



Department of Defense

Manufacturing Technology Program

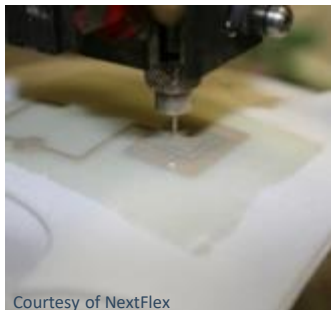
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Office of the Under Secretary of Defense
for Research and Engineering

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www.CTO.mil
www.DoDManTech.mil



Factory to Warfighter



Courtesy of NextFlex



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Our warfighters cannot use it if our U.S. manufacturers cannot make it!



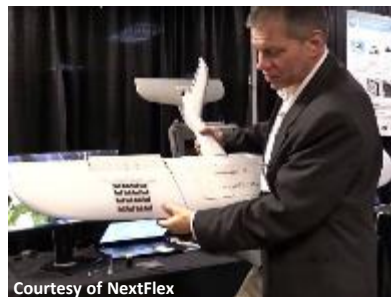
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DoD Manufacturing Activities Across Acquisition Lifecycle

DoD Acquisition Lifecycle	Enabling S&T Capability	Material Solution Analysis	Technology Maturation & Risk Reduction	Engineering & Manufacturing Development	Production/Deployment	Operations & Support		
Manufacturing Programs	DoD Manufacturing Technology (ManTech)							
	Industrial Base Analysis and Sustainment (IBAS)				Defense Production Act Title III			
	Programs of Record (PoR) manufacturing investments							
	Technology Readiness Level	TRL 1-3	TRL 4	TRL 5	TRL 6	TRL 7	TRL 8-9	
Manufacturing Readiness Level	MRL 1-3	MRL 4	MRL 5	MRL 6	MRL 7	MRL 8	MRL 9	MRL 10

- DoD manufacturing programs address technology development & fill capacity needs
- Programs of Record (PoR) allot portions of their budgets to support manufacturing needs
- Opportunities to leverage other investment programs for manufacturing (e.g. Small Business Innovation Research /Small Business Technology Transfer, Rapid Innovation Fund, National Security Innovation Network [formerly MD5], Defense Innovation Unit)



Manufacturing Underpins Defense Modernization

- **Desired outcomes of manufacturing investments**

- Alignment with modernization priorities to ensure technology, capability and capacity to meet DoD's manufacturing needs
- Leverage DoD investment in a strategic partnership with Federal/State/Local Government, Industry, Academia to foster robust organic and commercial manufacturing base, including workforce
- Advance and preserve manufacturing technology and process IP to ensure US national and economic security

- **Opportunity**

- Treat DoD manufacturing program as an integral part of modernization priorities
- Review and shape current DoD manufacturing programs, incentives, and goals
- Renew strategic Government partnerships

Superiority is gained through advanced technology production and adoption



OSD ManTech Investment Portfolio

Investment Programs Under PE 0603680D8Z

- P680 – Manufacturing Science and Technology (MSTP)
- P350 – Manufacturing Innovation Institutes (MIIs)
- P351 – Manufacturing Education and Workforce Development

- ✓ Administer the Department of Defense (DoD) Manufacturing Technology Program
- ✓ Support the Office of the Under Secretary of Defense Research & Engineering's (OUSD(R&E)) critical technology areas
- ✓ Maintain a joint planning process and provide centralized guidance through the Joint Defense Manufacturing Technology Panel (JDMTP)
- ✓ Manage the OSD Manufacturing Science and Technology Program
- ✓ Oversee the Federal government's partnership with the DoD Manufacturing Innovation Institutes
- ✓ Lead the DoD's Manufacturing Education and Workforce Development (EWD) initiatives
- ✓ Collaborate across the Department and Federal Government to advance manufacturing in the United States



OSD Manufacturing Science and Technology Program (MSTP) Overview

- A “traditional” research investment approach
 - Targeted investments in specific projects to advance manufacturability of emerging technologies
 - Typical projects run 1-3 years, annual budget \$500k-\$1M
- Explicit partnership with DoD government labs
 - Contracting support to execute the funds
 - First-line project management
 - Empowered as advocates for OSD and project technology
 - Conferences, program offices, Industry panels
 - Seeking transition and adoption
- Annual call for proposals
 - 1-5 Focused Investment Areas (FIAs) derived from:
 - OSD strategies, e.g. modernization priorities
 - Joint Defense Manufacturing Technology Panel technology watch items
 - Industry Survey
 - Currently accepts proposals only from DoD labs
 - Technologies not aligned to FIAs are accepted and duly evaluated



DoD MII Mission and Vision

Business Model Overview and Tenets

MISSION

Catalyze the establishment, effective operation and integration of industry-led public-private research partnerships that connect and develop people, ideas and technology in ways that accelerate the transition of new capabilities into defense products and systems.

Regional Hubs with National Impact to U.S. Ecosystem	Led by non-profit acting as “honest broker,” accountable for viability	Industry-led, DoD-informed technical roadmapping
Industrially relevant, DoD oriented Research and Development (R&D) to “Bridge-the Gap” (Technology Readiness Level / Manufacturing Readiness Level 4-7)	Access to shared assets for U.S. companies: IP and infrastructure	Education and training for sufficient, skilled manufacturing workforce
Significant initial federal investment (\$70-\$120M) over 5-7 years	Leverage minimum of 1:1 cost share from non-federal sources	Formal evaluation prior to continued DoD engagement and funding



DoD Manufacturing Innovation Institutes Current Network



Since Launching in 2012...

- Committed Funding: \$1.9+B Federal and \$2.2+B Private/State Investments
- 1,790+ companies, universities, and non-profit members or partners
- DoD MII members across 49 states, Washington DC, and Puerto Rico

Data as of 31 March 2023



OSD ManTech Management Team

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