

Air & Space Europe

THE QUARTERLY NEWSLETTER OF THE CEAS

editorial

THE CHANGING FACE OF AEROSPACE

Over the past five years, there have been tremendous changes in aerospace and aviation. The centenary of successful, man carrying, powered flight coincided with a number of significant events that are destined to set a new course for aerospace and aviation over the next 100 years and beyond.

For the first time, we see an irreversible divergence of civil and military aviation. Civil aviation has burgeoned since the introduction of the jet engine 50 years ago. The extensive national and international transport network that exists today is an essential part of the modern world. The ability to move people and goods rapidly and efficiently, over very large distances, is now a key element in global wealth creation. We are experiencing the fulfilment of the 200 year old vision of Sir George Cayley, who saw aerial navigation as the solution to unrestricted transport of raw material and goods to market.

In development terms, the civil aircraft of today are the direct descendents of the Boeing B-47 of the 1940's and they have become essentially commodity items. The role of technology has changed. For decades, technology led the market in the quest for «further, faster, bigger». Now the market demands «safer, cleaner and cheaper» and technology must occupy a supporting role. Moreover, the traditional core skills of aerodynamics, structures, flight mechanics and propulsion are close to maturity, with ever smaller improvements being delivered in return for ever increasing investment. The key issues today are manufacturing, production and through life support. Aircraft design must focus on the needs of the passenger through cabin comfort, in-flight entertainment and access to the internet. With the current state of the airline industry, issues such as cost of ownership, outsourcing, leasing agreements, new business models, supply chain management, insurance and staff training are every bit as important as aircraft performance, and are likely to remain so for the foreseeable future.

However, if the continued growth of the global economy and the opening up of new markets, such as China, demands year-on-year growth of air transport capacity, then the environmental impact of aviation will inevitably become an important issue. In this case technology intended to reduce the environmental impact of aviation will become a major enabler, or a limiter, for future growth in the air transport system.

In the military domain, the air vehicle is increasingly seen as an

enabler for very sophisticated military systems. Manned military aviation is in decline for a whole range of reasons. However, the unmanned air vehicle (UAV), which can trace its origins back to Samuel Langley, who achieved the first powered, sustained flight of a UAV on the 6th of May 1896 with his



«Aerodrome» Number 5, is clearly in the ascendancy. With the highly constraining 'biological' limits of manned aircraft removed, the UAV can be almost any size and have any desired performance. Hence, UAVs can be used in a wide variety of roles. They can be sensor platforms, weapon platforms and communications relays. They can perform their roles alone or they can be

integrated with other UAVs, manned aircraft, ships, ground vehicles and even individual soldiers to form hugely effective, integrated battle management systems. They will be key elements in the development of network centric warfare and in surveillance and intelligence roles they will provide greatly enhanced security in the fight against terrorism.

The evolution of the UAV will be determined by technical advances. Without the pilot, UAV performance is limited by technical capability and, hence, the development of military aviation and civil aviation will be very different.

Today we have a research, development, training and teaching infrastructure that has evolved over a long period and is focused on the needs of 20th century aerospace and aviation. If Europe is to take full advantage of the opportunities that these important changes are bringing, we must move quickly to apply our formidable intellectual talents to the new problems. CEAS has an important role to play. The programmes and activities that are organised under the auspices of CEAS must become key elements in the change process. We will expose our members to the new issues and we will focus on the key problems.

The 21st century will see dramatic developments and changes that are very difficult to imagine today. We must rise to the challenge or be left behind.

Professor Ian Poll OBE

CEAS Vice President Programmes
Director, College of Aeronautics

Cranfield University - Cranfield MK430AL - England

BIOGRAPHICAL DESCRIPTION

Professor D.I.A. (Ian) Poll OBE • FREng • FAIAA
• FRAeS is Director of Cranfield College of Aeronautics, Professor of Aerospace Engineering and Technical Director of Cranfield Aerospace Limited.

Cranfield College of Aeronautics is unique post-graduate School that is part of the UK Cranfield University. For over 50 years, the College has been a leading, internationally recognised, centre for research, teaching and consultancy in all aspects of aerospace and aviation. Alumni of the College form a worldwide group of leaders

in civil and military aviation.

Ian Poll was the President of the Royal Aeronautical Society in 2001/2002 and he has lectured extensively on the challenges facing aerospace and aviation, particularly in the areas of environment, impact, safety and security, and on the role that new technology can play.

PERSONALITY INTERVIEW

RICHARD I. CASE

► Richard I. Case has been elected as the CEAS award winner 2003. This CEAS' gold medal is presented to him in recognition to his outstanding contributions to the design, development and manufacture of the EH101 helicopter, as well as to a new generation medium-lift rotorcraft jointly developed by Westland Helicopters with Agusta of Italy. Also for being instrumental in the integration of Westland with Agusta to form the European joint-venture company Agusta Westland, which is now the largest helicopter company in the world.

The Editorial Coordinators of Air & Space Europe have interviewed Richard I. Case.



*Richard I. Case CBE FREng
Managing Director
Agusta Westland.*

A&SE

As a leading figure in the European aerospace industry, how do you view the Confederation of European Aerospace Societies (CEAS) and what are the main objectives towards which you believe it should strive?

Richard I. Case

Europe represents a formidable force in Aerospace Design and Engineering capability, coupled with its skilled manufacturing workforce. The Confederation of European Aerospace Societies (CEAS) is charged with developing the awareness of the global customers, particularly the United States of America of the total capability of European Aerospace Industry and promote intercontinental supply of European aerospace hardware to the export customer.

A&SE

In 2003, the year in which you were chosen to receive the CEAS Award, Agusta Westland celebrated the 50th anniversary of its first helicopter flight. Looking back at that period, what do you regard as the most significant event(s)?

Richard I. Case

In April 1957 the UK Government White Paper pointed the way towards rationalisation of the Britain's aircraft Industry - compounded two years later when the Minister of Aviation announced the plan to reduce the number of main aircraft manufacturers from 16 to 4 and the engine companies from 7 to 1.

Within this plan the Government wanted one helicopter-manufacturing organisation. In August 1959 Westland began an acquisition programme of Britain's helicopter manufacturing interests. Progressively, Saunders-Roe, Bristol Helicopters and Fairey Helicopters were acquired and Westland - through building under licence evolved to become a total capability, design and development, prime constructor.

The joint European, Anglo-Italian development of the EH101 helicopter cemented Westland relationship with Agusta and subsequently led to merging the companies into AgustaWestland currently as one of the world's leading helicopter companies with capability in all disciplines of rotorcraft technology and the widest product portfolio of modern, state of the art rotorcraft.

A&SE

The Anglo-Italian company Agusta Westland has a 32% stake in the NH90 programme in partnership with Eurocopter. Do you think that the United Kingdom will join other European nations as a customer for this helicopters soon?

Richard I. Case

The AgustaWestland (32%) stake in the NH-90 programme is an important part of our future business and maintains a close and important working relationship with Eurocopter. The UK and Westland were fully involved in the early crucial definition phase of the NH90, but the decision was made to focus on the EH101 for its prime military requirement. There is no current indication to feel that this position is changing.

A&SE

Are general cooperation agreements with Eurocopter being envisaged with a view to strengthening the position of Europe in the rotorcraft industry sector?

Richard I. Case

AgustaWestland and Eurocopter vie for number one position as the world's leading Helicopter Company. AgustaWestland and Eurocopter already contribute to the ERICA tilt rotor programme and in the realms of frontier technology - it would make sense for these two leaders to establish programmes for working together. An immediate example is Future Heavy Lift.

A&SE

Your company has stated that it is strengthening its expertise by investing in new technologies embodied in the next-generation TILTWING concept. Can you indicate what are the most significant of these new technologies? Also, could you tell us the present status of the "ERICA" (European Enhanced Rotorcraft Innovative Concept Achievement) research action currently conducted within the E.U.'s 6th Framework Programme?

Richard I. Case

ERICA is on track and AgustaWestland's exploitation of tilt wing technology manifests itself in the advanced development of the BA609, currently 150 hours into developmental test flying and going strong - an exciting prospect development with our American partners, Bell.

A&SE

Concerning Research & Technology Acquisition, what are in your view the most promising technology areas to be particularly developed in order to prepare for the future?

Richard I. Case

AgustaWestland is taking part in a series of Critical Technology Programmes (CTPs) as part of the EU Framework V programme in support of a future European Civil Tilt Rotor/Wing Aircraft (TR/WA).

The launch CTP was RHILP (Rotorcraft Handling, Interactions and Loads Prediction), and this was completed in April 2003. This paved the way for another five CTPs, initiated at the second and third calls of Framework V. Together, these CTPs tackle the technical risks associated with the drive system (TRYSID), advanced rotor design (DART), active control and cockpit technologies (ACT-TILT), rotor dynamics and acoustics (ADYN) and international aerodynamics (TILTAERO). These projects are a collaborative venture between the European rotorcraft industry (AgustaWestland, Eurocopter), system suppliers (e.g. FHL, Liebherr), research laboratories (DLR, ONERA, NLR, CIRA) and universities including the University of Liverpool and Glasgow Caledonian.

All of the critical technology programmes listed above have impact that extends beyond the Tilt Rotor application, and together these research initiatives are all contributing to a robust engineering technology base.

The CTPs are all due to complete in 2005 and success in these is expected to lead to a proposal to build a technology demonstrator in the 3rd call of Framework Programme VI. The anticipated commencement date for the technology demonstration phase is 2006.

AgustaWestland continues to invest in the key rotorcraft technologies including blade design and flight control systems. On the blade technology side we are investing in the BERP IV programme that is focusing on reducing first and life cycle costs, lowering vibration and noise while improving hover and cruise performance. The blades will initially be utilised on the EH101 and Lynx helicopters but will have the potential to be applied to other helicopter platform.

Additionally we are putting great emphasis on developing and utilising new technology to enhance both training and customer support activities. What we are providing customers is not just a helicopter, but a total package, with training and support being vital parts of that package.

A&SE

Could you give us some indications about the next generation products Agusta Westland is looking towards? Do you have high hopes for the development of markets for tiltrotor/tiltwing products, and if so, what are the most promising areas for possible utilisation of such products?

Richard I. Case

AgustaWestland will continue to develop its existing products through technology insertion to ensure it has modern market leading products while also developing equipment fits to widen the role applications of the products. Additionally we will continue to develop new products to meet future requirements, working with industrial partners where it is appropriate and brings benefits to all parties.

Tiltrotors will in 10 years time be established and will be considered just another alternative to a helicopter or fixed-wing aircraft with operators making decisions to purchase on the same traditional cost, performance, capability and safety issues as any other aircraft. The BA609 nine-seat tiltrotor will be attractive in a number of markets including corporate, law enforcement and public service duties.

A&SE

Could you also give us some indications about the future extension of Agusta Westland global support network ?

Richard I. Case

AgustaWestland are well advanced in their innovative approach to Integrated Operational Support (IOS) with the company taking ownership and total responsibility for spares provision and support, blade to blade, on a growing family of military helicopter types. The bench mark example with Sea King Integrated Operational Support (SKIOS) progressing towards Merlin IOS. Lynx IOS. et al.

AgustaWestland delivers leading edge solutions to customers with a complete range of advanced training courses through partnerships with BOEING - ATIL (Aviation Training International Ltd) and ROTORSIM teaming with CAE etc.

AgustaWestland provide support to International customers through a network of 30 service centres.

Supply chains located in Europe, the Americas, the Middle East, South East Asia and Australia service these support centres.

Dedicated and highly experienced teams of logistic and maintenance teams are on call to attend AgustaWestland customers, around the clock. These teams provide and co-ordinate continuous spares supply, repair and overhaul support services throughout the lifecycle of the product.

The three-engine EH101 is unique in being designed not only for maritime and other military missions but also as a civil helicopter for the transport of passengers and cargo.

The Helicopter Electric Actuation Technology (HEAT) programme is another example of technology AgustaWestland is investing in, where all conventional flying control systems are replaced by all-electric controls. It will be demonstrated on an EH101 helicopter and brings fly-by-wire technology to helicopters, boosting performance by offering increased range of payload, enhanced handling, lower cost of ownership and improved reliability and safety.



A&SE

Will the transition from JAA and CAA to the new European Aviation Safety Agency (EASA) have any marked impact upon the process of airworthiness certification as it relates to rotary wing aircraft? If so, what steps are you taking to deal with those changes?

Richard I. Case

European Aviation Safety Agency (EASA), a common European benchmark standard, accepted by the FAA and other International airworthiness authorities, should clarify and advance the Airworthiness Certification process. Rotary Wing Aircraft apply the strictest standards to their quality and integrity and will readily come to terms with EASA – certainly a step in the right direction.

A&SE

What is your opinion of education and training in the UK, and also more widely within Europe, in the Rotorcraft related disciplines? Are there in your view some areas in which improvements should be accomplished?

Richard I. Case

AgustaWestland UK Operations operate a wide-ranging Apprenticeship scheme with students in training across a choice of disciplines to achieve formal qualification in Aerospace Engineering. The Society of British Aerospace Companies (SBAC) are working with UK Government to encourage youth in Aerospace and Engineering studies and our Italian Operations recruit their first tier Engineers straight from College and University.

A&SE

Have you any wishes to express concerning the organisation and the programme of the next European Rotorcraft Forum, sponsored by CEAS, to be held in next September in Marseille?

Richard I. Case

European Rotorcraft Forum: the staging of the next European Rotorcraft Forum in Marseille offers a golden opportunity for European Helicopter Industry to demonstrate the technology advantage of their modern range of superior rotorcraft products in direct contrast to the long established, traditionally manufactured work horse products of the USA. A similar technology cycle which put Airbus Industries in the driving seat at the expense of Boeing in the commercial aircraft business.

Modern manufacturing processes, benefits in cost of ownership and cost of operations, now prevails in a very favourable comparative of European Helicopters with US Helicopter types. AgustaWestland will attend and give a good account of its products and capabilities.

For more information, please contact:
Agusta Westland Yeovil, BA 20 2 YB England
Public Affairs

Tel: + 44 1935 702 007 - Fax: + 44 1935 702 319
E.mail: d.bath@agustawestland.com

GERMAN AEROSPACE CONGRESS 2003

► DGLR HELD ITS ANNUAL AEROSPACE CONGRESS IN MUNICH FROM 17 TO 20 NOVEMBER 2003. THE CONFERENCE THEME OF THE WEEK WAS:

"100 YEARS OF ENGINE POWERED FLIGHT - 112 YEARS OF MANNED AVIATION: VISIONS ARE DESIGNING FUTURE"

Prof. Dr.-Ing. **Joachim Szodruich**, President of the DGLR, had the possibility to welcome nearly 400 guests during the opening ceremony and honoured in his opening speech the performance of Otto Lilienthal and the Wright Brothers, and emphasised the development of 260 metres flight of one man to nowadays 15000 kilometres with more than 400 passengers.



Subsequent Dr **Otto Wiesheu**, the Bavarian Minister for Economy, Infrastructure, Traffic and Technology highlighted the outstanding position of Bavaria within the German aerospace industry.

As a representative of the aerospace industry, Dr.-Ing. **Klaus Steffens**, President and CEO of MTU Aero Engines GmbH, gave an overview of engine development in the last century before Prof. Dr **Klaus Broichhausen**, chairman of the programme committee, talked about the contents of the congress.

Another highlight was the conferment of the Ludwig Prandtl-Ring, the highest award of DGLR, to Prof. Dipl.-Math. Dr.-Ing. **E.h. Klaus Gersten**, Bochum. This honour and the presentation of 13 young talent award winners of science in common with representatives of the their sponsors gave the opening ceremony the right surrounding.

The first day ended for the guests with a formal reception at the "Residenz of Munich".

The technical programme started on Tuesday with more than 250 lectures in 6 parallel sessions. For the first time the young talent conference was integrated into the congress, which gave the students the possibility to contact professionals and to give an outlook of their future profession.

During the Gala dinner with nearly 300 guests, the Otto Lilienthal Medal was awarded to Dipl.-Ing. **Reinhold Birrenbach**, who was honoured for his over 40 years outstanding work for the aircraft industry, who was among other things responsible for the projects Do-328 Prop, Do-328 Jet and 728 Jet.



The general assembly of the DGLR took place during this week, where the new constellation of the board was presented to the members of our society.

The congress ended on Friday with an industrial tour by MTU Aero Engines and the Airport of Munich Company, which was designed especially for our participants.

The congress can be regarded as highly successful and we are looking forward to organize this year's "German Aerospace Congress" in Dresden from 20th to the 24th of September 2004.

DGLR
 Haus der Luft-und Raumfahrt
 Godesberger Allee 70
 D - 53175 BONN
 Germany

SVFW, SCHWEIZERISCHE VEREINIGUNG FÜR FLUGWISSENSCHAFTEN (SWISS ASSOCIATION FOR AERONAUTICAL SCIENCES)



► IN 1961, THE ICAS CONGRESS TOOK PLACE AT THE PRESTIGIOUS ETH/SFIT SWISS FEDERAL INSTITUTE OF TECHNOLOGY IN ZURICH. FOR THIS OCCASION THE SVFW WAS FOUND AS THE SWISS HOST OF THE EVENT.

Even though important aeronautical research activities still take place nowadays, the post-war years were certainly some of the most productive in the aeronautical field for Switzerland. Aerodynamic research and development work was supported by high-class test facilities such as the first closed-cycle supersonic wind tunnel in the world built by Prof. **J. Ackeret** at the ETH (1935). Switzerland was also a leader in the fields of turbine and structures research. The know-how thus obtained allowed the development of new advanced combat jet aircraft and as a by-product the design of the first Lear Jet. The important growth of the airline industry was also a contributing factor. In this environment, SVFW was founded by Ackeret and his colleagues. The first president was Prof. **M. Rauscher** succeeded by Prof. **M. Berchtold** whose activities in thermodynamics and engine development and his world-wide relations helped to maintain a high profile of SVFW and many prestigious guest-speakers could be invited. From 1981 to 2001, Dr **G. Bridel** was president.

Today, as a scientific society of a small country with a relatively small industrial backing, its activities are by nature more limited compared to those of their European sister societies. SVFW counts 200 members from all fields of aeronautics. While another association represents space interests at a more popular level, SVFW covers in its programmes space topics which are closely related to aeronautical activities.



Swiss PC-21 training aircraft and the Matterhorn

The association serves as a forum for exchanging views, maintaining and promoting contacts and initiating research work. The yearly program consists of excursions, often combined with the membership general meeting, and some six lectures per year which are usually held at the ETH. This assures a close contact to the students. There is no formal student branch of the association but students are represented in the board next to professors from the ETH, industry and airline representatives. SVFW does not issue a journal but disseminates its information through its web site.

SVFW joined CEAS in 1996.

Website: www.svfw.ch

President: **Dr Juerg Wildi**, c/o Center Aerodynamik,
RUAG Aerospace AG
Postfach 301
CH-6032 Emmen • Switzerland
juerg.wildi@ruag.com
www.ruag.com

CEAS relations officer: **Dr Georges Bridel**,
c/o EADS Military Aircraft,
D-81663 Muenchen 80
Georges.Bridel@m.eads.net, GeorgesBridel@aol.com

SOME GENERAL NEWS

► ABOUT THE A380

A380 UPDATE – 2004 BRINGS JOURNEY TO THE FINAL ASSEMBLY LINE

A380 programme maintains momentum in 2004

During the first few months of the year, the A380 programme has maintained the momentum set in 2003 and achieved a number of noteworthy programme developments.

First shipping of complete A380 fuselage section

This included, for the first time ever, the loading and shipping of a complete A380 fuselage section, the forward fuselage, which took place at the end of January in Hamburg, Germany. The section, which weighs around 10 tonnes, was loaded into the cargo hold of the multipurpose vessel and arrived four days later on schedule in Saint-Nazaire, France.

Centre fuselage of A 380 nears completion

The enormous centre fuselage section of the A380 is also moving rapidly towards completion. Work started at the very end of 2003 to integrate the belly fairing and centre fuselage and was completed mid January this year.

The centre fuselage complete with belly fairing is scheduled to be delivered to the final assembly line in Toulouse, France in the next few weeks. Once joined together on the final assembly line these two fuselage sections, the centre and forward fuselage, will reach an impressive 42 metres/137.80 ft in length and represent two thirds of the entire A380 fuselage.

Delivery of floating station takes place

The delivery of a floating transfer station, which will play an integral part in the A380 transport programme, was received by Airbus at the end of January. The station, which arrived in Pauillac, just outside Bordeaux in France, from Gdansk in Poland, will be used to move A380 components smoothly from sea vessel to river barge.

The station weighs 3,500 tonnes and costs eight million euros

The station is 150 metres/492.126 ft long, 35 metres/ 114.829 ft wide, 7.5 metres/24.606 ft high and weighs 3,500 tonnes/7,700,000 lbs. It has its own ballast system and hydraulically operated side ramp. The sea-going vessels carrying A380 components will lower their ramps at the upstream end of the station and unload the palletised aircraft components

First A380 pylon completed in Toulouse

Also, the very first A380 pylon has been completed at Airbus in Toulouse, France, and delivered to engine manufacturer Rolls-Royce at the end of January. The pylon will be used in a fan blade out test. The A380 pylons - the structures that hold the aircraft's engines to the wing - are thicker and higher than previous models with a conical rather than flat base. A second pylon together with an A380 engine was fitted to an A340 test aircraft during February to undergo some 100 hours of flight testing. Pylons for the first A380 aircraft will be delivered at the end of May to the final assembly line in Toulouse, France.

Information extracted from the Airbus Letter March 2004.

► INTERNATIONAL, INTERPLANETARY AND NO INTERFERENCE ! MARS EXPRESS CALLS UP SPIRIT

A pioneering demonstration of communications between the European Space Agency's Mars Express orbiter and NASA's Mars exploration rover, Spirit, has succeeded.

On 6 February 2004, while Mars Express was flying over the area that Spirit is examining, the orbiter transferred commands from Earth to the rover and relayed data from the rover back to Earth. "This was the first in-orbit communication between ESA and NASA spacecraft, and we have also created the first working international communications network around another planet", said **Rudolf Schmidt**, ESA's Project Manager for Mars Express. "Both are significant achievements, two more "first" for Mars Express and Mars exploration rovers."

Jennifer Trosper, Spirit Mission Manager at NASA's Jet Propulsion Laboratory, California, USA, said, "We have an international interplanetary communications network establish at Mars".

ESA and NASA planned this demonstration as part of continuing efforts to cooperate in space.

The commands for the rover were first transferred from Spirit's operations team at JPL to ESA's European Space Operations Centre in Darmstadt, Germany, where they were translated into commands for Mars Express. The translated commands were transmitted to Mars Express, which used them to command Spirit. Spirit used its ultra-high-frequency antenna to transmit telemetry information to Mars Express, and the orbiter then relayed the data back to JPL via the European Space Operations Centre.

«This is excellent news,» said JPL's **Richard Horttor**, project manager for NASA's roles in Mars Express. «The communication sessions between Mars Express and Spirit were pristine. Not a single bit of data was missing or added, and there were no duplication.»

This exercise demonstrates the increased flexibility and capabilities of inter-agency cooperation and highlights the close mutual support that is essential when undertaking space exploration. ■

More information on the ESA Mars Express mission can be found at <http://mars.esa.int>

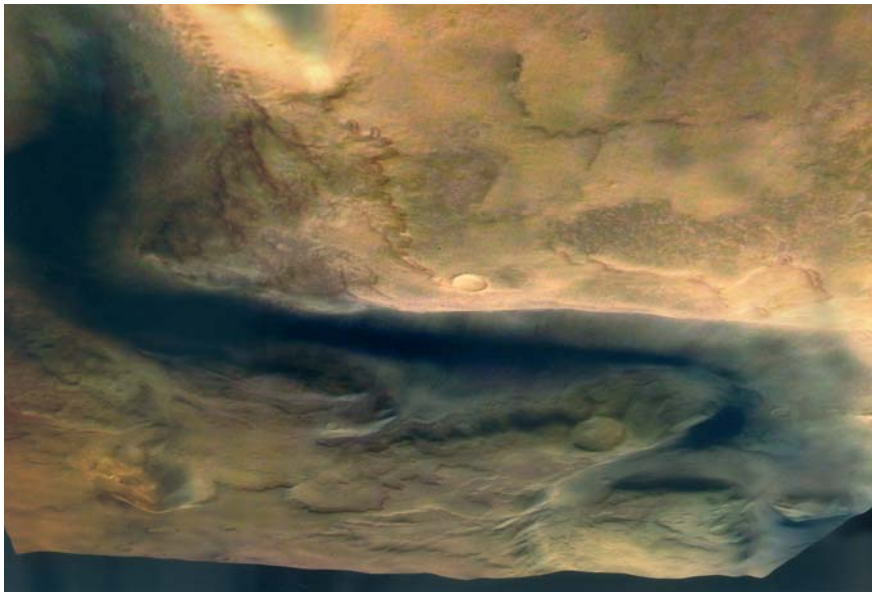
For further information, please contact:

ESA Media Relations Division

Franco Bonacina

Tel: + 33(0) 1.53.69.7155

Fax: + 33(0) 1.53.69.7690



Europe's eye on Mars: first spectacular results from Mars Express.

This picture was taken by the HRSC in colour and 3D in orbit on 15 January 2004 from a height of 273 km and is located on Mars east of the Hellas basin at 41° South and 101° East. This area is 100 km across, has a resolution of 12 m per pixel, and shows a channel (Reull Vallis) once formed by flowing water. The landscape is seen in perspective view, North is at top. Credit ESA/DLR/FU Berlin (G. Neulm)

EUROPEAN COMMISSION

► 15 MARCH

On 15 March a high level Group of Personalities (27 top policy makers and industry executives including, among others, AECMA's past and current Presidents **R. Hertrich** and **M. Turner**, and President-Elect **P-F. Guarguaglini**) presented President **Prodi** with a report entitled «Research for a secure Europe», which identifies an urgent need to adapt the funding and the organisation of European research activities to new security and technology realities. In its 12 recommendations it advocates the combining of

national, intergovernmental and Community research efforts across the civil-military continuum in the most efficient way, and developing a specific, Community-funded European Security Research Programme (with a minimum allocation of 1bn/year, additional to existing funding), to be launched as early as 2007.

► 6 JANUARY

COMMISSION LAUNCHES NEW AERONAUTICS CALL FOR PROPOSALS

New calls for proposals have been published for the Sixth Framework Programme (FP6) thematic priority area of «Aeronautics and Space». Specifically in the area of Aeronautics, the announcement makes an additional € 300 million available for

new integrated projects, networks of excellence, specific targeted research projects, and coordination actions. Activity areas include strengthening competitiveness, improving environmental impact with regard to emissions and noise, improving aircraft safety and security, and increasing operational capacity and safety of the air transport system.

EREA

At their meeting in November 2003, the European Research Establishment Association (EREA) Board unanimously elected **Joachim Szodruich** (DLR Board Member in charge of Aeronautics and Energy), as their new Chairman.

Joachim Szodruich, who is also the current ACARE Vice Chairman in charge of institutional issues and a former President of the CEAS, will serve for a two-year period.

THE EASA

► OPERATIONAL SINCE 28 SEPTEMBER 2003

The European Aviation Safety Agency was established under Regulation (EC) No. 1592/2002 of the European Parliament and of the Council of 15 July 2002 on common rules in the field of civil aviation. The Agency's primary missions focus on helping to maintain a high level of safety and environmental protection in

European civil aviation, assisting the European Commission with legislative and regulatory tasks, and issuing certificates for aeronautical products as well as approvals for design and maintenance organisations. EASA has been operational since 28 September 2003.

EASA moves up a gear with 3 new directors on board

The European Aviation Safety Agency has welcome early in 2004 its certification, Rulemaking and Administrative Directors. The Directors were nominated by the Agency's Management Board on the proposal of the Executive Director as follows:

Mr **Claude Probst**, Rulemaking Director

Dr **Norbert Lohl**, Certification Director

Mr **Markku Junkkari**, Administrative Director

«These nominations are another significant step forward to the building up of our Agency» said **Patrick Goudou**, EASA Executive Director. «Our organisational chart is progressively taking shape, but recruitment continues to be the priority for the Agency. Our goal is to have 95 experts on board by the end of 2004, so we will be recruiting at a fast pace in 2004.»

The decision on the final EASA headquarters being Cologne, Germany, and the arrival of these high-level staff will definitely reinforce the Agency's expertise and develop its credibility in the civil aviation sector.

For more information,
please contact :

EASA - **Hélène Barbier** :

Tél : + 32 2 299 3232 - Fax: + 32 2 298 6649

EASA site Internet : www.easa.eu.int

CEAS EVENT CALENDAR

Date	Location	Organising society	Event and theme
3-7 May 2004	ANCHORAGE	AIAA/CEAS	Workshop : «From Challenges to Solutions»
10-12 May 2004	MANCHESTER	AIAA/CEAS	Aeroacoustics Conference
14-16 September 2004	MARSEILLE	AAAF	CEAS Forum 30 th European Rotorcraft Forum

EDITORIAL BOARD

Director of the Publication

• Dr **Ulf Olsson**

Editorial Co-ordinators

• Dr **Hywel Davies**

52 Britain Lane
Sevenoaks
TN13 2JP • UK
Tel/Fax: + 44 1732 456 359
hywel Davies@aol.com

• Dr-Ing. **Jean-Pierre Sanfourche**

AAAF • 61, avenue du château
F-78480 Verneuil-sur-Seine
Tél.: + 33 (0)1 39 79 75 15
secr.exec@aaaf.asso.fr

CEAS National Member Representatives

Germany

Dr-Ing. **Holger Friehmelt**

DLR e.v.
Lilienthalplatz 7 • 38108 Braunschweig
Tel.: + 49 (0)531/295-2650
holger.friehmelt@dlr.de

Italy

Prof. **Antonio Castellani**

AIDAA General Secretary
Via Ravenna 9b
00161 Rome • Italy
Tel.: + 39 06 44 041 44
info@aidaa.it

Spain

Emilio Blanco

Emilio.Blanco@casa.eads.net

Sweden

Lars Andersson

Kammakargatan 52 • 11160 Stockholm
Tel: + 46 8 791 84 91
Fff@mailbox.swipnet.se

United Kingdom

Andrew Little

RAeS • 4, Hamilton Place
London W1J7BQ
Tel.: + 44 (0)20 76 70 43 11

Edition

Sophie Bougnon

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