



RINA AFFAIRS

JANAUARY/FEBRUARY 2015

The Newsletter of the Royal Institution of the Naval Architects

CHIEF EXECUTIVE'S COLUMN



May I take this opportunity of the first issue of RINA Affairs in 2015 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, iPads and other touchpads.

The Institution's conferences also continue to enjoy a high reputation for their quality of both content and organisation. The location of the conferences, in Europe, India, Asia and Japan 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

2015 AGM

The 2015 Annual General meeting will be held on 30 April 2015, at the Institution's Headquarters. On completion of the AGM, a presentation will be given on "Recent Technical Developments at the RNLI."

2015 SGM

A Special General Meeting will be held on 30 April 2015 at the Institution's Headquarters, to consider Resolutions to change the By Laws and Regulations.

Use of RINA Crest

Members may now display the RINA crest on their literature and websites.

Members in the News

Members in the News include John Christopher Jeremy FRINA, awarded the Australian Order of Merit, and Professor Lech Kobyliński FRINA, presented with the CEMT Award.

Letters to the Editor

Letters to the Editor include requests for information about the terms 'Bagging' and 'Reverse Bagging', naval architect Alexander Low Blackwood, and Steel specifications for World War Two Tank Landing Craft. Can you help? Also included is an offer of free RINA journals from 1988-2012, and the announcement of the publication of the 2014 Confidence Index.

Student Awards

The Institution congratulates students from Southampton University and the National Technical University of Athens on their success on being awarded the RINA – BMT Group Design award, and the RINA – Greek Shipping Co-operative Committee Student Award.

News from the Divisions and Branches

News from the Divisions and Branches include reports on the activities of the NSW Section and the Chennai Branch.

2015 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 THURSDAY 30 APRIL 2015 AT 1100 FOR THE FOLLOWING PURPOSES;

1. To receive the Annual Report and the Financial Statement for the year ended 30 September 2014.
2. To consider and if felt fit, approve the following Resolution:

Resolution: To re-appoint haysmacintyre as 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.
3. Proxy Forms are available online: <https://www.rina.org.uk/p/1/2015%20AGM%20Proxy%20Form.pdf> and must be returned by post or email, to arrive by 1030 on 30 April 2015

AGENDA

2015 Annual General Meeting and 2015 Special General Meeting

1. President opens the AGM.
2. Annual Report of Council
3. Financial Statement For 2014
4. AGM Resolutions
5. 2015 Elections to Council
6. 2014 Medals and Prizes
7. President adjourns the AGM and opens the SGM
8. SGM Resolutions
9. President closes the SGM and reconvenes the AGM
10. President's Report
11. General Discussion
12. President closes the AGM

On completion of the AGM, Dr Holly Phillips from the Engineering Department of the Royal National Lifeboat Institute will give a presentation on "*Recent Technical Developments at the RNLI*".

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

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 crest should be made to RINACrest@rina.org.uk

IMO Committee

The International Maritime Organisation (IMO) has formed a correspondence group to look at Innovative Technology. The focus for this group will be purely on technology that will enable new ship designs to meet the EEDI requirements by reducing their CO₂ emissions.

Members of the IMO Committee will represent the Institution on the Working Group.

STUDENT AWARDS

NOTICE IS HEREBY GIVEN THAT IN ACCORDANCE WITH BY LAWS 37 AND 77, A SPECIAL GENERAL MEETING WILL BE HELD AT 8-9 NORTHUMBERLAND STREET, LONDON, WC2N 5DA ON 30 APRIL 2015 AT 11:30 TO CONSIDER AND, IF FELT FIT, APPROVE THE FOLLOWING RESOLUTIONS:

Amendments to the By Laws

Resolution 1: To make such amendments to the By Laws as are necessary to remove the distinction between Corporate Members (FRINA and MRINA) and non-Corporate Members in respect of voting.

Resolution 2: To make such amendments to the By Laws as are necessary to remove all distinctions between ex officio and elected members of Council in respect of voting and terms of office, be abolished.

Resolution 3: To make such amendments to the By Laws as are necessary to describe the activities of the Institution and members as "the science and practice of the design, construction, maintenance and management of marine vessels and structures".

Resolution 4: To make such amendments to the By Laws as are necessary to require the Board to annually elect/re-elect a member of the Board who is a member of Council as the Vice Chairman of the Board.

Resolution 5: To make such amendments to the By Laws as are necessary to require the Board to provide an Annual Report and Financial Statement which will be independently audited.

Resolution 6: To amend the By Laws where required to abolish Entrance and Transfer fees.

Amendments to the Regulations

Resolution 7: To make such amendments to the Regulations as are necessary to allow full electronic voting at Council elections.

Notes:

1. All members have the privilege to attend the above meeting, but only Voting Members (all except Student and Junior 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.
3. Proxy Forms are available online: <https://www.rina.org.uk/p/1/2015%20SGM%20-%20Proxy%20Form.pdf> and must be returned by post or email, to arrive by 1100 on 30 April 2015

RINA – GSCC Student Award

THE 2014 RINA – GSCC Student Naval Architect Award has been presented to Eleftherios Koukoulopoulos, whose final year thesis entitled "*Software development for the solution of hydrodynamic lubrication problems in piston rings of two-stroke marine Diesel engines*" was adjudged by the Royal Institution of Naval Architects and the Greek Shipping Co-operation Committee to have been the best final year thesis at the National Technical University of Athens.

RINA – BMT Group Design Award

The 2014 RINA – BMT Group Design Award was presented to:

Chrysi Xanthi Lymeropoulos

Daniel Bruce

Antoine Michel Francois Du Baret De Lime

Riccardo Camin

whose design for a "Custom Cutter" was adjudged to have been the best presented Group Design Project at Southampton University.

The Award was presented by Chief Executive, Mr Trevor Blakeley.

Winners of the RINA-BMT Design Award



“What keeps the good ship RINA afloat?”

In an article published by the *Maritime Reporter*, Trevor Blakeley, Chief Executive of RINA and Peter French, former President of RINA and Chief Executive of BMT Group, discuss what has contributed to this "remarkable success story and what decisions and challenges have ensured its continued buoyancy."

Proposed Changes to the By Laws and Regulations

The following Resolutions to change the By Laws and Regulations are proposed and recommended by the Board of Trustees and Council:

Resolution 1. Corporate v non corporate members

The By Laws distinguish between corporate members (FRINA and MRINA) and non corporate members (AMRINA, AssocRINA, Student Member, Junior Member). This distinction applies to such activities as nominating members for election to Council (corporate members can nominate both corporate and non corporate members, but non corporate members can only nominate non corporate members); voting at Council elections (corporate members can vote for both corporate and non corporate members, but non corporate members can only vote for non corporate members), voting at SGMs (only corporate members can votes on Resolutions affecting the Charter and By Laws); membership of Disciplinary Panels (Corporate members only); expulsion of members (requires two thirds of voting Council members present to be corporate members); quorum at Council meetings (must be more corporate members than non corporate members); etc.

Both corporate and non corporate members are subject to the Code of Professional Conduct. Non corporate members may have more responsibility than corporate members (eg AMRINA v retired MRINA or FRINA). Notwithstanding lack of experience of AMRINAs, their contribution to work of Council can be just as great, and often more relevant. The non technical experience and responsibility of an AssocRINA can be just as extensive or greater than that of a MRINA (if it were as great as a FRINA, then the AssocRINA would be eligible for election as a FRINA).

It is considered that this distinction between members is iniquitous and outdated for a modern professional institution. (the definition of "corporate" is "belonging to a group or body, and might therefore be taken to apply to all members).

It is proposed that the terms Corporate and non Corporate members should be abolished, but the distinction between voting members (FRINA, MRINA, AMRINA, AssocRINA) and non voting members (Student Member, Junior Member) be retained, where lack of experience may be relevant.

Resolution 2. Ex officio members of Council

Chairmen of standing committees and Presidents of Divisions are ex officio members of Council, entitled to receive all Council papers and take part in all Council discussions, but not allowed to vote. Ex officio members have no maximum term of office, unlike elected members, but remain members of Council for as long as they are Chairmen of standing committees (Presidents of Divisions have fixed terms of office). Ex officio members of Council play a full and equal part in Council matters today.

It is therefore proposed that all distinctions between ex officio and elected members of Council be abolished (ie all be voting members, with maximum 3+3 year terms of office). This would also have the effect of limiting the terms of office of chairmen of standing committees.

Resolution 3. Scope of activities

It is proposed that the activities of the Institution and members should be described variously in the By Laws as "the science and practice of the design, construction, maintenance and management of marine vessels and structures", reflecting the activities of members today.

Resolution 4. Appointment of the Vice Chairman of the Board of Trustees

At present the position of Vice Chairman of the Board is unregulated. It is proposed that the By Laws be amended to show that the Vice Chairman is elected/re-elected annually by the Board, and that the Vice Chairman should always be a member of Council.

Resolution 5. Annual Statement of Finance

The By Laws state that "an Annual Statement of the funds of the Institution and of the income and expenditure shall be made under the direction of the Treasurer and presented to the Board for its approval. The Accounts shall then be signed by the Treasurer and Chief Executive and certified by the Auditors and presented at the Annual General Meeting". This does not reflect the procedure for the annual audit of the accounts.

It is proposed that the By Laws be amended to require the Board "to provide an Annual Report and Financial Statement which will be independently audited."

Resolution 6. Entrance and Transfer fees

Entrance and transfer fees, equivalent to the annual membership fee, have effectively been waived by Council, as allowed in the By Laws, for many years, recognising that such a requirement would deter many from seeking membership, particularly in lower income countries. It is proposed that the requirement for Entrance and Transfer fees be abolished.

Resolution 7. Voting at Council Elections

The most convenient and preferred method of voting at Council elections for the majority of members is by electronic means. Software systems are available which allow votes to cast online, automatically checked for validity and counted. However the use of such full electronic voting systems would conflict with the current Regulations which require all votes to be manually scrutinised and counted, regardless of the method by which the vote is cast. This imposes a not inconsiderable administrative load on the Secretariat and the scrutineers. It is proposed that the By Laws be amended to allow postal and/or electronic voting.

Whilst the option of postal voting at Council elections will continue for the foreseeable future, it is proposed that the Regulations be changed to allow voting to be scrutinised in a manner determined by Council, thereby enabling the administrative benefits full electronic voting to be achieved.

Letters to the Editor

2014 Confidence Index

Sir: Matchtech is pleased to announce that the results and report are now live for this year's Confidence Index; our annual survey of the perceptions, attitudes and ambitions of the UK's engineering professionals.

Now in its third year, the 2014 Confidence Index is our most comprehensive survey to date, with over 3,500 engineers providing their opinion on career prospects, industry confidence, and the future of their sector. The findings have revealed an increase in confidence this year; investment and on-going growth in UK engineering means the majority of engineers expect to see revenues and income grow with more staff hired and increased work with overseas clients.

For Maritime specifically, over 250 engineers completed the survey with 69% stating they are confident about their career prospects over the coming 12 months.

In November we previewed the survey results at a roundtable event with 17 key members of industry, where the results were debated and summarised in an accompanying report. The final document covers themes such as, the transfer of skills, the rising influence of apprenticeships, talent retention within an ageing workforce, and professionalisation of the industry.

I hope that you find the 2014 Matchtech Confidence Index informative, if you have any queries or comments on the findings then please feel free to contact me directly. We are passionate about engineering and I'd encourage you to join the debate by sharing, leaving your comments, and making suggestions for next year's survey questions using @Matchtech #CIndex2014 or via LinkedIn.

N Destry AssocRINA

Read the report online at: http://community.matchtech.com/wp-content/uploads/Matchtech_Confidence_Index_2014.pdf

'Bagging' and 'Reverse Bagging'

Sir: I came across a term 'bagging' and 'reverse bagging' as found in the paper presented at the IFSMA Annual General Assembly several years ago in Vladivostok

(2002) - Derbyshire - Christopher: *21 Years of Unseaworthiness For Bulk Carriers*.

Additionally, this term is also quoted in the - Work of the Formal Safety Assessment Experts Group presented to the Maritime Safety Committee 87th session Agenda item 18 (March 2010).

It would be appreciated if you could point me in the right direction to find out more with respect to this term and where I can find reference in naval architecture publications.

Captain Allen Brink
allen@arbrink.com

Alexander Low Blackwood

Sir: I am researching the family history and would be grateful for any information that you are able to give me about my grandfather, Alexander Low Blackwood. He was born in Port Glasgow, Scotland on 12 February 1882, and died at sea off Portuguese East Africa (now Mozambique) on 11 May 1931.

I understand from talking to my mother (his daughter) several years ago that he was a Naval Architect. It was thought that he may have studied at Newcastle University (as he met and married a girl from Sunderland) and I have been in touch with them but their records show nothing for my grandfather, although they did admit that they do not have full records for that time. Unfortunately my mother has since died at the age of 91 so I cannot clarify details with her. My grandfather died in 1931 of leukaemia, we believe as a result of experimenting with X-ray machines without realising the need for protection from the radiation, when my mother was only nine years old so her details are only what she was told but her memory was very good until the day she died.

Anthony David Clark
adclark747@gmail.com

Steel specifications

Sir: I have been researching World War Two Tank Landing Craft for several years and I am assisting the National Museum of the Royal Navy with research into LCT 7074, a Mk3 LCT, which is currently

in Portsmouth RN Dockyard about to undergo a 5-year restoration.

I know from drawings and correspondence in my possession that, apart from Mild Steel, two particular steel specifications were used in LCT production: KM steel and D1 HT (Heat Treated) steel. Both seem to be classed as 'bullet proof' or a type of armour plating. Whilst I have found the specification for D1 HT steel the KM steel specification seems to be lost. By that I mean that I can find no reference to it despite a few years of searching and making contacts with several archivists in the steel industry.

Sir Rowland Baker referred to these steels in his 1947 paper recounting the development of WW2 Landing Craft but no specification is given. Research so far suggests that KM might be a 'Killed Manganese' or 'Hadfield' formula. Would anyone at members have information about KM (sometimes referred to as 'KM quality') steel or be able to suggest other lines of research?

Mike Long
mwl1962@hotmail.co.uk

RINA Journals from 1988-2012

Sir: I have RINA Journals from 1988-2012 available free for anyone who would find these useful - free delivery in Sydney/ Newcastle area + freight elsewhere.

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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

PEOPLE IN THE NEWS

John Christopher Jeremy FRINA

John Jeremy FRINA has been awarded the Australian Order of Merit, for his "significant service to the preservation and celebration of naval and maritime history"

Professor Lech Kobyliński

The Confederation of European Maritime Technology Societies' Award for outstanding contribution to the European Maritime Industry has been presented to Professor Lech Kobyliński in recognition of his outstanding work over 60 years in the fields of high speed craft, ship manoeuvrability, ship stability and safety.

CEMT Award Certificate



Mr Trevor Blakeley presents the CEMT Award to Professor Lech Kobyliński

The Award was presented by Mr Trevor Blakeley, RINA Chief Executive and Chairman of the CEMT Council at a ceremony held at Gdańsk Technical University.

The Confederation of European Maritime Technology Societies (CEMT) is an independent confederation of professional institutions, that is those involved in education and professional development, and learned societies, that is those facilitating the exchange of information in the field of maritime

technology. CEMT is recognised by the European Commission.

Through its member Societies which come from Denmark, France, Italy, Portugal, Greece, Spain, Serbia, the UK and, of course, Poland, 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 shipbuilding and shiprepair industry.

Marine Architects: Between the Devil and the Deep Blue Sea

In his article *Marine Architects: Between the Devil and the Deep Blue Sea*, Ken MacBean MRINA considers the role of the naval architect as an engineer who is most often seen by the public as an expert in inanimate design within branches and specialized areas of engineering, and that as an architect, generally seen by the public as a generalist designer or problem-solver, engaging in environmental design and pre-engineering of a diverse range of project descriptions. In this role, the naval architect has much in common with the land-based architect.

Ken asks whether the Institution, representing marine architects, should develop closer links with land-based architects, and whether such closer connection would improve the understanding which the public has of naval architects and the status which they have in the public's mind. Any views should be sent to Ken at kmacbean@vt.edu copied to hq@rina.org.uk

The article is available online at: <https://www.rina.org.uk/p/1/Marine%20Architects.pdf>

News from the Divisions and Branches

New South Wales Section

SMIX Bash 2014

The 15th SMIX (Sydney Marine Industry Christmas) Bash was held on Thursday 4 December aboard the beautifully restored *James Craig* alongside Wharf 7, Darling Harbour, from 1730 to 2130. The Bash was organised jointly by RINA (NSW Section) and the IMarEST (Sydney Branch). About 210 guests came from the full spectrum of the marine industry, including naval architects, marine engineers, drafters, boatbuilders, machinery and equipment suppliers, regulators, classifiers, surveyors, operators, managers, pilots, navigators, researchers, and educators. Equally importantly, the full spectrum of age groups was represented, from present students to the elders of the marine community.

Walter Atkinson Award 2014

The Walter Atkinson Award for 2014 went to Richard Dunworth for his paper *Up Against the Wall*, presented at the Pacific 2013 International Maritime Conference and

which described a new method of analysing the inclining experiment which dispenses with the usual limitations associated with wall-sidedness. At Richard's request, the prize for 2014 was an analogue planimeter!

Phil Helmore

Chennai Branch

Student Chapter

The Committee of the Chennai Branch approved the formation of a Student Chapter.

The Chapter was inaugurated by Prof.V.Anantha Subramaniam, Head of the Department of Ocean Engineering, IIT Madras and Vice-Chairman of the RINA Chennai Branch, on 04 December 2014. It is intended that the Chennai Student Chapter will organise the following activities:

- Technical talks by experts from academic, R&D organisations and industry
- The annual Department Technical Festival (WAVEZ) jointly with RINA
- Technical visits to shipyards, ports, ships, etc.
- Seagoing trips and sea-trainings
- Open house in the Department for students from other institutes

- Annual get-together of students, faculty and other members of RINA Chennai Branch

AGM

The Annual General Meeting of the Chennai Branch was held on 4 December 2014 at IC&SR Building, IIT Madras, Chennai with Prof.V.Anantha Subramaniam in the chair.

Prof.P.Krishnankutty, Hon. Secretary presented the report of the Branches activities.

The following members were elected to the Branch Committee:

- Prof.V.Anantha Subramaniam, IIT Madras (Chairman)
- Dr.Rajiv Sharma, IIT Madras (Secretary)
- Mr.P.K.Anil Kumar, Principal Surveyor, Lloyd's Register, Chennai (Member)
- Mr.C.S.Manoj, Senior DGM, L&T Shipyards, Chennai (Member)
- Prof.P.Krishnankutty, IIT Madras (Member)
- Cdr.S.Perumal, AMET University (Member)
- Secretary, RINA Student Chapter, Chennai (Member)

Prof.V.Anantha Subramaniam, Chairman

MARITIME COURSES DIRECTORY

Naval Architecture academic and related courses are listed in the online Maritime Courses Directory. Entries for the Directory may be submitted online by university staff members at www.rina.org.uk/MaritimeCourses.

All queries about academic courses will be referred to the Maritime Courses Directory.

MARITIME SERVICES DIRECTORY

Do you or your company provide services or products to the public or the maritime industry? If so, promote yourself or your company by an entry in the online Maritime Services Directory.

Members will be aware that there are many online directories which list companies that provide services to the public or the maritime industry. Most of these directories seek quantity rather than quality of entries, and obtain their revenue through advertising rather than subscription.

Members of the Institution have, through their membership, demonstrated their achievement of internationally recognised standards of professional competence and integrity. Their membership is therefore an advertisement for the quality of the service or product which they offer.

The Institution's Maritime Services Directory restricts entries to companies which employ or are owned by members of the Institution. Entries are listed by category and will show company name, contact details, a brief description of the company, and a link to the company's website. All members are entitled to a free entry in the Directory. Applications for an entry should be made online at www.rina.org.uk/MaritimeServices.

All queries to Headquarters for members' services will be referred to the Maritime Services Directory.

Members with entries in the Directory are requested to check their entry for accuracy.