

## President's report for year 2020

The whole year 2020 for CEAS organisation was very different since CEAS was created in 1995. From the onset of the COVID-19 pandemic, the worldwide economy and especially aviation sector including research and dissemination is in permanent, very deep crisis. The CEAS Board of Trustees cannot idly wait on a full suppression of pandemic and must continue activity. It is extremely difficult for our members, officers and for me as the CEAS President. Some technical challenges, choice the proper electronic platform and voting mechanism sometimes dominate over the essence of our discussion. Nevertheless, I believe that we “passed the exam” were able to continue our main tasks following from our statute and mission.

### AEC-2020, CEAS role and image

AEC-2020 was perfectly organized in the Conference Centre located at the Bordeaux outskirts. More than 400 participants not only from Europe, but also from USA, China, South Korea presented many interesting papers. Having in mind the violent spreading of COVID-19 it was really the last moment to organise AEC-2020. Unfortunately, all technical visits planned on the last day of the conference were cancelled due to recommendation of French Ministry of Health and French Foreign Office. AEC-2020 was organized by 3AF together with AIAA and CEAS as the main co-organizer. CEAS was well visible and really played the key-role at the conference. 2 of 5 plenary sessions were chaired by CEAS officers – plenary session no 2 was chaired by Christophe Hermans and plenary session no 5 was chaired by Zdobyslaw Goraj. CEAS had a booth in a very well located place, where our bulletins and the information about our activity were offered to interested participants. Our Administrative Support Person – Beata Wierzbinska-Prus – played the essential role in registration desk and partly offering the information service in CEAS booth. During closing ceremony – Prof Tomasz Goetzendorf-Grabowski – PSAA President – invited all participants for the next AEC-2021, which will be held in Institute of Aviation, Warsaw, Poland.

CEAS is an International Non-Profit Association  
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The whole conference was dominated by presentations and papers dedicated to greener aviation. Most of key-note lectures were also related to climate-neutral aviation, green bizjet and clean aeronautic-space technology. From my personal perspective, I would like to mention about fascinating presentation delivered by Alain Rousset – the “Nouvelle Aquitaine” region President. He spoke about importance of research for novel technologies to retain our climate for future generations. It does not happen very often that local politician and territorial activist has such long-term vision and appreciates research as the way for better future of our society.

After returning home I sent the congratulation for 3AF for their effort and well done task. I wrote to Dominique Nouailhas with copy to Louis le Portz, Pierre Bescond, Christian Mari and Michael Scheller: “Dear Dominique, Please accept my sincerely congratulations for perfectly organized AEC2020. It was really a great success and will be a baseline for future organizers!”.

#### **FINAL REMARKS ABOUT AEC-2020 AT BORDEAUX**

An overview of AEC-2020 was widely described in Bulletin Aerospace Europe 2-2020. Parallel to key-note lectures, sectional lectures and very productive, private talks during breaks there were a number of events important for CEAS structure (Officers, Trustees, Presidents of CEAS National Societies, Recipients of CEAS awards). The key-point of Gala Dinner - perfectly organized by French Hosts - was the ceremony of awarding with CEAS Medal of Prof Richard (Ric) Parker - Commander of the Order of the British Empire, President of the International Society for Air-Breathing Engines (ISABE), Fellow of many international societies and doctor honoris causa of numerous British and overseas universities. The laudation spoken by CEAS President Prof Zdobyslaw Goraj and a number of photos taken during this ceremony can be seen at Aerospace Bulletin 3-2020.

On Wednesday, Feb.26, Board of Trustees Meeting gathered and discussed issues important for CEAS future. Among different issues on the agenda there were (1) smooth leave of Mrs Mercedes Oliver Herrero – CEAS General Director; (2) requirements for Administrative Support Person, General Director and Officers and (3) candidates for position of General Director and Financial Support Manager. After a discussion and voting the BoT decided that in the months to come the BoT decide about the requirements expected from candidates and then will look for proper candidates. Due to pandemic of corona-virus and cancelation of ILA planned to be held in May in Berlin, finally it was decided that discussion and approval of the list of requirement will be done remotely in June using the so-called Skype for Business tool.

During the last day of AEC-2020 the so-called Presidential Lunch was organized. 5 of 12 presidents of national societies attended this lunch (DGLR: Prof Rolf Henke, PSAA: Prof Tomasz Goetzendorf-Grabowski, TsAGI: Prof Sergey Chernyshev, AIAE: Ms Estefanía Matesanz Romero, NVvL: Mr Christophe Hermans). We deeply believe that presidential

lunches organized on the occasion of CEAS Conferences can play important role in strengthening links between CEAS and national societies and getting us a direct response and feedback how we can improve our activity and service for national societies. This time we know that some presidents had to cancel their trip to Bordeaux due to pandemic risk. Nevertheless, I appreciate the discussion and some ideas proposed by our presidents, who inspired us for some changes. Hopefully during the next AEC we will gather more our presidents.

### **CEAS AT WORK**

From the onset of the pandemic, the worldwide aviation system including research and dissemination is in permanent, very deep crisis. Since AEC-2020 in Bordeaux, the CEAS officers organized many remote discussions either by phones or by Skype for Business. The new challenges we have to face include rescheduling of many traditional aerospace events. For example, ICAS moved Shanghai Congress from initially planned for Sept 2020 to Sept 2021 and this way creating a conflict with AEC-2021 planned for the last week of Sept 2021. How we can react in order not to decrease the number of potential participants of AEC-2021? In the consequence, ICAS will move the Programme Committee Meeting and Emerging Technology Forum from Sept 2021 to winter 2022, so limiting our freedom to move AEC from 2021 to 2022.

### **NEW CHALLENGES IN PANDEMIC TIMES**

From the onset of the COVID-19 pandemic, the worldwide economy and especially aviation sector including research and dissemination is in permanent, very deep crisis. The CEAS Board of Trustees cannot idly wait on a full suppression of pandemic and must continue the discussions remotely by phones or Skype.

There are many urgent issues to be solved, for example next year:

- The CEAS Congress to be held in Warsaw in end of September 2021;
- The election of next CEAS president and other officers;
- The collaboration and coexistence processes with other aerospace organisations such as ICAS, IAF, EASN, etc.
- and many other current issues.

Since the spring 2020 the CEAS decided to organise on-line remote meetings by use of SKYPE for Business software which was kindly offered to us by DGLR and personally by Dr Cornelia Hillenherms. Both Board of Trustees' meetings in April and June and the extraordinary meeting in September were organised using just Skype for Business.

One of the important issues discussed during 28 September meeting was the so-called 'voting rights' for different category members, which was articulated in the spring this year. Several arguments were spoken-out during the 25 June remote meeting of CEAS

trustees and after this meeting in various e-mails sent by CEAS Officers. As the current president, I am trying to be impartial and concentrate on the consequences this decision will have for CEAS future. Mr Marc Bourgois proposed to set up a group of people (a commission) whose task will be to prepare a proposal to be voted and finally accepted on the occasion of the next Board of Trustees' meeting in the end of November. It was agreed that the commission will consist of five persons: Christophe Hermans (chair), Torben Henriksen, Marc Bourgois, Pierre Bescond, and Franco Bernelli.

### **AEROSPACE EUROPE CONFERENCE 2021 (AEC2021)**

As it was announced in the spring, 2020 CEAS decided to organise its next biennial Conference - AEC2021- in Warsaw at the end of September. It will be a challenge for CEAS because we must prepare a very attractive call for papers for this Event with a view to making it highly attractive for potential authors of presentations. Unfortunately, for COVID-19 reasons, the ICAS Congress of Shanghai initially programmed for September 2020 has been postponed to early September 2021 and the Calls for Papers are already being sent. So, this creates a regrettable conflict of dates with us.

In spite of that, we firmly believe that we can organise AEC2021 on a very high scientific and technological level, doesn't matter if it takes place in normal conditions (hopefully!) or remotely, depending on the pandemic situation. We plan to propose the following motto for AEC2021:

### ***“EUROPEAN AEROSPACE FACING CHALLENGING TIMES”***

It is also our intention to open a number of new chapters: Civil Aviation financial and economic aspects, Airports, Maintenance and Repair Overhaul (MRO), Defence and Security.

Besides, whilst AEC2020 was Clean Sky oriented, AEC2021 should be SESAR/EUROCONTROL/ATM oriented.

Moreover, innovations should constitute quite an important part of AEC2021. Among them: digitalization, artificial intelligence, more electrical aircraft, hybrid propulsion, alternative fuels, H2 propulsion, design of the future aircraft (the 3R triptych 'Restore, Rethink, Redesign').

Besides, we would like to be more open for Space Topics, for example 'Clean Space', less debris etc. More details were given by Prof T. Goetzendorf-Grabowski – the main organiser of AEC2021 in his 1<sup>st</sup> announcement. Here I am pleased to thanks a lot to Jean-Pierre Sanfourche for authorship of the motto for AEC2021 and ideas for opening a number of new chapters listed above.

## **GENERAL ASSEMBLY AND BOT MEETING IN THE END OF YEAR 2020**

The final accord of my activity as CEAS President was preparation and chairing the General Assembly and BoT Meeting held on 30<sup>th</sup> Nov 2020. The General Assembly discussed and approved unanimously the Annual Accounts of 2020 and the Budget of 2021, after some minor amendments were made. Also, the General Assembly approved unanimously the Annual Accounts and Balance 2019, which will be presented to the Belgian tax authorities at the end of the year. The General Assembly approved unanimously the resignation of 3 Trustees and decided unanimously to re-elect 5 nominees as CEAS Board of Trustees members for a two-year period. The CEAS Board of Officers, according to the decision made by the Board of Trustees in the subsequent meeting, is composed as follows:

- CEAS President, Prof Zdobyslaw Goraj.
- Elected CEAS President for 2021, Prof Franco Bernelli Zazzera
- Vice-President Publications and External Relations, Mr Pierre Bescond.
- Elected Vice-President Awards and Membership, Mr Anders Blom.
- Vice-President Finance, Dr Cornelia Hillenherms.
- Elected Director General, Prof Andrea Alaimo.
- Aeronautics Branch Chairman, Mr Christophe Hermans.
- Space Branch Chairman, Mr Torben Henriksen.

Then, during the 46 Board of Trustees the 44<sup>th</sup> and 45<sup>th</sup> Trustees Board Meeting minutes were approved. Prof Franco Bernelli was nominated and approved as the CEAS President from 2021, Mr Bescond and Dr Hillenherms were approved for a further two year term as VP Publications & External Relations and VP Finance and Mr Anders Blom was nominated and approved as the new VP Awards and Membership. Mr Hermans and Mr Henrikson agreed to continue in their roles as Branch Chairs. Prof Andrea Alaimo was nominated as the new Director General and after a discussion was approved unanimously. Prof Slobodan Bosanac from the Adriatic Aerospace Association presented to the Board about the organisation and interest to join CEAS.

It was decided that a formal decision about voting rights for agencies would not be passed until the 2021 General Assembly unless an Extraordinary General Assembly is organised, hopefully in Feb or March 2021. Moreover, it was decided that it would be necessary to distribute the text to amend the Statutes so that it can be voted on in the ordinary General Assembly 2021. It was announced that the HISST conference has been postponed to April 2021 and will likely be in virtual format. The AIAA/CEAS Aeroacoustics Conference will next be held in Europe (UK) in 2022. From that year onwards, it will be organised alternatively in US and Europe.

The joint 14<sup>th</sup> World Congress in Computational Mechanics (WCCM) and 8<sup>th</sup> ECCOMAS Congress (WCCM-ECCOMAS) will take place 'digitally' from 11 to 15 January 2021. A series of Special Technical Session (STS) has been set up for the technology areas Aeronautics, Transport and Energy with contributions from research projects (e.g. Horizon 2020, Clean Sky) or in-house R&T. CEAS will be organizing the STS 'Integration challenges of new disruptive and innovative aircraft design solutions: a multi-fidelity paradigm for computationally-efficient prediction of complex physics' with 4 contributions. The STS will address computational methods, numerical simulation and optimization framework for multidisciplinary design of (unusual) aircraft configurations with industrial relevance.

Finally it was decided that  $\mathbb{A}$  2021 Conference will be held in Warsaw in the fall of 2021 and that the form (likely hybrid) and date will be chosen by a 5-members commission chaired by Prof Goetzendorf-Grabowski. A few days after it was announced that  $\mathbb{A}$  2021 Conference will be held in the last week of Nov. In my private assessment for the future we have to fix the date of AEC (for example the last week of Sep in odd years). International aerospace community will never treat AEC seriously if the conference depends on other events. Event CEAS related conferences as Rotorcraft Forum or AIAA/CEAS Aeroacoustics Conference must adapt to AEC, not vice versa.

At the end of 46Board of Trustees dr Bridel noticed that (1) in general, CEAS has lost influence in Europe, but others spreading out their activities; (2) CEAS MoUs are not very efficiently served e.g. AIAA, ICAS, Chinese, Korean, AAE... Reactivation should be on the future agendas; (3) Other cooperation should be investigated or re-addressed: such as with EUCASS, EASN and; (4) Some advocate prioritizing first European affairs. I hope that these challenges will be effectively discussed and chaired by new President – Prof Franco Bernelli.

Prof Zdobyslaw Goraj – President of CEAS

Warsaw, 11.12.2020.