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**FOR IMMEDIATE RELEASE**

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***ICAS Workshop Sets R&T Directions for Advanced Materials & Manufacturing***

ICAS – the International Council of the Aeronautical Sciences, has just concluded its biennial workshop and planning meetings, which took place in Sweden over four days in Stockholm (4-5 September) and Linköping (6-8 September).

Dr Detlef Müller-Wiesner of the EADS Corporate Technical Office in Germany and ICAS President said “The series of meetings and specialist workshop took full advantage of this unique group, comprising over 50 representatives from the world-wide aeronautics and aviation communities, interacting with eight invited international experts on advanced aerospace materials and manufacturing”.

All the events were hosted by FTF – Flygtekniska Föreningen, the Swedish Society for Aeronautics & Astronautics, together with support from leading Swedish aerospace organisations. Prof. Murray Scott of Australia’s CRC for Advanced Composite Structures and ICAS Programme Chair stated, “A key aim of the workshop was to review the latest research and technology developments and experience in the implementation and certification of new structures, with particular emphasis on issues associated with the increased application of advanced composites in primary structures of large civil transport aircraft.”

The regulatory scene was set by Mr Richard Minter from the EASA Certification Directorate (Germany), and this was followed by industry presentations by Mr Frank Doerner of Boeing (USA), Mr Christophe Brand of EADS (France), Mr Toshio Abe of Mitsubishi Heavy Industries (Japan) and Mr Pontus Nordin of Saab Aeronautics (Sweden). The status of current research and technology activities in government laboratories was overviewed by JAXA’s Dr Takashi Ishikawa (Japan), NAL’s Dr AR Upadhyya (India) and DLR’s Prof. Richard Degenhardt (Germany).

Although it was noted that utilisation of advanced metallic materials, such as Aluminium-Lithium alloys, will continue to increase, and thus contribute further cost and weight savings, the majority of the workshop was focussed on advanced composites and their great promise. The introduction into service next month of the Boeing 787 with a 50% composite airframe will provide significant operational cost savings.

Prof. Scott concluded the proceedings by stating, “Further advancements will require close cooperation with Certification Authorities to ensure key issues are addressed during development, but for now the reduction in costs associated with the design, development and manufacture of composite structures at very high rates, is now critical.”

Significant advances in computational analysis, and multi-scale simulation in general, offer potential for both manufacturing and testing cost savings. Also, the development of multi-functional structures, including structural health monitoring, will lead to overall performance and other improvements.

The outcomes of the workshop will be used to inform the next ICAS Congress – to be held in Brisbane, Australia in September 2012, of the recent achievements and most important issues associated with advanced materials and manufacturing. “Improving the overall level of understanding and assisting in setting directions in key areas impacting our global industry and those that it serves, are high priority objectives for ICAS”, stated Dr Müller-Wiesner.

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