

Air & Space Europe

THE QUARTERLY NEWSLETTER OF THE CEAS

editorial

THE POINT OF VIEW OF THE RAeS PRESIDENT

I am very pleased and honoured to recently have become both the President of the Royal Aeronautical Society, and a CEAS Council Member. During my career, I have worked in both the manufacturing and airline sectors, which involved extensive dealings with companies based in all the major worldwide centres of aviation activity. It is very encouraging indeed that over the past 20 years, the European industry has significantly extended the range of products and services provided, and also substantially increased its market share. It is difficult to be precise as to the extent to which this change has resulted from a greater degree of cooperation within Europe, but there is no doubt that it has been a significant factor. It is very clear that huge investment is required to fund research, development, and production of aircraft and components, in order to be world class competitive. However, production volumes are so comparatively small, that for many products, only 2 or 3 major worldwide suppliers are likely to survive. Under these circumstances, the polarisation of production between the USA and Europe was probably both necessary and inevitable.



Europe has been less successful in the areas of regulation and infrastructural development, and it is in these areas that some of the greatest future challenges lie. An efficient and integrated Air Traffic Control system is a prerequisite for safe and orderly operation. Planners must often feel that they have a big enough challenge trying to maintain standards during the present period of rapid sustained growth in air transport demand, yet what is required is substantial improvement at the same time. Airport capacity is another pressure point, and needs have been addressed with varying degrees of success in different countries in Europe, adequacy being rightly viewed as a competitive advantage. City centre and surrounding area access times and convenience to airports is still a major issue. So too is the processing time for passenger handling within airports, where more imaginative use of modern technology is imperative if the threat of terrorism is to be contained, without intolerable frustration for passengers.

Civil aviation needs a substantial degree of regulation of necessity, but the current system still results in the arising of regular assertions of uneven treatment, thinly veiled subsidy, and protectionism. Harmonisation of certification and licencing has been the subject of much debate and a certain amount of progress, yet national differences remain, notably between Europe and the USA, which can significantly and adversely affect manufacture, and airline economics.

Finally, there is mounting pressure on the aviation industry to do more to address adverse environmental impact. It is often said that perception becomes reality, and whilst there is limited value in highlighting past achievements, the aviation industry as a whole has been very muted in this regard. Equally, it must be sensible to publicise the unique challenge which aircraft designers face, given the extreme weight sensitivity on aircraft operating economics, relative to other transport modes. To a significant degree, noise minimisation and gaseous emission reduction involve conflicting design decisions.

Having painted a brief picture of an industry facing formidable challenges, let me touch upon where I believe that professional societies and CEAS in particular should fit in. Government agencies face a huge problem soliciting views from all the various interested parties within aviation, when considering policy formulation and solidifying planning decisions. Often, the most relevant inputs are not effectively heard. Professional Societies with a broad membership from the entire spectrum of aviation are in a unique position to bring together and consolidate views into a simple digestible format. By doing this, government agencies are more likely to value inputs, engage in meaningful debate, and produce timely relevant plans. In effect we have to view this as « helping them to help us »!!

Roland J. FAIRFIELD
RAeS President
BSc, Msc, CEng, FRAeS

BIOGRAPHICAL DESCRIPTION

Roland Fairfield was educated at Oundle School, Bristol University (BSc Mechanical Engineering) and Cranfield University (MSc Air Transport Engineering). He joined Rolls-Royce as a graduate apprentice and subsequently worked as a design engineer in the advanced project department, which included involvement with the RB199 engine for the Tornado.

He joined BOAC as a power unit development engineer, subsequently transferring to the maintenance and overhaul division. He ran a variety of workshops, including powerplants, during the early phase of JT9D and Olympus 593 operation. He then became responsible for VC10 and Concorde maintenance and overhaul. He joined Cathay Pacific Airways as engineering planning manager in Hong Kong, subsequently holding a variety of posts culminating in engi-

neering director for the last four and a half years. On returning to the UK, he has been active as a consultant with Rolls-Royce, Messier-Dowty and FLS Aerospace, plus involvement in aircraft purchase, sale, freighter conversion and leasing.

His flying career has been confined to Chipmunks in the University Air Squadron and Beagle Pups at Cranfield.

PERSONALITY INTERVIEW

JACK METTHEY

► The Editorial Coordinators of A&SE interviewed Jack METTHEY, Director for Space and Transport Research in DG RTD, European Commission.



Jack METTHEY

A&SE

Could you please give us some general indications about the progress of the FP6 Research Actions? The most promising ones, in particular.

Jack METTHEY

The first call under the Sixth Framework Programme (FP6) «Aeronautics and Space» priority area produced eleven Integrated Projects (IPs), two Networks of Excellence (NoEs) and over 50 other proposals. Negotiations are complete with a total European Commission contribution of over €240 million.

One particularly interesting area is «Global Monitoring for Environment and Security» (GMES) subject to a Commission Communication¹ earlier this year. The planning phase is now complete and implementation has begun. Among other things, GMES will play a key role in future international Earth observation systems.

A&SE

What are the main results of the second FP6 proposals selection process?

Jack METTHEY

Proposals for the second call were received until the end of March. The budget available for the second call is €300 million. The proposals have been evaluated over the last several weeks and the results will be published soon. The Commission expects to fund another seven IPs, one NoE and 45 other proposals.

A&SE

When do you think the first EU security & defence related research & technology projects will enter into the EU Framework Programmes?

Jack METTHEY

Following requests from industry, the European Parliament and the Council, the Commission launched a 'Preparatory Action on the enhancement of the industrial potential in the field of security research'. The first call for proposals was published on 31 March with a closing date of 23 June 2004.

This Preparatory Action - which takes place outside the scope of FP6 - will cover a three-year period (2004-2006). Its aim is to prepare the groundwork for a full Security Research Programme to start after 2006. It is expected that this Programme would be managed within, or be closely related to, the structures of the next Framework Programme (FP7).

A&SE

Are preliminary discussions presently running, concerning co-operation processes between the EC and the authorities in charge of the future European Armament Agency's creation?

Jack METTHEY

Yes, a fruitful collaboration has been established between Commission services and the AET, the "Agency Establishment Team", which was in charge of preparing the statutes of the future agency.

Representatives from the main DGs involved in the agency's activities have participated in this preparatory work and the European Commission is carefully following the progress made towards the establishment of the Agency.

Close cooperation is foreseen between the Commission and the Agency in order to reach a common objective: contribute to EU effectiveness and coherence in this domain by reducing its fragmentation.

As far as R&D policy is concerned, it is necessary to create strong links between the Commission and the Agency, while clearly respecting each other's specific role. Programmes in the Security Research area should complement other research activities in to avoid duplication and the artificial divide between civil research under Community framework-programmes and defence research projects at national or intergovernmental level.

The first part of the process is now finished and we are now facing an important political challenge.

Now that a political agreement is reached and a Joint action adopted, the Agency and the Commission will need to define how to work together. I'm sure we will reach a workable arrangement since we share a common objective: to foster increased cooperation in research in the field of security and defence.

A&SE

How do you feel about the FP's Financial Perspectives beyond the current FP6? FP7 and following...

Jack METTHEY

I feel very optimistic about the future of Community research activities. In February 2004 the Commission presented a Communication to the Council and the European Parliament related to the future Financial Perspectives for all Community activities for the period 2007-2013 [«Building our common Future. Policy challenges and Budgetary means of the Enlarged Union 2007-2013»]. In this proposal, the strengthening of the European effort in research and technological development is

¹ Global Monitoring for Environment and Security (GMES): Establishing a GMES capacity by 2008 - (Action Plan (2004-2008)) COM (2004) 65 final

considered as a key objective to attain sustainable development, which is one of the three priorities for the coming period. This objective is also related to the implementation of the Lisbon agenda on competitiveness for growth and employment, which should be based on improving our research capacity, boosting enterprise and innovation, establishing networks and partnerships at European level, and certainly enhancing the role of education. Today, Europe allocates only an average of 2% of its GDP to research, compared with 2.7% in the United States and more than 3% in Japan. At the European Council of Barcelona, a target was established to raise the European effort on research to 3% of Union GDP by 2010, with 1% to come from public sources, and 2% from the private sector. In line with this target, the Commission proposes to double the budget of the next Framework Programme (FP7), to help achieve our research needs by providing direct financial support at European level to complement national programmes.

For the case of "aeronautics", the enlarged Union presents many new opportunities that can make a significant contribution to the economic prosperity of Europe and its citizens. It is recognised that aviation has delivered immense social and economic benefits. The aeronautic industry is a strategic sector that pushed the frontiers of technology throughout the 20th century which enhanced a wide range of other sectors as well. Today the mobility of people and goods across a larger, more diverse Europe is an essential requirement. An integrated transport system involving aeronautics will serve to enhance economic competitiveness while achieving the EU social objectives.

Concerning Space, European Space Policy aims at a greater coherence of European and national private and public efforts. The EC-ESA Framework Agreement concluded in May 2004 is a significant milestone to facilitate this process. The White Paper on the future European Space Policy presented by the Commission last year outlines an Action Plan for defining policy objectives. As a consequence, the importance of research efforts for Space activities was recognised in the financial perspectives proposal, where the development of applications in fields such as positioning and navigation, Earth observation and monitoring, and telecommunications are explicitly mentioned. Moreover, for the first time, specific references to Space are included in EU draft Constitution. Finally, I have to mention that international co-operation is of paramount importance in this field, particularly with existing Space powers such as USA and Russia, and emerging ones like China, India and Brazil.

A&SE

How is the EU's enlargement to 25 Nations being taken into account in the Aeronautics and Space works of the EC?

Jack METTHEY

In preparation for the enlargement, Specific Support Actions (SSA) for Associated Candidate Countries were implemented to stimulate, encourage and facilitate the participation of organisations from the Associated Candidate Countries (ACC). These actions include:

- information, awareness, and training activities;
- promotion of ACC competencies;
- support to researchers from these countries to participate in conferences and to prepare proposals;
- establishment and reinforcement of networks of high quality

research centres between Member States and ACC, and between high quality research centres of ACC and within ACC;

- measures in support of SMEs in ACC to better participate;
- evaluation of RTD systems and RTD policies, the screening of research establishments and prospective studies aimed at defining research policies and organisation of research systems in a particular field.

The Associated Candidate Countries enjoyed the status of observers in the Aeronautics and Space Programme Committee. As from 1 May 2004 the Associated Candidate Countries that became EU Member States have the same rights and obligations as the rest of EU members.

A&SE

What is the present status of the Strategic Research Agenda (SRA) development and of the "ACARE" Group works?

Jack METTHEY

The technology platform ACARE was launched at the Paris Airshow in June 2001. It comprises 37 members including representation from the Member States, the European Commission and other stakeholders, including manufacturing industry, airlines, airports, service providers, regulators, the research establishments and academia. ACARE's main focus has been to establish and carry forward a Strategic Research Agenda (SRA) that will influence all European stakeholders in the planning of research programmes, particularly national and EU programmes, in line with Vision 2020² and the goals it identifies.

The first edition of the SRA³ the culmination of more than 5 000 man days of effort of the ACARE working teams by some 300 experts representing all stakeholders - was released in November 2002. It was subsequently praised by the European Commissioner for Research as "an excellent example of non interventionist, modern industrial policy at work". After its launch it was disseminated widely throughout Europe through national workshops where it received widespread support. The main message delivered was that the SRA was not only addressing specialists in European research collaboration but that it was also relevant to a wide range of interests in the aviation community. This clearly had an impact and the SRA is now used as the reference for aligning European, national, regional and private research programmes.

The concept for the SRA has always been a dynamic series of reiterations over time allowing new developments within and outside the air transport community to be absorbed. As such, work is already well advanced in preparing the second edition of the SRA, which is due for later this year. ACARE and its working teams have been concentrating their efforts in:

- Strengthening the knowledge for specific sectors and perspectives missing in SRA-1;
- Developing a range of different future scenarios and interpreting these against the challenges and the resultant technologies required.

ACARE is also considering the most efficient and effective institutional enablers for research to support the implementation of the

² European Aeronautics: A Vision for 2020. Report of the Group of Personalities (January 2001)

³ Further information can be found by visiting the ACARE web site www.acare4europe.org

Agenda. It is looking in particular into aspects such as research infrastructures and education, capabilities of the technology supply chain across the Member States, the roles of the stakeholders and characteristics of their research programmes.

We are all delighted to witness the progress ACARE has made. The collaboration among public Institutions and private stakeholders, so well consolidated within ACARE, can be considered a good base for other private / public partnerships in research and technology development.

A&SE

Are the Nanotechnologies applications to Aeronautics & Space sufficiently covered, in your opinion?

Jack METTHEY

The European Commission is aware of the importance of this key technology. In fact it is a thematic priority under the Sixth Framework Programme and there is a unit completely dedicated to Nanosciences and Nanotechnologies under the Industrial Applications Directorate in DG Research.

In addition, the Aeronautics & Space calls are open to any proposal of application of Nanotechnologies. For example, one of the submitted proposals addresses the development of nanotube hybrid composite structures with sensing and actuating capabilities for aerospace.

A&SE

How is the cooperation EU-ESA evolving?

Jack METTHEY

ESA/EU relations are clearly not new. They date back to the 1970s for that matter. However, I must say that we have recently taken giant steps in strengthening our cooperation. The early 2003 Green Paper process, following the 2002 European Parliament request for the preparation of a White Paper on Space Policy by the Commission, was a landmark process that brought our institutions to far greater understanding than ever before.

ESA and the Commission have different decision-making structures, different legal mechanisms, and different mandates. Working closely together first on the Green Paper, and then on the White Paper, contributed to define a new relationship between the two organizations.

Today, we have agreed to implement a joint European Space Policy: ESA is responsible for the supply side of space solutions, while the EU will manage the demand side. Our future collaboration relies on this basic understanding that has very deep political and programmatic implications.

Finally, the recently concluded EC-ESA Framework Agreement gives our respective organizations the legal basis to work together on the development of a European Space Programme. The next step will be the entering into force of the draft Constitutional Treaty, which provides for a new EU competence in the Space field. ESA and our services are already tackling the elaboration of the European Space Programme, in close cooperation with our respective Member States through the High-Level Space Policy Group.

In brief, I would define our cooperation today as being an evolving process towards a closer relationship, clearly for the benefit of Europe and its citizens.

A&SE

Can we now consider that the GALILEO project is on the right track and that the entry in operation of the system will effectively start in 2008?

Jack METTHEY

The initial phase of Galileo (development phase) is co-financed by the European Union and by the European Space Agency. The start up of this phase was to coincide with the adoption by the Council of the European Union of the Regulation setting up the Galileo Joint Undertaking in May 2002. However, it took the European Space Agency another year to get approval from its Member States. The Galileo Joint Undertaking therefore became truly operational in July 2003. While research activities and technology developments have occurred between May 2002 and July 2003, some potential delay with respect to the initial planning could be considered as a result of these initial institutional problems. The European Space Agency is reviewing the programme calendar in order to update the Transport Council next December.

However, industrial activities for the development phase of Galileo are proceeding well: the orders for the first two Galileo satellites were placed in July 2003 (to SSTL and to Galileo Industries). The European Space Agency is now launching the full "In-orbit validation" contract through which a set of 4 satellites will be launched and tested in orbit in order to ascertain both the technology and the system compliance to the mission requirements.

In parallel, the Galileo Joint Undertaking is negotiating with three industrial consortia the "Galileo Concession": it is effectively foreseen that the deployment of the full satellite constellation (including its funding) and the commercial exploitation of its services will be handled by a private operator. The overall Galileo schedule is therefore dependent on the concessionaire plans and on the way it will procure the system elements. One scenario put forward is a gradual take up of the infrastructure, whereby initial services could already be provided to users as soon as the in-orbit validation phase is concluded, i.e. 2007.

10TH AIAA / CEAS AEROACOUSTICS CONFERENCE MANCHESTER, UK

By Andrew KEMPTON, Rolls Royce

► 10-12 MAY 2004



The 2004 AIAA/CEAS Aeroacoustics Conference was organised by the Royal Aeronautical Society with a technical organising committee from Europe and the US, and was sponsored by Rolls-Royce, QinetiQ, Short Brothers, and Manchester Marketing.

The AIAA/CEAS Aeroacoustics Conference has established itself as the premier international forum for the field of aeroacoustics. It is held annually, with strong participation from industry, research establishments and universities. Every third year it is held in Europe,



and this year it was held in the gothic splendour of Manchester Town Hall.

Over 220 high-quality papers were presented in six parallel sessions. The subject matter covered included: Acoustic / Fluid Dynamic Phenomena, Active Noise Control, Advanced Testing Techniques, Airframe Noise, Combustion Noise, Community Noise, Computational AeroAcoustics, Duct Acoustics, General Acoustics, Interior Noise and Structural

Acoustics, Jet Aeroacoustics, Loads / Sonic Fatigue, Rotating Machinery Noise and Turbomachinery Noise. Research aimed at further reductions in aircraft noise provided the main theme of the conference, with significant developments being reported in a number of technology areas. Two plenary papers covered the European SILENCE(R) noise research project and NASA research into technologies for aircraft noise reduction.

Over 310 participants attended the conference, a record.

A reception was held in the Air and Space Hall of the Museum of Science and Industry.

The awards dinner was held at Manchester United Football Stadium, where guests were entertained by a football match between Manchester United and Manchester City youth teams.

At the dinner, the 2003 CEAS Aeroacoustics Award was presented to Professor **Shon Fowcs Williams** and the 2004 CEAS Aero-



acoustics Award was presented to Professor **Sébastien Candel**. The 2004 AIAA Aeroacoustics Award was presented to Professor **Stuart Glegg**.

The Airbus-sponsored best student paper award was won by **Matt Wilkinson** of

the Institute of Sound and Vibration Research, Southampton University.

The conference proceedings were available on-line and will be published in a post-meeting CD.

Next year's conference will be held in Monterey, California from 23rd to 25th May 2005. The abstract deadline is 15th October 2004.

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REPORT ON THE LAST CEAS COUNCIL MEETING 17 MAY 2004, NOORDWIJK (NL)

By **ULF OLSSON**

► THE 35TH CEAS COUNCIL MEETING TOOK PLACE IN NOORDWIJK, THE NETHERLANDS, ON THE 17TH OF MAY WITH REPRESENTATIVES FROM ALL THE EIGHT MEMBER SOCIETIES.

Most of the meeting was devoted to a discussion of the future structure of CEAS. Since its creation in 1991, the CEAS has operated as an unregistered association to promote the interests of the constituent Societies. It has no funds of its own and cannot enter into any legally binding agreements. However, over the years, the activities have grown. This Newsletter is one example, the promotion of conferences another. Proposals to establish a European Space Society within the framework of CEAS have also been presented by ESA/ESTEC. The Council therefore decided that it was time to establish a legal structure for CEAS and delegated to the French Society AAAF to come back to a special Council meeting on the 29th of September with a draft of statutes. The aim would be to register the new CEAS in Brussels before the end of the year.

The Council also decided to present the CEAS Gold Medal for 2004 to Mr **Alvaro Azcarraga** of Spain for his outstanding contributions to the development and promotion of aeronautics and space in Europe. Mr **Azcarraga** is presently President of Boreas and Managing Director of SENER Aerospace. He is the author of several books and many articles on space activities, space education and upper atmospheric physics.

There were also some changes in the leadership of CEAS. Thus, Mr **Julian Simon** from the Spanish Society took over as CEAS President for the next year after Mr **Fedde Holwerda**, The Netherlands, and Mr **Roland Fairfield** from the Royal Aeronautical Society was elected as new CEAS Vice President for Technical Programmes after Professor Ian Poll from the same Society.

THE DGLR AT ILA 2004, BERLIN

By **Peter BRANDT**

► DGLR WAS PRESENT AT ILA 2004, WHICH TOOK PLACE FROM 10 TO 16 MAY AT THE SOUTH AREA OF BERLIN SCHÖNEFELD AIRPORT, WITH VARIOUS PRESENTATIONS.

Two focus were an «Aerospace Youth Point», where students got extensive information about aerospace education and professional and hobby activities, and a three days Conference called «Focusing Technology».

« AEROSPACE YOUTH POINT »

DGLR was offering in Hall 6 a broad spectrum of information for the interested public and a presentation stage for young professionals who are concerned with this fascinating technology. With 200 m² «Aerospace to grip» the «Aerospace Youth Point» built an attractive focus for students, pupils and other interested people. Visitors received first hand information about organisations and projects the young technicians are engaged in, from building model aircraft to Mars research. The «Youth Point» reflected the

ideas and the engagement of young DGLR members, and their professional work.

Highlights of this year were engines and rockets including an original launch pad presented by members of DGLR «Young Professional Groups», and the Rolls-Royce BR700 core engine, presented by expert trainees. A lunar probe model, a motorcar converted into a lunar rover and a remotely controlled Mars rover model were further highlights.

In Germany the year 2004 has been proclaimed as the «Year of Technology». We considered our «Aerospace Youth Point» to be an important contribution, promoting our goals of education and assistance of students interested in aerospace technology, the representation of aerospace interests in the public and the recruitment of new members to further establish contacts between individuals, organizations and politicians engaged and interested in aerospace matters.

Besides DGLR the following organizations were permanently represented:

- DERA (Construction of model and experimental rockets)
- DLR (Educational project School Lab und planet research)
- ERIG (Experimental rockets, mini satellite)
- FEZ orbitall (Space centre for young persons)
- Kids & Co.- Spaceclub Berlin (Space as hobby, lunar rover replica)
- IRS (Mini satellites, infrared astronomy, lunar probe)
- Mars Society (Mars research, mars balloon probe)
- MFC Rossendorf (Model aircraft construction)
- Rolls-Royce (Careers advisory service, BR700 engine)

Furthermore the following organizations were present

- Aquarius (Hot water propulsion engines)
- WARR (Experimental rockets, -engines)
- ÖWF (Austrian „ Weltraumforum“)

“FOCUSING TECHNOLOGY” CONFERENCES

In cooperation with the Technical University (TU) Berlin and the BDLI (the German Aerospace Industries Association) - conferences with top speakers took place.

11 May 2004

- Air Traffic Management – on the way to a global standard
- Systems for future Aircraft Guidance from the ground
 - Aeronautics needs Astronautics – Navigation and Communication from Space
 - Improved ATM procedures for environmental compatibility of air traffic – solutions already achieved
 - Single European Sky – Potential for the future

12 May 2004

- Air Traffic – No. 1 in protecting Environment and Resources
- Vision 2020 – the goals of Aeronautical Industry and Research
 - Aircraft Manufacturers on their way to the most ecological Transport System
 - Engines as Pacemaker for Reduction of Noise and Emission
 - Design Possibilities of Airline Companies for Ecological Operations

13 May 2004

- Cabin Technology – Travelling by Airplane in the 21st Century
- Aircraft Layout and Cabin Design
 - Research topic Cabin Systems

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SOME NEWS FROM EUROPEAN INSTITUTIONS

► COUNCIL OF MINISTERS

- **The European Council of 17-18 June** reached the following conclusions concerning Common Foreign and Security Policy (CFSP). The European Council endorsed the Headline Goal 2010 and the Action Plan for **Civilian Crisis Management**, welcoming further steps taken to improve EU capacity to undertake military rapid response operations for crisis management. The European also agreed to take the work related NATO/EU consultation, planning and operations further, and welcomed the agreement on the creation of the **European Defence Agency**.

*Information data extracted from
the ASD Weekly Bulletin N° 2004-25.*

► ABOUT THE EUROPEAN DEFENCE AGENCY

On 15 June, in an open letter to the EU Member States, the CEOs of EADS, THALES and BAE SYSTEMS called on the European

Council to give the newly created European Defence Agency the resources and support it will need. "Faced with many institutional and practical challenges, there is a serious risk that the Agency will fall short of the ambitions and expectations set for it", they said, outlining the four keys to rapid progress, as seen from industry's perspective : capabilities (the Agency should revitalise the ECAP process), research investment (a strategic research agenda needs to be agreed, and research funds consolidated, with the control of a budget going to the Agency), European defence equipment market (the Agency should encourage Member States to find common solutions to near-common requirements, taking the lead in breaking down market barriers and instigating more transparent and open competitive practices in national procurements across the board), and European defence industrial and technological base (neither governments nor industry, which faces enormous competitive pressure from the US, wish to develop a Fortress Europe, nor see European defence technology overtaken or becoming dependent on foreign technologies by necessity. The Agency has a vital role to play in fostering judicious policies and care towards the industrial base in Europe).

*Information data extracted from
the ASD Weekly Bulletin N° 2004-25.*

► EUROPEAN COMMISSION

- On 22 June Commissioner **Busquin** spoke of 5 EU-funded research projects, currently running at full speed, whose purpose is a cheaper, greener and quieter aircraft. The projects originated in Framework Programme 5 (FP5) and are now nearing the completion, with new technologies at the end of the research effort SILENCE(R) aims at reducing aircraft noise by 6 dB by 2008, FRIENDCOPTER concentrates on the reduction of noise in helicopters, EEFAE aims to build aero-engines that reduce fuel consumption and emissions. TANGO seeks ways of building lighter aircraft structures, AWIATOR aims at decreasing aircraft structural weight, reduce noise and improve performance. All these projects will provide technology objectives for the 2nd Strategic Research Agenda prepared by ACARE.
- On 23 June new legislation was adopted establishing a common definition of critical parts of Security restricted areas at EU airports. Its purpose is to oblige airport staff to undergo security screening checks when entering security-sensitive zones of airports. "Critical parts" should at least include areas containing screened departing passengers and their cabin luggage, and screened departing hold baggage that has not been sealed. - Member States will have a maximum of 5 years to apply the Regulation in full.

From ASD Weekly Bulletin, n° 2004-26

► EUROPEAN AVIATION SAFETY AGENCY : EASA DELIVERS FIRST TYPE-CERTIFICATE FOR IMPORT TO A SMALL US AEROPLANE : CIRRUS –SR 20

The European Aviation safety presented on the 1st of June 2004 to Cirrus Design Corporation its first type-certificate for import. The SR 20 therefore becomes the first US general aviation aeroplane to be certified, and concludes a challenging technical project initiated in Europe by the Joint Aviation Authorities.

For the first time, a FAR 23 aeroplane is validated by EASA for import into the European Union. This US aeroplane is powered by a single 200-hp piston engine fitted with 2 or 3-blade, constant speed propeller. The SR 20 is the first aeroplane equipped with a ballistic parachute system in the event of spins or other emergencies. It meets enhanced stall characteristics and is also equipped with advanced avionics including a flat panel multifunction display. This EASA type-certificate validates the certification process initiated and performed by the Federal Aviation Administration, and submitted in April 1999 to the Joint Aviation Authorities for validation. After a fruitful and intense work to address the new design features specific to this aeroplane, the JAA transferred the project to the newly-created EASA in September 2003 for completion.

From EASA Press Release dated 1st of June 2004

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► EUMETSAT

Dr **Lars P. Prahm**, Danish, succeeds Dr **Tillmann Mohr** as Director-General of EUMETSAT in August 2004.

EUMETSAT : looking ahead

« We'll continue developing EUMETSAT, ensuring we maintain our reputation for delivering cost-effective, high quality operational Earth observation satellite data and products to Europe's meteorological service ».

Dr Lars P. Prahm

EUMETSAT • am Kavalleriesand 31 – D-64295 Darmstadt

SOME NEWS FROM INDUSTRY

► On 17 June **Dassault Aviation and EADS** announced they had concluded a partnership in the production of the future combat air system (UCAVs and manned aircraft) which is intended to replace in due course Rafale, Eurofighter and Gripen.

► It was reported on 29 June that **EADS and Lufthansa** have set up a new air cargo company whose main purpose will be to ensure transport for NATO, while waiting for the A400M aircraft to become operational. The company will lease 6 Antonov 124-100 which can transport 120 tonnes each. A Beluga fleet will also be on standby. The new company will be operational beginning 2005, and has been described by EADS as a perfect example of a «PPP» - a public-private partnership which reduces costs all around.

► **GE has opened its first research centre in Europe.** It is based in Munich and has cost some \$52 million. It will concentrate inter alia, on alternative energy systems.

► A 380 – AIRBUS KEEPS PRODUCTION ROLLING

Major components make their way to final assembly line

As A380 final assembly began in April, Airbus' production schedule for the new twin-deck aircraft keeps rolling on.

Work on four more A380 centre & forward fuselage in France

At Airbus' site in Saint-Nazaire, France, work has already been completed on components for the first A380 and production of parts for a further four aircraft is well underway.

Four sets of A380 wings in production in UK

At Airbus' wing manufacturing centre in Broughton, UK, the first

set of wings for the A380 left for the final assembly line in Toulouse in early April. The second set of wings has left at the end of April. A further four sets of A380 wings are currently in production, with three in structural assembly and another pair in final equipping – the stage where systems such as electrics and hydraulics are installed.

Next two rear fuselage in final stages of production in Germany

Work in Hamburg, Germany, is also moving forward rapidly. At this site, Airbus manufactures and assembles the A380 rear fuselage and forward fuselage (without cockpit) sections. Hamburg has also delivered five upper central fuselage shells to Saint-Nazaire. In March, the first-ever rear fuselage for the A380 left Hamburg destined for the final assembly line in Toulouse.

Spain works on A380 central belly fairing number five

Airbus in Puerto Real, Spain, has delivered the central belly fair-

ing for the first three "flying" A380s, as well as for the A380 static-test-bed aircraft. They were sent from Spain to Saint-Nazaire in France, where work is now underway on the integration of the parts into the forward and central fuselage.

Airbus to manufacture four A380 aircraft a month

A380 production is currently geared to delivering one section a month, but is designed to manufacture four aircraft a month once production is fully ramped up.

Information data extracted from the Airbus Letter, April 2004.

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MOON, MARS AND BEYOND

• On 16 June the US Presidential Commission on Moon, Mars and Beyond, chaired by **Edward Aldridge**, handed in its report entitled «A Journey to inspire, Innovate and discover», in which it calls for a change in NASA basic structure in order that the agency can carry out the next generation of space travel, in line with the goals outlined by President Bush in January. A slimmed-down NASA should subcontract space roles to private enterprise and enter only areas where there is «irrefutable» evidence that the government is solely qualified to perform space activities (i.e. manned space flight). In order to address the

long-standing problems of the agency, the creation of three new internal bodies is proposed: a technical advisory board (advising on technology and risk mitigation), an accounting group (ensuring accurate estimates of mission cost) and a high risk, high payoff research division (recapturing the innovative spirit of NASA's earlier years).

Information data extracted from the ASD Weekly Bulletin N° 2004-26.

THE NEXT EVENT

Date	Location	Organising society	Event and theme
14-16 September 2004	MARSEILLE	AAAF	CEAS Forum 30 th European Rotorcraft Forum

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