

Welcome from the ICAS President



Dr. Joao Luiz Azevedo
President, International Council
of the Aeronautical Sciences

On behalf of the International Council of the Aeronautical Sciences (ICAS), it is my pleasure to welcome you to the 33rd ICAS Congress in Stockholm, Sweden. ICAS was established in 1957 under the leadership of Professor Theodore von Kármán and ICAS biennial congresses have been providing a forum for an open discussion of current and relevant topics in aeronautics since 1958. The collaborations and partnerships that have become a reality as a result of the opportunities provided by ICAS congresses demonstrate the value of such a high-level forum.

In 2022, the ICAS Congress is returning to Stockholm after 32 years. The last time that an ICAS Congress was held in Sweden was in 1990. Our Swedish colleagues have been hard at work, for quite some time now, and they are striving to uphold the ICAS tradition of bringing together a global array of topics and participants as ICAS Congresses constitute the only true international forum that covers the world of aeronautics. All of us at ICAS are very grateful for their efforts that will give us the opportunity to meet again, in-person, after the several difficulties generated by the Covid pandemic. We are also grateful to our sponsors for this year's congress, whose names will be prominently displayed in this program and throughout the congress venue.

The scientific portion of the congress will take place at the Stockholm Waterfront Congress Centre, which is a world-class facility, extremely conveniently located and that affords beautiful views of the Stockholm waterfront. I believe that our ICAS Program Committee has been able to put together an extremely strong and interesting technical program. As usual with our congresses, the technical program includes the award and general lectures as well as the parallel technical sessions. For the present Congress, there was a definite effort to also invite keynote talks for the various technical panels and, even, invite complete sessions that would address current topics of interest for our industry. Several of these invited sessions will allow for further in-depth discussion of issues addressed in the general lectures. Hence, topics such as certification by analysis, validation of computational tools, sustainable aviation and clean aviation, among other subjects, have all been included as invited sessions. In order to accommodate these additions to the technical program, 14 parallel sessions are being planned throughout the week. I am confident that you will find the technical program for the 33rd ICAS Congress to be insightful and relevant for the current needs of the aeronautical industry.

It is, therefore, with great pleasure that I extend to you my warmest welcome to Stockholm. I encourage you to actively participate in this year's ICAS Congress, taking advantage of the very encompassing technical, networking and cultural opportunities that have been prepared by our Swedish colleagues in the Local Organizing Committee and by the ICAS Program Committee. I am sure that the 2022 ICAS Congress will be a memorable experience.

Welcome by FTF & Innovair



Dr. Roland Karlsson
President, The Swedish Society
of Aeronautics and Astronautics



Dr. Anders Blom
Program Director, Innovair

Dear Colleagues,

On behalf of the Swedish Society of Aeronautics and Astronautics (FTF) and the Swedish Strategic Programme for Aeronautics (Innovair), we are proud to invite professionals from academia and industry, as well as governmental representatives, to attend the 33rd Congress of the International Council of the Aeronautical Sciences (ICAS).

ICAS 2022 shall be held at the Stockholm Waterfront Congress Centre in Sweden on 4-9 September 2022, and FTF and Innovair will host the event.

ICAS was established in 1957 as a non-government, non-profit scientific organisation with the mission to advance knowledge and facilitate collaboration in aeronautics. Today ICAS gathers members from 30 countries from five continents. One of the essential activities of ICAS is the biennial international Congress. Since the first ICAS Congress in Madrid in 1958, this has become the world's primary forum for aeronautical technology. The Congress attracts leading experts and leaders of top aerospace research centres, industries, universities, and representatives from governments. The topics of the Congress include the most recent scientific achievements in aeronautics and top priorities in the design of future generation aircraft, engines, and systems to cater for the greening of sustainable aviation. Moreover, the Congress is a unique platform for companies to showcase products and services and network with professionals worldwide. An essential part of the gathering is introducing and encouraging young people to enter the aeronautics sector via higher education and research activities.

Sweden has a long and successful tradition of designing and producing aircraft and propulsion systems, both for the civil and military markets, which are unique for a small country. Furthermore, the Swedish industry, and society, are well-known for efficient, innovative, and non-hierarchical organisations. Besides our big companies, there is a structured innovation system including academia, research institutes, and an increasing number of sub-contractors available in Sweden.

A large number of papers will be presented at ICAS 2022 Congress in Stockholm, together with an exhibition of products and services from world-leading companies, and we anticipate more than 800 delegates from some 40 countries to attend.

We very much look forward to welcoming you to ICAS 2022 in Stockholm.