AFRL

THE AIR FORCE RESEARCH LABORATORY

Reimagining what's possible and creating tomorrow's technology . . . today

LEAD | DISCOVER | DEVELOP | DELIVER

AIR

AEROSPACE SYSTEMS

High-speed structures, flight control systems, power and thermal management, advanced engines, compressors, unmanned aerial vehicles, and hypersonic flight

BLU-137 warheads

Automatic Ground Collision Avoidance System (Auto GCAS)

High-temperature polymer composite developed using additive manufacturing

BASIC RESEARCH

Long-term, broad-based research that provides the foundation for future technological advancements

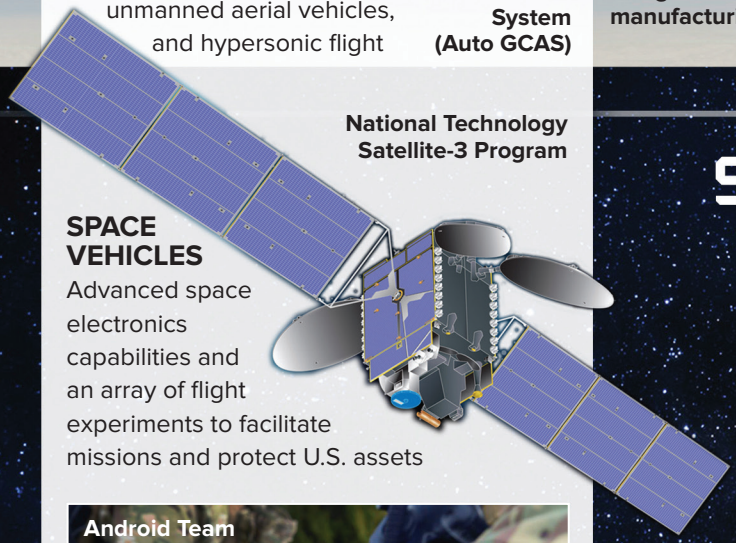
MUNITIONS

Hyper-precision weapons that allow the Air Force to adapt tactics, operate in complex environments and neutralize enemy threats

MATERIALS AND MANUFACTURING

Manufacturability and sustainability of the world's most advanced materials for aircraft, spacecraft, missiles, rockets and ground-based systems as well as their structural, electronic and optical components

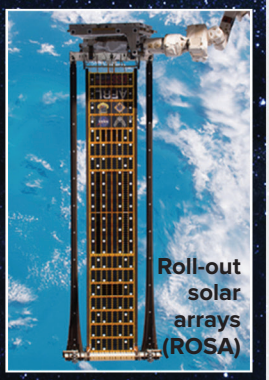
SPACE



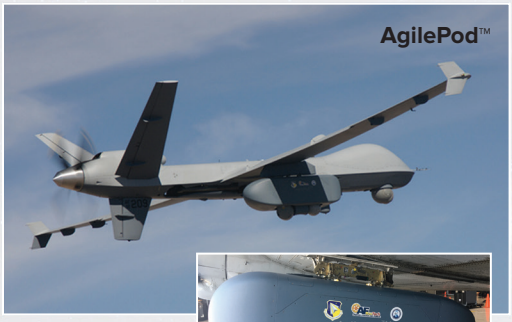
National Technology Satellite-3 Program

SPACE VEHICLES

Advanced space electronics capabilities and an array of flight experiments to facilitate missions and protect U.S. assets



Roll-out solar arrays (ROSA)



AgilePod™

SENSORS

Exploration, surveillance, precision engagement and electronic warfare capabilities

Android Team Awareness Kit (ATAK)

CYBERSPACE

INFORMATION

Command, control, communications, computers, intelligence and cyber technologies that enable the U.S. Air Force to maintain its superior technical advantage

HUMAN PERFORMANCE

Biological and cognitive research, warfighter training and readiness, systems integration, aerospace, medicine with emphasis on education, research and consultation

Secure Live Virtual Constructive Advanced Training

Tactical High Power Operational Responder (THOR)

DIRECTED ENERGY

Counter-electronics weapons technologies including high-energy lasers, high-power microwaves and electro-optics that degrade, damage or destroy electronic systems with minimum collateral damage

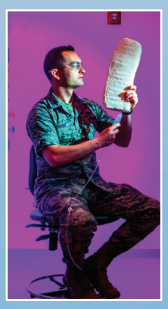
AFRL COMMUNITY

AFRL employs *5,216 government civilians and students. A highly educated research staff includes 1,139 personnel with doctoral degrees, 1,440 master's degrees, and 560 bachelor's degrees. The research community (Scientists & Engineers) is supported by professional and support staffs (Non S&Es). **AFRL** also employs 1,146 active-duty military members and 4,725 contractors for a total workforce of *11,087.

*As of August 31, 2019.

Scientists/Engineers: 3,200
Top S&E Occupations

- Electronics/Electrical Engineers
- General Engineers
- Aerospace Engineers
- Computer Scientists
- Materials Engineers
- Physicists
- Mechanical Engineers
- Computer Engineers
- Operations Researchers
- Chemists



Professional and Support Staff 2,016
Top Non S&E Occupations

- Contracting Professionals
- Managers and Program Analysts
- Financial Administration and Programmatic Support
- Information Technology Managers
- Security Administration Professionals

HISTORY

With roots tracing back to World War I, **AFRL** has led numerous technological advances in the last 100 years. Notable examples include advanced composites, turbine engines, guided munitions and GPS navigation. Today, **AFRL** leads science and technology (S&T) development through in-house and contractual programs to maintain a diverse portfolio ranging from basic and applied research to advanced technology development focused on specific products. To ensure the Air Force has access to the most innovative S&T, **AFRL** partners with industry, academia and the international community.

F-35

AFRL leads targeted research to shape the future battlespace. The lab develops integrated technologies and delivers solutions to satisfy Air Force requirements to meet urgent operational needs. **AFRL**'s efforts advance Air Force capabilities and contribute to mission readiness. In balancing a legacy of success with a pursuit of innovation, **AFRL** enhances existing warfighter capabilities while addressing the evolving battlefield. With innovative breakthroughs present in all of today's modern aircraft and weapon systems including the B-2 and the F-35, **AFRL** pushes technological boundaries while creating a safer, more secure tomorrow for the world.

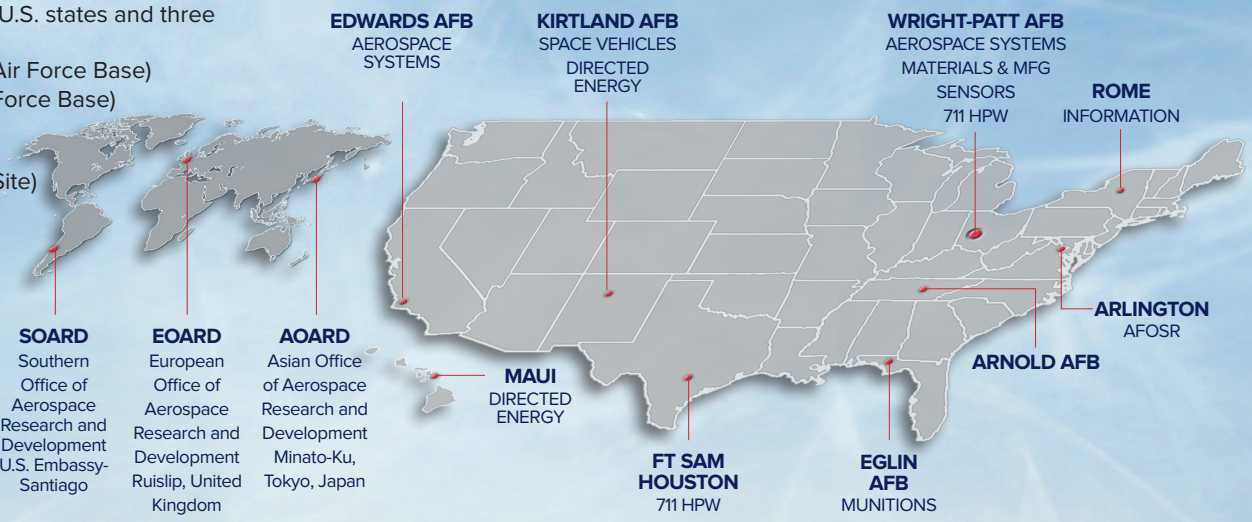
LOCATIONS

AFRL has facilities in nine U.S. states and three countries.

- Ohio (Wright-Patterson Air Force Base)
- California (Edwards Air Force Base)
- Florida (Eglin Air Force Base)
- Hawaii (Maui Research Site)
- New Mexico (Kirtland Air Force Base)
- New York (Rome)
- Tennessee (Arnold Air Force Base)
- Texas (Ft. Sam Houston)
- Virginia (Arlington)

International sites

- London, UK
- Tokyo, Japan
- Santiago, Chile



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For more information about the Air Force Research Laboratory, please visit our website at **www.AFResearchLab.com**.

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