The Department of Defense (DoD) has awarded a total of 16 projects valued at nearly $65.6M in the first six months of calendar year 2021. These projects and programs were selected to expand, establish, and/or support domestic manufacturing, throughput, and capacity, to meet the Department’s growing need for advance capabilities in critical areas such as workforce manufacturing skills, microelectronics, directed energy, and rare earth materials. The following is a summary of the highest priority projects:

1. **Project Title:** Accelerated Training in Defense Mfg (ATDM)
   
   **Contractor/Recipient:** Institute for Advanced Learning (Danville)
   
   **Contract/Obligation Date:** 03/08/21
   
   **Amount ($):** 1,583,965
   
   **Project Narrative:** Improve the nation’s capacity to produce and deliver workers with industrial skills to meet defense technology, acquisition, and operational needs through demonstration of a novel training program that reduces training time up to 75% while preserving or improving quality and can be the replicated at a national network of regional training centers serving the Defense Industrial Base.

   **American Manufacturing Capabilities (1-Expand, 2-Establish, or 3-Support):** 1, 3

2. **Project Title:** Defense Electronics Consortium Management
   
   **Contractor/Recipient:** U.S. Partnership for Assured Electronics
   
   **Contract/Obligation Date:** 01/20/21
   
   **Amount ($):** 3,900,000
   
   **Project Narrative:** Establish a public-private partnership framework between the U.S. Government and a new Defense Electronics Consortium for electronics to mitigate industrial base risks. Consortium will develop requirements for, solicit, and manage execution of a variety of defense electronics tasks, beginning with assessment of the use of lead-free electronics in high stress environments experienced in DoD systems.

   **American Manufacturing Capabilities (1-Expand, 2-Establish, or 3-Support):** 1, 3
3. **Project Title**: Precision Optics Manufacturing

   **Contractor/Recipient**: Americom

   **Contract/Obligation Date**: 4/17/2021

   **Amount ($)**: 6,086,361

   **Project Narrative**: Establish a public-private partnership that manages a consortium that develops requirements for, solicits, and manages the development of workforce training programs specifically targeted to support the increasing complexity and growing manufacturing requirements of the nation’s optics and photonics industry.

   **American Manufacturing Capabilities (1-Expand, 2-Establish, or 3-Support)**: 3

4. **Project Title**: Rare Earth Elements from Coal Ash

   **Contractor/Recipient**: Physical Sciences, Inc.

   **Contract/Obligation Date**: 4/21/2021

   **Amount ($)**: 4,042,787

   **Project Narrative**: Develop and test a prototype technology to economically produce a Critical Mineral concentrate from coal ash using a domestic source of supply while preserving or improving environmental quality.

   **American Manufacturing Capabilities (1-Expand, 2-Establish, or 3-Support)**: 2, 3

5. **Project Title**: Manufacturing Skills (MSC in PB21) (project MFG)

   **Contractor/Recipient**: RD Solutions

   **Contract/Obligation Date**: 05/04/21

   **Amount ($)**: 2,000,000

   **Project Narrative**: Collectively improve the nation’s capacity to produce and deliver workers with industrial skills to meet defense technology, acquisition, and operational needs. Create a program that promotes manufacturing skill competitions held across the
nation in multiple states, accelerates the building of the workforce pipeline, and elevates the workforce.

**American Manufacturing Capabilities (1-Expand, 2-Establish, or 3-Support):** 1, 3

6. **Project Title:** Shipbuilding Supply Chain Workforce Development

**Contractor/Recipient:** SENEDIA (Southeastern NE Defense Industry Association)

**Contract/Obligation Date:** 05/14/21

**Amount ($):** 11,797,604

**Project Narrative:** Working in close partnership with the Navy, develop and deploy multiple workforce-building efforts in support of submarine shipbuilding requirements derived from analysis of defined regional workforce capabilities and capacity.

**American Manufacturing Capabilities (1-Expand, 2-Establish, or 3-Support):** 1, 3

7. **Project Title:** Tungsten Supply Chain Resiliency

**Contractor/Recipient:** Global Tungsten & Powders Corp

**Contract/Obligation Date:** 5/24/2021

**Amount ($):** 2,216,562

**Project Narrative:** Prototype new manufacturing processes for tungsten and tungsten alloy components in support of DoD products.

**American Manufacturing Capabilities (1-Expand, 2-Establish, or 3-Support):** 1, 3

8. **Project Title:** America's Cutting Edge (ACE) (FY20 Project Name)

**Contractor/Recipient:** UT-Battelle, LLC

**Contract/Obligation Date:** 05/06/21

**Amount ($):** 15,474,443
Project Narrative: Leverage multibillion-dollar DOE investments to create ACE, a national research and training hub dedicated to increasing the productivity of the existing installed U.S. machine tool base and initiative efforts to create the next generation of advanced machine tools. Develop technologies to increase the productivity and efficiency of current machine tools; develop novel processes and control algorithms to enable hybrid manufacturing; and establish new machine tool metrology designs, and controls for rapid production of large components.

American Manufacturing Capabilities (1-Expand, 2-Establish, or 3-Support): 2, 3