THIRD WAVE SYSTEMS

6475 City West Parkway | Minneapolis, MN 55344 | USA
t (1) 952.832.5515 | f (1) 952.844.0202
www.thirdwavesys.com

Jennifer Holt, Marketing Communications Specialist
Jennifer.holt@thirdwavesys.com

FOR IMMEDIATE RELEASE

U.S. Air Force Awards $3 Million Contract to Third Wave Systems

Company to Expand Machining Modeling Technology to Various F-35 Composite Materials

MINNEAPOLIS, MN. (December 11, 2013) – Third Wave Systems, provider of premier machining modeling technology, has been awarded a $3 million contract by the United States Air Force Life Cycle Management Center. The contract, which is one of the largest funded projects in Third Wave's 20-year history, is to expand its metal-cutting simulation solutions to composite materials used on the F-35 Joint Strike Fighter. The Department of Defense Rapid Innovation Fund (RIF), which was designed to transition innovative technologies to resolve operational DoD challenges, is allocating funds for the contract.

Selected from hundreds of submitted white papers, Third Wave's project, "High Productivity Composite Machining for F135 Fan Inlet Case," is a direct response to the DoD's need to reduce risk at every stage of composite manufacturing in addition to improving machined composite component quality to accelerate insertion. Composite components offer great performance and fuel economy benefits for modern military aircraft, yet introduction of these materials into engine and airframe platforms is hindered by the high costs and long lead times of manufacturing.

Third Wave's Chief Technical Officer, Troy Marusich, Ph.D., said he's looking forward to the project at hand.

"We are excited to once again partner with the Air Force on this RIF project which will result in full-scale composite machining modeling software, enabling reduced costs and manufacturing times while improving component quality," Marusich said. "Working closely with GKN and other F-35 suppliers will result in the development, demonstration and transition of this technology into the DoD supply base."

Third Wave intends to mature and transition machining modeling technology that will reduce composite machining times by 20-35 percent and tooling costs by 20 percent. The reduction in time and cost minimize composite machining risks and accelerate insertion of organic matrix composites into military systems. Initial technology transition targets for the project are the F135 fan inlet case.

(more)

Working closely with Third Wave throughout the two-year project will be several F-35 suppliers including GKN Aerospace, who will be the primary project partner as a supplier of the F135 fan inlet case. Working with these companies, Third Wave will develop, validate and implement a physics-based machining model of the Cycom 5250-4 bismaleimides (BMI) composite material. Additionally, airframe builders Triumph Group and Northrop Grumman Corporation, along with F-35 composite machining supplier Janicki Industries, will work with Third Wave to perform similar activities for resin systems Cycom 977-3 and AFR-PE-4.

ABOUT THIRD WAVE SYSTEMS, INC. > Third Wave Systems (www.thirdwavesys.com) is the premier machining computer-aided engineering (CAE) provider for companies that machine. Its modeling products and services are used by progressive companies to dramatically reduce costs of machined components, accelerate design cycles, improve part quality, and get to market faster. This validated material modeling technology gives engineers access to more information than trial-and-error tests, allowing them to make better decisions. Third Wave is headquartered in Minneapolis (USA) with a remote office in Detroit (USA) and distributors throughout Europe and Asia.

###