

SBIR/STTR Definitions and Suitability Resources

This document is intended to provide general terms, definitions, and guidance to support the preparation of STRATFI/TACFI program submissions. It is for informational purposes only. Do not include it in the final submission.

Identifying Research, Development, Testing, & Evaluation (RDT&E) in SBIR /STTR

The definitions and criteria below govern SBIR/STTR as RDT&E programs. These definitions and criteria implement 15 USC 638, the SBIR/STTR Policy Directive, and DoD Financial Management Regulation (FMR), Vol. 2A, Chapter 1, Section 0102, Funding Policies (Oct 2008, as amended). Subject to programmatic phase conditions, SBIR/STTR awards are made for RDT&E efforts.

Department of the Air Force

The Department of the Air Force (DAF) encompasses both the Air Force and the Space Force. The Program Year (PY) 2026 STRATFI/TACFI program is a Department of the Air Force program, which is jointly-managed by the Innovation Arm of the Air Force (AFWERX) and the Innovation Arm of the Space Force (SpaceWERX).

Research or Research and Development (R/R&D)

Any activity that is:

- 1) A systematic study directed toward greater knowledge or understanding of the subject studied
- 2) A systematic study directed specifically toward applying knowledge and innovation to meet a recognized but unmet need
- 3) A systematic application of knowledge and innovation toward the production of useful materials, devices, and systems or methods, including design, development, and improvement of prototypes and new processes to meet specific requirements

The term "research and development (R&D)" is intended broadly to include the work performed under a funding agreement with the government. It includes R&D in all fields, including the physical sciences, engineering, etc. Research is systematic study directed toward fuller scientific knowledge or understanding of the subject studied. Development is a systematic use of the knowledge and understanding gained from research, for the production of useful materials, devices, systems, or methods, including the design and development of prototypes and processes.

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HUMAN SUBJECTS RESEARCH (HSR)

Any activity that is a combination of RESEARCH and HUMAN SUBJECTS per the regulatory definitions found in 32 CFR 219:

- **Research**: Defined as, “A systematic investigation, including research development, testing, and evaluation, designed to develop or contribute to generalizable knowledge.”
- **Human Subject**: Defined as, “A living individual about whom an investigator (whether professional or student) conducting research obtains (1) Data through intervention or interaction with the individual, or (2) Identifiable private information.”

Authority to Operate (ATO)/Security Provision

First, every Information Technology (IT) needs a Risk Management Framework (RMF) assessment and/or an Authority To Operate (ATO) within the Air Force. The RMF assessment ascertains the data security requirement of the IT and assigns an Impact Level (IL) of cloud security for the IT (e.g. IL-2 through IL-5)

The second key is to establish DevSecOps in a secure Cloud environment, which meets the business’s needs. Fundamental cybersecurity control requirements for businesses are outlined in NIST SP 800-171 and DFAR PGI 239.76-CLOUD COMPUTING and serve as the backbone to Air Force cybersecurity and data security. Cybersecurity Maturity Model Certification is another measure of cybersecurity and preparation for this future requirement is fulfilled by the steps above. AFWERX does not grant the ATO.

Commercial Off the Shelf (COTS)/Unmanned Aircraft Systems (UAS)

All activities involving UAS operation shall be conducted in accordance with (IAW) DoD memo “Guidance for the Domestic Use of Unmanned Aircraft Systems in the U.S. National Airspace”. Contractor personnel operating DoD or DoD-contracted UAS in US National Airspace, whether domestic use is related to an intelligence activity or not, will comply with all UAS operations in US National Airspace laws, regulations, and guidance. Specific programs utilizing UAS shall obtain an UAS operational use exemption. Therefore, the DAF may request additional documentation to support an exemption request. The DoD exemption approval process can last up to three months. No funding can be used for contracted-UAS operations until ALL approvals are granted.

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Flight Testing/Safety

All aircraft and air systems owned, leased, operated, used, designed, or modified within the Department of Defense (DoD) will have to complete an airworthiness assessment in accordance with Air Force Policy Directive 62-6, USAF Airworthiness and Department of Defense Directive 5030.61, DoD Airworthiness Policy.

Helpful Online Resources

SBIR and STTR Policy Directive (May 2023): [SBIR STTR POLICY DIRECTIVE pdf](#)

AFWERX Resources: <https://afwerx.com/>

PIII Transition Webinar: [Phase III: Engaging the Market](#)

RDT&E Webinar: [RDT&E Webinar](#)

Small Business Cybersecurity Information: [Small-Business Cybersecurity-Info](#)

DoD FMR 7000.14-R Volume 2A, Chap 1: <https://comptroller.defense.gov>

32 CFR 219: <https://www.ecfr.gov>

DoDI 3216.02 Protection of Human Subjects & Adherence to Ethical Standards in DoD Conducted & Supported Research: <https://www.esd.whs.mil>

NIST SP 800-171 Rev 3: <https://csrc.nist.gov/pubs/sp/800/171/r3/final>

DFAR PGI 239.76-CLOUD COMPUTING:

https://www.acq.osd.mil/dpap/dars/dfars/html/current/239_76.htm

Federal Acquisitions Regulation (FAR): <https://www.acquisition.gov/browse/index/far>

DoD Memo “Guidance for the Domestic Use of Unmanned Aircraft Systems in the U.S. National Airspace”, 18 August 2018:

<https://info.publicintelligence.net/DoD-DomesticUnmannedAircraftSystems.pdf>

Department of Defense Directive 5030.61, DoD Airworthiness Policy (Dec 2024):

https://www.esd.whs.mil/Portals/54/Documents/DD/issuances/dodi/503061p.PDF?ver=a4--jubJTtO3HPR0IUN_cQ%3D%3D

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Department of the Air Force Instruction 62-601, Airworthiness (Apr 2025):

https://static.e-publishing.af.mil/production/1/saf_aq/publication/dafi62-601/dafi62-601.pdf

Air Force Information/Organizational Listings

USAF Major Commands and Air National Guard (pgs 61-79) & US Space Force (pgs 87-94):

<https://www.airandspaceforces.com>

Force Global Strike Command - AFSTRAT-Air: <https://www.afgsc.af.mil/About/Units/>

Air Combat Command: <https://www.acc.af.mil/units/Air>

Education and Training Command: <https://www.aetc.af.mil/Units/>

Air Force Materiel Command: <https://www.afmc.af.mil/Units/>

Air Force Reserve Command: <https://www.afrc.af.mil/Units/>

Air Force Special Operations Command: <https://www.afsoc.af.mil/Units/>

Air Mobility Command: <https://www.amc.af.mil/Units/>

Pacific Air Forces: <https://www.pacaf.af.mil/Info/PACAF-Units/>

U.S. Air Forces in Europe - Air Forces Africa: <https://www.usafe.af.mil/Units/>

Air National Guard: <https://www.ang.af.mil/>

Space Force Information/Organizational Listings

USSF Major Commands (pgs 87-94): <https://www.airandspaceforces.com>

Space Operations Command: <https://www.spoc.spaceforce.mil/>

Space Training and Readiness Command: <https://www.starcom.spaceforce.mil/>

Space Systems Command: <https://www.ssc.spaceforce.mil/>

Space Systems Command Program Executive Offices:

<https://www.ssc.spaceforce.mil/Program-Offices>

Air Force Life Cycle Management Center:

<https://www.af lcmc.af.mil/WELCOME/Organizations/>

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AFRL Technical Directorates (TD): <https://www.afrl.af.mil/About-Us/>

- 711HPW - 711th Human Performance Wing
- (RH) Human Effectiveness
- RQ - Aerospace Systems
- AFOSR - Air Force Office of Scientific Research
- RG - AFWERX
- RD - Directed Energy
- RI - Information
- RX - Materials & Manufacturing
- RW - Munitions
- RY - Sensors
- RV - Space Vehicles

AFLCMC Directorates: <https://www.afcmc.af.mil/WELCOME/Organizations/>

- AQ-AZ - Acquisitions Excellence & Program Execution
- AZT - Test & Eval
- DP-DZ - Personnel
- EB - Armament
- EN-EZ - Engineering
- FM-FZ - Financial Management
- GB - Business and Enterprise Systems Directorate
- HB - Electronic Systems Directorate (Digital)
- HI - Business & Enterprise Systems
- HN - Cyber & Networks
- HO - History
- IG - Inspector General
- IN - Intelligence
- IP - Information Protection (Security)
- JA - Judge Advocate
- LG - Logistics
- LP - Propulsion
- PA/QZ – Public Affairs
- PK - Contracting
- RO - Rapid Sustainment
- SB - Small Business Office
- SE - Safety
- WA - Fighters & Advanced Aircraft

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- WB - Bombers
- WF - AF Security & Cooperation
- WI - ISR & SOF
- WJ - Joint Strike Fighter
- WL - Mobility
- WN - Training
- WV - Presidential & Executive Airpower
- XP - Plans & Programs
- Other

Air Force Program Executive Offices (PEO)

- **Armament Directorate - (EB)**
 - Potential Tech Area mapping: Aerospace; Hypersonics; Materials/Manufacturing; Munitions; Sensors
- **Bombers Directorate - (WB)**
 - Potential Tech Area Mapping: Aerospace; Materials/Manufacturing; Human Performance; Sensors
- **Business and Enterprise Systems Directorate - (GB)**
 - Potential Tech Area Mapping: Software/Cyber; Human Systems; Digital Capabilities
- **Combat Readiness - (RO)**
 - Potential Tech Area Mapping: Human Performance; Autonomy-AI/ML-Networks
- **Command, Control, Communications & Battle Management - (DAF PEO C3BM)**
 - Potential Tech Area Mapping: Information, Autonomy-AI/ML-Networks; Sensors; Quantum; Digital Capabilities; Cross Domain
- **Cyber & Networks - (HN)**
 - Potential Tech Area Mapping: Information, Autonomy-AI/ML-Networks; Software/Cyber; Quantum; Digital Capabilities, Integrated Capabilities; Cross Domain
- **Electronic Systems Directorate - (HB)**

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- Potential Tech Area Mapping: Information, Cyber, Sensors
- **Fighters and Advanced Aircraft Directorate - (WA)**
 - Potential Tech Area Mapping: Aerospace; Materials/Manufacturing; Sensors; Integrated Capabilities
- **Intelligence, Surveillance, Reconnaissance, and Special Operations Forces Directorate - (WI)**
 - Potential Tech Area Mapping: Integrated Capabilities
- **Joint Strike Fighter - (WJ)**
 - Potential Tech Area Mapping: Materials/Manufacturing; Human Performance; Sensors
- **Mobility Directorate - (WL)**
 - Potential Tech Area Mapping: Aerospace; Materials/Manufacturing; Human Performance; Sensors
- **Training Directorate - (WN)**
 - Potential Tech Area Mapping: Aerospace; Human Performance; Munitions; Integrated Capabilities; Cross Domain
- **Presidential and Executive Airpower Directorate - (WV)**
 - Potential Tech Area Mapping: Materials/Manufacturing; Human Performance; Sensors
- **Propulsion Directorate - (LP)**
 - Potential Tech Area Mapping: Aerospace; Directed Energy; Materials/Manufacturing; Sensors

Space Force PEOs

- **Assured Access to Space**
 - Potential Tech Area Mapping: Space; Aerospace; Directed Energy)

- **Space Domain Awareness & Combat Power**
 - Potential Tech Area Mapping: Space; Aerospace; Directed Energy; Integrated Capabilities
- **Operational Test & Training Infrastructure**
 - Potential Tech Area Mapping: Space
- **Space Sensing**
 - Potential Tech Area Mapping: Space; Directed Energy
- **MilComm & PNT**
 - Potential Tech Area Mapping: Information, Autonomy-AI/ML-Networks; Sensors; Quantum; Digital Capabilities; Cross Domain; Space
- **BMC3**
 - Potential Tech Area Mapping: Space; Information; Cyber

AFNWC PEOs

- **Intercontinental Ballistic Missiles Systems Directorate (ICBM)**
- **Nuclear Air Delivered Capabilities Directorate (NAD)**
- **Nuclear Command, Control and Communications (NC3) Integration Directorate (NC)**
- **Nuclear Technology and Integration Directorate**

Air Force Centers of AFMC or HAF

- **Air Force Installation and Mission Support (AFIMSC)** - Acquires capabilities that cross cut across three 77 Air Force installations.
- **Air Force Life Cycle Management Center (AFLCMC)** - Holistic management of capabilities across their lifecycle, mostly focused on Aircraft.
- **Air Force Nuclear Weapons System (AFNWC)** - Manages the acquisition and sustainment of all nuclear-related capabilities.

- **Air Force Research Laboratory (AFRL)** - Performs earlier stage research, development and integration of capabilities across all AF missions areas.
- **Air Force Sustainment Center (AFSC)** - Sustains aircraft and other systems through maintenance, upgrades, overhauls and supply chain management of existing systems.
- **Air Force Test Center (AFTC)** - Conducts test and evaluation of AF capabilities across all AF mission areas.
- **Air Force Operational Test and Evaluation Center (AFOTEC)** - Conducts tests and evaluations of how well capabilities meet user requirements.

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