The European Rotorcraft Forum 2016 was held in Lille on 6-8th September.

The 2016 edition was a success in terms of content, complete and rich, and interests of major players in the sector, as industrial institutions.

The edition 2016 is a good vintage: 213 participants, 103 papers presented and 19 countries represented. A plenary session per day was settled to have stakeholders providing complementary vision to the technical sessions.

During his keynote address, Jean-Brice Dumont Vice President Research and Innovation Helicopters Airbus spoke about the helicopter market and about the growing efforts towards more autonomous flights (OPV) or fully autonomous and the wide market for VTOL drones. The operational maintenance of aircraft in service in the French Army has been addressed by a specialist AIA-CP (French Ministry of Defence- Air Force). The Director of Operations of the DGA (French MoD), the IGA (Lieutenant-General) Monique Legrand-Larroche has reminded that helicopters are essential in the foreign operations. She also addressed the evolution of specifications as well as the required changes due to the lessons learned from operations and the future for military rotorcraft. The main topics being affordability, availability and taking into account the maintenance from the beginning.

During the opening Ceremony, Dr Klausdieter Pahlke (DLR, German National Research Center) as the and Chair of the CEAS Rotorcraft Group and Jean-Brice Dumont handled the CEAS AWARD 2016 to the BlueCopter Team of Airbus Helicopters Deutschland, represented by Dr Marius Bebesel. The demonstrator of the BlueCopter demonstrates numerous breakthrough solutions for decreasing noise in approach and flight eco friendly. Time was given to Marius Bebesel to summarize the main results of the demonstration specially with a very impressive low noise approach.

The participation in the 42nd European Rotorcraft Forum is more than 50% made up by university researchers and national research centers. A cross presentation of the first user of the H175, NVH offshore transport company, Eric Van Hal, and the industrial program Director at Airbus Helicopters, Marc Allongue, explained how to find solutions in real time target very low level of perturbation in the operational use of a new machine.

The CEO of ONERA (The French National Research Center), Bruno Sainjon has undertaken during the last plenary session to a conclusion of this conference. His speech demonstrated in addition the importance given by ONERA in this event. He reminded the ONERA place in the field of R & T helicopters. He also underlined the long and dynamic running cooperations with DLR, USARMY, NASA and others in multinational frameworks.

The 2016 Alfred Gessow Award was invited to present the 72nd AHS Best Paper during this ERF. Enrico Fabiano, University of Wyoming, US, presented his paper *"Adjoint-based Aeroacoustics Design- Optimization of Flexible Rotors in Forward Flight"*. The Award was handled to him by Mike Hirschberg, Executive director of AHS, Klausdieter Pahlke, Chairing the Aerodynamic session, in presence of Blanche Demaret, Chair of the 42nd European Rotorcraft Forum.

On Friday 9th September, technical visits were organized at ONERA, Centre de Lille, leveraged Centrale Lille and the Institute of Electronics, Microelectronics and Nanotechnology (IEMN).

The next ERF will take place in Milano (Italy) from 12th to 15th September 2017.

All the European Rotorcraft Papers up to the 40th ones are available on: <u>www.rotorcraft-forum.eu</u>.

The ERF Proceedings are uploaded each year including the previous ERF (2 years after the ERF Forum).

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