

## **IFAR – International Forum for Aviation Research**

### **Declaration Summit 2012**

13 - 14 October 2012, Nagoya, Japan

The International Forum for Aviation Research (IFAR) is the world's only aviation research establishment network connecting the government-supported aviation research community worldwide. IFAR aims to be a cooperative forum for exchange among aviation research organisations in view of the increasing demands for aviation research on a global level. IFAR aims to support its members in the implementation of their research aims. IFAR was founded in 2010. Currently 23 aviation research organizations are associated under the umbrella of IFAR on a voluntary, non-binding basis.

On the occasion of the Japan International Aerospace Exhibition 2012 in Nagoya this year's and 3rd "IFAR Summit 2012" was held in Nagoya, Japan at the Yagoto Koushoji Temple on 13 and 14 October 2012. Japan Aerospace Exploration Agency, JAXA, invited and hosted the high level representatives of 17 IFAR organisations. The IFAR Summit was preceded by the "JAXA Aeronautics Symposium in Nagoya" on 12 October 2012.

The IFAR member organisations acknowledged and decided:

- The basis of IFAR's organisation, work and cooperation is the **IFAR Charter** adopted at the second IFAR Summit in Paris 2011, and subsequently signed by all IFAR members. This underlines the strong confidence and commitment of the members in the mission and work of IFAR.
- Building on discussions at previous IFAR Summits in 2010 and 2011, the IFAR members will further intensify their scientific-technical discussions on common **IFAR focus areas** regarding the following topics:
  - Advance technologies and operational procedures to improve efficiency of air transportation and decrease the environmental impact of the aviation system.
  - Improve management of operations at and around airports to improve efficiency and environmental impact (e.g. noise).
  - Enable the use of alternative aviation fuels.
  - Increase air transportation system performance to safely enable projected growth in system operations.
  - Reduce the adverse impacts of weather on air traffic management decisions and operations.

Two technology lists on "efficiency of the air transport system" and "noise" in the context of **the Framework Document** were presented. The lists will be used for further discussions on IFAR expert level.

- Upon proposal by NASA, the members envisage to further explore collaboration on research related to **alternative aviation fuels, including for example bio fuels**, using

NASA's planned flight research to measure emissions from alternative aviation fuels. NASA and interested IFAR members will form a small working group(s) to explore the feasibility of future coordination and collaboration. At a later stage a joint flight campaign by interested IFAR members might be envisaged.

- IFAR wants to improve further their **public relation and communication activities** internal and external to IFAR member organisations. In addition to the IFAR webpage for external communication, a new web based networking initiative among IFAR members called *IFARlink*, will be created to support internal communication among members.
- IFAR will intensify its work on **exchange on education and promotion of young IFAR scientists and engineers** under the lead of VKI. A task force will be established for a collaborative PhD program. Members intend to develop a web based platform for exchange among PhD students as well as to serve as a data base for PhD students supported by the IFAR members.
- The Budapest University of Technology and Economics, Hungary presented the idea of a worldwide competition for students on the development of radically new aviation-related ideas and technologies. The IFAR members are invited to discuss the further development of this competition.
- A **Steering Committee** for handling of technical, organisational and operational matters and supporting the activities between Summits has been convened. Concerning scientific focus areas, some new **Ad Hoc Committees** with interested IFAR members will be established. The results of the Steering and Ad hoc Committees will be evaluated at the next IFAR Summit 2013.
- IFAR welcomed the **nomination of two new members**; IAE, Aeronautics and Space Institute, Brazil, and KTN, Aerospace, Aviation & Defence Knowledge Transfer Network, United Kingdom, were accepted as new IFAR members by the Summit. Now IFAR connects worldwide 23 aviation research organizations with about 34,000 researchers in aviation.
- As a unique opportunity for IFAR and the aeronautical research community, the “**JAXA Aeronautics Symposium in Nagoya**” was held in conjunction with the IFAR Summit. Representatives from industry, government, IFAR research organisations and the general public discussed the challenges of the future air transport system with emphasis on environmental aspects of aviation.
- The **next IFAR Summit in 2013** will be hosted by the Central Aerohydrodynamics Institute of Russia (TsAGI), possibly in conjunction with the MAKS Air Show. A conference with young specialists from IFAR members at the beginning of the meeting is planned. The IFAR members expect that a TsAGI-IFAR Symposium also will be organised in connection with the Summit.

The results of the 2012 Summit as well as further information on IFAR are available at <http://www.ifar.aero> .