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Aurora Wins Laser Assisted Machining Grant

BRIDGEPORT, WV, June 4, 2007 – Aurora Flight Sciences announced today that the company has been awarded a grant from the West Virginia High Technology Consortium and NASA for the development of Laser Assisted Machining of Silicon Carbide Ceramic Matrix Composites (CMCs) for Space Propulsion Structures.

CMCs are becoming widely used in aerospace applications, especially in rocket motors and turbine engine hot exhaust areas, as a method to reduce weight while increasing performance and efficiency. They are replacing the nickel, chromium and titanium alloys historically used in high-temperature applications, resulting in reduced engine weight - as much as 50%.

CMCs are also being considered for use in naval and aircraft structures and are becoming a standard material of choice for new turbine engines, such as the General Electric-Rolls Royce F136 used on the Lockheed Martin F-35 Lightning II Joint Strike Fighter.

“This program will develop a technology to significantly reduce the manufacturing time currently associated with final machining of CMC components as well as allow the fabrication of complex geometry components that cannot be fabricated using current technologies such as grinding,” said Aurora Flight Sciences President and CEO John Langford. The laser assisted machining process will be performed by heating the surface of the material to approximately 1000°F with a laser just prior to the removal with advanced cutting tool.

In this effort, Aurora Flight Sciences will be assisted by Kansas State University and General Electric Aviation. The program will develop a variety of characteristic features to be installed into CMC substrates and be representative of those found in many space propulsion and turbine engine structures. Additionally, Aurora will perform physical testing of the fabricated components to determine the effects of laser assisted machining.

“If proven successful, this program would provide Aurora with a highly desirable sole source technology capable of fabricating complex components at significantly reduced costs as well as open new doors into the space propulsion and turbine engine markets,” said Ron Richman, Aurora Flight Sciences of West Virginia General Manager.

About Aurora Flight Sciences

Aurora Flight Sciences develops and provides robotic aircraft and other advanced aerospace vehicles for scientific and military applications. Aurora is headquartered in Manassas, VA and operates production plants in Clarksburg, WV and Columbus, MS and a Research and development Center in Cambridge, MA. Please visit our web site at www.aurora.aero.

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