

The Quarterly Newsletter AAAF/AIAE/AIDAA/DGLR/FTF/NVVL/RAGS/SVFW BOENE

n°1-2006 • 1st Quarter 2006

editorial

THE BIRTH OF THE NEW CEAS: NO LONGER A CONFEDERATION, NOW A COUNCIL

As I wish to be sincere, I must acknowledge that I feel very honoured to have been the latest president of the CEAS – which although widely known in aeronautical circles, I must remind you that the acronym stands for

Confederation of European Aerospace Societies – and furthermore will stand for, albeit in interim manner, the Council of European Aerospace Societies which also reads as CEAS. Speaking in clear terms, with the approval and signing of the new statutes, the old CEAS has evolved towards another CEAS, with a clear legal character and capable of undertaking greater activity and presence in the European Aerospace world.

Although for me CEAS was somewhat familiar, my arrival to the board was almost a parachute landing. I was elected as a member of the board of the AIAE in March 2004 and a couple of months later I found myself in Noordwijk in my first meeting, and which I left finding myself president: as given the rotation nature of the presidency, it was the turn of Spain to hold the post. I must admit that for a new arrival it was almost too much...

The CEAS is henceforth a legal entity

The main and most acute problem that was on the table were the new statutes, as they had already undergone a year of preparation and their aim was to empower the CEAS, giving it the character of a legal entity.

It seems to be a common factor that everything in Europe always goes slow. This is not very surprising as the slowness is the counterpart of the diversity which – in my opinion – is the richness which must not be lost. It is true that aircraft, to give an example, are not very different no matter where they come from, but the men who build them come from cultures with different traditions. However, it also seems to be a common fact that this slowness always ends in an agreement, and thus it has been with the statutes.

I would like to underline that actually we have had two agreements: the first of which was achieved in the end of 2004, but the text approved – being prepared as it was by CEAS members, that is to say engineers – had to be adapted to the legal ambit, that is to say the kingdom of

lawyers. This adaptation gave rise to changes in the text, whose extension, for some Members Societies, rendered it rather more than an adaptation. As a result, it was necessary to continue with another series of retouches and

arrangements until the new text was attained, which is the present one. All this was due to disparity between the worlds of engineering and law, however we must acknowledge that the lawyers did indeed improve the statutes. To sum up, here Belgian, French and Spanish lawyers have intervened, another example of the multicultural nature of the CEAS and the modern world in general. Then, the process of legal constitution in

Brussels could conclude shortly with the result that we could be able to commence the activities as soon as in the first half of 2006.

In this long year which I had passed as president, I have clearly seen the need for the CEAS to be an effective element of union between the different Societies, so that it must be consolidated as the European reference even with a form of an international projection for each one of its individual Societies. In spite of the fact that the activity of the CEAS has been in the dormant state – perhaps would be better to say sleepy, as at no time did it stop functioning – it has continued to work all along thanks to the efforts of the Member Societies.

Two branches: Aeronautics, Space

Apart from the legal nature, to me the fundamental changes introduced were twofold: one was the establishment of a fixed address, with a permanent office provided with fully dedicated personnel; and the other to allow individuals to enter into two branches: Aeronautics and Space. This office will be the executive instrument of the CEAS: it will facilitate the programming and the performance of the different activities, while giving life to the relationships with European industry and institutions.

Apart from this, it will obviously be a help not only for the Council, but also for the working groups and committees. As regards the branches, they will permit direct personal action on the most specific and immediate problems.

The CEAS: a new reference, not just one more organisation!

I see the future with great optimism, but there still remains a lot of work to be done. It is easy to plan things on paper, this puts up with everything as we have often heard and seen, however reality is harder and more difficult to attain. The present Aerospace world is rich and complex owing to its trans-national nature, this is why the CEAS is called on to be a new reference, not just one more organisation.

The Association of Aeronautical Engineers of Spain (AIAE), which I represent, has given me all support possible during my presidency. In the future, when the new adventure gets underway, I hope to continue collaborating, as just another member of the Council, in the hard days approaching.

Julián SIMÓN CALERO President of the CEAS since May 2004

BIOGRAPHICAL DESCRIPTION

Graduated as aeronautical engineer from the "Escuela Superior de Ingeniería Aeronáutica" of Madrid, **Julián Simón Calero** started his professional life in INTA where he remains to the present day. He began with programmes developing airearth military rockets and sounding-rockets which were in their beginnings in Spain at

that time. He participated in all the programmes of this type undertaken in INTA. He was Director of the Rockets and Missiles Department, where all the activities and installations required for these developments were concentrated.

He initiated and was the driving force behind the Spanish attempt to develop a microsatellite launch vehicle, being the director of this programme until its cancellation. He was the Spanish delegates in AGARD and currently, he manages the Electromagnetic Compatibility Area.

Apart from his technical activity, he is also doctor in Pure Philosophy, with special dedication to the History of Science, and in particular to the genesis of Fluid Mechanics in the 18th century.

PERSONALITY INTERVIEW

Dr Constantinos STAVRINIDIS

▶The Editorial Coordinators of the CEAS Quarterly Newsletter interviewed Dr Stavrinidis, ESA/ESTEC-NOORDWIJK, about the future Space Branch of CEAS.



Dr STAVRINIDIS

CEAS Quarterly Newsletter

What is your opinion about the last developments of the CEAS transformation process?

C. STAVRINIDIS

Thanks to the recognised need for a pan-European Space Society offering membership also at individual level, CEAS underwent much restructuring and legal transformation to provide such means. Overall it is fair to mention that remarkable progress has been achieved by the CEAS member societies through the process of consensus. I am very pleased that I have been able to contribute to bringing leading European aerospace societies closer together.

CQN

As future head of the Space Branch, how do you conceive its mission, its short-term and mid-term objectives?

C. STAVRINIDIS

The mission of the European Space Society (ESS)/Space Branch of CEAS, and its short-term and mid-term objectives essentially need to cover actions which will strengthen performance in this domain by:

- stimulating genuine competition between Europe's space researchers through competition for scientific excellence across Europe well beyond the national level which happens at present;
- helping first-class European research organisations, universities, scientific institutions, industries in order to reach their full potential which might be inhibited by the current fragmented state of affairs;
- attracting young people into space careers;
- offering the opportunity to publish recent scientific achievements first in a European Journal, thus strengthening European R&D space-related efforts.

CQN

In which manner do you foresee to structure it?

C. STAVRINIDIS

It is intended to initiate the operations of the European Space Society (ESS)/Space Branch of CEAS by forming a membership of the space interested members of the national societies members of the CEAS. An initial membership of about 3000 has been preliminarily estimated at the last CEAS Council by the executives of the member societies: AAAF (F), AIAE (E), AIDAA (I), DGLR (D), FTF (S), NVvL (NL), RAeS (UK), and SVFW (CH). It is particularly important for the success of the space society that the activity will be initiated with a significant level of membership and provision of quality deliverables right from the outset. The technical activities initially will cover structures, thermal, mechanisms, propulsion, robotics, GNC, power, and aerothermodynamics as it might affect space technology and applications. Technical Committees will be established by reputable European and international specialists in the respective domains. These activities are largely on a voluntary basis, but we expect to attract leading professionals from the respective domains.

CQN

What are your intentions concerning the Space Branch publications, scientific and technical disciplines on the one hand, other subjects on the other hand (policy, finance, management...)?

C. STAVRINIDIS

It is intended to offer in the first instance the following to European Space Society Members:

- a quarterly "Technical Journal" with refereed papers that initially will cover structures, thermal, mechanisms, propulsion, robotics, GNC, power, and aerothermodynamics as it might affect space technology and applications. The Editorial Board would be formed by reputable European and international specialists in the respective domains;
- a regular "Space Bulletin" newsletter, also quarterly, associated with CEAS Member Societies, ESA, industry, research institutes, national space agencies, and news of more general nature;
- a European Directory;
- and many other additional benefits, e.g. organisation of conferences, position papers, etc.

Particular attention is required on the financial side to be able to provide members with input of value and substance, bearing in mind that resources will be limited at least initially. It is hoped to attract support from sponsors, including the European Space Agency, for a period 3 to 5 years. It is expected that the operations will become largely self-sustaining during that period.

CQN

Concerning the high level technical journal, could you summarise the general philosophy and the main characteristics of this publication: frequency, authors of the articles, length of the articles, total number of pages...

C. STAVRINIDIS

The Technical Journal will be published quarterly, and contain about 200 pages per copy. The articles are expected to vary from few pages to about 10 pages. The papers will be refereed by an Editorial Board made up of Technical Committee members. Some papers might originate from Proceedings of conferences organised by ESA, CEAS, CNES, DLR, etc. while others might be submitted by authors directly to the Journal.

CQN

How do you plan to set up and to organise the editorial committee and the realisation process ?

C. STAVRINIDIS

An Editorial Board will be set up consisting of members of the various Technical Committees, i.e. structures, thermal, mechanisms, propulsion, robotics, GNC, power, and aerothermodynamics. As far as preparation of the manuscripts is concerned, it is intended to reach the "ready to print" stage largely through the voluntary efforts of the dedicated committee members participating in the Editorial Board.

CQN

Could you say something about advertising and sales?

C. STAVRINIDIS

Advertising and sales are certainly important issues, and will be addressed seriously also with CEAS member societies. Hopefully income from these areas will contribute significantly to the respective operations.

CON

What are your objectives regarding the planning of this ambitious project?

C. STAVRINIDIS

This project is indeed ambitious, and certainly many non trivial issues will have to be addressed within a short period. It is intended to set it up and have it operational by the end of 2006. I look for the active support of and contributions from all interested parties.

CON

What are your main wishes for the year 2006, regarding the CEAS Space Branch?

C. STAVRINIDIS

My main wish for 2006 regarding the European Space Society/CEAS Space Branch is to successfully set-up an organisation capable of:

- providing output of value and substance to its members;
- contributing towards space professionals achieving their full potential;
- enabling European space aspirations, through large-scale networking, to build further on what has been achieved so far and reach even higher goals in the future.

BIOGRAPHICAL DESCRIPTION

Dr Contantinos Stavrinidis is graduated in Aeronautical Engineering (Bachelor and Master of Science) from Imperial College, University of London and obtained Doctorates in Structural Dynamics from University of Stuttgart, Germany and University of London, England.

He worked in industry with Lloyds Register of

Shipping and Kongsberg, and subsequently joined ESA in 1976 where he has been successively in charge of Structures Section, and Structures and Mechanisms Division at ESA/ESTEC, Noordwijk.

In 1997, he became head of the Mechanical Engineering Department which covers the classical space disciplines: Structures, Mechanisms, Optoelectronics, Microgravity and Life Sciences Instrumentation, Automation and Robotics, Thermal Control and Life Support, Propulsion and Aerothermodynamics, and Test Facilities for verification of space vehicles and subsystems. **Dr Constantinos Stavrinidis** is Fellow of the Royal Aeronautical Society (RAeS), and Fellow of the American Institute of Aeronautics and Astronautics (AIAA).

REPORT BY THE VICE PRESIDENT, AWARDS & PUBLICATIONS



Dr Ulf OLSSON CEAS Vice-President, Awards and Publications

The Confederation of European Aerospace Societies

(CEAS) has been in existence since 1993. It represents the 25000 individual members of the eight leading national societies on the European scene. Over the years, this role has grown in importance with the emergence of transnational companies like AIRBUS and the increased cooperation in Europe within the EC research programmes and the space programmes of the European Space Agency.

As it exists today, CEAS has no legal status and no resources of its own. It now wants to take one step forward. From this year, it will be registered formally as an international non-profit association "The Council of European Aerospace Societies" with an office in Brussels. The Statutes governing this new organization has been signed by the eight constituent member societies and the legal activities needed to establish it in Belgium are now proceeding. The Royal Aeronautical Society (RAeS) has agreed to provide the Presidency of the Council during the first crucial year. It is foreseen that a new President will be elected at the first General Assembly meeting of the new CEAS, which is expected to be held between end of March and beginning of May.

The new CEAS will be composed of two Branches in aeronautics and space respectively and it will be possible to join one of those Branches as an individual member. At the last Council meeting, Mr Stavrinidis from ESTEC, was given the task to prepare for a Space Branch and the Member Societies were also invited to propose candidates for setting up of the Aero Branch.

One of the activities of CEAS is to organise scientific Conferences on a European scale. Traditionally, the European Commission has arranged the so called "Aeronautics Days" conferences to report the progress in the EC aeronautics research programmes. The next such event is to be held in Vienna during 19-21 June 2006 and this time, CEAS will be organising the conference together with Austrian authorities and institutions. This will raise the profile of CEAS considerably on the European scene.

The CEAS Award has been created in order to recognize persons who have made outstanding contributions to aerospace in Europe. The Award for 2006 will be presented to Mr Rainer Hertrich for his successful leadership of the EADS, the first pan-European aerospace company, and as an advocate and a respected voice of the European aerospace sector. The presentation will take place during the "Aeronautics Days" conference in Vienna.

EDITORIAL BOARD

CEAS National Member Representatives

Lilienthalplatz 7 • 38108 Braunschweig

Dr-Ing. Holger Friehmelt

Tel.: + 49 (0)531/295-2650

holger.friehmelt@dlr.de

Prof. Antonio Castellani

AIDAA General Secretary

Tel.: + 39 06 44 041 44

Director of the Publication

Dr Ulf Olsson

Editorial Co-ordinators

• Dr Hywel Davies

52 Brittains Lane Sevenoaks TN13 2JP • UK

Tel/Fax: + 44 1732 456 359

hyweldavies@aol.com

• Dr-Ing. Jean-Pierre Sanfourche

AAAF • 6, rue Galilée - 75016 Paris Tél.: + 33 (0)1 56 64 12 30

Fax: + 33 (0)1 56 64 12 31 secr.exec@aaaf.asso.fr

Spain

DLR e.v.

info@aidaa it **Emilio Blanco**

Via Ravenna 9b

00161 Rome • Italy

Emilio.Blanco@casa.eads.net

Sweden

Lars Andersson

Kammakargatan 52 • 11160 Stockholm

Tel: + 46 8 791 84 91

Ftf@mailbox.swipnet.se

United Kingdom

Andrew Little

RAeS • 4, Hamilton Place

London W1J7BQ

Tel.: + 44 (0)20 76 70 43 11

Sophie Bougnon

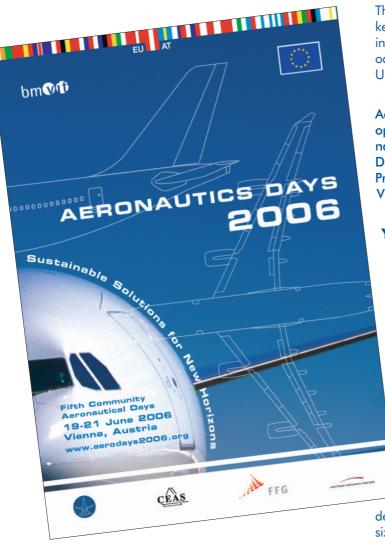
26, rue de Crussol • 75011 Paris soboo@club-internet.fr

AERONAUTICS DAYS 2006

SUSTAINABLE SOLUTIONS FOR NEW HORIZONS



VIENNA, AUSTRIA HOFBURG IMPERIAL PALACE



The Fifth Community Aeronautical Days is a key event for European research and technology in aeronautics and air transport during the period of Austrian Presidency of the European Union.

Aeronautics Days 2006 will present the development and application of advanced aeronautics technologies in Europe. Aeronautics Days 2006 will be held under the Austrian Presidency at the historic Hofburg Palace in Vienna

You can expect the following events:

• Conference: This event will be a platform for an exchange of results and information on finished and ongoing projects of the European Research Framework Programmes (FP5 and FP6) and national and international aeronautics research. It will also foster the sharing of best practice in the aeronautics sector, promote mutual understanding of their respective roles and define strategies towards the co-ordinated implementation of the Strategic Research Agenda, developed by the Aeronautics Council for Aeronautics Research in Europe (ACARE). Improving communication and dissemination of research results will be essential parts of the programme. Special initiatives are

dedicated to the support of small and mediumsized Enterprises (SMEs) in Europe.

- Exhibition: Selected FP5 and FP6-projects as well as national projects, will have the opportunity to present exhibits and posters. Students will be offered the chance to present the results of a dedicated competition. Additional resources will be available for aeronautics organisations from the new EU Member States to present their activities.
- Excursions: Excursions to leading Austrian aeronautics companies and infrastructures will complete the comprehensive programme.

Key Issues:

 Special focus on new EU Member States and global integration

In the heart of Europe, Vienna represents a natural bridge between the EU-15 and the new Member States. As the conference location, Vienna symbolizes the enhanced integration of new Member States into the European aeronautics research community. In addition, addressing RTD collaboration with America, Asia and Africa, the event will demonstrate Europe's role in the global aeronautics community.

• A Preview of 7th Research Framework Programme (FP7)

When "Aeronautics Days 2006" takes place, the preparation of the specific work programme for "Aeronautics and air transport" within FP7 will be in its final phase. The current state of play will be presented by high-ranking EC representatives and there will be opportunities to provide input into the discussion on the final drafting of the work programme for FP7.

Small and Medium-sized Enterprises (SMEs)

SMEs play an important role within the aeronautics industrial supply chain. Therefore their competitiveness and technological enhancement are the key objectives for Community and national initiatives that will be presented at the conference.

Addressees

Up to 1.000 participants are expected to attend Aeronautics Days including CEOs, industry R&D managers, project co-ordinators, researchers, engineers, academics, government officials from RTD and transport ministries, and journalists from across Europe, as well as the global aeronautics community. Students and young researchers will be particularly addressed.



Practical Information

The conference language will be English. Detailed information and registration will be available at: www.aerodays2006.org. Admission will be subject to a registration fee. A reduction for students is foreseen. Fees include admission, information material, lunch, coffee breaks and conference dinner. An optional evening event will be offered. Individual hotel booking is available via a dedicated www portal.

Website

Visit the conference website for further information: www.aerodays2006.org

The Agenda

By making further steps in implementing the ACARE Strategic Research Agenda, the 3-day programme will include:

- Key Note lectures on European and global strategies in aeronautical RTD
- Plenary discussions
- Parallel technical sessions on key FP5 & FP6 and national projects contributing to the high level target concepts of the Aeronautics Strategic Research Agenda:
- The greening of air transport
- Increasing time efficiency
- Ensuring customer satisfaction and safety
- Improving cost efficiency
- Protection of the aircraft and passengers
- Pioneering the air transport of the future
- Parallel Sessions will feature:
- SMEs & supply chain issues
- Technological synergies of automotive and aeronautics sector
- Research networks
- Students research activities
- Best practice to integrate new Member State activities
- Overview on national RTD programmes
- Research political cooperation
- Global cooperation