



Message from the President of the International Council of the Aeronautical Sciences

It was with great pleasure that the International Council of the Aeronautical Sciences accepted the invitation from Japan Society for Aeronautical and Space Sciences (JSASS) to, for the first time, come to Japan to hold the 24th ICAS Congress in Yokohama 29 August – 3 September 2004.

At the inaugural meeting of ICAS in 1957, the vision set out by Theodore von Karman and the Founding Fathers was that the ICAS Congress should provide aeronautical scientists and engineers from all over the world with a forum in which they could meet to learn about new discoveries in aeronautical science, technology and products, exchange ideas and experiences and develop a friendly professional network free from cultural, political and ideological constraints. ICAS has served that vision well and over the years has increasingly established itself as the foremost international forum for aeronautical science and engineering. Today, special attention is being given to students and young engineers and scientists and the opportunity that the ICAS Congress provides for them to meet with colleagues from all over the world. We also must prepare for the increasingly global nature of our industry and the increasingly international nature of all aspects of aeronautical products, from research through development, production, operations, training and maintenance.

The global changes in the structure of the industry along with new priorities in R&T topic areas such as information technology, electronics, microsystems and system of systems solutions are challenges for our established scientific and engineering community. The ICAS Executive Committee and the Programme Committee are seriously watching these changes and are adjusting to today's and future requirements to support a healthy collaboration between academia, research and industry.

The call for Papers for the 24th Congress attracted over 520 submissions from 34 countries. From these, the ICAS Programme Committee, chaired by Jerry Hefner of USA, had the difficult task of selecting about 330 papers for presentation. The caliber of the authors and the quality of their submission were well up to the high standards set by previous ICAS Congresses and, as is evident from the programme set out in the following pages, ICAS 2004 promises to be a highly stimulating and rewarding event.

The City of Yokohama will provide a most attractive venue for the Congress and, on behalf of ICAS, I would like to thank the Japan Society for Aeronautical and Space Sciences for undertaking the substantial organizational task that is entailed in hosting this event. I am personally delighted that JSASS proposed Yokohama for 2004. I would also like to extend my grateful thanks to all authors who are sharing their work and ideas with us as well as to all session chairs who are bringing in their expertise. I have no doubt that, for everyone who participates in the Congress, it will be a meeting to remember.

Billy Fredriksson, President of ICAS



Message from the President of the Japan Society for Aeronautical and Space Sciences

I am delighted to invite you to attend the 24th congress of ICAS to be held in Japan for the first time, hosted by the Japan Society for the Aeronautical and Space Sciences.

Last year, we celebrated the centennial of the first powered flight by the Wright Brothers. The world has tremendously changed since 1903. We are still working hard for the development of this changing world and for the future of mankind.

The Congress will be held in Yokohama, which is the second largest city in Japan. Yokohama has been the principal port of Japan and has served as the gateway to the world through many years. Apart from the technical sessions for four days, delegates have a chance to attend the technical tour visiting Japanese aeronautical research facilities. Accompanying persons and delegates may enjoy Japanese scenic points around Yokohama, Japanese traditional cultural activities and historical points of interest in Japan back to the 8th century.

I am looking forward to meeting you at the 24th ICAS Congress in August.

Toshio Nagashima, President of JSASS

Supporting Organizations / Companies

ICAS 2004 is being supported by organizations and companies including: The Ministry of Education, Culture, Sports, Science and Technology; Yokohama City; Takahashi Industrial and Economic Research Foundation; Japan Aerospace Exploration Agency; Fuji Heavy Industries Ltd.; Ishikawajima-Harima Heavy Industries Co., Ltd.; Kawasaki Heavy Industries, Ltd.; Mitsubishi Heavy Industries, Ltd.; NIPPI Corporation; ShinMaywa Industries, Ltd. and a number of organizations and aerospace companies in Japan.