



RESEARCH
AND ENGINEERING

UNDER SECRETARY OF DEFENSE
3030 DEFENSE PENTAGON
WASHINGTON, DC 20301-3030

19 OCT 2022

MEMORANDUM FOR THE DEFENSE MANUFACTURING COMMUNITY

SUBJECT: Recognizing 10 Years of the Department of Defense Partnership with its
Manufacturing Innovation Institutes

The accomplishments of the nine Department of Defense (DoD) Manufacturing Innovation Institutes (MIIs) demonstrate the powerful benefit of public-private partnerships to the Defense Industrial Base and the Nation. In August 2012, DoD launched the first DoD MII, America Makes, to enhance America's strategic competitiveness while advancing DoD critical technologies. Today, there are nine DoD MIIs with over 1,580 members collectively. These members include commercial manufacturers of all sizes, start-ups, universities, and community colleges, along with state and local economic developers. The DoD MIIs have leveraged \$1.5 billion in Federal funding and \$2.2 billion in private-sector cost share, executing more than 1,110 applied research projects and over 480 education and workforce development projects. Such projects include a secure, DoD-wide additive manufacturing model exchange; America's first integrated silicon photonic circuit offering; and the world's only continuously cleaning antimicrobial mat.

The DoD MIIs are game-changing catalysts intended to build enduring advantages for the future Joint Force by connecting innovative industrial ecosystems with emerging technology and domestic market sectors. The DoD MIIs' increasing value to the Nation includes secure manufacturing supply chains and a growing skilled workforce. Their value prompts the Department's continued strategic engagement with the nine DoD MIIs. Through the DoD Manufacturing Technology Program, the Department commits to:

- Maintain active partnership with the DoD MIIs to ensure DoD equities, contingent upon periodic evaluation of performance and progress towards their chartering principles.
- Establish follow-on agreements, as appropriate and in the Department's best interest, at the Department's discretion.
- Integrate DoD MII project portfolios with the Department's critical technology areas.

I encourage the defense manufacturing community to leverage the DoD MIIs' technology development and manufacturing education resources. Through DoD's sustained partnerships, the DoD MIIs will continue to develop innovative advanced manufacturing solutions for greater national and economic security. I am proud of what we have accomplished in the past 10 years and look forward to strengthening our public-private partnerships for years to come.

A handwritten signature in cursive script, reading "Heidi Shyu", is positioned above the printed name.

Heidi Shyu



**Department of Defense
Manufacturing Innovation Institutes**
Executive Directors

MEMORANDUM FROM THE DOD MANUFACTURING INNOVATION INSTITUTES

SUBJECT: Public-Private Partnership – Advancing the Industrial and Organic Manufacturing Base

In 2012, a group of diverse and visionary leaders and champions of manufacturing launched an effort to advance a common vision of an incomparably innovative and globally competitive U.S. manufacturing sector.

Ten years into that work, we, the leaders of the DoD Manufacturing Innovation Institutes realize that the public-private partnerships we have established and grown have catalyzed the significant progress made to date and will propel our future impact. Central to that partnership is our foundational relationship with the DoD, which provides a productive environment for collaboration to tackle national manufacturing challenges in support of our National and economic security.

The commitment from the DoD allows our institutes to advance research and development, grow manufacturing ecosystems, and further education and workforce development to train Americans of all ages and backgrounds for the constantly evolving manufacturing jobs of today and tomorrow.

Together, our nine institutes are catalyzing technology advancements in additive manufacturing, cybersecurity, digital manufacturing, integrated photonics, flexible hybrid electronics, advanced materials manufacturing, robotics, advanced functional fabrics, biofabrication, and bioindustrial manufacturing. We all share the same mission of growing U.S. manufacturing and supporting national defense.

Nearly 1,600 manufacturing, academic, technology, and non-profit organizations throughout the United States choose to work with our institutes because they understand that the collective outcome is greater than the sum of its parts. Our common consortium model allows us to connect start-ups, technologists, researchers, and manufacturers with each other – and the DoD – to identify, prioritize, and implement practical and innovative solutions for economic benefit at every level.

As we recognize the 10-year anniversary of the formation of our institutes, we celebrate the accomplishments of our respective organizations and look forward to a robust, continuing partnership with the DoD and our members to build an even stronger U.S. manufacturing base.

America Makes

MxD

Nigel Francis

LIFT

AIM Photonics

NextFlex

AFFOA

BioFabUSA

ARM

BioMADE