A Conference on Composite Materials initiated by Aircelle, SLCA and the University of Le Havre

Le Bourget, France, June 20, 2007 – Aircelle, a member of the SAFRAN group, the specialist in the aircraft engines nacelles, Its subsidiary SLCA, the specialist in Composite aerostructures, and the University of Le Havre are organizing a Conference during the Le Bourget Air Show. Entitled "Composite Materials and lighter aeronautical structures", the conference also highlighted the co-operation between laboratories and industrialists.

The presentations were followed by the official signature of the C-Can Charter (Norman Advanced Composites Campus) by the University of Le Havre, ENSICAEN, the Normandy AéroEspace network, Aircelle and the MOV’EO Competitiveness Cluster.

In terms of aeronautical equipment made with Composites, the scope for research is vast:

- The cost of the materials,
- Knowledge about their mechanical behavior, their acoustic potential, their ageing, etc.
- The control and the optimization of their use,
- Non-destructive testing,
- Repair techniques,
- Control in service and maintainability.

Hervé Hurlin, SLCA Engineering Director, gave a progress report on the performance of composite material aerostructures. Pascal Marchant, Aircelle Director for Research and Technology programs gave a talk on lightening structures to serve nacelles. Bruno Morvan of the University of Le Havre also presented an assessment of the thermal ageing of the composites.

"We are fully in line with this logic of structured networks to unite all the players in a complete sector, from SMEs to laboratories and heavy industry with the support of the government and the local authorities. And we all benefit from the economic dynamics that is produced", pointed out Patrick Girault, Aircelle Director for Strategy and Development. Aircelle and SLCA, for example, were recently awarded with their local partners for four projects involving advanced technologies to implement composite materials. Two of these projects are headed by Aircelle as part of the developments by the Mov’eo competitiveness cluster (Ile de France and Normandy regions).
TOUPIE concerns stamping techniques for high performance thermoplastic composites. RTM Structural concerns the development of Resin Transfer Molding processes (RTM) for complex geometries of structural composite parts. The two other projects are headed by SLCA, the Aircelle subsidiary specialized in composite aerostructures, via the MIPI Pole in the Lorraine region. CAPSAIRTM is designed to develop the application of the resin infusion technique to complex aeronautical parts. COMAC (Optimized Multi-technique Control of Composite Aerostructures), is designed to develop a multi-technology analysis platform transportable to non-destructive testing based on optical technologies.

"Collaborative work of this kind enables significant scientific and technological breakthroughs because it associates upstream research work (numerical modeling) and work close to the final industrial application with the checkout of the process and prototype demonstrators" concluded Michel Récatume, Aircelle’s Industrial Director for Engineering and Technology.

Aircelle is one of the leading players in the worldwide nacelle market for aircraft engines. A member of the SAFRAN group, it employs approximately 3,500 persons at eight sites in France, the United Kingdom and Morocco. Aircelle is the only nacelle manufacturer in the world present on all the market segments, from regional jets and corporate aircraft to the largest airliners (A380). (Web site: www.aircelle.com) An industrial expert in composite materials for 25 years, SLCA, a subsidiary of Aircelle and a member of the SAFRAN group, is a partner with the leading names in aeronautics. Its business lines today focus on the project management, design and production of complex composite material aerostructures, such as the belly fairings of the A330-340 Airbus or the engine cowls for Eurocopter NH90 helicopters. The head office of SLCA has always been located in Florange (57) in the buildings of the production plant. The company has a second site in Plaisir in the Paris region for executive management as well as the engineering, commercial and purchasing divisions.