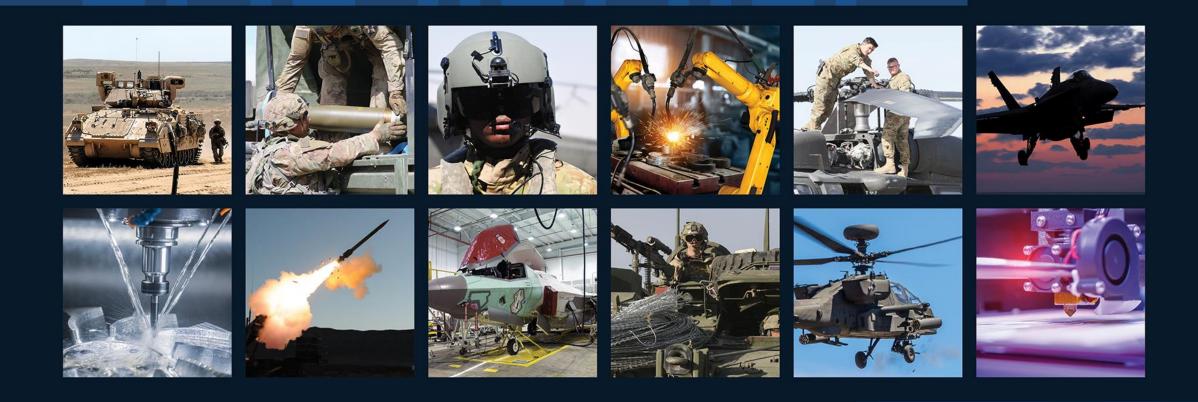


NCDMM

National Center for Defense Manufacturing and Machining





VISION

NEVER A FAIR FIGHT

Ensure the U.S. warfighter always has a superior advantage

MISSION

Delivering unbiased advanced manufacturing technology solutions to the defense industrial base

DEVELOP • TRANSITION • IMPLEMENT

WE ARE

TRUSTED

Independent, unbiased solution provider

CONNECTED

Collaborating with leading providers with innovative technologies

EXPERIENCED

Experts with diverse manufacturing backgrounds

FOCUSED

Successful program execution benefiting the warfighter





NATIONAL MANUFACTURING INNOVATION INSTITUTE NETWORK



THRUST AREAS





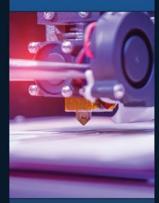
Advanced Manufacturing



Accelerating innovative technologies, processes, materials, and R&D



Additive Manufacturing



Advancing design, processes, materials, and applications



Crisis Response



Providing
access to
essential
manufacturing
capabilities



Education & Workforce Development



Training today for the technologies of tomorrow



Manufacturing Assessments



Determining baselines to advance technology



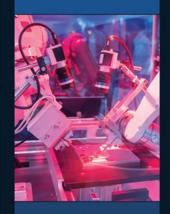
Strategic Roadmapping



Developing investment strategies for critical technologies



Supply Chain



Enabling
greater control
and efficiency
of complex
supply
networks

PORTFOLIO OF SUCCESS



MUNITIONS



NEED

Increase production capability for specialized printed circuit boards

SOLUTION

Automated composite/metal casting of material

IMPACT

More than doubled production yield

ROTORCRAFT



NEED

Improve erosion coating application accuracy

SOLUTION

Robotic spray system with 0.0002" accuracy

IMPACT

Transitioned a precise robotic system; material savings

LAND SYSTEMS



NEED

Refurbish and recondition vehicles/large equipment

SOLUTION

Overhaul existing 5-Axis Milling Machine

IMPACT

Automated machining; integrated user safety

AEROSPACE



NEED

Sustain legacy aircraft in extended service

SOLUTION

Additive manufacturing of hard-to-locate spare

IMPACT

Maintained existing fleet of Air Force equipment

MISSILES



NEED

Complex manufacturing, design, and quality issues

SOLUTION

Integration of next generation technology

IMPACT

Prototyped MML; advanced TRL from 4 to 6



WHAT THIS LOOKS LIKE IN PRACTICE



ID CHALLENGE

DESIGN FLAW

PRODUCTIONIZATION

DEMO – PRODUCTION PROTOTYPE

COST REDUCTION

SCHEDULE REDUCTION

SUPPLY CHAIN RISK

LONG RANGE STRATEGIC **PLANNING**



NCDMM BUILDS TECHNICAL TEAM

200+ ALLIANCE PARTNERS

BEST IN CLASS TECHNOLOGISTS

NICHE DEVELOPMENT

NATIONAL MANUFACTURING INSTITUTES

NATIONAL LABS

ACADEMIA

...ANY NEEDED TECHNOLOGY WITH INDUSTRY EXPERIENCE



DELIVER UNBIASED SOLUTION

TECH DATA PACKAGE

PRODUCT REDESIGN

PRODUCTION RECOMMENDATIONS

ALLIP REMAINS



2023 DOD MENTOR DESIGNATION







MANUFACTURING READINESS ASSESSMENT: AN ACTIONABLE FIRST STEP

TECHNOLOGY AND INDUSTRIAL BASE DESIGN MANUFACTURING COST & FUNDING READINESS ASSESSMENT RISK **RAW MATERIALS, COMPONENTS, SUB-RISK ASSEMBLIES AND SUB-SYSTEMS USING AIR FORCE FULL RATE MITIGATION** TO PRODUCTION **INSTITUTE OF** PROCESS CAPABILITY **PRODUCTION PLAN AND IDENTIFIED TECHNOLOGY** & CONTROL **EXECUTION METHODOLOGY QUALITY MANAGEMENT MRL 1-10 MANUFACTURING WORKFORCE FACILITIES MANUFACTURING MANAGEMENT**



CONNECT WITH US









