

STATE OF CONNECTICUT

**Innovation Technology Center
(ITC)**

CONNECTICUT CENTER FOR ADVANCED TECHNOLOGY, INC.

Proposal for Program Funding & Administration

February 2, 2017

Introduction and Foreword:

The Connecticut Center for Advanced Technology, Inc. (CCAT) respectfully submits this Economic Development Grant Proposal which seeks support for the continuation of the OEA RADE equipment currently in the Innovation Technology Center (ITC). For the period beginning immediately after the expiration of the OEA RADE program, CCAT proposes to use the acquired equipment as part of our mission to serve manufacturers with a special focus on Pratt & Whitney's supply chain for the F-135 engine.

About CCAT:

CCAT is a non-stock, tax-exempt corporation incorporated on May 3, 2004, and is funded under federal and state sponsored grants. CCAT's mission is to address 21st century economic challenges by creating partnerships which collaboratively provide services and resources to industry, academia, government and non-profit organizations that help them implement innovative solutions, increase efficiencies and improve workforce development. To be acknowledged by our clients as the "go to" resource for improving America's competitiveness and as the best practices partner for organizations and businesses with a technology focus. We will deliver value-added programs efficiently and effectively, with a bold entrepreneurial spirit, and attract the best and brightest people to our collaborative culture and landmark facilities.

Program Background and Summary:

The ITC was created as part of the OEA RADE contract with the federal government. Its purpose is to introduce new manufacturing technology to manufacturers with a particular focus on Pratt & Whitney's F-135 supply chain in preparation for future production. This Center is located at CCAT's Advanced Manufacturing Center and, as of the writing of this proposal, housed a GOM Atos Blue Light scanner purchased under the OEA RADE program as cost share. A second piece of equipment is contemplated (CT X-ray Scanning) but has not been fully defined yet.

CCAT proposes any equipment bought under the OEA RADE program become part of CCAT's AMC by means of a no-cost transfer. This equipment will continue to be used to demonstrate advanced technologies to manufacturers with a particular focus on the F-135 supply base for the same purpose for which it was originally intended. The equipment will become part of a pool of advanced technology used by CCAT. CCAT will fund labor and maintenance expense using current and future federal, state and industry funding as applicable and will not require any new funding from the DECD.

Administrative Qualifications & Justification

CCAT has been involved with manufacturing technology since the company's inception in 2004. Our Advanced Manufacturing Center (AMC) serves as a national resource for applied manufacturing technology and boasts some of the most modern manufacturing equipment currently available in the marketplace. With the rapidly expanding interest in additive manufacturing, CCAT has also added both metal and plastic 3D printing capability to its inventory of advanced manufacturing equipment. CCAT recently installed a Hybrid DMG machine and is in the process of installing a new CNC Portal Milling Machine from Zimmermann for composites. The latest High Rate Additive Manufacturing (HRAM) equipment is expected to be installed later this year.

Through site visits, surveys, and research CCAT continually seeks to understand the needs of small and medium-sized manufacturers (SMMs). CCAT's history of conducting technology workshops, providing manufacturing training and productivity assessments to small and medium sized manufacturers makes it uniquely qualified to manage the additional equipment from the OEA RADE program. Included among our staff are degreed engineers and machinists with decades of combined manufacturing experience. Many individuals on our staff have also worked in manufacturing environments and understand the many unique challenges faced by manufacturers.

CCAT believes our AMC would be the best, most cost effective use of the OEA RADE equipment. CCAT has the right facility, staff, and programs to continue to effectively use this equipment in the manner it was intended. Our staff has been fully trained to use this equipment and has experience on projects with manufacturers using it. DECD would incur significant cost to rig out and move this equipment to any other location as well as potentially damaging it during a move.

The GOM Atos has already proven valuable to the manufacturing supply chain as we have received projects/inquirers from; EDAC, Flanagan, GKN, Hubbell, NEAP Phoenix, Satellite Tool, Alpha Q, Polamer, Pratt & Whitney (P&W) and Vivax Medical companies. We have also had interest from the Air Force Research Laboratory (AFRL) for measurement of artifacts to prove out the technology.

Program Summary & Procedures

1. Overall Objective

CCAT's primary objective will be to make the OEA RADE equipment available to the manufacturing supply chain with a special emphasis on P&W's F-135 suppliers. CCAT will use funding from the various federal and state programs to fund this effort as well as appropriate cost share from manufacturers. We will follow whichever procedures are required by the funding source.

CCAT will keep the equipment in good working order for the extent of its useful life, estimated to be approximately seven years. This equipment will become part of CCAT's fixed assets which are audited annually by an independent audit firm, a copy of which is supplied to the State of Connecticut each year.

2. Management

The management of this equipment will be part of CCAT's AMC Directors' duties and responsibilities. He/she will be responsible for maintaining the equipment and for carrying out the objective of making it available to manufacturers and the F-135 supply chain.

3. Reporting

At DECD's request, CCAT will provide a yearly summary of projects which used the OEA RADE equipment for the duration of its useful life. This summary would include:

- a.) Project description
- b.) Company
- c.) Funding source
- d.) Impact/outcome

4. Scope of Services

Not applicable

5. Budget Narrative

No further funds are requested after the completion of the OEA RADE program.

6. Payment Schedule

Not applicable