DEPARTMENT OF DEFENSE

MANUFACTURING TECHNOLOGY PROGRAM

JOINT ADDITIVE MANUFACTURING WORKING GROUP

The JOINT ADDITIVE MANUFACTURING WORKING GROUP is a Department of War community focused on communication and coordination among the Military Services and Defense Agencies to maximize the application of additive manufacturing for the U.S. warfighter and sustainers

Explore our website for more information and updates

WHO?

- 20 Department of War Principal Members
- 200+ Members from the Joint Services (Army, Navy, Air Force, and Marine Corps), Defense Logistics Agency, Defense Innovation Unit, Office of the Secretary of Defense Manufacturing Technology Program, and Joint Staff

WHAT?

- Develop approaches to accelerate additive manufacturing adoption across the Department of War
- Coordinate additive manufacturing technology development
- Engage with industry through the Department of Defense Manufacturing Innovation Institutes

OBJECTIVES

1. **Qualification & Certification:** Accelerate qualification and certification of additive materials, machines, and parts
2. **Data and Model Sharing:** Secure a common digital thread across the Department of Defense and industry
3. **Education and Workforce Development:** Expand proficiency in additive manufacturing
4. **Integration:** Develop Department of Defense additive manufacturing policy and guidance
5. **Alignment:** Improve communications and collaborations

PARTNERSHIPS

JAMWG engages with Department of War public-private partnerships to collect insights, share information, and advance state-of-the-art developments for additive manufacturing with the private sector. *Key partners include:*

- **America Makes: The National Additive Manufacturing Innovation Institute**
- **Additive Manufacturing for Maintenance Operations**
- **Additive Manufacturing Standards Collaborative**

WHY?

- Understand the current state-of-the-art advanced manufacturing technologies and apply those capabilities for military operations in contested logistics
- Update on test & evaluations, demonstrations, assessments
- Inform future planning and exercises for Joint Forces needs

WHEN? MAJOR EVENTS

- Office of the Secretary of Defense Additive Manufacturing Workshop and Wargame
- Challenges leveraging multiple Department of Defense Manufacturing Innovation Institutes
- Defense Manufacturing Conference Technical Sessions
- Post-Military Additive Manufacturing Summit Face-to-Face

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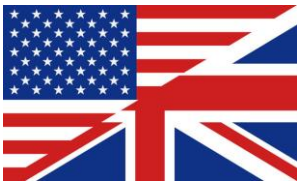
Department of Defense Manufacturing Technology Program

Office of the Under Secretary of War for Research and Engineering

SUCCESS STORIES

Allied Additive Manufacturing Interoperability



The JAMWG's Allied Additive Manufacturing Interoperability (AAMI) project program aims to make it easier for American and British defense industries to use additive manufacturing to make parts.

It demonstrates laser powder bed fusion production qualification methods for critical parts using a multi-phased approach that delivers a structured framework for additive manufacturing suppliers. By leveraging performance-based methods, the project ensures equivalent part production across allied nations, supporting a globally connected and resilient U.S. defense industrial base.

AAMI strengthens supply chain integration by addressing common barriers to additive manufacturing adoption like qualification, certification, and data security.

Joint Additive Qualification for Sustainment (JAQS)

The Joint Additive Qualification for Sustainment (JAQS) program addresses the lack of mature additive manufacturing suppliers for Department of War (DoW) applications. JAQS develops, trains, and qualifies contract manufacturers to execute process control standards necessary for qualified additive manufacturing serial production.

The program aims to create, document, and share additive manufacturing process know-how for the DoW. This expertise, focused on laser powder bed fusion and directed energy deposition, will be captured in process control documents and qualification guidance. Selected U.S. suppliers will receive hands-on training to learn how to implement these process control documents and qualification procedures.

After training, suppliers will undergo an audit to verify their capability to perform qualified additive manufacturing for the DoW, ensuring consistent part production. The suppliers that successfully complete a JAQS audit will be added to the DoW's list of approved suppliers.