



ACQUISITION  
AND SUSTAINMENT

## THE UNDER SECRETARY OF DEFENSE

3010 DEFENSE PENTAGON  
WASHINGTON, DC 20301-3010

March 21, 2019

MEMORANDUM FOR: CHIEF MANAGEMENT OFFICER OF THE DEPARTMENT OF  
DEFENSE  
SECRETARIES OF THE MILITARY DEPARTMENTS  
CHAIRMAN OF THE JOINT CHIEFS OF STAFF  
UNDER SECRETARIES OF DEFENSE  
CHIEF OF THE NATIONAL GUARD BUREAU  
GENERAL COUNSEL OF THE DEPARTMENT OF DEFENSE  
DIRECTOR, COST ASSESSMENT AND PROGRAM  
EVALUATION  
INSPECTOR GENERAL OF THE DEPARTMENT OF DEFENSE  
DIRECTOR, OPERATIONAL TEST AND EVALUATION  
CHIEF INFORMATION OFFICER OF THE DEPARTMENT OF  
DEFENSE  
ASSISTANT SECRETARY OF DEFENSE FOR LEGISLATIVE  
AFFAIRS  
ASSISTANT TO THE SECRETARY OF DEFENSE FOR PUBLIC  
AFFAIRS  
DIRECTOR, NET ASSESSMENT  
DIRECTORS OF THE DEFENSE AGENCIES  
DIRECTORS OF THE DOD FIELD ACTIVITIES

SUBJECT: Directive-type Memorandum (DTM)-19-006 – “Interim Policy and Guidance for the Use of Additive Manufacturing (AM) in Support of Materiel Sustainment”

References: Code of Federal Regulations, Title 48, Chapter 2, Subpart C, Part 217.75, Section 217.7504  
Deputy Secretary of Defense Memorandum, “Establishment of the Office of the Under Secretary of Defense for Research Engineering and the Office of the Under Secretary of Defense for Acquisition and Sustainment,” July 13, 2018  
DoD Directive 5134.01, “Under Secretary of Defense for Acquisition, Technology, and Logistics (USD(AT&L)),” December 9, 2005, as amended  
Under Secretary of Defense Acquisition, Technology, and Logistics Memorandum, “Establishment of the Joint Additive Manufacturing Steering Group and the Joint Additive Manufacturing Working Group,” July 6, 2017

Purpose: In accordance with the authority in DoD Directive 5134.01 and the July 13, 2018 Deputy Secretary of Defense Memorandum, this DTM:

- Provides interim policy guidance and assigns responsibilities necessary to ensure safe and effective use of AM in DoD’s sustainment enterprise.

- Is effective March 21, 2019; it will be converted to a new DoD instruction. This DTM will expire effective March 21, 2020.

Applicability. This DTM applies to OSD, the Military Departments, the Office of the Chairman of the Joint Chiefs of Staff and the Joint Staff, the Combatant Commands, the Office of the Inspector General of the Department of Defense, the Defense Agencies, the DoD Field Activities, and all other organizational entities within the DoD.

Definitions. See Glossary.

Policy. It is policy that DoD will use AM to enable the transformation of maintenance operations and supply chains, increase logistics resiliency, and improve self-sustainment and readiness for DoD forces.

Responsibilities. See Attachment 1.

Procedures. See Attachment 2.

Releasability. **Cleared for public release.** This DTM is available on the Directives Division Website at <https://www.esd.whs.mil/DD/>.



Ellen M. Lord  
Under Secretary of Defense for Acquisition and  
Sustainment

Attachments:  
As stated

ATTACHMENT 1

RESPONSIBILITIES

1. UNDER SECRETARY OF DEFENSE FOR ACQUISITION AND SUSTAINMENT (USD(A&S)). The USD(A&S):

- a. Reviews current policy and develops AM policy pertaining to acquisition, including intellectual property policy, as appropriate.
- b. Ensures that the digital and cyber infrastructure supports AM for sustainment operations in appropriate policy and guidance.
- c. Assesses domestic industrial AM equipment manufacturing capability and develops industrial policy and guidance needed to ensure adequate and uninterrupted AM capacity in support of military operations.
- d. Incorporates AM considerations into the guidance and training for applicable acquisition workforce under the purview of the USD(A&S) responsible for acquisition and sustainment.

2. ASSISTANT SECRETARY OF DEFENSE FOR SUSTAINMENT. Under the authority, direction, and control of the USD(A&S), the Assistant Secretary of Defense for Sustainment:

- a. Reviews current policy and develops policy and guidance that supports the use of AM for sustainment.
- b. Monitors and reviews the implementation of AM policy across the sustainment enterprise.
- c. Leads collaboration across the sustainment enterprise, including commercial industry, and shares best practices through established sustainment focused AM forums such as the Additive Manufacturing for Maintenance Operations Working Group.
- d. Engages with the acquisition and the research, development, test, and evaluation communities to ensure AM capabilities and processes are adequately considered and resourced and AM-designed parts are adequately documented to support sustainment.
- e. Leads efforts to ensure that sustainment business processes adequately address AM related issues and challenges in sustainment policy and guidance.

3. DIRECTOR, DEFENSE LOGISTICS AGENCY. Under the authority, direction, and control of the USD(A&S), the Director, Defense Logistics Agency:

- a. Establishes processes and procedures for integrating AM into the supply chain, including safe handling and distribution of AM feedstock.
- b. Provides an interoperable capability enabling DoD entities to procure, securely access, and share AM technical data in alignment with Military Service requirements.
- c. Participates in joint-DoD AM collaborative activities.

4. UNDER SECRETARY DEFENSE FOR RESEARCH AND ENGINEERING. The Under Secretary of Defense for Research and Engineering:

- a. Reviews current policy and develops AM policy and guidance pertaining to research and engineering, as appropriate.
- b. Incorporates AM sustainment operations in the development of digital engineering policy and guidance.
- c. Integrates AM considerations into guidance and training for applicable acquisition workforce under the purview of the Under Secretary of Defense for Research and Engineering.
- d. Aligns the focus of DoD investments in organizations such as America Makes (under the National Center for Defense Manufacturing and Machining) with DoD's priorities.
- e. Leads the Joint Additive Manufacturing Steering and Working Groups to collaborate on implementing AM at OSD, the Defense Logistics Agency, and the Military Services.

5. SECRETARIES OF THE MILITARY DEPARTMENTS. The Secretaries of the Military Departments:

- a. Ensure Service-level AM policy, guidance and implementation strategies incorporate needs for sustainment operations, including use of AM to produce parts in a contingency or combat environment.
- b. Ensure Service-level use of AM complies with all laws, regulations, and policies relating to rights in technical data and computer software.
- c. Provide oversight to ensure AM critical items and repair parts comply with Service-level standards and qualification and certification processes and procedures.
- d. Integrate AM into appropriate supply chain processes and ensure that technical data and demand feedback is systematically provided to appropriate DoD supply organizations.
- e. Maintain records of all AM-produced end-items put into operational use per established inventory and configuration management policy and procedures.

- f. Incorporate approved AM parts and technology into specifications, standards, and technical data packages.
- g. Develop AM implementation metrics and methods to track implementation progress.
- h. Certify that the workforce (all Military Services and DoD entities) engaged in the acquisition and/or manufacturing of AM materials is adequately trained on AM processes and documentation.
- i. Designate a Service lead and focal point for AM efforts in support of Service sustainment operations.
- j. Ensure that the digital and cyber infrastructure supports AM for sustainment operations.
- k. Enable integration of AM capabilities into enterprise architecture and supporting business systems and processes.
- l. Ensure AM requirements are properly considered and resourced.
- m. Participate in joint-DoD AM collaborative activities.

ATTACHMENT 2

PROCEDURES

1. Maintenance activities utilize AM as a timely and cost effective alternative to sustain equipment availability in the areas of tooling, molds, and fixtures needed for traditional manufacturing and direct manufacture of components.
2. AM produced or acquired parts must comply with established configuration, change control, and parts management procedures, as appropriate.
3. Acquisition of AM parts when the requisite technical data is not available must comply with Title 48, Chapter 2, Subpart C, Part 217.75, Section 217.7504 of the Code of Federal Regulations.
4. AM parts or AM repair processes can be used in both critical and non-critical applications. For all applications, the appropriate level of qualification, certification, and risk/safety evaluation must be completed by the appropriate engineering support activity.
5. Local manufacture of AM parts in the sustainment enterprise will augment normal supply chain processes and procedures in support of materiel readiness requirements. The Military Services will strictly adhere to procedures regarding capturing item demand to the appropriate supply organization and providing the requisite technical data.
6. Activities using AM must abide by all laws, regulations, policies, and relevant contract clauses pertaining to rights in technical data and intellectual property.
7. Training and certification will be provided to personnel responsible for all facets of AM parts processing and acquisition.
8. In accordance with the July 6, 2017 Under Secretary of Defense for Acquisition, Technology, and Logistics Memorandum, the sustainment community will actively collaborate and share additive manufacturing best practices through the Joint Additive Manufacturing Steering and Working Groups.

GLOSSARY

ABBREVIATIONS AND ACRONYMS

AM	additive manufacturing
DTM	Directive-type Memorandum
USD(A&S)	Under Secretary of Defense for Acquisition and Sustainment