

# RINA AFFAIRS

**APRIL 2019** 

The Newsletter of the Royal Institution of Naval Architects

## CHIEF EXECUTIVE'S COLUMN



s always, April was an eventful month for the Institution, with the Annual General Meeting, a Special General Meeting and the Annual Dinner all taking place.

The Annual General Meeting provides the opportunity for the Institution to recognise the achievements of members and others by the presentation of Medals and Prizes for the best papers published in the Transactions. Details of the Awards and Prizes are reported in this issue of RINA Affairs. The AGM also provides the opportunity for the President to report to the members on its activities over the past 12 months, and to look forward to the next 12 months. The President's Report described an Institution which continues to go

from strength to strength, always seeking to respond to the changing needs and priorities of its members, the profession and the maritime industry. The full report may be read online.

This AGM also provided the opportunity to look beyond the next 12 months, to 2050. The Strategic Review, looking at how the Institution will achieve its Objectives, is now in its final phase, in which the Recommendations of the Working Groups are assessed by the Board, and in due course implemented. Full details of the Recommendations will be published in due course, but the first steps in implementing one of the most significant Recommendations was taken at the SGM with the adoption of the Resolution to change the composition of the Council to make it representative not only of the experience of the membership, but also of its geographical location. Details of the changes are described in this issue of RINA Affairs.

The Annual Dinner, enjoyed by members and their guests, also provided the opportunity to recognise past success with the presentation of the RINA – QinetiQ Maritime Innovation Award, and to look to future success with the announcement of the introduction of the Eiliy Keary Award to an individual or organisation making a significant contribution to improving equality, diversity and inclusion in the maritime industry. The first Award will be announced at the 2020 Annual Dinner, so please start thinking about nominations now.

Chief Executive

## IN THIS ISSUE

#### Chief Executive's Column

In his Column, the Chief Executive reflects on a busy April for the Institution, with the Annual General Meeting, Special General Meeting and Annual Dinner.

#### **Annual General Meeting**

The President's Report, Treasurer's Report, and award of Medals and Prizes at the AGM are reported.

#### **Special General Meeting**

The Resolution to authorise the Board to amend the By Laws to change the composition of Council was approved by the members.

#### **Annual Dinner**

The President welcomed members and their guests to the Annual Dinner.

#### Strategic Review

The Strategic Review enters the implementation stage.

#### Institution News

The Institution signs a MOU with the Institution of Engineers of Singapore. New Corporate Partner members are welcomed to the Institution.

#### **Publication News**

Contributions from members to the Institution's technical magazines are invited. Have you downloaded the Publications and eNewsletter Apps?

### News from the Universities

The achievements of students at universities in Australia, Poland, Italy and Singapore are recognised by the award of Prizes.

#### Letters to the Editor

Letters to the Editor include a request for information about C. V. Mackrow, Boat designers and Builders. Can you help?

## ANNUAL GENERAL MEETING

he 2019 Annual General Meeting was held at the Institution's Headquarters on Thursday, 11 April. Members were welcomed to the AGM by the President, Professor Richard Birmingham.

#### **Elections to Council**

The following members were elected/ re-elected as members of Council:

#### **Vice-Presidents**

D Aldwinckle N Pattison

#### **Fellows**

A Dev H Karanassos R Gehling

## Members

R Spink

The 3-year term of office for these members commenced on completion of the AGM.

#### **Appointment of Auditors**

Haysmacyntyre were appointed as the Institution's Auditors for 2018-2019.

### Report by the Treasurer

On behalf of the Board of Trustees, the Treasurer presented the summarised Statement of Financial Affairs for the year ending 30 September 2018 which has been published on the Institution's web site. He reminded members that the full version of the Statement of Financial Affairs is available from the Chief Executive.

The Annual Report of the Board and Summarised Financial Statement is published on the Institution's website: http://www.rina.org.uk/annual\_report\_AGM

The Treasurer concluded his report by stating that the auditors had expressed their satisfaction in the manner in which the Institution's Accounts were presented. The Board had therefore approved the Annual Accounts as presented in the Statement of Financial Affairs, a copy of which had also been submitted to the Charities Commission.

## Award of Medals and Prizes

he following award of medals and prizes was announced:

#### **Medal of Distinction**

The Institution's Medal of Distinction for papers published in the 2018 Transactions was awarded to the following:

W Zhang, S Chai, H Nguyen and Y Jin for their paper *URANS* prediction of the slamming coefficients for perforated plates during water entry.

K Ljungqvist, M Orych, L Larsson and C Finnsgard for their paper *Comparison of modern keel types for sailing 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 2018 Transactions was awarded to C Bonnici for his paper *Analysis of a WWII T2 tanker using a virtual 3D model and contemporary criteria.* 

### Wakeham Prize

The Wakenham Prize for the best general paper published in the 2018 Transactions by a member under the age of 35 was awarded to J Mathew, S Denehy, J Norman, A Cameron and N Eutick for their paper *An experimental study of ship motions during replenishment at sea operations between a supply ship and a LHD*.

## **Austin Farrar Prize**

The Austin Farrar Prize for the best paper published in the 2018 Transactions by a member under the age of 35 on the subject of small craft is awarded to K Ljungqvist for his paper Comparison of modern keel types for sailing yachts.

#### Calder Prize

The Calder Prize for the best paper published in the 2018 Transactions by an author under the age of 35 on the subject of small or high-speed craft is awarded to S Williams for his paper Dynamic stability of foil-borne hydrofoil/SWATH with anhedral foil configuration.

#### **David Goodrich Prize**

The David Goodrich Prize for the best paper presented at the 2018 Warships Conference was awarded to A Aitken for his paper *The Next Generation MCM Platform - Not Yet Full Autonomy.* 

A Aitken receives the David Goodrich Prize from the President



# Report by the President and Chairman of the Board

In his President's Report to the members, Professor Birmingham reflected on the Institution's achievements over the past year, and looked forward to what changes and activities members can expect over the next 12 months and beyond. He noted that membership had again increased, that the Branches and Sections had again organised active programmes of meetings, that the Institution's publications and conferences had maintained their international reputation, and that the Institution has continued to encourage high academic and professional standards by recognising the achievement of both those young – and not so young – members of the profession and industry.

He reminded members that 100 years' ago, members voted to admit women as members of the Institution on the same terms as men. In recognition of this significant event in 1919 the Institution was introducing the Eily Keary Award, named after the first woman to be elected as a member, to be presented annually to an individual or organisation which has made a significant contribution to promoting equality, diversity and inclusion in the maritime community.

He expressed the hope that members would agree that his report on the Institution's activities over the past 12 months described an Institution which continues to go from strength to strength. For the next 12 months, he expected it to be more of the same with the Institution always seeking to respond to the changing needs and priorities of its members, the profession and the maritime industry.

He concluded his report by looking further ahead than the next twelve months, indeed to the next 30 years, to 2050 by updating the members on the progress with the Strategic Review.

The full text of the President's Report and the photos taken at the AGM may be downloaded at: https://www.dropbox.com/sh/unqqs5ddt19qzwd/ AAAXfFbW7mZiKEgM7ncAO9bda?dl=0

## Post 2019 AGM Lecture

In introducing the post AGM speaker, the President again reminded members that 2019 marks the 100th anniversary of the decision to admit women as members of the Institution of Naval Architects, on equal terms with males.

In her Lecture entitled *Women Pioneers* in Naval Architecture, Dr Jo Stanley, FRHistS, AssocRINA, visiting Senior Research Fellow at Liver John Moore's University, described the early female engineers and architects involved with ship design and construction.

## QUOTES FOR THE MONTH

"An engineer is someone who can do for a pound what any damn fool can do for ten pounds".

Neville Shute Norway

## SPECIAL GENERAL MEETING

he following Resolution was approved at the Special General meeting on 11 April 2019.

"To make such amendments to the By Laws as are necessary to change the composition of the Council of the Institution to enable it to become more representative of the worldwide membership by reflecting geographic location as well as membership class and experience."

The members of Council are elected by the members, with places on Council allocated according to category of membership – Fellow, Member, Associate Member etc. – which reflects experience. However, the composition of Council does not represent the geographic location of members. Following a Strategic Review of the future Objectives of the Institution, the Board considers that the composition of Council should be changed to reflect both the category and geographic location of members.

The proposed change to its composition will set the total number of elected Council members at 40, comprising 30 Corporate members (Fellows and Members) and 10 Non Corporate members (Associate Members, Associates), thereby continuing to reflect experience. Members' countries will be grouped into global Regions, with

members of Council being nominated from and elected by members in each Region, thereby reflecting geographic location. The number of members of Council elected in each Category from each Region will be in proportion to the number of Voting Members (Corporate members and Non Corporate members) in the Region. In addition, one or more Vice Presidents will be appointed in each Region from Corporate members elected by members in the Region, to represent the Institution and members in the Region. The Board will have the flexibility to vary the number of elected members from each Region and appointed Vice Presidents to reflect the changing number of members in each Region and to achieve greater representation, whilst retaining the effectiveness of the Council.

## **QUOTES FOR 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

## ANNUAL DINNER

embers and their guests attended the Institution's 2019 Annual Dinner, held at the Royal Lancaster Hotel, London, where the principal speaker was Dr Cleopatra Doumbia-Henry LL.B, LL.M, President of the World Maritime University.

In her speech, Dr Doumbia-Henry spoke of Today's maritime challenges and opportunities, describing some of the major issues that currently affect maritime trade and transport and will continue to shape them for the foreseeable future, particularly in connection with regulatory and policy activity.

She spoke of the need for adequate and forward-looking policies to meet these challenges, and the importance of a highly sophisticated and enduring programme of training and education.



Members and guests at the 2019 Annual Dinner

She concluded her speech by stating that "we have not always been the wise and caring stewards of the ocean environment. This is due, in large part, to a lack of knowledge and appropriate education about the ocean and how we should interact with it. We need to know the ocean better, to treat it better and to avoid unsustainable exploitation.

I am sure that all of us in this room share the sense of urgency and a call for action to ensure that future generations do not hold us accountable for having failed to take action. Now is the time!"

Dr Doumbia-Henry proposed the toast to the guests, and the Rev'd Andrew Wright, Secretary General of the Mission to Seafarers, replied on their behalf, in his usual entertaining fashion. Members and guests at the Dinner donated £400 to the Mission.

The full text of Dr Doumbia-Henry's speech and photographs taken at the Annual Dinner may be downloaded at https://www.dropbox.com/sh/n1f5amym97tpwup/AAB4pru7675zrCCOhKT5O2aqa?dl=0

The World Maritime University in Malmö, Sweden is a postgraduate maritime university founded in 1983 by the International Maritime Organization (IMO).

# STRATEGIC REVIEW 2050 – REPORT TO MEMBERS

n 2017, the Board initiated a Strategic Review of the Objectives of the Institution in 2050, and actions needed to achieve them.

#### Phase 1 - Membership Survey

Phase 1 of the Strategic Review consisted of a Membership Survey to seek members' views on what the Objectives and activities of the Institution in 2050 should be.

The Membership Survey, which was completed in late 2017, showed a high level of satisfaction with the role and activities of Institution. 94% of members who completed the Survey considered that that the current Objectives were correct and would continue to be relevant for the foreseeable future, ie

- Setting standards of professional competence and integrity.
- Encouraging membership at all levels.
- Enabling the exchange of technical information.
- Contributing its collective expertise to the benefit of society.

The Board therefore accepted that these will be the continuing Objectives of the Institution for the next 30 years.

However, the Survey also confirmed the need to review the means by which these Objectives would be achieved and what changes would be needed to reflect the changes in the maritime industry and the professional needs of the members.

### Phase 2 - Working Groups

Phase 2 of the Strategic Review has been carried out by a number of Working Groups, comprising members of Council and other members of the Institution, with each addressing a specific Objective. Each Working Group was tasked with identifying how the Objective is achieved today and what changes would be required to continue achieving the Objective in 2050.

#### Phase 3 - Board Consideration

The Working Groups presented their findings and recommendations for consideration the Board during Phase 3

of the Strategic Review.

A recommendation which has had early acceptance by the Board was change the composition of the Council of the Institution to enable it to become more representative of the world-wide membership by reflecting geographic location as well as membership class and experience. The Resolution authorising the Board to amend the By Laws was approved at the 2019 SGM.

#### Phase 4 - Implementation

After seeking further clarification on some of the Recommendations, the Board has now determined which Recommendations will be implemented and to what timescales, subject only to affordability and cost effectiveness. A number of Sub Groups and the the E,D&I Sub Committee of the Professional Affairs Committee will consider the costs and feasibility of implementing the Recommendations, subject to the Board's final approval.

# RINA – QINETIQ MARITIME INNOVATION AWARD

he Institution's Maritime Innovation Award, which is presented in conjunction with QinetiQ, recognises outstanding scientific or technological research by an individual or organisation 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.

The 2018 Maritime Innovation Award is presented to Nauti-Craft Ltd for its Marine Suspension System which provides an innovative approach to improving the ride, handling, comfort and safety of marine vessels. This novel System decouples the hulls and superstructure of a vessel to provide an improved ride using a passive suspension system.

The Judging Panel considered that this system has the potential to provide significant benefits to the operational window of high-speed craft, both civilian and military, as well as reducing injury and fatigue risk.



Chris and Annie Heyring, joint founders of Nauti-Craft, receive the 2018 Maritime Innovation Award

Full details of Nauti-Craft Ltd for its Marine Suspension System will be published online.

The Award was announced and presented at the Annual Dinner.

# 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.



**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

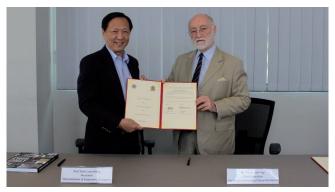
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## **INSTITUTION NEWS**

# Institution signs MOU with Institute of Engineers of Singapore

uring a recent visit to Singapore, the Chief Executive signed a Memorandum of Understanding with the Institute of Engineers of Singapore. The MOU covers reciprocal membership and joint activities.

The Chief Executive of RINA and President of IES



# Corporate Partner visits Headquarters

Corporate Partner, the Bahamas Maritime Authority, recently held its RO and Inspectors meeting at the Institution's Headquarters, when Capt. Dwain Hutchinson, Managing Director & CEO of the BMA, presented a BMA crest to the Institution

Other recently elected Corporate Partners include BLOM Maritime Pte. Ltd and Consult Maritime LLC

Chief Executive, Trevor Blakeley, receives the BMA crest from Captain Hutchison



### 2019 EVENTS PROGRAMME

#### **DESIGN & OPERATION OF PASSENGER SHIPS**

30 April - 1 May 2019, London, UK www.rina.org.uk/Passenger\_Ships\_2019

#### **DESIGN & OPERATION OF PASSENGER SHIPS**

1 May 2019, London, UK www.rina.org.uk/Passenger\_Ships\_2019

#### SUPER AND MEGA YACHTS

14 - 15 May 2019, Genoa, Italy www.rina.org.uk/Design\_Construction\_of\_Super\_Mega\_ Yachts

#### BASIC DRY DOCK TRAINING COURSE

17 - 20 June 2019, London, UK www.rina.org.uk/Basic\_Drydock\_Course\_June\_2019

#### WARSHIP 2019: MULTI-ROLE VESSELS

25 - 26 June 2019, Bristol, UK www.rina.org.uk/Warship\_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

#### **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

## LIBRARY ADDITIONS

#### Alec William Cranfield

The notebooks of Alec William Cranfield (1915-1977), Naval Architect and Shipyard Manager, containing his work in the Drawing Offices at Rowhedge Ironworks (early 1930's) and the British Powerboat Company, Southampton (mid 1930's) have been presented to the Institution by his family

### Engineering - A First World

During a recent visit to Singapore, the Chief Executive, Mr Trevor Blakeley, was presented with a copy of *Engineering – A First World*.

RINA Chief Executive, Trevor Blakeley receives the book from the President of IES, Professor Yeoh Lean Weng



## **PUBLICATIONS NEWS**

# Contributions to the Magazines

#### An invitation from the Technical Director

he previous issue of RINA affairs included an invitation for articles for our in house magazines. That same invitation was also sent separately by email and was met with a significant response. I would like to thank those readers who offered articles as several contributions have already been published in our magazines and several more are lined up for publishing in forthcoming editions. Sadly, a couple of the contributions that were offered could not meet the short term publishing deadlines. In view of that experience, I would like to establish a regular rolling programme of contributions looking further ahead to ensure relevant articles are given sufficient notice for drafting to meet the various editions. I have, therefore, included a forward projection of features that will appear over the next six months, and hence would like to reiterate my invitation for you to offer your expertise and experience by contributing to the schedule of the Institution's magazines.

#### The Naval Architect

**July/August**: cranes, deck & cargo equipment; shipbuilding technology; propulsion; containerships

**September**: ferries; environmental legislation; CFD & hydrodynamics; China; Germany

October: LNG/LPG; CAD/CAM/CAE; ship safety; Netherlands; Korea

### Ship & Boat International

**July/August**: RIBs; patrol and rescue boats; life-saving and safety equipment; waterjets; UK

**September/October**: offshore support vessels; fishing vessels; green craft technology; gears, propellers and thrusters; Europe

#### Shiprepair and Maintenance

**3rd Quarter**: Middle East and Indian Subcontinent; UK/Benelux; BWTS retrofits; LNG carrier repairs; paints and coatings; propulsion system repairs and refits; electrical and navigation system upgrades

## Offshore Marine Technology

**3rd Quarter**: support vessels; ROVs and AUVs; machinery control and monitoring; walk-to-work systems

#### Warship Technology

**July/August**: sealift/logistic support; amphibious vessels; coast guard & patrol craft; machinery control and surveillance; UK naval programmes

**October**: propulsors; fast naval craft; small naval craft and paramilitary craft; advanced hullforms; Australia/ New Zealand

These and the complete schedules are published regularly on the magazine pages of the website: https://www.rina.org.uk/publications.html

Contributions in MSWord, of up to 1,500 words and two photos or tables, should be forwarded to me. Queries or proposals for longer articles should also be made to hq@rina.org.uk.

I and the Editors look forward to hearing from you and to making your expertise and experience available to the international readership of the magazines.

Karl Monk

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# New eNewsletter App RINA Publications App

The Naval Architect eNews Shiprepair & Maintenance eNews Ship & Boat International eNews Warship Technology eNews Offshore Marine Technology eNews

he Institution publishes a range of free eNewsletters. These eNewsletters complement the Institution's magazines in providing informed and independent reports on technical developments in all sectors of the international maritime industry. They contain a selection of articles published in the latest issues of the magazines, as well as material which did not make the magazines. The eNewsletters are published by email to those who have opted to receive them.

The eNewsletters may now also be downloaded and read as convenient on a new, free, RINA eNewsletter App, containing the latest issues of all eNewsletters. The App is available from Google and Apple Stores in a simple and easy-to-read format. Users of the App may opt to receive notification of when the App is updated with a new issue of an eNewsletter.

embers and subscribers may read the electronic versions of the Institution's magazines on their PC, or by using the free App on their tablet or smartphone, containing the latest issues of all magazines.





# e-Library

The e-Library provides a one-stop access to magazines, published and unpublished papers, reports, presentations etc, available to members. The e-Library may be accessed at www.rina.org.uk/ MyRINA/e-Library

Members wishing to submit an item for inclusion in the e-Library should forward it to hq@rina.org.uk. Where such items are subject to copyright, permission must be obtained before submission.

## 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/maritimesafetyaward

maritimesafetyaward@rina.org.uk

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

## NEWS FROM THE UNIVERSITIES

# University of Gdansk

he 2018 Royal Institution of Naval Architects – KORAB Student Naval Architect Award for the best final-year thesis at the Faculty of Ocean Engineering & Ship Technology of The Gdansk University of Technology was awarded to Alicja Bera for her thesis "Analysis of the influence of steel properties on selected resistance aspects of construction of SOV type bow during collision."

Commended for their thesis were Katarzyna Karasińska, Mateusz Kilkowski and Kamil Rogowski.



Students and judges at the RINA-KORAB Award ceremony

# University of Genoa

he 2018 Royal Institution of Naval Architects – d'Amico Student Award was awarded to Riccardo Righetti for his final year project "Identification and Validation of a manoeuvring mathematical model by means of model test results".

Riccardo was presented with the Award at a meeting of the Genoa Branch of the Institution, at which Michele Francioni (Senior Vice President, MSC Cruises S.A.) gave a lecture entitled Navigating a sustainable course (Sustainability and environmental protection of cruise ships).

# Ngee Ann Polytechnic

The 2018 Royal Institution of Naval Architects – Keppel Shipyard Student Awards for the best Marine Design Projects were presented to Ong Yu Xun and Laurette Zachary Tileron for their project "Ship Design"; and to Muhammad Idham Bin Pak Kai Xun and Husni for their project "Drilling Engineering".

# Accreditation of academic courses

cademic courses which are accredited by the Institution on behalf of the Engineering Council, which meet the academic requirements for registration and membership are listed at:

https://www.engc.org.uk/education-skills/course-search/accredited-course-search/

# University of Tasmania

The Royal Institution of Naval Architects – Defence Science and Technology Organisation Prize for the best team project in the unit Design Project in the Bachelor of Engineering degree at the Australian Maritime College was presented to Uddish Singh, Sam Smith, Michael Fisher and Connor Hickey for their project "Under Water Restaurant (Core Marine)".

## QUOTES FOR THE MONTH

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 labor 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

## LETTERS TO THE EDITOR

# C. V. Mackrow boat designers and builders

Sir: In 1927 a motor yacht, 'Frothblower' Lloyd's Registered number 160542 subsequently owned by my family was designed and built by C.V. Mackrow, allegedly in Blakeney, Norfolk. The vessel was built for Sir Henry R.S. Birkin, also known as Sir 'Tim' Birkin of Bentley motor racing fame and was a twin screw wooden schooner some 80ft long, with two Ricardo petrol engines, grt 44.51, net 23.25, breadth 11.9ft and, draught of 5.1ft.

I have been trying to research C.V. Mackrow, to find out where they were

located and, whether they are still active or, whether an archive exists concerning plans of the vessel. Also, perhaps you can advise whether, in 1927 there was any mandatory requirement to file yacht plans and, if so with whom.

I would be grateful for any information which your members might have any information that you may have on file would be much appreciated and, if there is a charge involved, please advise.

 $\label{lem:martinar} \textit{Martin Armitage} \\ \text{martinarmitage1@hotmail.com}.$ 

## 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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## QUOTES FOR THE MONTH

"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

"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

"The ideal engineer is a composite ... He is not a scientist, he is not a mathematician, he is not a sociologist or a writer; but he may use the knowledge and techniques of any or all of these disciplines in solving engineering problems",

N. W. Dougherty, 1955

"It is true that improved results in ship-building have been obtained through accumulated experience; but it unfortunately happens that many of the theories by which this experience is commonly interpreted are interwoven with fundamental fallacies, which, passing for principles, lead to mischievous results when again applied beyond the limits of actual experience",

William Froude, 1875