



DEPARTMENT OF DEFENSE MANUFACTURING USA INSTITUTES



Quick Start Engagement Guide for Federal Agencies

Partner up to achieve your mission!

MAKING THE U.S. MORE COMPETITIVE

The Department of Defense (DoD) Manufacturing USA institutes collectively represent nearly 1,000 organizations including defense and commercial manufacturers of all sizes, start-ups, universities, community colleges, and state or local economic developers in active partnership with the U.S. Federal Government. Since 2012, the DoD has established eight Manufacturing USA institutes, combining \$600 million in federal investment with \$1.2 billion in matching funds from industry, academia and state governments to form centers of excellence promoting U.S. competitiveness.

Each institute is its own public-private partnership and innovation ecosystem providing high value access to world class pilot manufacturing facilities that complement member capabilities, yielding a robust and sustainable domestic 'industrial commons' in a promising technology area. Also critical to U.S. competitiveness is the availability of a well-trained, qualified workforce with manufacturing skills matched to the nation's current and emerging production needs. Each institute has developed a set of education and workforce development activities that can be leveraged by all participants.



PARTNER UP TO ADVANCE YOUR IMPACT AND REACH

Manufacturing USA Institutes offer an array of high-tech leveraging opportunities for the federal professional. From a research and development perspective, the Manufacturing USA institutes provide access to joint DoD-commercial road-mapping activities, pilot manufacturing facilities, and responsive project contracting. From an acquisition perspective, these pre-competitive federal assistance agreements can be utilized to perform technology-related projects, access to cost share and ensure competition. From an operations and sustainment perspective, they can be a source for producing quick-turn complex parts and low cost research & development.

"The DoD has needed a concerted effort focused on invigorating manufacturing capabilities for some time. These Manufacturing Institutes address this need and are now providing solutions that DoD should be able to leverage for years to come."

- Dr. Nicholas Usechak, Government CTO AIM Photonics

RAPIDLY TRANSITION S&T

- Advance concepts through prototype development
- Sponsor projects to meet specific mission needs
- Contracting meets all competition requirements

LOWER RISK FOR TECHNOLOGY INSERTION

- Apply new manufacturing processes to reduce cycle time
- Utilize tools to support legacy systems
- Reduce risk on DoD Programs of Record

SCALE-UP ADVANCED MANUFACTURING

- Identify domestic sources for components and materials
- Advance from prototype to limited-scale production

ACCESS THE ADVANCED MANUFACTURING ECOSYSTEM

- Hone your expertise & engage with the best & brightest
- Participate in institute-led training programs

Department of Defense Manufacturing USA Institutes Program Office

Office of the Secretary of Defense | Manufacturing Industrial Base Policy Office | Manufacturing Technology Program

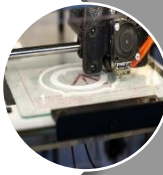
For more information visit: www.businessdefense.gov | www.manufacturingusa.com

Or email inquires to: osd.mc-alex.ousd-atl.mbx.dod-mfg-usa@mail.mil



America Makes: National Additive Manufacturing Innovation Institute
Youngstown, OH | www.americamakes.us

America Makes strengthens U.S. capabilities in 3D printing and additive manufacturing.



DMDII: Digital Manufacturing and Design Innovation Institute
Chicago, IL | dmdii.uilabs.org

DMDII leads the nation's research institute into applying cutting-edge digital technologies.



LIFT: Lightweight Innovations For Tomorrow

Detroit, MI | lift.technology

LIFT speeds development of new lightweight metal manufacturing processes.



AIM Photonics: American Institute for Manufacturing Integrated Photonics
Albany & Rochester, NY | www.aimphotonics.com

AIM Photonics accelerates development of the photonic integrated circuit industry.



NextFlex: America's Flexible Hybrid Electronics Institute

San Jose, CA | www.nextflex.us

NextFlex innovates electronic packaging & printing to produce flexible electronic products.



AFFOA: Advanced Functional Fabrics of America

Cambridge, MA | join.affoa.org

AFFOA accelerates widespread commercialization of highly functional fabrics.



BioFabUSA: Advanced Tissue Biofabrication Institute

Manchester, NH | www.armiusa.org

BioFabUSA develops next-generation techniques for cell & tissue biofabrication.



ARM: Advanced Robotics Manufacturing Institute

Pittsburgh, PA | www.arminstitute.org

ARM improves U.S. competitiveness through advancements in smart collaborative robotics.

