MODERNIZE ACQUISITION & SUPPLY CHAIN MANAGEMENT

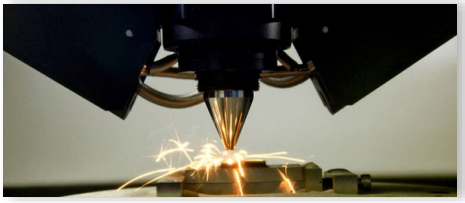
Defense Logistics Agency *Research & Development*

SMALL BUSINESS INNOVATION PROGRAMS (SBIP)
SBIR/STTR

To support DLA's strategic line of effort to *Modernize Acquisition and Supply Chain Management,* SBIP engages with industry to develop quality solutions addressing industrial base and supply chain vulnerabilities. Priorities include addressing limited sources for weapons system parts, supply chain risk mitigation, foreign dependence on critical materials, and decreased U.S. industrial base manufacturing capabilities. Through competitive awards, SBIP identifies small businesses capable of developing and transitioning reverse and value engineered parts, advanced manufacturing techniques, domestic sources of supply, and supply chain risk reduction technologies that either meet or exceed current military or industry standards. To qualify new sources for weapons systems parts, SBIP, Engineering Support Activities and small businesses work through the Source Approval Request (SAR) – a rigorous qualification process used to approve a business as a source of supply for critical parts. Likewise, small businesses developing domestic sources of supply, advanced manufacturing techniques and supply chain risk reduction technologies partner with industry to define requirements and integrate innovations through DoD programs of record. SBIP's collaborative, high-standard approach to validating small business solutions ensures innovations are relevant to real-world customer requirements, and with transition, integrates industry best practices into the defense supply chain.

SUPPORTING READINESS THROUGH INNOVATION

SUPPLY CHAIN INNOVATION

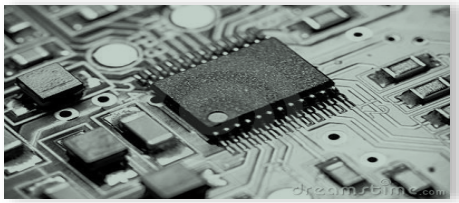


Additive Manufacturing (AM). AM is an efficient supply chain solution to low-demand parts with long lead times and costly production processes; but the rapid advancement and adoption of AM within the defense supply chain requires a standard to certify AM parts for the same quality and performance as the conventionally manufactured part. To streamline AM build quality and repeatability SBIP funded a collaborative effort to develop an advanced in-situ monitoring sensor suite and process alongside an OEM and DoD subject matter experts.

DOMESTIC SOURCES

Strategic Materials. Rare Earth Elements (REEs) are a classification of seventeen elements on the periodic table that have unique geochemical properties critical to major weapons systems. Foreign dependence on REE renders DoD vulnerable to politically-driven supply chain disruptions. By developing trusted domestic sources, DLA will reduce dependence on foreign sources, thereby reducing quality concerns and non-competitive costs. SBIP is funding the development of domestic suppliers for critical REEs and derived parts, such as magnets.

SUPPLY CHAIN ASSURANCE



Anti-Counterfeit. Foreign sources of supply within the defense supply chain exposes DoD to damaging disruptions in supply chain operations that can cost time, money and lives. Without secure authentication and end-to-end traceability technologies, DoD cannot effectively or efficiently identify non-conforming supplies or where a critical breach occurred. SBIP is evaluating industrial base best practices for supply chain security as well as funding a series of anti-counterfeit and track-and-trace solutions based on industry standards.

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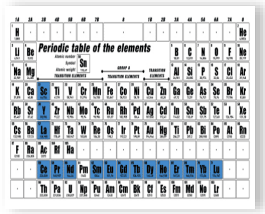
Defense Logistics Agency

"The Nation's Combat Logistics Support Agency"

PRIMARY RESEARCH THRUST OBJECTIVES

Additive Manufacturing (AM) Technologies and Materials: Improve repeatability and build quality for AM metal components, with insitu process monitoring and control technologies for both Laser Powder Bed Fusion and Directed Energy Deposition methods. Create a domestic supply of high performance, high temperature advanced metal powders from industrial waste streams.



Rare Earth Separations: Develop domestic commercial production of rare earth oxides from industrial waste feedstock. A rare earths supply chain in the U.S. will reduce reliance on foreign sources, ensure availability and lower costs versus standard process manufacturing.

Rare Earth Magnets: Expand domestic capacity for recycled NdFeb rare earth magnets to reduce foreign dependence on items critical to weapons systems maintenance and sustainment. A domestic source will mitigate single-source price increases and supply disruptions.

Domestic Sources of Critical Metals and Materials: Demonstrate metals and materials recovery processes with reliable production and quality compliance to reduce foreign dependance and cost.

Microelectronics Tracking and Security: Address a critical defense need to tag microelectronic circuit boards from cradle-to-grave. With a single anti-counterfeit, track-and-trace and data storage technology, OEMs can ensure provenance, and movement throughout the supply chain through disposition.

HOW TO SUBMIT A PROPOSAL

More information about the Small Business Innovation Program can be found on the SBIP Website:

http://www.dla.mil/SmallBusiness/SmallBusinessInnovationPrograms/

A schedule of solicitations and topics released by all DoD components (Broad Agency Announcements (BAA)), can be found on the DoD SBIR/STTR website, the Defense Innovation Portal:

https://www.dodsbirsttr.mil/submissions/login

Carefully review the instructions. Evaluate the topic content and reach out to the SBIP program management team within the first 30 days from the announcement date for questions or clarifications.

At minimum, proposals are evaluated on: **1)** The relevance of the innovation to the DLA requirement; **2)** Technical sufficiency, facilities and SOW feasibility; **3)** Qualifications of the PI and supporting staff; **4)** The potential of technology for transition to a program of record; and **5)** Cost.

A small business can distinguish themselves among the competing proposals by including: **6)** A business case analysis; **7)** A strategy and a plan to transition the innovation to a government program of record; and **8)** An industrial partner that will qualify the innovation for the DoD supply chain and connect the innovation with a government program of record. OEM letters of endorsement and/or in-kind support are recommended.

If you have any questions, please contact us at DLASBIR2@dla.mil

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