



THE NATIONAL COMPOSITE CENTER'S WRIGHT CAPITAL PROJECT FUND PROPOSALS MAKE SHORT LIST

Wright Capital Project Fund (WCPF) officials notified the National Composite Center (NCC) that its proposals have made the short list for possible award this month. NCC is the lead organization for two proposals the Center submitted to the Wright Capital Project Fund for 2004.

Under the first proposal – Long Fiber Thermoplastics for Low Cost, Light Weight Transportation – NCC is leading a collaboration to scale up a unique material production process and promote breakthrough low cost and light weight applications for commercial industries, particularly transportation vehicles. Commercialization of this technology will help to create a major economic impact for Ohio businesses from polymer suppliers to part fabricators and transportation manufacturers. The economic benefit is expected to exceed \$225 million over the next five years.

In the second proposal - Litecast™ – Metal-to-Composite Joining for Automotive, Aerospace, and Industrial Parts Applications - NCC is leading a collaboration to advance its patented process Litecast™. The unique process allows molten metal to be cast directly on composite material enabling the use of integral metal

attachments on composite structures. The Center would use \$835,000 in funding from this project to purchase capital equipment, tooling, and laboratory analysis equipment needed to further develop applications of Litecast™ for the aerospace, medical, and other industrial markets. Volume manufacturing would be transferred to the project's industrial partners following validation of these applications. The collaboration is expected to leverage over \$1.2 million in matching funds and resources.

SAMPE TECHNICAL CONFERENCE HOSTED BY MIDWEST CHAPTER – GENERATES EXPOSURE, LEADS FOR NCC

Attendance to the 35th International SAMPE Technical Conference held Sept. 28 – Oct. 2 in Dayton, Ohio exceeded pre-conference predictions. Representatives from Wright-Patterson Air Force Base's Air Force Research Laboratory (AFRL) and the University of Dayton Research Institute (UDRI) contributed heavily to leading and organizing the conference which was hosted by The Midwest Chapter. Attendees' reactions to the conference were very positive.

In addition to exhibiting its breakthrough signature Rapid Fiber Preform (RFP) process NCC highlighted its advanced closed molding techniques and patented Litecast™ technology. NCC technical specialists co-chaired a

session on Resin Infusion Processes. In addition, NCC hosted two tours of its facility on Oct. 2. More than 40 visitors examined the Center's broad range of advanced manufacturing and prototyping capabilities and watched live demonstrations of its Rapid Fiber Preform (RFP) process.

Visitors also got the chance to experience history with NCC's special attraction – the USU Wright Flyer™. Visitors were able to sit in the composite Flyer and work with replica controls to get a better understanding of how the Wright Brothers controlled the flying machine using wing warping and canards. The NCC tour also sparked significant interest with 10 potential customers while booth attendance, networking and lead generation were high during the trade show portion of the event.

A number of NCC member companies also exhibited at the Conference. They are the AFRL Materials & Manufacturing Directorate; The Boeing Company; Cornerstone Research Group, Inc.; Cytec Carbon Fibers Division; Effective Metrix; Saertex; Schmelzer Industries, Inc.; University of Dayton Research Institute (UDRI); and WebCore Technologies Inc. A number of NCC parts were displayed at these booths including its YC-15 composite tail cone at the Boeing booth.



NCC TO HOLD CLOSED MOLDING CLASS THIS MONTH

NCC will hold a Commercial Infusion Training class October 22-23, 2003. The two-day class features vacuum infusion of commercial grade materials with a special emphasis on production cost, part quality and part reproducibility.

Vacuum infusion is an environmentally friendly closed molding process able to manufacture high quality composite parts with minimum tooling costs. Students will be taken step by step through proven vacuum infusion techniques that include hands on demonstrations. Production and conversion costs will be discussed as they apply to open molding. Class time will also be used to discuss a variety of patented technologies and how they can be applied to attendees' products. Space is limited to 15 students.

For more details or to sign up for a class, interested individuals can contact Andrew Loff at 937-297-9436 or email aloff@compositecenter.org.

USU WRIGHT FLYER™ FEATURED AT SERIES OF SPECIAL EVENTS

The USU Wright Flyer cut a unique profile skimming the front straight away of Lowe's Motor Speedway in Charlotte, North Carolina during a special press conference event Sept 10. The event was held to

kick off the track's annual Fall AutoFair sponsored by Food Lion. Local media along with Fox National News captured the Flyer as it gave Lowe's Motor Speedway President Humphries "Humpy" Wheeler a bird's eye view of the 1 ½ mile oval NASCAR race track during a special demonstration flight. The three-day AutoFair was attended by more than 100,000 motorheads and featured the Flyer as a special guest in a 1000-foot long tent filled with museum piece Harley Davidson motorcycles, two Winston Cup winning race cars and a Zippo Lighter car.

Just prior to the AutoFair, the USU Wright Flyer team spent Sept. 5-7 At Warner Robins Air Force Base providing flight demonstrations and a static display. The Flyer participated in the University of Utah's annual Aggie Day celebration September 27 before returning to Dayton to take position with a 1903 Wright Flyer engine replica made by local machinist Terry Hessler at the front entrance of the United States Air Force Museum for the 35th International SAMPE Technical Conference's banquet dinner. The conference, held Sept. 28 – Oct. 2 also featured a tour of the National Composite Center (NCC) which displayed the Flyer in front of its facility.

The USU Wright Flyer will travel to Shelby, North Carolina to participate in the Curtiss-Wright Flight Systems Company's annual employee appreciation weekend Oct. 11. Curtiss-Wright Flight

Systems is a direct descendent of the Wright Airplane Company. Lou Luedtke, President of NCC and Dr. David Widauf, Associate Professor for the College of Engineering, Utah State University and Director of the USU Wright Flyer™ Project will provide support to the static display.

Plans are also underway for the Flyer to participate in the Engineering and Science Exposition in Idaho Falls, Idaho in late October. The Flyer will conclude the season with a show at Nellis Air Force Base November 14, 15 and 16.

The USU Flyer Team would like to extend a very special thank you to NCC member company sponsors Delphi, Day International, National City Bank, Lewis & Michael Trucking, Dennis Rediker and Bill Lockwood for their monetary support of this effort.