

**BY ORDER OF THE COMMANDER  
OKLAHOMA CITY AIR LOGISTICS  
COMPLEX**

**OKLAHOMA CITY AIR LOGISTICS  
COMPLEX INSTRUCTION 63-101**

**21 JULY 2025**



***Materiel Management***

**ADVANCED MANUFACTURING  
QUALIFICATION REVIEW  
OVERSIGHT**

**COMPLIANCE WITH PUBLICATION IS MANDATORY**

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This instruction implements and extends the guidance of Department of Defense (DoD) Instruction (DoDI) 5000.93 Department of the Air Force Supplement, DAFI63-149, *Use of Additive Manufacturing*, procedures governing qualification of metal additive manufacturing and repair technologies within the Oklahoma City Air Logistics Complex (OC-ALC). This instruction establishes institutionalization of senior leader oversight of Advanced Manufacturing qualification processes. This instruction applies to all OC-ALC military and civilian personnel. Ensure that all records adhere to AFI 33-322, *Records Management and Information Governance Program*, and disposed of in accordance with (IAW) the Air Force Records Information Management System. Refer recommended changes and questions about this publication to the office of primary responsibility (OPR) using the Department of the Air Force (DAF) Form 847, *Recommendation for Change of Publication*. This publication may be supplemented at any level, but all direct supplements must be routed to the OPR of this publication for coordination prior to certification and approval. Requests for waivers must come through the chain of command from the Commander or Civilian Director of the maintenance group or staff office seeking relief from compliance. Waiver requests must be submitted to the OPR; waiver authority has not been delegated.

**1. Overview.** This instruction institutes a formal, structured system for OC-ALC Senior Leader Oversight of qualification processes for machines, materials, and parts involved in the implementation of Advanced Manufacturing (AdvMfg) techniques in the complex.

**2. Roles and Responsibilities.**

2.1. OC-ALC/CC will ensure establishment and maintenance of an AdvMfg Process Qualification oversight program within the complex.

**2.2. OC-ALC Director of Engineering will:**

2.2.1. Oversee the OC-ALC AdvMfg Process Qualification program.

2.2.2. Establish and chair AdvMfg Process Qualification reviews.

2.2.3. Gather and integrate progress reviews for each Maintenance Group (MXG) for their respective AdvMfg areas of Metal Additive Manufacturing, Digital Casting, Direct Energy Deposition, and Robotic Cold Spray.

2.2.4. Maintain and incorporate changes to the briefing template for the review via SharePoint site: EN Documents AdvMfg Qualification.

**2.3. MXG/CC/CL will:**

2.3.1. Oversee the MXG AdvMfg Process Qualification program.

2.3.2. Utilize MXG engineering resources to ensure qualifications meet requirements flowed down from customers to include Program Office, Supply Chain, other services and agencies.

2.3.3. Manages MXG qualification process risk per DAFI 90-802, *Risk Management*.

2.3.4. Participate in AdvMfg Process Qualification reviews.

**2.4. MXG Engineering Chief will:**

2.4.1. Be accountable to MXG/CC/CL for technical matters within the MXG's specific AdvMfg areas.

2.4.2. Serve as the MXG's technical authority over AdvMfg processes and function within respective MXG.

2.4.3. Assess MXG qualification process risk per DAFI 90-802.

2.4.4. Execute the AdvMfg Qualification Process program for respective MXG.

2.4.5. Participate in AdvMfg Qualification Process reviews.

**2.5. MXG Engineering and 76th Maintenance Support Squadron (76 MXSS) Laboratory Organizations will:**

2.5.1. Develop schedules and gated process structure using the Art of the Possible approach to AdvMfg qualification processes.

2.5.2. Initiate process qualification risk analysis per DAFI 90-802 prior to qualification execution start.

2.5.3. Apply issue mitigation during execution phase of each part qualification process.

2.5.4. Execute operational, performance, and repair qualification requirements for each machine, material, and part combination as specified by their customers and applicable technical data package requirements, technical orders, government standards, and industry standards.

2.5.5. Deliver models, drawings, testing reports, test artifacts, first articles, and all other associated technical data to customers as specified in the qualification request.

2.5.6. Present status in AdvMfg Qualification Process reviews.

BRIAN R. MOORE  
Brigadier General, USAF  
Commander

**Attachment 1****GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION*****References***

DoDI5000.93\_DAFI63-149, *Use of Additive Manufacturing*, 6 January 2022

DAFI 90-802, *Risk Management*, 1 April 2019

AFSCI 60-101, *Art of the Possible*, 13 April 2021

AFSCI 21-104, *Industrial Process Control*, 29 October 2024

***Prescribed Forms***

None

***Abbreviations and Acronyms***

**76 MXSS**—76th Maintenance Support Squadron

**AdvMfg**—Advanced Manufacturing

**MXG**—Maintenance Group