

The Royal Institution of Naval Architects



2022 Annual Report and Financial Statements for the year ending 30 September 2022

Contents	Page
Annual Report	
Objectives of the Institution	2
Activities, Achievements and Performance	2
Board of Trustees	2
Council	3
Standing Committees	4
Membership	6
Cooperation with other Organisations	6
Publications	7
Conferences, Courses and Events	7
Institution Awards	8
Members Deceased during the Year	9
Financial Statements	
Financial Review and Reserves Policy	10
Statement of the Board of Trustees' Responsibilities	11
Independent Auditors' Report	11
Summary Statement of Financial Activities	13
Balance Sheet	14
Statement of Cash flows	15



Royal Institution of Naval Architects

2022 ANNUAL REPORT

OBJECTIVES OF THE INSTITUTION

The Objectives of The Royal Institution of Naval Architects are as set out in the Charter of Incorporation 1910 - 'the improvement of ships and all that specially appertains to them, and the arrangement of periodic meetings for the purpose of discussing practical and scientific subjects bearing upon the design and construction of ships and their means of propulsion, and all that relates thereto'.

Today, reflecting the wider range of activities of the Institution as both a professional institution and learned society, the Objectives of the Institution are more aptly described as "to encourage and assist in the achievement of the safe and efficient design, construction, maintenance and operation of marine vessels and structures."

These Objectives are primarily achieved by:

- Setting of internationally recognised and accepted standards of professional competence and integrity required for membership.
- Encouraging membership of the Institution at all levels
- Enabling of the exchange of technical information through the Institution's publications, conferences, and local meetings, which are open to all those involved in the design, construction, maintenance and operation of marine vessels and structures.
- Contributing its collective expertise to national and international maritime organisations for the benefit of the profession and society.

The Institution's specific Objectives in 2022 have been to increase the internationalism of the Institution in both its membership and its activities, to encourage the younger members of the profession to become involved in the activities of the Institution, and to strengthen its links with academia and industry. These remain the Institution's specific Objectives for the forthcoming year.

The Institution's local Branches and Sections have held regular meetings to present and discuss matters of professional interest. The Institution's conferences, publications and local meetings are available to both members and non-members.

The Institution also contributed its collective expertise to national and international organisations, particularly concerned with maritime safety and the protection of the maritime environment. The Institution recognised and encouraged the achievement of individuals at all stages of professional development through its prizes and awards.

During the year, the Institution achieved its programme of planned activities in full, and smoothly transitioned from live events and activities to online working and increased their availability to both members and non-members. Feedback on its activities confirmed that the Institution was maintaining the high standard and value of its conferences, publications etc., and meeting its Objects.

Future Plans

In the forthcoming year, the Institution intends to maintain its programme of courses, conferences and local meetings, reflecting developments in the design, construction and maintenance of marine vessels and structures, and to continue contributing its collective expertise to appropriate national and international organisations for the public benefit. All activities have returned to a hybrid model with the option for live attendance or online participation. The digital program is well underway to improve the Institution's systems architecture and communication, with the launch of the new membership CRM, website and digital media. The secretariat has been restructured to include an Chief Operations Officer and Business Development Director, focusing on global operations and marketing and communication.

ACTIVITIES, ACHIEVEMENTS AND PERFORMANCE

The Institution organised/co-organised 8 courses and conferences, covering the full spectrum of maritime technology, consisting of 1-2 day events. Throughout the year, the Institution published 10 journal titles (7 Magazines, 2 supplements and 1 Journals), reporting on developments in the maritime industry and the results of research and development. Conferences and publications have also contributed to the Institution's income. Publications: NA (10), SBI (6), WT (5), SRM (4), OMT (4), Jetro supplement 2022, Marine Power & Propulsion October 2022, Significant Ships, Significant Small Ships and IJME (4 issues) Also, 5 RINA Conference Proceedings

BOARD OF TRUSTEES

The Royal Institution of Naval Architects, also known as "RINA", is a registered charity (number 211161) incorporated under Royal Charter. The Board of Trustees is the governing body of the Institution.

The Board of Trustees is responsible for the governance and management of the Institution. Responsibility for the day-to-day management of the Institution's affairs is delegated to the Chief Executive, accountable through the Chairman to the Board of Trustees. All Trustees are provided with guidance documentation issued by the Charity Commission concerning their responsibilities.

Board of Trustees

(at 31 December 2022)

Chairperson
C Savage

Vice Chair
R Cripps

Treasurer
D Monioudis

Trustees

T Strang	L Santini	R Gehling
E Pang	T Allan	J Paik
K Hutchinson	B Rosenblatt	

The Board of Trustees met four times in the year, during which its principal considerations were the policy, management and review of the Institution's investments, the management and review of the Risk Register, and review of the Institution's financial and administrative procedures.

The implementation of the strategic direction is ongoing. The Institution continues improving its profile within the maritime community, whilst addressing future challenges and maintaining the Institution's standing as a leading maritime organisation.

Management of Risk

The Risk Register is reviewed and updated at every Trustees meeting.

COUNCIL

The Council is elected by the members. It is responsible for communicating the views of the Institution's membership to the Board and providing guidance and advice to the Board of Trustees on all matters related to the governance of the Institution.

The Council holds delegated authority from the Board of Trustees for the management of the professional, technical, and learned society affairs of the Institution. Such delegated authority is principally exercised through the Institution's standing committees and the Chief Executive.

Council and Officers of the Institution

(at 31 December 2022)

President
2022 – Hon Professor C Savage FRINA

Past Presidents

1984-1987 Professor J B Caldwell OBE PhD MSc FEng
1996-1999 Sir John Parker FEng
2002-2004 Professor W G Price FEng FRS
2004-2007 Dr N Gee DEng FEng
2007-2010 Dr S Payne OBE HonPhD (Sc) FEng
2010-2014 P French FEng FRSA
2014-2016 B S. Rosenblatt FRINA

2016-2018 T Boardley FRINA
2018-2020 Professor R Birmingham FRINA
2020-2022 M d'Amico FRINA

Honorary Vice Presidents

2004 - E C Tupper RCNC FRINA
2022 - J Frier FRINA
2022 - P Wrobel FRINA

Date Elected/Appointed

Date Elected/Appointed

Vice Presidents

2019 R Gehling	2019 D Molyneux*
2019 Dr D Aldwinckle	2020 C De Marco*
2019 P Krishnankutty*	2021 IKAP Utama*
2019 J K Paik*	2021 T Allan
2019 A Subahani *	2021 A K Dev*

* Regional Vice Presidents

Fellows

2020 R Downs	2020 G S Chopra
2020 P A Wilson	2020 S Inayatullah
2020 K W Hutchinson	2020 D Konovessis
2020 R P Fernandez	2021 B Y W Lau
2020 R Cripps	2021 P Kujala
2020 C L Savage	2022 M Renilson
2020 D Vassalos	2022 N Ratukalou

Members

2020 N MacLennan	2020 H Theunissen
2020 C Silitziotis	2020 P Crossland
2020 L Santini	2020 A J Aitken

Associate-Members

2021 M H Ghaemi	2022 H Dixon
2021 R Miller	2022 C Baxter
2021 Y R Kamath	2022 C McNair
2021 S De Villiers	2022 C Baker
2021 A Kumar	

President of the Australian Division
2022 Jim Black +

President of the New Zealand Division
Vacant

Chairperson of Standing Committees

R Cripps	Maritime Innovation Committee
S Watts +	Maritime Safety Committee
T Strang +	Maritime Environment Committee
E Pang +	IMO Committee
Frank Spencer +	Disciplinary Committee
N Overfield +	Publications Committee
M Hart +	Membership Committee
M Barton +	Professional Affairs Committee

+ Ex officio members

Chief Executive

C Boyd - 1st Nov 2020

Auditors

haysmacintyre

Bankers

The Royal Bank of Scotland

Investment Advisors

CCLA Investment Management Ltd

Staff

The Board and Council record their grateful thanks to the Chief Executive and the Secretariat staff for their dedication to the work of the Institution during the year.

STANDING COMMITTEES

The Council thanks the chairperson and members of the Institution's standing committees for the time and effort which they devote to the work of the Institution.

Membership Committee

The Committee met four times during the year to consider applications for membership and registration with the Engineering Council UK.

The Committee was saddened to hear that G Stoneman had passed away in May 2022 and her contributions to the Committee's work will be sadly missed.

Disciplinary Committee

No allegations of improper professional conduct by members were received during the year.

IMO Committee

In 2022 the IMO Committee met three times (22/02, 09/05, 24/10). The first two meetings took place on-line, using the RINA Zoom platform, the October meeting was held in hybrid format: in person and on-line.

The Committee organised RINA delegations to participate in the following IMO Committees, Sub-Committees, and inter-sessional working groups:

- Sub-Committee on Ship Design and Construction (SDC) 8
- Sub-Committee on Ship Systems and Equipment (SSE) 8
- Intersessional Working Group on Greenhouse Gas (ISWG-GHG) 11
- Sub-Committee on Pollution Prevention and Response (PPR) 9

- Maritime Safety Committee (MSC) 105
- Intersessional Working Group on Greenhouse Gas (ISWG-GHG) 12
- Marine Environmental Protection Committee (MEPC) 78
- Sub-Committee on Implementation of IMO Instruments (III) 8
- Sub Committee on Carriage of Cargo and Containers (CCC) 8
- Maritime Safety Committee (MSC) 106
- Marine Environmental Protection Committee (MEPC) 79

The IMO meetings resumed physical attendance at the London HQ in September 2022.

The committee is 30 strong and in 2022 contributed around 150 days to IMO meetings, industry meetings, correspondence groups and preparing submissions.

Committee members continued to participate in a number of correspondence groups, being particularly active in life-saving appliances, lifting appliances, bio-fouling, EEDI, GHG, carbon intensity reduction matters and submitted or co-sponsored 14 papers.

The Committee continued to engage widely with flag states and NGOs at the IMO.

The RINA Global Naval Architecture Group was always involved in all the Committee's activities.

The Committee has been working to help setup a RINA prize in the memory of Peter Contraros, sponsored by his family. Nominations for the award have been invited until the end of 2022. The winner will be announced at the RINA 2023 AGM.

Publications Committee

The Committee met four times during the year to determine the award of Medals and Prizes for papers published in the Transactions, and to consider how it should respond to actions placed on the Committee arising from the Strategic Review, including the extension of its responsibilities to include the exercise of greater oversight of the quality of the Institution's publications and events to ensure they continue to maintain the Institution's high standards. The Committee's Terms of Reference have been revised to reflect this wider responsibility.

Professional Affairs Committee

The Professional Affairs Committee (PAC) met on three occasions during 2022 (23/02, 06/07, 26/10).

All three meetings were held in hybrid format: in person and on-line. At the end of the February meeting there was handover of the Chairperson from Andrew Bunney to Mark Barton.

The main activities of the PAC during the year were:

- Continuing implementation of the procedure for reviewing Continuous Professional Development (CPD) records of members.
- Continuing development and implementation of RINA's policy for Equality, Diversity and Inclusivity (ED&I) via a working group which reports to the PAC;
- Action continued formalising the training of PAC members for their various assessor tasks. A Training Plan has been developed and approved.
- The re-accreditation of the MSc in Naval Architecture and the MSc in Marine Engineering at the University College London (UCL) (January 2022).
- The accreditation of the MCA Graduate Surveyor training programme and the Marine Surveyor development Scheme (January 2022).
- The accreditation of BMT DAS UK Ltd graduate training scheme (October 2022).
- The accreditation of the Frazer Nash Ltd professional development scheme (October 2022).
- The accreditation of the UK MOD Submarine Delivery Agency technical engineering graduate scheme (November 2022).
- The accreditation of the Kent Plc graduate development programme (November 2022).
- The accreditation of the Shell Shipping and Maritime Technology graduate programme (December 2022);
- The accreditation of the BAE Systems (submarines) graduate training scheme (December 2022);
- RINA CPD endorsement was granted for the Australian Shipbuilding and Repair Group (ASRG) *Dockmaster Training* course (July 2022);
- RINA CPD endorsement was granted for the BMT DAS Australia Pty Ltd *Whole Life Warship Capability Management* course (September 2022);
- RINA CPD endorsement was granted for the BMT DAS UK Ltd *Naval Surface Ship Stability* course (November 2022).
- RINA CPD endorsement was granted for Lloyd's Maritime Academy ten courses (October 2022).
- RINA CPD endorsement was granted for the Navalapp *Sailing Yacht Design 1 and Sail Design 1* courses (December 2022).
- The 2022 Internal audit was undertaken (December 2022) with no significant issues being identified.
- Following a meeting with the Engineering Council for the licence review held on the 22/06/22 a number of actions were completed in the following months. The Engineering Council confirmed full satisfaction of all conditions in October 2022 and therefore granted renewal of the license until June 2026.

- Members of the Committee joined the judging panel for the 2021 RINA Eily Keary Award. The winner Ms Ralitsa Mihaylova was announced officially at the 2022 AGM.

In the forthcoming year, the following will provide a major focus of PAC Activity:

- Continuing action to ensure that the PAC has the experienced resources to successfully undertake its activities.
- Continuing focus on reviewing CPD records and increasing the CPD activities of members.
- Continuing the implementation of the ED&I policy.
- Implementation of IT tools for improved record keeping and document control.
- Continuing the implementation of the Training Plan for PAC members and assessors.

Maritime Safety Committee

The Maritime Safety Committee met four times during 2022, (17/03, 14/06, 27/09, 6/12) to discuss and review issues of maritime safety and continued to develop its remit and scope.

A new Chair was elected in the March Meeting, Sarah Watts and a new Vice Chairman, Paul Coley was elected in the September Meeting.

A meeting was held with the President of SNAME, the Chairman of the SNAME Marine Forensic Committee (MFC), the Chair and Vice Chair of RINA Safety Committee, and RINA's CEO. The purpose of the meeting was to discuss how RINA and SNAME could work better together in the future in relation to the SNAME Marine Forensic Committee, subsequently members of SNAME attend RINA's Maritime Safety Committee meetings and RINA have representation at SNAME MFC.

A working Group was set up to develop processes for the review of accidents, to ensure that important trends in accidents could be established and where Naval Architectural improvements could be made that they are recognised. The analysis is designed as a simple guide to provide a consistent methodology and approach in assessing the relative importance of these cases for the Committee to allocate its resources.

Enclosed Space Safety was raised, and the committee recognised that this was a problem that needed to be addressed by naval architects, operators, and individual personnel. A letter was published in S&BI from the Chairman of the Safety Committee, acknowledging that there is a problem, but also pointing out that many naval architects are trained in enclosed space entry and have shipyard experience of the issues. The letter has resulted in further correspondence from members and the subject continues to be on the agenda. The committee is represented on IMarEST's Human Element Working Group, where a specific work strand is addressing this issue.

The containership working group has been working with the IMO Committee to improve containership safety and prioritise the current range of important discussions at IMO and identify gaps in areas that are being addressed. There was a meeting with the

TopTier JIP (a joint industry project run by MARIN on containership safety), and it was agreed that RINA would continue to advise TopTier of work undertaken on containership safety and any continuing initiatives, alongside this TopTier would continue to update RINA on their project.

A meeting was held with the National Oceanography Centre (UK), to discuss whether climate change was having an impact on wave characteristics. It was advised that there were very small changes in average wave heights, but the extreme wave heights are increasing in a more significant manner (m rather than cm). This suggested that attention should be paid to improved weather routing to avoid the extreme waves and it also has implications for the safety issues on container ships as well as ship longitudinal strength.

A number of events were agreed as priorities, such as Safety Techniques workshop, Conference on Risk and Safety Management, Containership Workshop, Fishing Vessel Safety Seminar. However, the lack of available resources within the Secretariat, at the time, unfortunately, precluded the events coming to fruition.

Maritime Innovation Committee

The Maritime Innovation Committee met three times during the year 2022 (10/03, 15/06, 25/10).

It has continued to discuss and review the innovative and emerging technologies that will have an impact on the industry, the profession, and the Institution across all sectors in the immediate future and long term during the year.

There have been wide-ranging discussions on some of the technological developments and the following topics were raised as areas of particular interest:

- Alternative Fuels and the supporting regulatory framework
- Floating Offshore Wind Technology
- Digitalisation and Sustainability
- Education/training/skills

One area that has also been discussed in depth has been Cyber Security in the Maritime Sector.

The Committee has recognised the importance that all the standing Technical Committees need to work together with the Secretariat on common topics for the benefit of the industry, the profession and the Institution and during the year the Technical Committee Steering Group was established to ensure that this happens.

Maritime Environment Committee

During 2022, the Maritime Environmental Committee met 3 times (24/02, 13/06, 27/10) to review issues related to the maritime environment.

The Marine Environmental Committee continued to work on matters related to the environment and supporting the IMO Committee as needed. While many issues continue to be discussed (underwater noise, hull coatings, training of Naval

Architects etc) the main focus remains on decarbonisation and how the alternative fuels and technologies that the next generation of vessels will use impacts the work and study of naval architecture.

The MEC continued to look for members who are passionate about the environment and believe they have more to offer to their profession particularly those with specialist skills and knowledge of the maritime environment.

Benevolent Fund Committee

Limited financial assistance was given to members who found themselves in necessitous circumstances. The Council records its grateful thanks for the donations to the Benevolent Fund received during the year.

MEMBERSHIP

Members on the Roll at 31 December 2022 are shown below:

	Total
Hon Fellows	7
Fellows	1065
Members	3111
Associate Members	2415
Associate	298
Student Members	1235
Junior Members	4
Corporate Partners	79

Total	8214

Corporate Partners

The following companies were elected Corporate Partners in 2022, having demonstrated their commitment to achieving and maintaining high standards of professional competence amongst their engineers:

Leela Worldwide
Fortinet Inc.
Tadek
SAIMENA
Yara Marine
BV Solutions UK

COOPERATION WITH OTHER ORGANISATIONS

The Engineering Council

The Institution continued to carry out its responsibilities as a Licensed and Nominated Body of the Engineering Council of the United Kingdom. A total of 2366 members were registered with the Engineering Council through the Institution, with 112 members being registered during the year.

RINA and IMarEST

The Institution continued to work closely with the IMarEST through joint branch and accreditation activities.

RINA and SNAME

The Institution continued to work closely with SNAME through the SNAME Marine Forensics Committee.

Agreements of Co-operation

The Institution continued to work with national professional institutions with common aims and objectives through its Agreements of Co-operation.

The Council considers that these Agreements also serve to demonstrate the Institution's commitment to maintaining the professional standing and influence it derives from its international membership and activities.

International Maritime Organization

The Institution has continued to make a significant contribution to improving safety at sea and the protection of the maritime environment through its work as an NGO at the International Maritime Organization. The significance of this contribution is recognised by staff and members of the IMO and is an important element of the public benefit which the Institution provides.

Confederation of European Maritime Technology Societies (CEMT)

The Council of CEMT met twice during the year. The Institution was represented by Trevor Blakeley FRINA who is also Chairman of the CEMT Council. The principal activity of CEMT during the year was the organisation of the third International Conference on Postgraduate Research in the Field of Maritime Technology. This annual online Conference provides a unique opportunity for younger postgraduates to present and discuss their current or recently completed work, and to meet with other postgraduates from universities and industry in a conference environment. Over 100 registrations from 17 countries were received for PostGradMarTec 2022 which was organised by the Hellenic Institute of Maritime Technology with administrative support from the Institution.

The Annual CEMT Award for 2022 was presented to Professor Harilaos N. Psaraftis of the Danish Technical University in recognition of the significant contribution which his academic and research activities over many years have made towards the development and achievement of safe, clean and sustainable maritime transportation in Europe and world-wide.

PUBLICATIONS

Magazines

The Naval Architect, Ship & Boat International, Ship Repair & Maintenance, Offshore Marine Technology and Warship

Technology, were published during the year, providing reports on technological development in all sectors of the maritime industry.

All magazines published during the year were also published online.

eNewsletters

The eNewsletters *The Naval Architect eNews, Shiprepair & Maintenance eNews, Warship Technology eNews* and *Offshore Marine Technology eNews* were published during the year. These eNewsletters are available free to all members of the global maritime community, and may be read online and through the eNewsletters App.

Significant Ships and Significant Small Ships

The series were continued with the publication of *Significant Ships 2022* and *Significant Small Ships 2022*.

Transactions

Transactions Part A – *International Journal of Maritime Engineering (IJME)* was published four times during the year.

The IJME were published in printed format, on CD-ROM and on the RINA website.

Digital Media

Extensive use was made of the Institution's social media groups on LinkedIn, Facebook, Instagram and Twitter, as well as the Institution's YouTube channel to communicate with the members of the Institution and global maritime community

CONFERENCES, COURSES AND EVENTS

Conferences and Courses

The following conferences and courses were organised or co-organised during 2022:

Scaling Decarbonisation Solutions - Reducing Emissions by 2030
29 November - 1 December 2022, Rotterdam, Netherlands

ICCAS 2022
13-15 September 2022, Yokohama, Japan

Water-jet Propulsion 2022
30 June - 1 July 2022, Online

Warship 2022
8 - 9 June 2022, Bristol, UK

Contract Management 2022
17 - 20 May 2022, Online

WEGEMT 2022 Course on Green Shipping
9 - 10 May 2022, Online

Dry Dock Training 2022
3 - 6 May 2022, Online

Autonomous Ships 2022
31 March - 1 April 2022, Greenwich, UK

Sponsored Student Places

The Council record their grateful thanks to the following companies who generously sponsored places for students at Institution conferences during the year.

BAE Systems
Lloyd's Register
ABS

Annual General Meeting

The Annual General Meeting was held online on 12th May 2022 at which the following Resolution was passed:

Resolution 1

To elect Honorary Professor Catriona Savage RCNC, CEng, FRINA, MIMarEST as the President of the Institution.

Resolution 2

To reappoint haysmacintyre as the Institution's auditors.

Professor D Andrews FREng, PhD, FSNAM, FRINA, RCNC presented 'What makes the early stage of complex design sophisticated? A ship architecture-based approach – design inside out'.

Annual Dinner

The Annual Dinner was postponed due to the COVID pandemic and on hold until April 2023.

President's Invitation Lecture

The President, Hon. Professor C Savage, welcomed guests and members to the 2022 President's Invitation Lecture on the 16th November, when Mr. Jorge Porres, Director of Technology and Supply Chain, BlueFloat Energy, presented: "Floating wind challenges and opportunities for faster deployment"

The President's Invitation Lecture was again sponsored by ABS, to whom the Institution is indebted for their support of this and other Institution activities.

Divisions, Sections and Branches

The Divisions, Branches and Sections provided a comprehensive programme of online technical events during the year.

The Board of Trustees and the Council recognise the value which the membership places upon the activities of the Divisions, Sections and Branches, and record their thanks to those members who spend much time and effort in organising these activities.

INSTITUTION AWARDS

Gold Medal

The Institution's Gold medal and Medal of Distinction were not awarded in 2022.

Jeom Paik Prize

The Jeom Kee Paik Prize for the best paper on the subject of structures, published by an author under the age of 35 in the 2022 Transactions is awarded to Shen Li for their paper *Uncertainty of Ship Hull Girder Ultimate Strength in Global Bending Predicted By Smith-Type Collapse*.

W H C Nicholas Prize

The W H C Nicholas Prize for the best paper on a design related topic published by an author under the age of 35 in the 2022 Transactions is awarded to Mathieu Courdier for their paper *Numerical Validation of the Hydrodynamic Drag of a Surfaced and Fully Appended Underwater Vehicle*.

Wakeham Prize

The Wakeham Prize for the best general paper published in the 2022 Transactions by an author under the age of 35 was awarded to Xavier Ling for their paper *Free Surface Effect on the Hydrodynamics of an Underwater Vehicle Hullform, the Darpa Suboff*.

Samuel Baxter Prize

The Samuel Baxter Prize for the best paper on the subject of safety published by an author under the age of 35 in the 2022 Transactions was not awarded in 2022.

Austin Farrar Prize

The Austin Farrar Prize for the best paper published in the 2022 Transactions by an author under the age of 35 on the subject of small craft is awarded to Utku Cem Karabulut for their paper *Determination Of Nox Emission Factor For Diesel Engines of Recreational Boats by On-Board Measurement*.

Calder Prize

The Calder Prize for the best paper published in the 2022 Transactions by an author(s) under the age of 35 on the subject of small or high-speed craft is awarded to Mark Warren for their paper *Fatigue Estimation on a High-Speed Wave Piercing Catamaran During Normal Operations*.

Ian Telfer Prize

The Ian Telfer Prize for the best published paper on energy or the environment related issues by an author under the age of 35 is awarded to Ahmed Elkafas for their paper *Assessment of Technical and Environmental Performance of Marine Alternative Fuels for Container Ships*.

David Goodrich Award

The David Goodrich Prize for the best paper presented at the 2022 Warships Conference was awarded to Jacqueline Christmas for their paper *Resolving the Impact of Ship's Design on Deck and Well-deck Launch and Recovery Operations by applying of Quiescent Period Prediction (QPP)*.

Pyrgotelis Zoitos Award

The Pyrgotelis Zoitos Award, sponsored by Cyprus Marine and Maritime Institute for the best general paper published in the 2022 Transactions by an author under the age of 35, was awarded to Bogdan Molchanov and Lien Tran for their paper *Improving Ship Sustainability by Re-Using Engineering Simulators In Multi-Objective Optimization*.

Peter Contraros Award

The Peter Contraros award for the best paper on Strength, Safety or Reliability of Marine Structures by an undergraduate or postgraduate student is awarded to Dr. Shen Li for his paper "Progressive collapse analysis of ship hull girders subjected to extreme cyclic bending"

Letters of special recognition

The letters of special recognition for the selected papers published in the 2022 Transactions were issued to Nicole Taylor for their paper *'Mariner 4.0: Integrating Seafarers Into A Maritime 4.0 Environment* and to Robin Loscombe for their paper *Analysing Ancient (Viking) Longship Structures*.

Student Awards

Student Awards in recognition of their achievement were presented to students at 24 universities.

The Institution is grateful to the following organisations and companies for their support of the Awards:

BAE Systems
Bureau Veritas
d'Amico Società di Navigazione
Greek Shipping Cooperative Committee
Keppel Shipyard
Lloyd's Register
Defence, Science & Technology Group

RINA – QinetiQ Maritime Innovation Award

The 2022 Maritime Innovation Award was presented to STADT AS in recognition of the latest ship electric propulsion technology: "Lean propulsion"- unique, patented, with a series of unique qualities that never has been achieved in previous propulsion solutions. The most unique feature is complete silence stealth operation now implemented in series of Naval ships as well as

Commercial ships. The winner will be announced at the 2023 Annual Dinner.

RINA – LR Maritime Safety Award

The 2022 Maritime Safety Award was presented to University College London Marine Research Group, Institut Teknologi Sepuluh Nopember, the University of Pattimura and Orela Shipyard, in recognition of the improvement in maritime safety through their development of the KORA KORA mobile phone application that enables fishers to assess their vessel's stability in port and while underway. The winner will be announced at the 2023 Annual Dinner.

RINA – BP Eily Keary Award

The 2022 Eily Keary Award was presented to Susan Kingswood, Inclusion and Diversity Manager at the Royal National Lifeboat Institution, in recognition of ED&I activities and for working across the business to create a full-scale transformation from a command and control culture to one of inclusive leadership, minority representation and a fully inclusive environment which is welcoming to all. The winner will be announced at the 2023 Annual Dinner.

MEMBERS DECEASED DURING THE YEAR

Patron

Her Majesty Queen Elizabeth II

Honorary Fellow (HFRINA)

-

FRINA

K D A Shearer	T J V Colton	M E R Collis
L Elona-Lilley	W T Cairns	J N Casciani-Wood
W J Lithgow	R Siddiqui	V Gorbov
D L Blount		

MRINA

D Livingston	D Burrows	J R Booth
G D Thompson	J S Alcock	J L Mouldey
G Stoneman	J Coltman	E J Thomson
R L C Sarre	L D Lubman	F G Smallwood
C L Jones	H D Parsons	J Ridehalgh
R F Burnett	A J Wright	G Breekveldt

AssocRINA

J B Stubbs

AMRINA

-



The Royal Institution of Naval Architects

FINANCIAL STATEMENTS FOR THE PERIOD ENDING 30 SEPTEMBER 2022

FINANCIAL REVIEW AND RESERVES POLICY

Total income (Restricted and Unrestricted) in 2021/22 was £1.95m (2020/21: £1.72m) and total expenditure (Restricted and Unrestricted) in 2020/21 was £2.13m (2020/21: £2.12m). The increase in income has been due to events returning to pre-pandemic levels in the second part of the financial year whilst membership and publications activity has remained stable.

Net deficit before investment losses in 2021/22 was £181k (2020/21: £400k). The operating deficit in the Unrestricted Fund in 2021/22 was £245k (2020/21: £474k), and the operating surplus in the Restricted Fund in 2021/22 was £65k (2020/21: £74k).

The total value of the Institution's funds (Unrestricted, Restricted and Endowment) on 30 September 2022 was £9.17m (2021: £9.53m). The value of the Unrestricted Fund on 30 September 2022 was £7.27m (2021: £7.62m). The value of Restricted Funds on 30 September 2022 was £334k (2021: £312k). The value of Endowment Funds on 30 September 2022 was £1.58m (2021: £1.59m). The total value of the Institution's investments on 30 September 2022 was £3.5m (2021: £4.07m).

The Institution's free reserves (unrestricted funds less designated funds and tangible fixed assets) stood on 30 September 2022 at £1.80m (2021: £2.33m). The Board of Trustees' policy is to maintain minimum cash reserves at the level of 3 months forward cash outflow from HQ operating costs net of rental and investment income, namely circa £300k, and to consider reserves in excess of this level for investment.

Investment policy and performance

In accordance with authority enabled by the Order of the Charity Commissioners for England and Wales, dated 1 Nov 2002 and issued under Section 26 of the Charities Act 1993, the Trustees have sought and gained approval to use a 'Total Return' policy with regard to the Endowment Funds.

The investment powers of the Board of Trustees are set out in the Royal Charter and By-Laws, copies of which are available from the Chief Executive at RINA Headquarters. Under the terms of those powers, management of the investment portfolio has been delegated to two investment management companies: CCLA Investment Management Ltd and M&G Investment Management Ltd.

The Board of Trustees reviewed its investment policy and confirmed that it remains the purpose of the Investment Portfolio to provide the Institution with income whilst maintaining the value of capital in real terms. As such the investment aim is to generate a minimum total return in excess of inflation (UK RPI).

The value of the investments at September 2022 (£3.5m) has decreased by 14.1% from the previous year, as a result of some significant market turbulence throughout the year and the UK government's 'mini budget', just before the financial year-end as well as a disposal of £400k. The M&G dividend income generated a yield of 3.9% which is marginally ahead of the average yield FTSE All Share Index. In May 2022 £3m investment was transferred from M&G to CCLA to be invested on a higher long-term total return basis.

Restricted Funds

The Board of Trustees' policy is to use all dividend income from Restricted Funds to assist and enable the continuing academic and professional development of members. The Board has extended this policy to include both undergraduate and post graduate members.

Risk Management

Operational and financial risks facing the Institution are listed in the Risk Register which is routinely reviewed and revised by the Trustees. Policies and procedures have been established to mitigate any risks identified during these reviews. Compliance with these policies and procedures is monitored by routine Internal Audit and Self-Assessment.

COVID-19 has presented a significant risk to both the operation and finances of the Institution. Furthermore, the depressed global maritime industry continues to have a negative impact on the Institution's income from conferences and publications. The combination of these principal risks has the potential to undermine the Institution's ability to maintain the current level of its activities and services to members. The Board routinely reviews cashflow, income and expenditure in both short and long term to manage financial risk.

Remuneration of key personnel

The remuneration of senior members of the Secretariat is reviewed and changes approved annually by the Trustees.

Fundraising

The Institution does not carry out any active fundraising, nor does it engage with any third party or professional fundraisers, and therefore has not signed up to any fundraising standards. There have been no complaints received during the year (2021: none). Complaints are considered by the Board or by independent non-Board members as appropriate.

STATEMENT OF THE BOARD OF TRUSTEES' RESPONSIBILITIES

Law applicable to charities in England and Wales requires the Trustees to prepare financial statements for each financial year which give a true and fair view of the Institution's financial activities during the year and of its financial position at the end of the year. In preparing financial statements giving a true and fair view, the Board of Trustees should follow best practice and:

- select suitable accounting policies and apply them consistently.
- make judgements and estimates that are reasonable and prudent.
- state whether applicable accounting standards have been followed, subject to any material departures disclosed and explained in the financial statements; and
- prepare the financial statements on a going concern basis unless it is inappropriate to presume that the Institution will continue in operation.

The Board of Trustees is responsible for keeping accounting records which disclose with reasonable accuracy the financial position of the Institution, and which enable them to ascertain the financial position of the Institution, and which enable them to ensure that the financial statements comply with applicable law. They are also responsible for safeguarding the assets of the Institution and hence for taking reasonable steps for the detection and prevention of fraud and other irregularities.

The Trustees who held office at the date of approval of this Board of Trustees' Report confirm that, so far as they are each aware;

- there is no relevant audit information of which the auditor is unaware; and
- each Trustee has taken all steps that they ought to have taken as a Trustee to make themselves aware of any relevant audit information and to establish that the auditor is aware of this information.

Annual Accounts

The accounts which follow are the full statutory accounts of the Institution and should be read in conjunction with the Annual Report of the Board of Trustees.

Auditors

Haysmacintyre LLP have expressed their willingness to continue in office as auditors and a resolution proposing their re-appointment will be submitted at the Annual General Meeting.

INDEPENDENT AUDITORS' REPORT TO THE BOARD OF THE ROYAL INSTITUTION OF NAVAL ARCHITECTS

Opinion

We have audited the financial statements of the Royal Institution of Naval Architects for the year ended 30 September 2022 which comprise the Statement of Financial Activities, the Balance Sheet, the Statement of Cash Flows, and the notes to the financial statements, including a summary of significant accounting policies. The financial reporting framework that has been applied in their preparation is applicable law and United Kingdom Accounting Standards, including Financial Reporting Standard 102 The Financial Reporting Standard applicable in the UK and Republic of Ireland (United Kingdom Generally Accepted Accounting Practice).

In our opinion, the financial statements:

- give a true and fair view of the state of the charity's affairs as of 30 September 2022 and of the charity's net movement in funds for the year then ended.
- have been properly prepared in accordance with United Kingdom Generally Accepted Accounting Practice; and
- have been prepared in accordance with the requirements of the Charities Act 2011.

Basis for opinion

We have been appointed as auditor under section 144 of the Charities Act 2011 and report in accordance with the Act and relevant regulations made or having effect thereunder. We conducted our audit in accordance with International Standards on Auditing (UK) (ISAs (UK)) and applicable law. Our responsibilities under those standards are further described in the Auditor's responsibilities for the audit of the financial statements section of our report. We are independent of the charity in accordance with the ethical requirements that are relevant to our audit of the financial statements in the UK, including the FRC's Ethical Standard, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Responsibilities of trustees for the financial statements

The trustees are responsible for the preparation of the financial statements and for being satisfied that they give a true and fair view, and for such internal control as the trustees determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the trustees are responsible for assessing the charity's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the trustees either intend to liquidate the charity or to cease operations, or have no realistic alternative but to do so.

Auditor's responsibilities for the audit of the financial statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance but is not a guarantee that an audit conducted in accordance with ISAs (UK) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

A further description of our responsibilities for the audit of the financial statements is located on the Financial Reporting Council's website at: www.frc.org.uk/auditorsresponsibilities. This description forms part of our auditor's report.

Conclusions relating to going concern

In auditing the financial statements, we have concluded that the trustees' use of the going concern basis of accounting in the preparation of the financial statements is appropriate.

Based on the work we have performed, we have not identified any material uncertainties relating to events or conditions that, individually or collectively, may cast significant doubt on the charity's ability to continue as a going concern for a period of at least twelve months from when the financial statements are authorised for issue.

Other information

The trustees are responsible for the other information. The other information comprises the information included in the Board of Trustees' Report. Our opinion on the financial statements does not cover the other information and, except to the extent otherwise explicitly stated in our report, we do not express any form of assurance conclusion thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements, or our knowledge obtained in the audit or otherwise appears to be materially misstated. If we identify such material inconsistencies or apparent material misstatements, we are required to determine whether there is a material misstatement in the financial statements or a material misstatement of the other information. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Matters on which we are required to report by exception

We have nothing to report in respect of the following matters in relation to which the Charities (Accounts and Reports) Regulations 2008 require us to report to you if, in our opinion:

- adequate accounting records have not been kept by the charity; or
- sufficient accounting records have not been kept; or
- the financial statements are not in agreement with the accounting records and returns; or
- we have not received all the information and explanations we require for our audit.

Use of our report

This report is made solely to the charity's trustees, as a body, in accordance with section 144 of the Charities Act 2011 and regulations made under section 154 of that Act. Our audit work has been undertaken so that we might state to the charity's trustees those matters we are required to state to them in an Auditor's report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the charity's trustees as a body for our audit work, for this report, or for the opinions we have formed.

Haysmacintyre LLP

Statutory Auditors

SUMMARY STATEMENT OF FINANCIAL ACTIVITIES FOR THE YEAR ENDED 30 SEP 2022

	Unrestricted Funds £	Restricted Funds £	Endowment Funds £	Total 2022 £	Total 2021 £
Income and expenditure					
Income and endowments from:					
Charitable Activities					
Membership	924,025			924,025	898,492
Events	239,559			239,559	99,003
Publications	569,451			569,451	528,052
Grants, Donations and legacies	32			32	7
Investment income	130,360	82,803		213,163	197,656
Total income and endowments	<u>1,863,427</u>	<u>82,803</u>	<u></u>	<u>1,946,230</u>	<u>1,723,210</u>
Expenditure on:					
Charitable Activities					
Membership	703,772	14,370		718,142	852,051
Events	463,400	952		464,352	308,498
Publications	941,655	2,637		944,292	962,393
Total expenditure	<u>2,108,827</u>	<u>17,959</u>	<u></u>	<u>2,126,786</u>	<u>2,122,942</u>
Net income before investment gains/losses	(245,400)	64,845		(180,556)	(399,732)
Gain/(loss) on investment assets	(151,874)	(5,495)	(17,515)	(174,884)	880,820
Net income before transfers	<u>(397,275)</u>	<u>59,350</u>	<u>(17,515)</u>	<u>(355,440)</u>	<u>481,088</u>
Transfers between funds	38,000	(38,000)	-	-	-
Net movement in funds	<u>(359,275)</u>	<u>21,350</u>	<u>(17,515)</u>	<u>(355,440)</u>	<u>481,088</u>
Reconciliation of funds					
Total funds brought forward	<u>7,624,470</u>	<u>312,362</u>	<u>1,592,805</u>	<u>9,529,636</u>	<u>9,048,548</u>
Total funds carried forward	<u>7,265,195</u>	<u>333,712</u>	<u>1,575,290</u>	<u>9,174,197</u>	<u>9,529,636</u>

All amounts relate to continuing activities.

BALANCE SHEET AS AT 30 SEPTEMBER 2022

	2022		2021	
	£	£	£	£
FIXED ASSETS				
Tangible assets		5,461,254		5,296,288
Investments		3,499,872		4,074,756
		<u>8,961,126</u>		<u>9,371,044</u>
CURRENT ASSETS				
Debtors	152,499		122,442	
Cash at bank and in hand	487,266		455,164	
	<u>639,765</u>		<u>577,606</u>	
CREDITORS: amounts falling due within one year	(426,694)		(419,014)	
NET CURRENT ASSETS		213,071		158,592
NET ASSETS		<u>9,174,197</u>		<u>9,529,636</u>
CHARITY FUNDS				
Unrestricted funds				
General funds		7,265,195		7,624,470
Restricted		333,712		312,361
Endowment		1,575,290		1,592,805
		<u>9,174,197</u>		<u>9,529,636</u>

The financial statements were approved and authorised for issue by the Board of Trustees on 10 January 2023 and signed on their behalf by:

J Frier
Trustee

STATEMENT OF CASHFLOWS FOR THE YEAR ENDING 30 SEPTEMBER 2022

	2022 £	2022 £	2021 £	2021 £
Operating activities				
Net income before investment gains	(180,556)		(399,732)	
Depreciation	75,967		79,879	
Impairment of fixed assets	-		122,778	
Investment income	(213,163)		(197,656)	
(Increase)/decrease in debtors	(30,059)		74,433	
Increase in creditors	7,678		22,571	
	<u> </u>		<u> </u>	
Net cash from operating activities		(340,129)		(297,727)
Investing activities				
Purchase of tangible fixed assets	(241,963)		(90,182)	
Purchase of investments	(3,000,000)		-	
Investment income	213,163		197,656	
Proceeds from Sale of tangible fixed assets	1,033		894	
Proceeds from sale of investment	3,400,000		244,049	
	<u> </u>		<u> </u>	
Net cash from investing activities		372,233		352,417
Movement in cash and cash equivalents		(32,102)		54,690
Cash and cash equivalents at 1 October 2021		455,164		400,474
Cash and cash equivalents at 30 September 2022		<u>487,266</u>		<u>455,164</u>
Cash and cash equivalents comprise				
Cash at bank		<u>487,266</u>		<u>455,165</u>
Analysis of changes in net debt	Balance at 1 Oct 2021	Cash flow	Other movements	Balance at 30 Sep 2022
Cash at bank	<u>455,164</u>	<u>32,102</u>	<u>£-</u>	<u>487,266</u>