

**BY ORDER OF THE COMMANDER
AIR FORCE MATERIEL COMMAND**

**AIR FORCE MATERIEL COMMAND
MISSION DIRECTIVE 420**



23 OCTOBER 2023

Mission Directive

**AIR FORCE RESEARCH LABORATORY
(AFRL)**

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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(Ms. Luci Slygh)

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This mission directive implements AFI 38-101, *Manpower and Organization*, and defines the mission of the Air Force Research Laboratory (AFRL), a primary subordinate unit of HQ AFMC. This mission directive applies to AFMC Regular Air Force, AFMC civilian employees, United States Space Force and those with a contractual obligation to abide by the terms of its issuance. This mission directive does not apply to Air National Guard or Air Force Reserve Command units. Ensure all records created as a result of processes prescribed in this publication are maintained in accordance with AFI 33-322, *Records Management and Information Governance Program*, and disposed of in accordance with the Air Force Records Disposition Schedule located in the AF Records Information Management System. Refer recommended changes and questions about this publication to the Office of Primary Responsibility using the DAF Form 847, *Recommendation for Change of Publication*; route DAF Forms 847 from the field through the appropriate functional chain of command. HQ AFMC/A1 is the waiver authority for compliance items in this publication. Submit requests for waivers through the chain of command to the publication OPR for consideration. This mission directive may not be supplemented.

SUMMARY OF CHANGES

Major changes to this edition include AFRL mission, command relationships, and responsibilities in addition to administrative updates to publication formatting and form references. This revision substantially revises the previous edition dated 22 May 2018 and must be reviewed in its entirety.

1. Mission. AFRL leads the discovery, development and integration of warfighting technologies for the DAF's air, space and cyberspace forces; executes the DAF Science and Technology (S&T) budget and orchestrates the investment strategy for DAF S&T activities; and manages external funds received from other government and industry customers. AFRL conducts research for both the United States Air Force and United States Space Force (One AFRL supporting Two Services) to ensure continued technological superiority; develops and transitions new threat-informed technologies for USAF and USSF weapon systems and their supporting infrastructure; and ensures responsive technical support to time-urgent problems. AFRL also commands the 711th Human Performance Wing and its USAF School of Aerospace Medicine, the premier institute for education and worldwide operational consultation in Aerospace and Operational Medicine.

2. Command.

2.1. AFRL, Wright-Patterson Air Force Base, Ohio, is a Primary Subordinate Unit of AFMC.

2.2. The AFRL Commander is dual hatted as the DAF Technology Executive Officer and reports in this capacity to the US Air and Space Service Acquisition Executives.

3. Responsibilities. The Commander, AFRL shall:

3.1. Organize, train, equip, attract, develop, and retain AFRL talent.

3.2. Plan, program, and execute the Department of the Air Force S&T Program in accordance with guidance provided by SAF/AQ and SAF/SQ.

3.3. Develop the Air Force S&T Plan, in coordination with SAF/AQR, to implement the Air Force S&T Strategy.

3.4. Direct, administer, and control activities for Air Force S&T relating to patents, inventions, trademarks, copyrights, royalty payments, and matters connected therewith.

3.5. Derive S&T requirements from strategic guidance and refine S&T needs with DAF warfighters; develop the DAF's S&T investment strategy accordingly.

3.6. Develop unique and integrated threat-informed S&T solutions to meet DAF warfighter needs.

3.7. Prioritize activities among the multiple competing demand signals.

3.8. Develop technology transition strategies.

3.9. Provide annual feedback to stakeholders and support acquisition reviews as required by SAF/AQ and SAF/SQ.

3.10. Protect critical technical information.

3.11. Formulate a strategic partnership strategy, including international engagements, and execute appropriate S&T with allies, academia, and industry partners.

3.12. Conduct far-reaching horizon scanning into international, academia, and industry S&T ventures and recommend actions to lead, leverage or follow the most promising areas for DAF applications.

3.13. Identify and assess international collaboration opportunities for value and fit within Technology Directorates' S&T strategy to satisfy AFRL, USAF, and/or Joint objectives.

3.14. Conduct Aerospace and Operational Medical Enterprise consultation, education and training activities, including specific Air Force Specialty Code initial skills training, readiness currency and competency training, and skills enhancement training.

3.15. Establish and operate a Defense Production Act Title III [*Expansion of Productive Capacity and Supply*] Program Office.

KATHY L. WATERN, SES, DAF
Director Manpower, Personnel and Services

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

AFI 33-322, *Records Management and Information Governance Program*, 23 March 2020

AFI 38-101, *Manpower and Organization*, 29 August 2019

Prescribed Forms

None.

Adopted Forms

DAF Form 847, *Recommendation for Change of Publication*

Abbreviations and Acronyms

AFRL—Air Force Research Laboratory

S&T—Science and Technology

Office Symbols

HQ AFMC—Headquarters Air Force Materiel Command

HQ AFMC/A1—HQ Air Force Materiel Command Manpower, Personnel and Services

HQ AFMC/A1M—HQ Air Force Materiel Command Manpower and Organization Division

SAF/AQ—Assistant Secretary of the Air Force for Acquisition, Technology, and Logistics

SAF/AQR—Assistant Secretary of the Air Force for Science, Technology, and Engineering

SAF/SQ—Assistant Secretary of the Air Force for Space Acquisition and Integration

Terms

None.