THE INTERNATIONAL COUNCIL OF THE AERONAUTICAL SCIENCES

Current information
Covering the world of aeronautics
ICAS Family members
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**
• 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.
• 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 world-wide 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
• 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
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.
ICAS Founding members in 1957
<table>
<thead>
<tr>
<th>Year</th>
<th>Country</th>
<th>City</th>
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<tbody>
<tr>
<td>1958</td>
<td>Spain</td>
<td>Madrid</td>
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<td>1960</td>
<td>Switzerland</td>
<td>Zurich</td>
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<td>1962</td>
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<td>1972</td>
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<td>1976</td>
<td>Canada</td>
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<td>1978</td>
<td>Portugal</td>
<td>Lisbon</td>
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<td>1980</td>
<td>Germany</td>
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<td>1988</td>
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<td>1990</td>
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<td>1992</td>
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<td>1994</td>
<td>United States</td>
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<td>1996</td>
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<td>1998</td>
<td>Australia</td>
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<td>2002</td>
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<td>2004</td>
<td>Japan</td>
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<td>2006</td>
<td>Germany</td>
<td>Hamburg</td>
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<td>2008</td>
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<td>2010</td>
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<td>Nice</td>
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<td>2012</td>
<td>Australia</td>
<td>Brisbane</td>
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<td>2014</td>
<td>Russia</td>
<td>St. Petersburg</td>
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<td>2016</td>
<td>Korea</td>
<td>Daejeon</td>
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<td>2018</td>
<td>Brazil</td>
<td>Belo Horizonte</td>
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<td>2021</td>
<td>China</td>
<td>Shanghai/hybrid</td>
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<td>2022</td>
<td>Sweden</td>
<td>Stockholm</td>
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<td>2024</td>
<td>Italy</td>
<td>Florence</td>
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<td>2026</td>
<td>Australia</td>
<td>Sydney</td>
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2003  Italy – Sorrento  
Towards a Global Vision for Aeronautics

2005  Greece – Mykonos  
Towards a global vision for Aviation Safety and Security

2007  Spain – Seville  
UAV Airworthiness – certification and access to the airspace

2009  The Netherlands – Amsterdam  
Aviation and Environment

2011  Sweden – Stockholm  
Advanced materials & manufacturing – Certification & Operational Challenges

2013  South Africa – Cape Town  
The More Electrical Aircraft: Achievements and perspectives for the future

2015  Poland – Krakow  
Complex Systems Integration in Aeronautics

2017  Switzerland – Winterthur  
Intelligent and Autonomous Technologies in Aeronautics

2019  Australia – Melbourne  
Digital Transformation in Aerospace

2019  Australia – Melbourne  
Digital Transformation in Aerospace

2023  Japan - Kyoto  
Urban Air Mobility tbc
Organisation

Main Bodies

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

Regulatory Documents

- Statutes
- Internal Regulations

Covering the world of aeronautics
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
Executive Committee 2021/2022

- President: Joao Azevedo, Brazil
- PC Chair: Dimitri Mavris, U.S.A.
- Treasurer: Gunnar Holmberg, Sweden
- Past President: Shinji Suzuki, Japan
- Executive Secretary: Axel Probst, Germany
Executive Committee 2021/2022

- Chair of the **Honorary Fellows Advisory Group**: Murray Scott
- Chair of the **Programme Planning Sub-Committee**: Chris Atkin
- Chair of the **Membership & External Relations SC**: Sebastien Remy
- Chair of the **Strategic Planning Sub-Committee**: Michel Peters
- Members at Large: Xin Guo Zhang, Sergej Chernyshev, Roland Gerhards, Sara Bagassi, Faye Collier
- Associated to ICAS EC 2022: Anders Gustafsson
Programme Committee (PC)

- “ICAS Work-Committee”
- Meets every year
- Members are chosen by qualification (from industry & academia)
- The current members are:
MISSION | OBJECTIVE | HISTORY | ORGANISATION
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PROGRAMME COMMITTEE

Covering the world of aeronautics

A. Alaimo, IT
L. Alves, BR
G. A. Amiryants, RU
K. Anderson, AU
A. Andreeeva-Mori, JP
C. Atkin, UK
J.L.F. Azevedo, BR
S. Bagassi, IT
J. Bayandor, AU
E. Belo, BR
G. Bezos O Connor, US
C. Bil, AU
A. Blom, SE
Ch. Breitsamter, DE
P. Camanho, PT
L. Campos, PT
Y. C. Chen, CN
F. Collier, US
M. Consiglio, US
S. Conway, US
H. Djojodihardjo, ID
B. Fredriksson, SE
S. Fu, CN
Y.L. Fu, CN

NEW MEMBERS

Z.H Gao, CN
R. Gerhards, DE
T. Gibson, UK
T. G.-Grabowski, PL
Z. Goraj, PL
E. Gowree, UK
D. Gu, CN
G. Halila, BR
J.H. Han, KR
M. Harigae, JP
F. Haselbach, UK
G. Holmberg, SE
T. Ikeda, JP
A. Isikveren, FR
E. Itoh, JP
L.P. Jiang, CN
J. Juracka, CZ
M. Kanerva, FI
Y. Kim, KR
B. Kimmel, US
L. Kiszkowiak, PL
A. Krein, DE
P. Krus, SE
M. Lott, BR
L. Manfriani, CH
R. Mange, US
F. Marulo, IT
F. Mastroddi, IT
D. Mavris, US
J. Melkert, NL
J. Mieloszyk, PL
A. Mirzoyan, RU
J. Monk, ZA
R. Mori, JP
D. Mueller-Wiesner, DE
B. Nagel, DE
J. Nairus, US
P. Oliveira, PT
M. Padulo, FR
M. Peters, NL
O. Pinon-Fischer, US
P. Prakash, DE
O. Rand, IL
B. Rasuo, RS
K. Rein-Weston, US
S. Remy, FR
S. Ricci, IT
K. Rinoie, JP
D. Rohacs, HU
T. Rogalski, PL
C. Mari, FR
M. Scheidt, US
P. Schmollgruber, FR
M. Scott, AU
Y. Shang, CN
P. Stezicky, PL
B. Stoufflet, FR
E. Stumpf, DE
S. Suzuki, JP
H. Toebben, DE
P. Vigen, US
N. Viola, IT
A. Viviani, IT
N. Voevodenko, RU
R. Wahls, US
T. Wan, TW
Y. Watanabe, JP
I. Yimer, CA
S. Ying, US
X.G. Zhang, CN
Y. Zhang, CN
D. Zingg, CA

Currently 96 members, as of 29.07.2022
ICAS Permanent Secretariat

- ICAS Executive Secretary (currently Axel Probst)
- ICAS Coordinator (currently Bodo Heinrichs)
- Always hosted by an ICAS Member (currently Germany DGLR)
• Programme Planning Sub-Committee (PPSC)
  Chair: individually chosen from EC  Currently: Chris Atkin

• Honors & Awards Sub-Committee
  Chair: Past President  Currently: Shinji Suzuki

• Finance Sub-Committee
  Chair: Treasurer  Currently: Gunnar Holmberg

• Strategic Planning Sub-Committee (SPSC)
  Chair: individually chosen from EC  Currently: Michel Peters

• Membership & External Relationship Sub-Committee (MERSC)
  Chair: individually chosen from EC  Currently: Sebastien Remy

• Student Awards Selection Sub-Committee
  Chair: individually chosen from 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
To achieve its objectives and foster greater exchange of knowledge ICAS proudly cooperates with the following organisations:
Odd year (e.g. 2023)

- **April**: Proposals for Congress
  Venues +5 years (e.g. 2028)
- **May**: EC Meeting
- **June**: Call for papers
- **September**: Emerging Tech Forum & PC meeting
- **November**: Agreement with 2024 Congress hosting society signed

Even year (e.g. 2024)

- **February**: Deadline for abstract submission
- **February**: PC meeting online with discussion of the technical programme
- **April**: Release of the Preliminary Programme
- **May**: EC Meeting
- **June**: Paper upload to Journals
- **September**: Congress
As the 2020 Congress in Shanghai was postponed to 2021, we will have two Congresses in the two-year cycle of 2021-2022 (for the first time in ICAS history).

The 2022 Congress will be held in Stockholm, Sweden:

The 2024 Congress will be held in Florence, Italy.
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
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.

Explanation: The Award includes:
- Lecture
- Certificate
- Medal
- Money

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.
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

ICAS IFAR Award
To recognize the completeness, actuality and comprehensiveness of a delivered PhD Thesis
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 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 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
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 in 32 countries.
Thank you for your attention

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