

THE INTERNATIONAL COUNCIL OF THE AERONAUTICAL SCIENCES



Current information



ICAS Family members

ROYAL AERONAUTICAL SOCIETY









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International Council of

the Aeronautical Sciences





















The International Council of the Aeronautical Sciences intends to provide regularly scheduled events and publications that enable a

better understanding of engineering science and practice and an improved level of cooperation

among aeronautical professionals from around the world

STRATEGIC

- Facilitate the exchange of ideas, information, and understanding about the body of aeronautics knowledge among the *international* community so that important research can proceed rapidly
- Expose the *international* research community to challenges and issues through lectures by leading experts in aeronautics and related technologies
- Engage young people in the **global** aeronautical community through special events and prizes
- Create a vibrant *international* network that produces increased understanding, appreciation, and tolerance among participants



OPERATIONAL

- Implement our objectives through the involvement of appointed representatives of our Member Societies and the valued advice and counsel of our Associated Members
- Provide a biennial Congress to present useful, high quality work from worldwide research and technology organizations to all interested engineers and scientists
- Provide articulate experts to challenge our global community on issues of specific interest to aeronautics

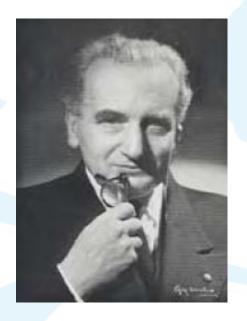
OPERATIONAL

- Provide supporting sessions and papers to meetings of Member Societies and Associated Members upon request
- Provide global recognition for key leaders and researchers in aeronautics through several prestigious awards
- Provide a global platform for early career professional and students to begin to develop an international network of colleagues



The early years

In 1957 Theodore von Karman founded ICAS as a non-government not-for-profit scientific organization to encourage the free international exchange of information on aeronautical research and technology





The early years

ICAS Founding members in 1957



AISSION OBJECTIVE HISTOR

HISTORY ORGANISATION



ICAS Congresses

1958	Spain - Madrid	1988	Israel - Jerusalem	2018	Brazil – Belo Horizonte			
	·							
	Switzerland - Zurich		Sweden - Stockholm		China – Shanghai/hybrid			
1962	Sweden - Stockholm	1992	China - Beijing	2022	Sweden –Stockholm			
1964	France - Paris	1994	United States - Anaheim		Italy – Florence			
1966	United Kingdom - London	1996	Italy - Sorrento	2026	Australia - Sydney			
1968	Germany - Munich	1998	Australia - Melbourne					
1970	Italy - Rome	2000	United Kingdom - Harrogate					
1972	The Netherlands - Amsterdam	2002	Canada – Toronto					
1974	Israel - Haifa	2004	Japan – Yokohama					
1976	Canada – Ottawa	2006	Germany – Hamburg					
1978	Portugal – Lisbon	2008	United States - Anchorage					
1980	Germany – Munich	2010	France - Nice					
1982	United States – Seattle	2012	Australia – Brisbane					
1984	France – Toulouse	2014	Russia – St. Petersburg					
1986	United Kingdom – London	2016	Korea - Daejeon					



International Council of the Aeronautical Sciences

Workshop/ ETF-History

- **2003 Italy Sorrento:** *Towards a Global Vision for Aeronautics*
- **Greece Mykonos:** Towards a global vision for Aviation Safety and Security
- **Spain Seville :** *UAV Airworthiness certification and access to the airspace*
- The Netherlands Amsterdam: Aviation and Environment
- **Sweden Stockholm:** Advanced materials & manufacturing Certification & Operational Challenges
- **South Africa Cape Town:** *The More Electrical Aircraft: Achievements and perspectives for the future*
- **Poland Krakow:** Complex Systems Integration in Aeronautics
- **Switzerland Winterthur:** *Intelligent and Autonomous Technologies in Aeronautics*
- **Australia Melbourne:** Digital Transformation in Aerospace
- 2023 Japan - Kyoto: Urban Air Mobility
- **2025** Czech Republic Brno: Topic tbd



Organisation



Main Bodies

- Council
- Executive Committee (EC)
- Programme Committee (PC)



Regulatory Documents

- Statutes
- Internal Regulations





Council

- "ICAS General Assembly"
- Representation of the Members
- Members of the ICAS EC can not be representatives in the Council
- ICAS President is the Chair of the Council Meeting





Executive Committee (EC)

- "ICAS Management"
- Appointed by the Council
- Voted for a two-year-cycle
- Meets at least twice a year in person

ORGANISATION



EXECUTIVE COMMITTEE

Executive Committee 2023/2024













President: Dimitri Mavris, USA



PC Chair: Chris Atkin, UK



Treasurer: Roland Gerhards, Germany



Past President: Joao Azevedo, Brazil



Executive Secretary: Axel Probst, Germany



ORGANISATION



EXECUTIVE COMMITTEE

Executive Committee 2023/2024













Chair of the Honorary Fellows Advisory Group: Susan Ying



Chair of the Programme Planning Sub-Committee: Gunnar Holmberg



Chair of the Membership & External Relations SC: Sara Bagassi



Chair of the Strategic Planning Sub-Committee: Fay Collier



Members at Large: Xin Guo Zhang



Michel Peters



Axel Krein



Associated to ICAS EC 2024: Marco Petrolo







Programme Committee (PC)

- "ICAS Work-Committee"
- Meets every year
- Members are chosen by qualification (from industry & academia)
- The current members are:

ORGANISATION

International Council of the Aeronautical Sciences

PROGRAMME COMMITTEE



Members of the ICAS Programme Committee 2023-2024

Andrea Alaimo, IT Maurilio Albanese, BR

Ken **Anderson**, AU Adriana Andreeeva-Mori, JP Chris Atkin, UK

João Azevedo, BR Sara Bagassi, IT Javid **Bayandor**, AU

Michael Benner, CA

Gaudy Bezos O Connor, US

Cees Bil, AU Anders Blom, SE

Christian Breitsamter, DE

Pedro Camanho, PT

Luis Campos, PT Jun Che, CN Yingchun Chen, CN Fay Collier, US

Maria Consiglio, US Sheila Conway, US

Yuval **Dagan**, IL

Matteo Filippi, IT Billy Fredriksson, SE Sona Fu, CN

Yongling Fu, CN

Zenghong Gao, CN

Roland Gerhards, DE

Tom Gibson, UK

Tomasz G.-Grabowski, PL

Erwin Gowree, UK Dongdong Gu, CN

Eduardo Guevara, CL

Gustavo Halila, BR

Jay **Han**, KR

Masatoshi Harigae, JP Frank Haselbach, UK

Gunnar Holmberg, SE

Tagashige Ikeda, JP

Eri Itoh, JP

Liping Jiang, CN Marcus Johnson, US

Jaroslav Juracka, CZ

Mikko Kanerva, FI

Michael Kelly, US

Youdan Kim, KR

Lukasz Kiszkowiak, PL

Kyriakos Kourousis, GR

Axel Krein, DE Petter Krus, SE

Cristina Leone, IT

Bok Jik Lee, KR

Chang-Hún Lee, KR

Alejandro Lopez, CL

Mario Lott, BR

Chrisitian Mari, FR Per-Olof Marklund, SWE

David Maroney, US

Dimitri Mavris, US

Joris **Melkert**, NL Jacek Mieloszyk, PL

Vasileios Miliotis, GR

John Monk, ZA

Rvoto Mori, JP

Detlef Mueller-Wiesner, DE

Björn **Nagel**, DE

John Nairus, US

Fabrizio Nicolosi, IT

Paulo Oliveira, PT

Mattia Padulo, FR Michel Peters, NL

Olivia Pinon-Fischer, US

Marco Petrolo, IT

Martiqua Post, US

Prajwal **Prakasha**, DE Christian Puebla, CL

Domingos Rade, BR

Bosko Rasuo, RS

Karl Rein-Weston, US

Sergio Ricci, IT

Kenichi Rinoie, JP Daniel Rohacs, HU

Tomasz **Rogalski**, PL

Ricardo Saez, CL

Megan Scheidt, US

Peter **Schmollgruber**, FR

Murray **Scott**, AU

Vitaly **Shaferman**. IL

Yaoxing Shang, CN

Konstantinos Stamoulis, GR

Bruno **Stoufflet**, FR

Eike Stumpf, DE

Shinii Suzuki, JP

Helmut Toebben, DE

Paul Vijgen, US Nicole Viola, IT

Andrea Viviani, IT

Angela Vozella, IT

Rich Wahls, US Tung Wan, TW

Yoko Watanabe, JP

Susan Ying, US

Xin Guo Zhana, CN

Yanzhong Zhang, CN David Zingg, CA

PC CHAIR

NEW MEMBERS

JOHN J GREEN AWARDEE(s)

Currently 104 members, as of 26 January, 2024

SECRETARIAT

ICAS Permanent Secretariat

- ICAS Executive Secretary (currently Axel Probst)
- ICAS Coordinator (currently Bodo Heinrichs)
- Always hosted by an ICAS Member (currently Germany DGLR)



AISSION OBJECTIVE HISTORY ORGANISATION



ICAS Statutes



STATUTES

of the Association

INTERNATIONAL COUNCIL OF THE AERONAUTICAL SCIENCES

Brisbane, September 26, 2012



ICAS Internal Regulations

Related to the ICAS Statutes adopted in 2012

Internal regulations modified December 2023 (various items) and Sept 2014 (section IR(C)-01) due to Council decision about new membership fee structure.

SION OBJECTIVE HISTORY ORGANISATION

International Council of the Aeronautical Sciences

SUB-COMMITTEES

- Programme Planning Sub-Committee (PPSC) Chair: individually chosen from EC - Currently: Gunnar Holmberg
- Honors & Awards Sub-Committee Chair: Past President - Currently: Joao Azevedo
- Finance Sub-Committee Chair: Treasurer - Currently: Roland Gerhards
- Strategic Planning Sub-Committee (SPSC) Chair: individually chosen from EC - Currently: Fay Collier
- Membership & External Relationship Sub-Committee (MERSC) Chair: individually chosen from EC - Currently: Sara Bagassi
- Student Awards Selection Sub-Committee Chair: individually chosen by the EC - Currently: Karl Rein-Weston
- Early Career Sub-Committee Chair: individually chosen by the EC - Currently: Prajwal Prakasha
- Digital Planning Sub-Committee Chair: individually chosen by the EC - Currently: Björn Nagel

MISSION

ORGANISATION

MEMBER SOCIETIES

International Council of the Aeronautical Sciences























Shaping the Future of Aerospace





DGLR

3AE



























ORGANISATION

ASSOCIATE MEMBERS



















(CIRA









































SAFRAN







COOPERATIONS

To achieve its objectives and foster greater exchange of knowledge ICAS proudly cooperates with the following organisations:









MISSION OBJECTIVE HISTORY

ORGANISATION

CYCLE TO A CONGRESS



Odd year (e.g. 2023)

- April: Proposals for Congress Venues +5 years (e.g. 2028)
- May: EC Meeting
- <u>June</u>: Call for papers
- <u>September</u>: Emerging Tech Forum
 & PC meeting, 2023 in Kyoto, Japan
- November: Agreement with 2024 Congress hosting society signed

Even year (e.g. 2024)

- <u>January</u>: Deadline for abstract submission
- <u>February</u>: PC meeting online with discussion of the technical programme
- April: Release of the Preliminary Programme
- May: EC Meeting
- <u>June</u>: Paper upload to Journals
- <u>September</u>: Congress, 2024 in Florence, Italy



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ORGANISATION

International Council of the Aeronautical Sciences

Topic Areas 2024

- 1. Aircraft Design and Integrated Systems
- 2. Systems Engineering and Integration
- 3.1 Aerodynamics CFD Methods and Validation
- **3.2 Experimental Aerodynamics**
- 3.3 Basic Fluid Dynamics and Flow Control
- **3.4 Applied Aerodynamics**
- 4.1 Material Issues, Fatigue and Damage Tolerance
- 4.2 Structural Analysis and Design, Structural Dynamics and Aeroelasticity
- 5. Propulsion and Energy
- 6.1 Flight Dynamics and Control (Control & Modelling)
- **6.2 Flight Dynamics and Control (UAV Related)**
- 7. Systems, Subsystems and Equipment
- 8. Manufacturing and Supply Chain Management
- 9. Air Transport System Efficiency
- 10. Safety and Security
- 11. Operations and Sustainment
- 12. Education and Training

MISSION OBJECTIVE HISTORY

ORGANISATION

International Council of the Aeronautical Sciences

AWARDS

ICAS Daniel and Florence Guggenheim Award

To recognise and honour a scientist or engineer of eminence who in a long and productive career has made a significant contribution to progress in aeronautics



ICAS von Karman Award for International Cooperation in Aeronautics

To acknowledge exceptional achievement in international cooperation in the field of aeronautics, being awarded to a project or programme in which two or more countries are major participants and which is characterized by substantial technical achievement, scientific or technological advance or benefit to society







ICAS Award for Innovation in Aeronautics

To recognize contributions of an individual or a team in effectively integrating a suite of advanced technologies, combined with new design and/or manufacturing processes, to create a new aeronautical system with significant worldwide impact







Explanation: The Award includes:









MISSION OBJECTIVE HISTOR

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AWARDS

ICAS Maurice Roy Award

To honour persons of distinction who have an exceptional record in fostering international cooperation in the field of aeronautics





ICAS John J. Green Award

To honour young persons of distinction who are demonstrating an exceptional record in fostering international cooperation between scientists, technologists and engineers by their personal participation and involvement in aeronautics





PC

ICAS IFAR Award

To recognize the completeness, actuality and comprehensiveness of a delivered PhD Thesis





Explanation: The Award includes:









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AWARDS

ICAS John Mc Carthy Student Award

To honour students working in scientific research in aeronautics by the quality of content and presentation of which is judged to be the best or second best of the student papers presented at the Congress







ICAS Honorary Fellowship

To honour to individuals who in the opinion of the Council have distinguished themselves by virtue of their exceptional personal contributions, or through exceptional service to the objectives of ICAS over an extended period of time



ICAS Award for Distinguished Service to ICAS

To honour to individuals who in the opinion of the Council have distinguished themselves by virtue of their exceptional personal contributions, or through exceptional service to the objectives of ICAS over an extended period of time



Explanation: The Award includes:









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AWARDS

Honorary Fellowship (current members)



Current Chair of the Honorary Fellows Advisory Group: Susan Ying

C.D. Mc Carthy	US	2000	I. Poll	UK	2012
B.J. Laschka	DE	2002	A. Gustafsson	SE	2012
JP. Marek	FR	2004	D. Müller-Wiesner	DE	2014
S. Kobayakawa	JP	2006	M. Scott	AU	2016
G.M. Carlomagno	IT	2008	C. Mari	FR	2018
J. Hefner	US	2008	S. Ying	US	2020
F. Abbink	NL	2010	J. Szodruch	DE	2020
B. Fredriksson	SE	2010	S. Suzuki	JP	2022
R. Bengelink	US	2012			

The ICAS Council may grant the status of "Honorary Fellow" to individuals who have distinguished themselves by virtue of their exceptional personal contributions, or through exceptional service to the objectives of ICAS.



THE VALUE OF ICAS

How do we know the latest issues and hot topics in global aeronautical sciences?

Who do we network to gain knowledge of the state-of-the-art developments?

What are the latest and greatest innovations and achievements by the aeronautical communities including industry, academia and research laboratories?



THE VALUE OF ICAS

ICAS provides a *global* support network to each of its Member and Associate Members. Through these societies it provides access to leading members of the world-wide aeronautical community

Through its *global* meetings and programs ICAS provides an opportunity for early career professionals and students to develop an international network of colleagues and peers

ICAS provides significant coverage of the financial risk for the local society involved in the sponsorship of a biennial Congress





ICAS currently serves as **the only world-wide** supernational organization to represent aeronautical engineering professional societies and associated organizations and their members



























AEROSPACE · DEFENCE · SECURITY











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ROYAL AERONAUTICAL SOCIETY























中国航空学会





















International Council of the Aeronautical Sciences



















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Department of Defence Defence Science and Technology Group



























Thank you for your attention



Please follow us on:









Should you have any questions, please contact the ICAS Secretariat at icas@icas.org