



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

### **Declaration Summit 2016 (D R A F T)**

27 – 29 September 2016, Daejeon, South Korea

The International Forum for Aviation Research (IFAR) is the world's only aviation research establishment network that connects government-supported agencies within the global aviation community. **The purpose of IFAR is to enable the exchange of information in the field of aviation and aeronautics research, with the overall objective of identifying areas for mutually beneficial collaboration among members.** In addition to its scientific and technical expertise, IFAR also promotes interactions among young aviation scientists and engineers. IFAR held its first Summit in 2010, and was formally established by its Charter in 2011. There are currently 26 member nations, representing five continents.

On the occasion of the 7th annual IFAR Summit, the **Korea Aerospace Research Institute (KARI)** hosted 18 member organizations in Daejeon, South Korea from 27 to 29 September 2016. The participants exchanged information on members' aviation research focus areas, discussed collaborative activities with internal and external partners and considered issues of common interests. In addition, the participants took part in a technical tour of the KARI facilities in Daejeon, gave an IFAR plenary lecture at the 30th Congress of the International Council for Aeronautical Sciences, and met with the IFAR early careers networks (ECN) participants of the 4th IFAR Young Researcher's Conference (YRC). The ECN's also held their conference in Daejeon at the same time as the summit and they were able to interact with IFAR participants on a number of occasions.

#### **During the summit the members accomplished the following:**

- Emphasized the importance of information exchange and the facilitation of collaborative opportunities among members, as two of the main focus areas. With this as a foundation, sessions were organized so that the results of the 5 IFAR working groups and 7 initiatives could be presented to the members. In addition, each member organization was encouraged to give a presentation on their aviation strategies and research activities, with the goal of identifying areas for potential bilateral and multilateral collaboration.
- Highlighted unmanned aircraft systems" (UAS), as one of the key topic areas of interest by members. The discussion on forming a UAS related initiative began during the 2015 IFAR Summit in California, and continued during the recent summit in South Korea. UAS was discussed as members' domestic research priority and a challenge that also includes national laws and regulations, which could provide opportunities for collaborations by members. The summit

decided to compile the knowledge and experience in the area of UAS among members to begin the process of engaging in pre/non-competitive opportunities for cooperation. Within the next year IFAR will organize a UAS workshop, and then look to establish a working group. The IFAR Summit 2017 will review the progress of work on UAS.

- Reflected on IFAR's unique position to collect and monitor national, regional and global aviation challenges, and work to offer possible innovative solutions, 5 IFAR principals and representatives of IFAR's ATM working group from JAXA, NASA, NLR and KARI presented "IFAR and Globally Air Traffic Management Challenges" during a plenary session at the 30th Congress of ICAS, the International Council for Aeronautical Science.
- With regard to IFAR's contribution to other international organizations, the summit discussed the possibility of future collaboration with the International Civil Aviation Organization (ICAO), which is the primary United Nation organization for aviation standards and regulations. IFAR decided to analyze IFAR's potential role and contributions to ICAO by providing scientific data and concepts for future developments in related fields of aeronautics research. IFAR will continue to look into possible areas of common interest for enhanced partnerships and cooperation with ICAO.
- Agreed to evaluate a partnership with the Council of European Aerospace Societies (CEAS)
- An IFAR principals-only session was organized with three main topic areas, "balancing technical services with strategic research", "finding research seeds/ ideas within and outside of Aeronautics," and "attracting young people into aviation." The leaders expressed their appreciation of the format and outcomes of exchanges, and agreed to continue with similar principals-only sessions at future summits.
- Reiterated their desire to develop and encourage ECN's and continued to inspire the participants of the 4<sup>th</sup> IFAR young researchers' conference (YRC). Participating in the YRC were 11 ECN's from nine member organizations (NRC, NASA, CAE, TsAGI, KARI, JAXA, DLR, ONERA, INCAS), and they met in parallel with the IFAR Summit in Daejeon. The primary purpose of the ECN's activities is to establish a self-sustaining and voluntary network of early careers to promote professional growth and work among themselves and their respective agencies. It also aims to identify possible areas for international cooperation. IFAR requested that the ECN participants make use of virtual capabilities and IFARLink as much as possible, and look to hold face-to-face meetings when opportunities are available.
- The inaugural ICAS-IFAR Award winner was presented during the summit to an outstanding PhD of a young IFAR researchers under 40 years in the field of aviation. The IFAR Summit and the 30<sup>th</sup> ICAS Congress jointly granted the award to William Leser from NASA, who was given a plaque and

certificate. The next ICAS-IFAR Award will be held at the 31th ICAS Congress in 2018. The call for nomination and selection process will begin in the first quarter of 2017.

- The host of the next IFAR Summit will be CSIR, the Council for Scientific and Industrial Research, and the 7<sup>th</sup> Summit will take place in South Africa from 24 to 26 October 2017.

The results of the Summit 2017 as well as further information on IFAR are available at <http://www.ifar.aero>.

## Annex

### **IFAR member organizations presented at Summit**

1. Budapest University of Technology and Economics (BME), Hungary
2. Central AeroHydrodynamics Institute of Russia (TsAGI), Russia
3. Centre for Excellence and Innovation in the Automotive Industry (CEiiA), Portugal
4. Centro Italiano Ricerche Aerospaziali (CIRA), Italy
5. Chinese Aeronautical Establishment (CAE), China
6. Commonwealth Scientific and Industrial Research Organisation (CSIRO), Australia
7. Council for Scientific and Industrial Research (CSIR), South Africa
8. French Aerospace Lab (ONERA), France
9. German Aerospace Center (DLR), Germany
10. Japan Aerospace Exploration Agency (JAXA), Japan
11. Korea Aerospace Research Institute (KARI), Korea
12. Middle East Technical University (METU) Ankara, Turkey
13. National Aerospace Laboratory of the Netherlands (NLR), Netherlands
14. National Institute of Aerospace Research "Elie Carafoli" (INCAS), Romania
15. National Aeronautics and Space Administration (NASA), USA
16. National Research Council (NRC), Canada
17. Swedish Defence Research Agency (FOI), Sweden
18. Vienna University of Technology (TU Vienna), Austria

### **IFAR member organizations not present at Summit**

1. Aerospace Technology Institute (ATI), United Kingdom
2. Aeronautics and Space Institute (IAE), Brazil
3. CSIR-National Aerospace Laboratories (CSIR-NAL), India
4. Czech-Aeronautical Research and Test Institute (VZLU), Czech Republic
5. National Institute of Aerospace Technology of Spain (INTA), Spain
6. Polish Institute of Aviation (ILOT), Poland
7. Technical Research Centre of Finland (VTT), Finland
8. Von Karman Institute for Fluid Dynamics (VKI), Belgium