



IFAR – International Forum for Aviation Research

Declaration Summit 2018

27– 29 November 2018, Moscow, Russia

The International Forum for Aviation Research (IFAR) met at the end of November for the 9th time. This annual *IFAR Summit* took place in Moscow, hosted by the Zhukovsky Central AeroHydrodynamic Institute (TsAGI) on the occasion of its centennial anniversary.

IFAR, the only global network platform uniting government-supported aeronautical research organizations from around the world, is working to tackle today's and tomorrow's aviation challenges that exceed national borders, such as emissions, noise, safety, security and efficient operations. IFAR connects its members to promote international partnership in the form of information exchange and technical collaboration in the field of aeronautics research, and to empower global networking and professional development of their early career employees. IFAR held its first Summit in 2010. Today, IFAR has 26 member organizations from five continents, representing 35,000 researchers worldwide working in aviation.

The discussions at the 9th IFAR Summit were mainly focused on the emerging disruptive technological developments such as Urban Air Mobility (UAM) and Hybrid Electrical Propulsion. Urban Air Mobility is aimed at exploring development of low altitude flying systems for manned and unmanned aircraft in urban environments. The Summit participants addressed UAM's usability, safety, environmental impact, integration into airspace, technical challenges related to these novel (manned or unmanned) aircraft, as well as their possible future business models. The second technical theme Hybrid Electrical Propulsion directly deals with sustainability of aviation which is of great importance to the climate challenges the world is facing. The members will intensify their exchanges on UAM and Hybrid Electrical Propulsion over the coming year.

The global aviation leaders also exchanged thoughts on talent development under topics such as "Attracting young people to aeronautics" and "Empowering early career employees". They welcomed the success of IFAR Young Researchers Conference (YRC) hosted by TsAGI in October 2018. The YRC offers an opportunity for young aeronautics researchers from member organizations to get together to exchange views and gain new insights through seminars. The German Aerospace Center (DLR) proposed to hold the next YRC in Germany covering the topic of Aircraft Design.

The Summit participants also endorsed the next call for nominations for the ICAS-IFAR Award, an award jointly established by IFAR and the International Council of the Aeronautical Sciences (ICAS) to honor an individual who has made a significant contribution to Aeronautical Science within his/her doctoral thesis (PhD or equivalent). The call for the 2020 Award will be issued in the first half of 2019.

The Summit adopted the reports and working plans of several IFAR technical and non-technical working groups and initiatives, e.g. on noise, air transportation efficiency, supersonic, aircraft development for climate change, vertical lift, IFAR infrastructure inventory, early career network, and IFAR's communication platform called the IFARLink.

The 10th IFAR Summit will take place in September 2019 in Amsterdam, Netherlands, on the occasion of the centennial anniversary of the Netherlands Aerospace Centre, NLR.

More information on IFAR is available at <http://www.ifar.aero>.

IFAR member organizations present at the IFAR Summit 2018

1. Budapest University of Technology and Economics (BME), Hungary
2. Central AeroHydrodynamic Institute (TsAGI), Russia
3. Centre for Innovation and Creative Engineering, CEiiA, Portugal
4. Italian Aerospace Research Centre (CIRA), Italy
5. Chinese Aeronautical Establishment (CAE), China
6. CSIR-National Aerospace Laboratories (CSIR-NAL), India
7. Council for Scientific and Industrial Research (CSIR), South Africa
8. Czech-Aeronautical Research and Test Institute (VZLU), Czech Republic
9. French Aerospace Lab (ONERA), France
10. German Aerospace Center (DLR), Germany
11. Japan Aerospace Exploration Agency (JAXA), Japan
12. Korea Aerospace Research Institute (KARI), Korea
13. Netherlands Aerospace Centre (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. Polish Institute of Aviation (ILOT), Poland
18. Swedish Defense Research Agency (FOI), Sweden
19. Vienna University of Technology (TU Wien), Austria