



International Council of
the Aeronautical Sciences

THE INTERNATIONAL COUNCIL OF THE AERONAUTICAL SCIENCES





International Council of
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INTERNATIONAL COUNCIL OF THE AERONAUTICAL SCIENCES

Covering the world of Aeronautics



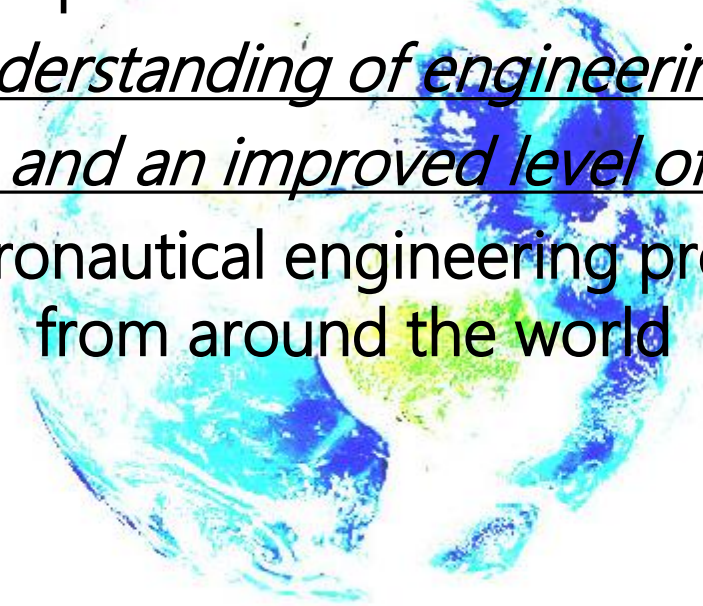


International Council of
the Aeronautical Sciences

INTERNATIONAL COUNCIL OF THE AERONAUTICAL SCIENCES

MISSION OBJECTIVE HISTORY ORGANISATION

The International Council of 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 engineering professionals
from around the world



Covering the world of Aeronautics



International Council of
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INTERNATIONAL COUNCIL OF THE AERONAUTICAL SCIENCES

MISSION **OBJECTIVE** HISTORY ORGANISATION 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 its 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



Covering the world of Aeronautics

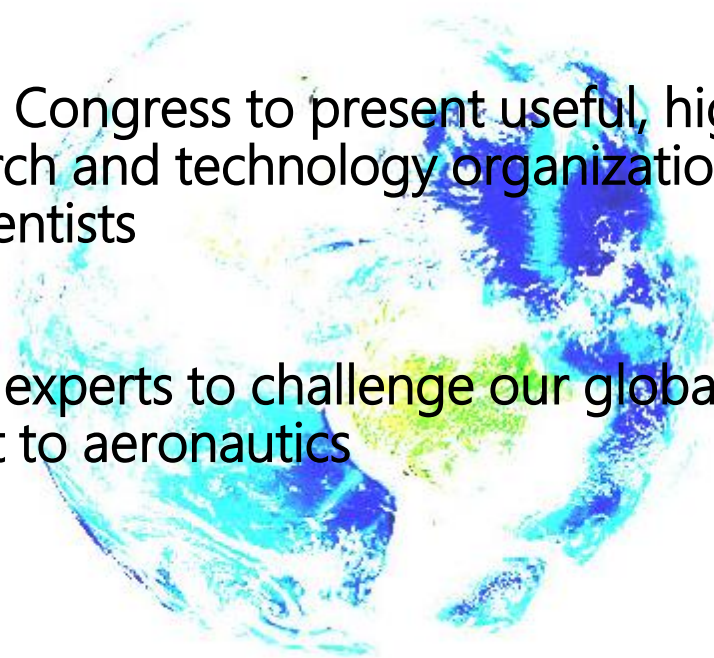


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INTERNATIONAL COUNCIL OF THE AERONAUTICAL SCIENCES

MISSION **OBJECTIVE** HISTORY ORGANISATION
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 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



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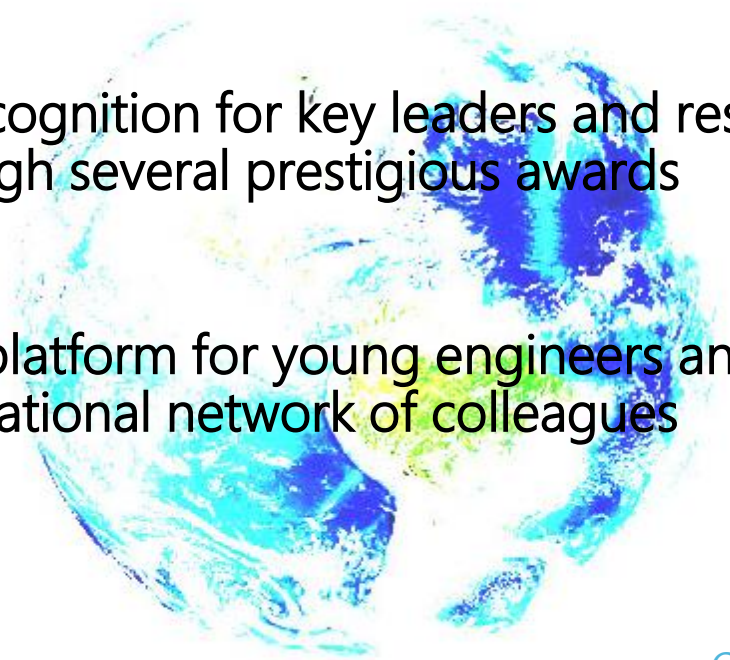


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MISSION **OBJECTIVE** HISTORY ORGANISATION
OPERATIONAL

- 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 young engineers and students to begin to develop an international network of colleagues



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MISSION OBJECTIVE **HISTORY** ORGANISATION

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



Theodore van Karman
ICAS President 1957-1963



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MISSION OBJECTIVE **HISTORY** ORGANISATION





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MISSION OBJECTIVE **HISTORY** ORGANISATION

CONGRESS HISTORY

1958	Spain - Madrid	1994	United States - Anaheim
1960	Switzerland - Zurich	1996	Italy - Sorrento
1962	Sweden - Stockholm	1998	Australia - Melbourne
1964	France - Paris	2000	United Kingdom - Harrogate
1966	United Kingdom - London	2002	Canada – Toronto
1968	Germany - Munich	2004	Japan – Yokohama
1970	Italy - Rome	2006	Germany – Hamburg
1972	Netherlands - Amsterdam	2008	United States - Anchorage
1974	Israel - Haifa	2010	France - Nice
1976	Canada - Ottawa	2012	Australia – Brisbane
1978	Portugal - Lisbon	2014	Russia – St. Petersburg
1980	Germany - Munich	2016	Korea - Daejeon
1982	United States – Seattle	2018	Brazil – Belo Horizonte
1984	France – Toulouse	2020	<i>China – Shanghai</i>
1986	United Kingdom – London	2022	<i>Sweden – Stockholm</i>
1988	Israel – Jerusalem		
1990	Sweden – Stockholm		
1992	China - Beijing		



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MISSION OBJECTIVE **HISTORY** ORGANISATION
WORKSHOP/ETF HISTORY

- 2005 Greece –Mykonos: *Towards a global vision for Aviation Safety and Security*
- 2007 Spain –Seville: *Advanced Materials & Manufacturing: Certification & Operational Challenge*
- 2009 The Netherlands-Amsterdam: *UAV Airworthiness – certification and access to the airspace*
- 2011 Sweden–Stockholm: *Advanced Materials&Manufacturing-Certification&Operational Challenges*
- 2013 South Africa–Capetown: *The More Electrical Aircraft :Achievements&perspectives for the future*
- 2015 Poland –Krakow: *Complex Systems Integration in Aeronautics*
- 2017 Switzerland – Winterthur: *Intelligent and Autonomous Technologies in Aeronautics*
- 2019 Australia-Melbourne: *Digitalization and Industry 4.0 for Aerospace*

ICAS Organisation



ICAS Main Bodies

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

Regulatory Documents

- ICAS Statutes
- ICAS Internal Regulations



ICAS Council

- “ICAS General Assembly”
- Representation of the Members
- Members of the ICAS EC can not be representatives in the Council
- ICAS President is Chair of the Council Meeting
- Council Meetings are held at the Congress



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INTERNATIONAL COUNCIL OF THE AERONAUTICAL SCIENCES

MISSION OBJECTIVE HISTORY **ORGANISATION**
ICAS MAIN BODIES



ICAS Executive Committee (EC)

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



ICAS Executive Committee (EC)

- Five Officers:
 - President
 - Past President
 - Treasurer
 - Chair of the Programme Committee
 - Executive Secretary
- Chair of the Honorary Fellows Advisory Group
- Plus not more than eight additional members



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INTERNATIONAL COUNCIL OF THE AERONAUTICAL SCIENCES

MISSION OBJECTIVE HISTORY ORGANISATION

ICAS MAIN BODIES

Current ICAS Executive Committee (EC)



- President: Shinji Suzuki, Japan 
- Chair Programme Committee: Joao Azevedo, Brazil 
- Treasurer: Gunnar Holmberg, Sweden 
- Past President: Susan Ying, U.S.A 
- Executive Secretary: Axel Probst, Germany 



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INTERNATIONAL COUNCIL OF THE AERONAUTICAL SCIENCES

MISSION OBJECTIVE HISTORY ORGANISATION

ICAS MAIN BODIES

Current ICAS Executive Committee (EC)



- Chair of the Honorary Fellows Advisory Group: Murray Scott 
- Chair of the Programme Planning Sub-Committee: Chris Atkin 
- Chair of the Strategic Planning Sub-Committee: Dimitri Mavris 
- Chair of the Members & External Relations SC: Michel Peters 
- Members at Large:
 - Xin Guo Zhang 
 - Zdobyslav Goraj 
 - Sebastien Remy 
 - Sergej Chernyshev 
 - Roland Gerhards 
- Associated to ICAS EC 2020: Yu Ce 

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MISSION OBJECTIVE HISTORY ORGANISATION

ICAS MAIN BODIES



ICAS Programme Committee (PC)

- “ICAS Work-Committee”
- Meets every year
- Members are chosen by qualification (industry & academia)



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MISSION OBJECTIVE HISTORY ORGANISATION

ICAS MAIN BODIES

ICAS Programme Committee (PC)

G. A. **Amiryants**, Russia
K. **Anderson**, Australia
C. **Atkin**, United Kingdom
J.L.F. **Azevedo**, Brazil
S. **Bagassi**, Italy
J. **Bayandor**, Australia
E. **Belo**, Brazil
E. **Bigarella**, Brazil
C. **Bil**, Australia
A. **Blom**, Sweden
Ch. **Breitsamter**,
Germany
Y. C. **Chen**, China
F. **Collier**, U.S.A.
S. **Conway**, U.S.A.
R. **Del Rosario**, U.S.A.
H. **Djojodihardjo**,
Indonesia
B. **Fredriksson**, Sweden
Y. **Fu**, China
S. **Fu**, China
Z. **Gao**, China

Y. **Kim**, Korea
B. **Kimmel**, U.S.A.
P. **Krus**, Sweden
L. **Manfriani**,
Switzerland
C. **Mari**, France
D. **Mavris**, U.S.A.
J. **Melkert**, The
Netherlands
A. **Mirzoyan**, Russia
J. **Monk**, South Africa
D. **Mueller-Wiesner**,
Germany
B. **Nagel**, Germany
J. **Nairus**, U.S.A.
M. **Peters**, The
Netherlands
O. **Rand**, Israel
B. **Rasuo**, Serbia
K. **Rein-Weston**,
U.S.A.
S. **Remy**, France

R. **Gerhards**, Germany
T. **Goetzendorf-Grab.**,
Poland
Z. **Goraj**, Poland
E. **Gowree**, United
Kingdom
J.H. **Han**, Korea
M. **Harigae**, Japan
F. **Haselbach**, United
Kingdom
C. **Hermans**, The
Netherlands
G. **Holmberg**, Sweden
T. **Ikeda**, Japan
A. **Isikveren**, France
E. **Itoh**, Japan
L. **Jiang**, China
J. **Juracka**, Czech
Republic
M. **Kanerva**, Finland

S. **Ricci**, Italy
K. **Rinoie**, Japan
M. **Scott**, Australia
P. **Stezycki**, Poland
B. **Stoufflet**, France
E. **Stumpf**, Germany
S. **Suzuki**, Japan
M. **Tavares**, Brazil
H. **Toeppen**, Germany
P. **Vijgen**, U.S.A.
N. **Voevodenko**,
Russia
T. **Wan**, Taiwan, China
I. **Yimer**, Canada
S. **Ying**, U.S.A.
X. **Zhang**, China
Y.Z. **Zhang**, China

Currently 68 members, as of 25.10.2018





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MISSION OBJECTIVE HISTORY ORGANISATION
ICAS MAIN BODIES

ICAS Permanent Secretariat

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





International Council of
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INTERNATIONAL COUNCIL OF THE AERONAUTICAL SCIENCES

MISSION OBJECTIVE HISTORY

ORGANISATION
REGULATORY DOCUMENTS

ICAS Statutes



ICAS Internal Regulations



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 Sept 2014 (section IR(C)-01) due to Council decision about new membership fee structure.

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MISSION OBJECTIVE HISTORY ORGANISATION

SUB COMMITTEES

- ICAS Honors & Awards Sub-Committee
Chair: ICAS Past President
- ICAS Finance Sub-Committee
Chair: ICAS Treasurer
- ICAS Strategic Planning Sub-Committee (SPSC)
Chair: individually chosen from EC
- ICAS Membership & External Relationship Sub-Committee (MERSC)
Chair: individually chosen from EC
- ICAS Student Awards Selection Sub-Committee
Chair: individually chosen from EC
- ICAS Young Professionals Sub-Committee
Chair: individually chosen from EC



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MISSION OBJECTIVE HISTORY ORGANISATION

MEMBER SOCIETIES



中国航空学会





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INTERNATIONAL COUNCIL OF THE AERONAUTICAL SCIENCES

MISSION OBJECTIVE HISTORY

ORGANISATION

ASSOCIATE MEMBERS





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INTERNATIONAL COUNCIL OF THE AERONAUTICAL SCIENCES

MISSION OBJECTIVE HISTORY ORGANISATION
COOPERATIONS





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INTERNATIONAL COUNCIL OF THE AERONAUTICAL SCIENCES

MISSION OBJECTIVE HISTORY ORGANISATION CYCLE TO A CONGRESS

Odd year (e.g. 2019)

- February: Call for Papers
- April: Proposals for Congress Venues +5 years (e.g. 2022)
- May: EC Meeting
- September: PC Meeting
- November: Acceptance of authors
- December: Agreement signed

Even year (e.g. 2020)

- February: Letters to invited authors
- March: Release of the Preliminary Programme
- May: EC Meeting
- June: Paper Review
- September: Congress

Decision of venue of the Congress: 4 years prior (2018 for 2022)



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MISSION OBJECTIVE HISTORY ORGANISATION
CYCLE TO A CONGRESS





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MISSION OBJECTIVE HISTORY ORGANISATION

ICAS TOPIC AREAS

Aircraft and System Integration
Aerodynamics – CFD Methods and Validation
Experimental Aerodynamics
Basic Fluid Dynamics and Flow Control
Applied Aerodynamics
Materials issues, Fatigue and Damage tolerance
Structural Analysis and Design, Structural Dynamics, Aeroelasticity
Propulsion and Energy
Flight Dynamic and Control (Control and Modeling)
Flight Dynamics and Control (UAV & Flight Experiment related)
Systems, Subsystems and Equipment
Manufacturing and Supply Chain Management
Air Transport System Efficiency
Safety and Security
Challenge of the Environment
Operations and Sustainment



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MISSION OBJECTIVE HISTORY ORGANISATION
ICAS AWARDS

ICAS Daniel and Florence Guggenheim Award



ICAS von Karman Award for International Cooperation in Aeronautics



ICAS Award for Innovation in Aeronautics



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

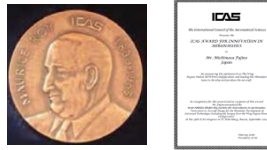


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ICAS AWARDS

ICAS Maurice Roy Award



ICAS John J. Green Award



PC

ICAS IFAR Award



ICAS John Mc Carthy Student Award



Explanation: The Award includes:



Lecture



Certificate



Medal



Money



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MISSION OBJECTIVE HISTORY ORGANISATION
ICAS AWARDS

ICAS Honorary Fellowship



ICAS Award for Distinguished Service to ICAS



Explanation: The Award includes:



Lecture -



Certificate -



Medal -



Money



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MISSION OBJECTIVE HISTORY ORGANISATION

ICAS AWARDS

ICAS Honorary Fellowship



F.J. Sterk	NL	1998	J. Hefner	US	2008
C.D. McCarthy	US	2000	F. Abbink	NL	2010
J. E. Green	UK	2002	B. Fredriksson	SE	2010
B.J. Laschka	DE	2002	R. Bengelink	US	2012
R.H. Petersen	US	2002	I. Poll	UK	2012
R.V. Harris	US	2002	A. Gustafsson	SE	2012
C. Dousset	FR	2002	D. Müller Wiesner	DE	2014
J.-P. Marec	FR	2004	M. Scott	AU	2016
S. Kobayakawa	JP	2006	C. Mari	FR	2018
G.M. Carlomagno	IT	2008			



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MISSION OBJECTIVE HISTORY ORGANISATION

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?





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MISSION OBJECTIVE HISTORY ORGANISATION

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 engineering community

Through its *global* meetings and programs ICAS provides an opportunity for students and young engineers 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





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ICAS currently serves as the only world-wide supernational organization to representative aeronautical engineering professional societies and associated organizations and their members in 32 countries





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Thank you for your attention

