



SBIR/STTR Program Vision and Mission

VISION

- Empower small businesses to deliver technological innovation that contributes to NASA's missions, provides societal benefit, and grows the US economy

MISSION

- Create opportunities through SBIR/STTR awards to leverage small business knowledge and technology development for maximum impact and contribution

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Structure of the Programs



Topics/Subtopics are aligned by Mission Directorates:

- Aeronautics Research Mission Directorate (A)
- Human Exploration and Operations Mission Directorate (H)
- Science Mission Directorate (S)
- Space Technology Mission Directorate (Z)
- STTR Program (T)


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2017 Solicitation - Noteworthy Changes

- **Focus Areas**
 The research subtopics are now organized by “Focus Areas” that group NASA interests and related technologies.
 This change is intended to make it easier for proposers to understand related needs across the agency and thus identify subtopics where their R&D capabilities may be a good match.
<http://sbir.gsfc.nasa.gov/solicit-detail/58007>

2017 Focus Areas	
1. In-Space Propulsion Technologies	12. Entry, Descent and Landing Systems
2. Power and Energy Storage	13. Information Technologies for Science Data
3. Autonomous Systems for Space Exploration	14. In-Space and Advanced Manufacturing
4. Robotic Systems for Space Exploration	15. Lightweight Materials, Structures, Assembly, and Construction
5. Communications and Navigation	16. Ground and Launch Processing
6. Life Support and Habitation Systems	17. Thermal Management Systems
7. Human Research and Health Maintenance	18. Air Vehicle Technology
8. In-Situ Resource Utilization	19. Integrated Flight Systems
9. Sensors, Detectors and Instruments	20. Airspace Operations and Safety
10. Advanced Telescope Technologies	21. Small Spacecraft Technologies
11. Spacecraft and Platform Systems	22. ISS Utilization and Microgravity Research

Structure of the Programs (cont'd)



Phase I: Concept

- Award Guideline: \$125K
- Duration: 6 months (SBIR)
12 months (STTR)

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Phase II: Full Research, R&D to Prototype

- Award Guideline: \$750K
- Duration: 24 months
 - Phase II-E → 1:1 Matching up to \$375K (2016 Solicitation onwards)

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Phase III: Commercialization/Infusion

- Non-SBIR/STTR funds
 - Contract from NASA program, other agency, prime contractor

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2017 Solicitation - Noteworthy Changes

- **I-Corps**
In partnership with the National Science Foundation (NSF), NASA is offering the I-Corps program to educate selected teams on how to translate technologies from the laboratory into the market place.
<http://sbir.nasa.gov/content/I-Corps>
- **CCRPP**
Under NASA's new Civilian Commercialization Readiness Pilot Program (CCRPP), NASA will match the investments with SBIR/STTR program funds between \$125K-\$2M for each CCRPP award. The technology proposed for advancement toward commercialization should have a strong relevance to NASA's missions, as well as a strong potential use by NASA and/or markets outside of NASA beyond the CCRPP investment.
<http://sbir.gsfc.nasa.gov/content/post-phase-ii-initiatives>

Mentor-Protégé Program

The NASA Mentor-Protégé Program encourages NASA prime contractors to assist eligible protégés in enhancing their capabilities to perform on NASA contracts and subcontracts, fostering the establishment of long-term business relationships between these entities and NASA prime contractors, and increasing the overall number of these entities that receive NASA contract and subcontract awards.

For more information on the Mentor-Protégé Program please visit: <http://www.osbp.nasa.gov/mpp/index.html>.

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Success Stories

SBIR Assists in Water Conservation

The Soil Moisture small unmanned aircraft system is the only aircraft capable of mapping soil moisture content at critical depths for low cost, provides valuable localized high resolution data to augment NASA Satellites. Helping pinpoint crops on multi-acre farms in need of water.

Black Swift Technologies LLC

<https://sbir.nasa.gov/success-stories/black-swift-technologies>



Scanning Radar for Climate Research

SBIR helps NASA's Jet Propulsion Laboratory realize its vision for an electronic scanning radar that transmits radio waves to gather cloud data at multiple simultaneous frequencies, thus helping climate scientists get a more comprehensive view of cloud systems.

Nuvotronics Inc.

<https://sbir.nasa.gov/success-stories/nuvotronics-scanning-radar-frequency-side-climate-research>



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Success Stories

Self-diagnosing in Outer Space
 Self-diagnosing for astronauts on long missions in outer space is possible using an innovative blood analysis system which can generate comprehensive medical test results within minutes using a single drop of blood.

DNA Medicine Institute (DMI)

<https://sbir.nasa.gov/success-stories/dna-medicine-institute-dmi>



Real-Time Rice Mapping
 Rice Decision Support System (RiceDSS) allows for real-time rice mapping and production forecasting tool piloted in the United States through SBIR is being further developed for a multi-million dollar initiative to reduce greenhouse emissions in Vietnam

Applied GeoSolutions

<https://sbir.nasa.gov/success-stories/rice-decision-support-system-ricedss>



Next Steps

- Review latest solicitation (2017) (*on website*)
- Find technical areas of interest (*subtopics*)
- Each subtopic has a lead center listed
- Program contacts for each NASA center (*assist you in connecting with the agency technical community*)

Other resources on website:

- Participation guides
- Techsource (previous awards/abstracts)

How to Contact Us:

- Online: www.sbir.nasa.gov
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