwarded to the Chief Executive at:
hq@rina.org.uk

IMO Committee

Members of the IMO Committee represented the Institution at MEPC 74, ISWG-GHG5 and MSC 101 and III 6. A presentation on JoRes was given at MEPC 74.

The Institution submitted a paper at MSC 101, reminding the delegates that revision of SOLAS chapters should be accompanied by a hazard identification exercise, in accordance with IMO guidance.

Whilst the Institution was supported by IACS and ICS, the member states rejected this as too much work has already gone into revision of Chapter III and the LSA Code. The Committee will consider what action to take.

Members of the Committee attended IMO Council meeting, where it participated in discussion on reform of engagement with NGOs. The Institution's continuing NGO status at the IMO was affirmed and members of the Committee were assured in private conversations that the Institution's engagement was noted and valued.

The Committee is now preparing for the Autumn programme - CCC 6, ISWG-MASS, ISWG-GHG 6.

Maritime Environment Committee

The main focus of the Committee's work has been on the further development of the 'Design for the Marine Environment' document to include an additional level of detail that would identify the required activities for each of the design areas. After input from the Committee, comment from the wider membership would be invited.

The main achievement of the Committee has been the development of an Environmental Statement for the Institution. The development of the List of Design Considerations for the Marine Environment was the current focus, together with support for the IMO Committee. One of the original objectives of the Committee was to develop guidance for young engineers and naval architects, to emphasise the credentials of sustainability and environmental design, to make this an attractive profession for new entrants.

The Committee welcomes comment on the 'Design for the Marine Environment', which can be viewed at: https://www.rina.org.uk/Maritime_Environment_Group.html, through the Maritime Environment Group Forum.

RINA-QINETIQ Maritime Innovation Award

Innovation is key to success in all sectors of the maritime industry and such innovation will stem from the development of research carried out by engineers and scientists in universities and industry, pushing forward the boundaries of design, construction and operation of marine vessels and structures

The Maritime Innovation Award seeks to encourage such innovation by recognising outstanding scientific or technological research in the areas of hydrodynamics, propulsion, structures and material which has the potential to make a significant improvement in the design, construction and operation of marine vessels and structures

The Award is made annually to either an individual or an organisation, in any country. Nominations for the Award may be made by any member of the global maritime community, and are judged by a panel of members of the Institution and QinetiQ. The award will be announced at the Institution's Annual Dinner.

Nominations are now invited for the 2019 Maritime Innovation Award. Individuals may not nominate themselves, although employees may nominate their company or organisation.



QINETIQ

Nominations may be up to 750 words and should describe the research and its potential contribution to improving the design, construction and operation of maritime vessels and structures.

Nominations may be forwarded online at www.rina.org.uk/maritimeinnovationaward

or by email to: maritimeinnovationaward@rina.org.uk

Nominations should arrive at RINA Headquarters by 31st December 2019.

Queries about the award should be forwarded to the Chief Executive at hq@rina.org.uk

NEWS FROM THE DIVISION, BRANCHES AND SECTIONS

New South Wales Section

Steve Quigley, Managing Director, and Rob Tulk, Principal Naval Architect, One2three Naval Architects, gave a presentation on *Design and Construction of White Rabbit: the World's Largest Trimaran Superyacht* to a joint meeting with the IMarEST attended by 27 on 29 May in the Mitchell Theatre at Sydney Mechanics School of Arts in Sydney's CBD.

Bert Ritscher, Business Development Manager, Europe, Africa and Middle East, Caterpillar Assert Intelligence, gave a presentation on *Enabling Highest Uptime at Lowest Total Cost of Ownership* to a joint meeting with the IMarEST attended by 36 on 3 July in the Harricks Auditorium at Engineers Australia in Chatswood.

Jarrah Orphn, PhD Candidate at the Australian Maritime College

and the recipient of the IMarEST's Laurie Prandolini Scholarship, gave a presentation on *Mitigating Uncertainty in Oscillating-water-column Wave-energy Converters* to a joint meeting with the IMarEST attended by 25 on 7 August in the Harricks Auditorium at Engineers Australia in Chatswood.

Phil Helmore

NEWS FROM THE UNIVERSITIES

University of Malta

Mikiel Anton Abela received the 2019 RINA Student Naval Architect Award for his final year project "Three - Dimensional Multiphase Modelling and Optimisation Framework of a Merchant Ship".

The following students received Certificates of Achievement for their Projects:

Keith Abela
Timothy Borg
Mark Defelice
James Agius
Andrew Borg
Aaron Demanuele
Joseph Abela
Basel Fael Al Satmi
Nathan Povo
Mark Galea
Eric Borg Saywell

THOUGHT FOR THE MONTH

He who loves practice without theory is like the sailor who boards ship without a rudder and compass and never knows where he may cast.

Leonardo da Vinci

UCL

The RINA - BAE Systems Award for the best Ship Design Project for Innovation at UCL was presented to Andrew Williamson (UK MoD DE&S), Rafael Castillo (Chilean Navy) and Aaron Coates (UK RN) for their project "Future Fighter (light) - Indefatigable Class".

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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The Chief Executive

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EVENTS PROGRAMME

2019

ICCAS 2019

24-26 September 2019, Rotterdam, Netherlands
www.rina.org.uk/ICCAS_2019

PACIFIC 2019

8 - 10 October 2019, Sydney, Australia
www.pacific2019.com.au/

WIND PROPULSION

15-16 October 2019, London, UK
www.rina.org.uk/Wind_Propulsion_2019

CONTRACT MANAGEMENT FOR SHIP CONSTRUCTION, REPAIR & DESIGN

23-25 October 2019, London, UK
https://www.rina.org.uk/Contract_Management_Oct_2019.html

MARINE INDUSTRY 4.0

5 November 2019, Rotterdam, Netherlands
www.rina.org.uk/Marine_Industry_4_0

ICSOT INDIA 2019

7-8 November 2019, Kharagpur, India
www.rina.org.uk/ICSOT_India_2019

ICSOT INDONESIA 2019

25-26 November 2019, Semarang, Indonesia
www.rina.org.uk/ICSOT_Indonesia_2019

2020

MARINE DESIGN 2020

15-16 January 2020, Cadiz, Spain
www.rina.org.uk/Marine_Design_2020

LNG/LPG

29-30 January 2020, London, UK

HUMAN FACTORS

19-20 February 2020, London, UK
www.rina.org.uk/Human_Factors_2020

SUSTAINABLE AND SAFE PASSENGER SHIPS

5 March 2020, Athens, Greece
www.rina.org.uk/Sustainable_and_Safe_Passenger_Ships

DAMAGED SHIP V

11-12 March 2020, London, UK
www.rina.org.uk/Damaged_Ship_V

AUTONOMOUS SHIPS

1-2 April 2020, London, UK
www.rina.org.uk/Autonomous_Ships

INFLUENCE OF EEDI ON SHIP DESIGN & OPERATION

22-23 April 2020, London, UK
www.rina.org.uk/EEDI_2020

BASIC DRY DOCK TRAINING COURSE

2-5 June 2020, London, UK

WARSHIP 2020

June 2020, UK

OFFSHORE MARINE TECHNOLOGY

23-24 September, Aberdeen, UK

SMART SHIP TECHNOLOGY

14-15 October, London, UK

ICE CLASS VESSELS

4 November, London, UK

HISTORIC SHIPS

2-3 December, London, UK