



# SUCCESS

COOPERATIVE RESEARCH AND DEVELOPMENT AGREEMENT

**CONTRACT  
NUMBER:**

16-132-RX-02

**COMPANY  
NAME:**

Creare LLC  
Hanover, NH

**TECHNICAL  
PROJECT  
OFFICE:**

AFRL/RX  
WPAFB, OH

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## AFRL AGREEMENT WILL FURTHER Non-contact Inspection Method Developments

**WRIGHT-PATTERSON AIR FORCE BASE, Ohio** –The Air Force Research Laboratory Materials and Manufacturing Directorate (AFRL/RX) recently signed a Cooperative Research and Development Agreement with Creare LLC in order to transfer hardware and software to the Hanover, New Hampshire company so that they can continue important research to develop non-contact inspection methods for aircraft components.



*The Hole-to-Edge Measurement Technology system performs a non-contact inspection. The HEMT was developed by Creare, LLC under an Air Force Small Business Innovation Research agreement. The technology and other equipment was temporarily transferred to Creare, LLC under a Cooperative Research and Development Agreement with the Air Force Research Laboratory Materials and Manufacturing Directorate. (Photo courtesy of Creare, LLC.)*

For several years the Air Force has worked to develop non-contact inspection methods for military aircraft in order to decrease the amount of time inspections take and to increase inspection accuracy and repeatability. Current inspection methods involve physical contact with the surface of the aircraft parts such as placing transducers or measurement devices on the part. These methods require much more time to complete.

“The Air Force currently requires 100 percent component inspection as aircraft parts are manufactured. Non-contact methods will allow inspectors to make the necessary measurements in less than half the time of previous methods and with greater accuracy,” said Mr. Craig Neslen, the AFRL/RX materials engineer managing the effort.

The equipment was originally developed by Creare as part of an Air Force Small Business Innovation Research effort to develop a non-contact inspection method that measures the distance between a drilled hole and the edge of a part. That agreement ended with significant elements of the project (hardware and software) being transitioned to a non-contact hole measurement requirement for Air Force aircraft. The new CRADA agreement allows the company to temporarily maintain physical ownership of the equipment and continue research.

“Creare’s ability to continue to use the technology has been critical in fostering transition to end users and the development of new applications. We very much look forward to continuing to work with the Air Force to continue to leverage the work they have supported,” said Mr. David Kynor, the Creare engineer leading development of the non-contact inspection systems.

A CRADA is one type of technology transfer agreement that provides quick access to extensive government-funded research and development resources that can be leveraged to create powerful results while also providing intellectual property protection. CRADAs are facilitated by the Air Force Technology Transfer Program and its affiliated Office of Research and Technology Applications. An ORTA is embedded at many Air Force research locations.

“CRADAs can be an extremely useful tool used in order to quickly establish a cooperative technical agreement with industry,” Neslen said, “This agreement has worked out well. It allows Creare to maintain possession of equipment that will be used on research that benefits the Air Force.”

For more information about technology transfer opportunities with the Air Force, call the Air Force Technology Transfer Program Office at 937-904-9830.

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*Linking technology with the mission and marketplace.*

**U.S. AIR FORCE TECHNOLOGY TRANSFER PROGRAM OFFICE**

1864 4TH STREET | BLDG 15, RM 225 | WRIGHT-PATTERSON AFB | OHIO | 45433  
COMM: 937-904-9830 | AF.TECHTRANSFER@US.AF.MIL | WWW.WPAFB.AF.MIL/T2