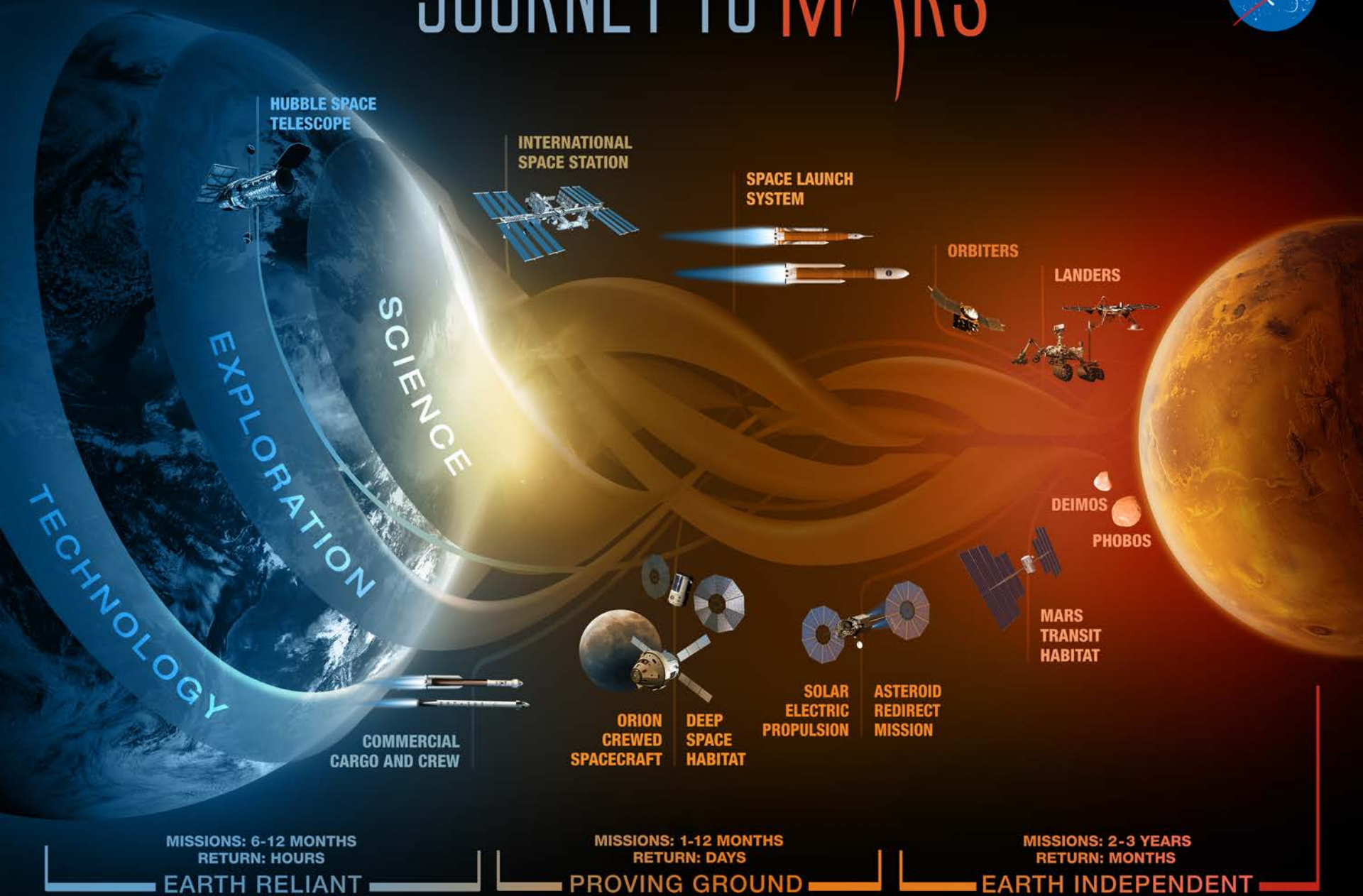




Small Business Innovation Research Small Business Technology Transfer

Dr. Joseph Grant
Deputy Program Executive
September 27, 2016

JOURNEY TO MARS



Starts Here on Earth



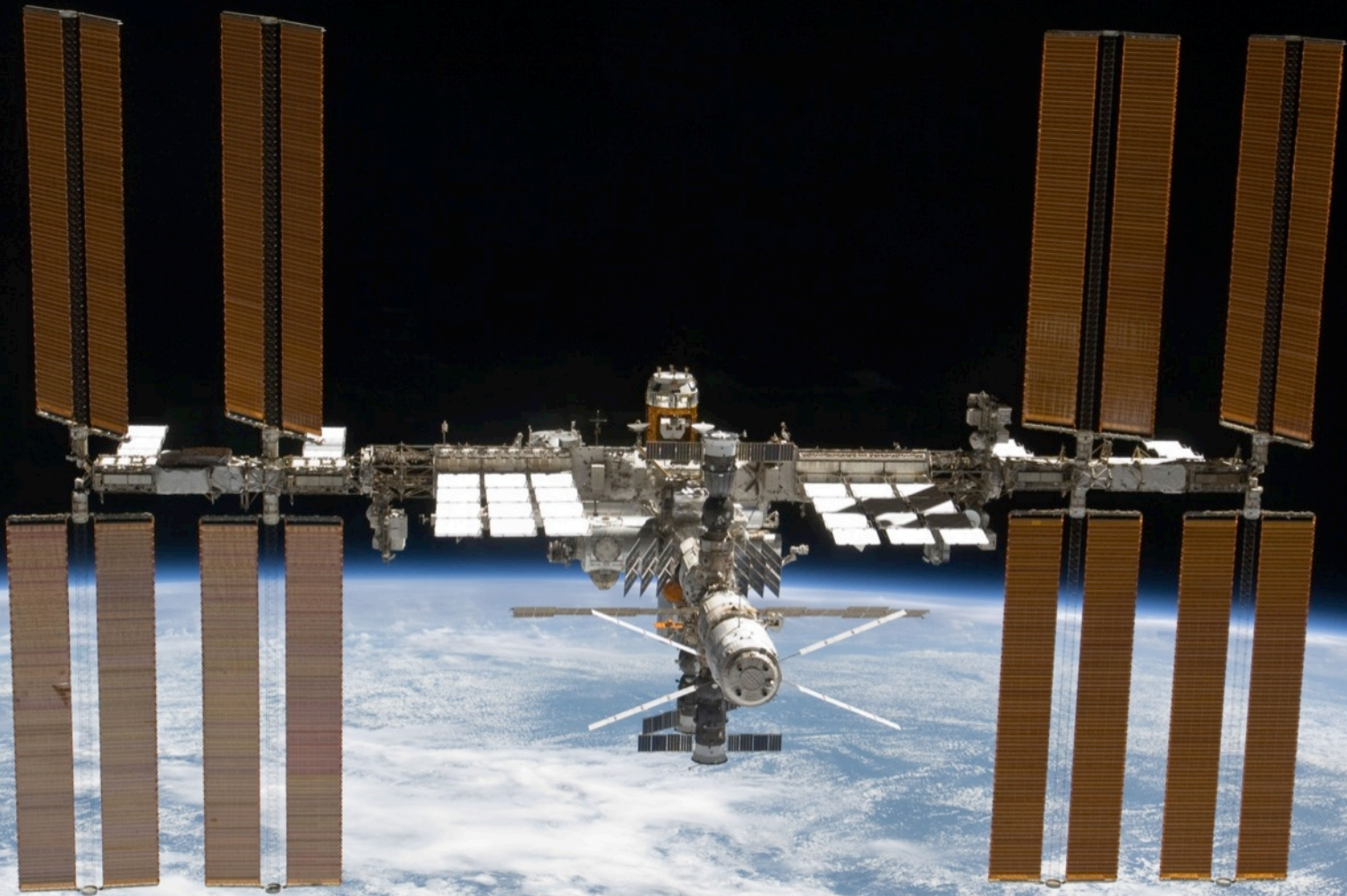
SBIR Assists in Emergency Communication Systems

Popular with U.S. military and intelligence agencies, the systems have been used in missile ranges, severe weather, and emergency response situations.

SRS Technologies



SBIR Farms & Manufactures in Space



Farming in Space



Aboard the International Space Station, there is a deployable fresh-food production system called VEGGIE. Astronauts use the system to grow red romaine lettuce and in the summer of 2015 sampled the first ever space-grown crop.

ORBITEC

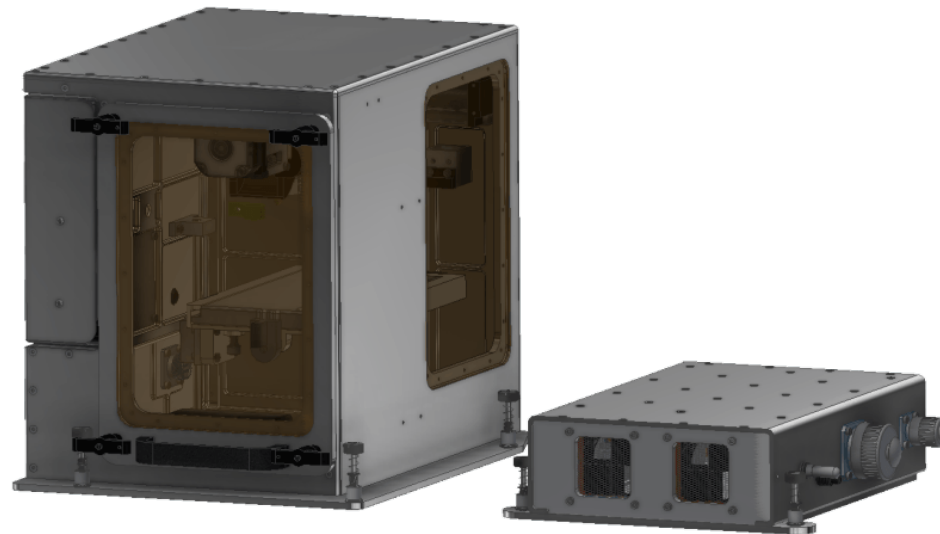


First Zero-Gravity 3D Printer



Made In Space's Zero-G Printer was launched to the ISS in September 2014, making it the first company to manufacture in zero gravity. This will allow for lighter payloads in launch and real time manufacturing of necessities such as tools for repairs.

Made in Space

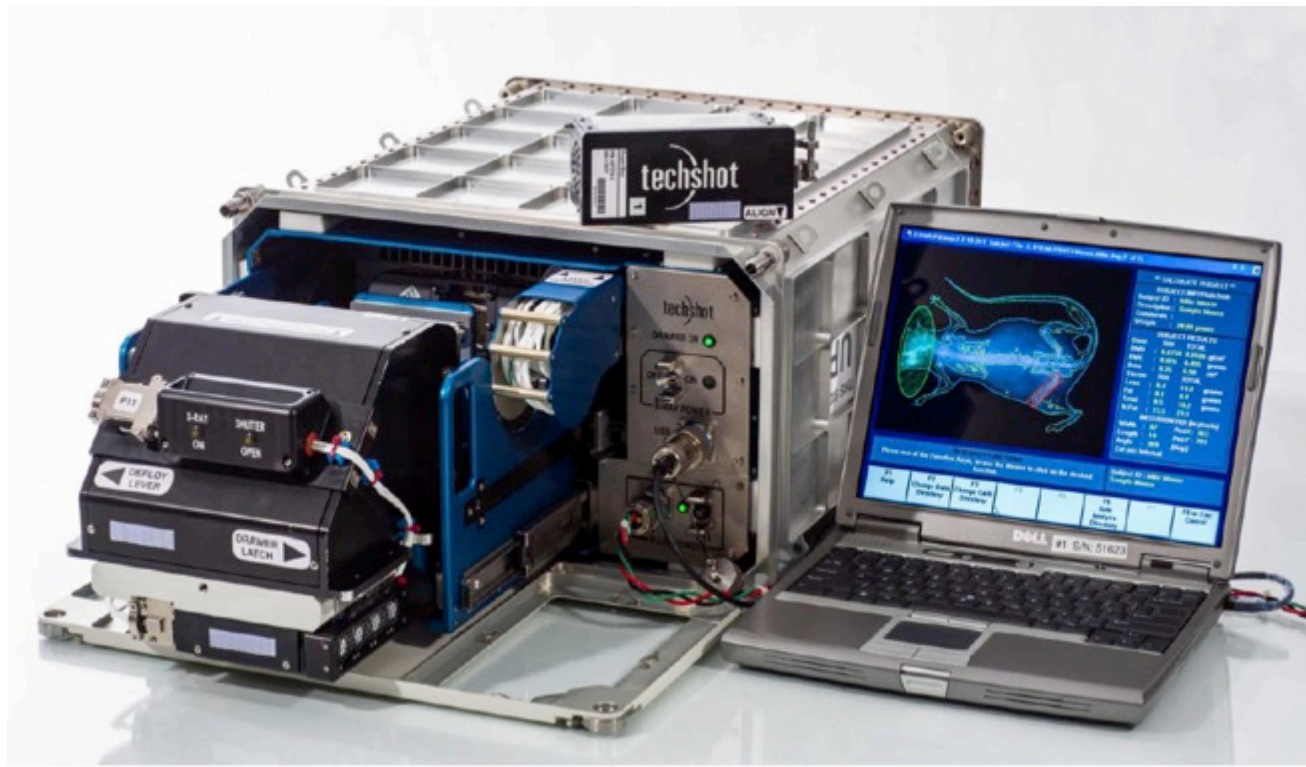


Bone Densitometer

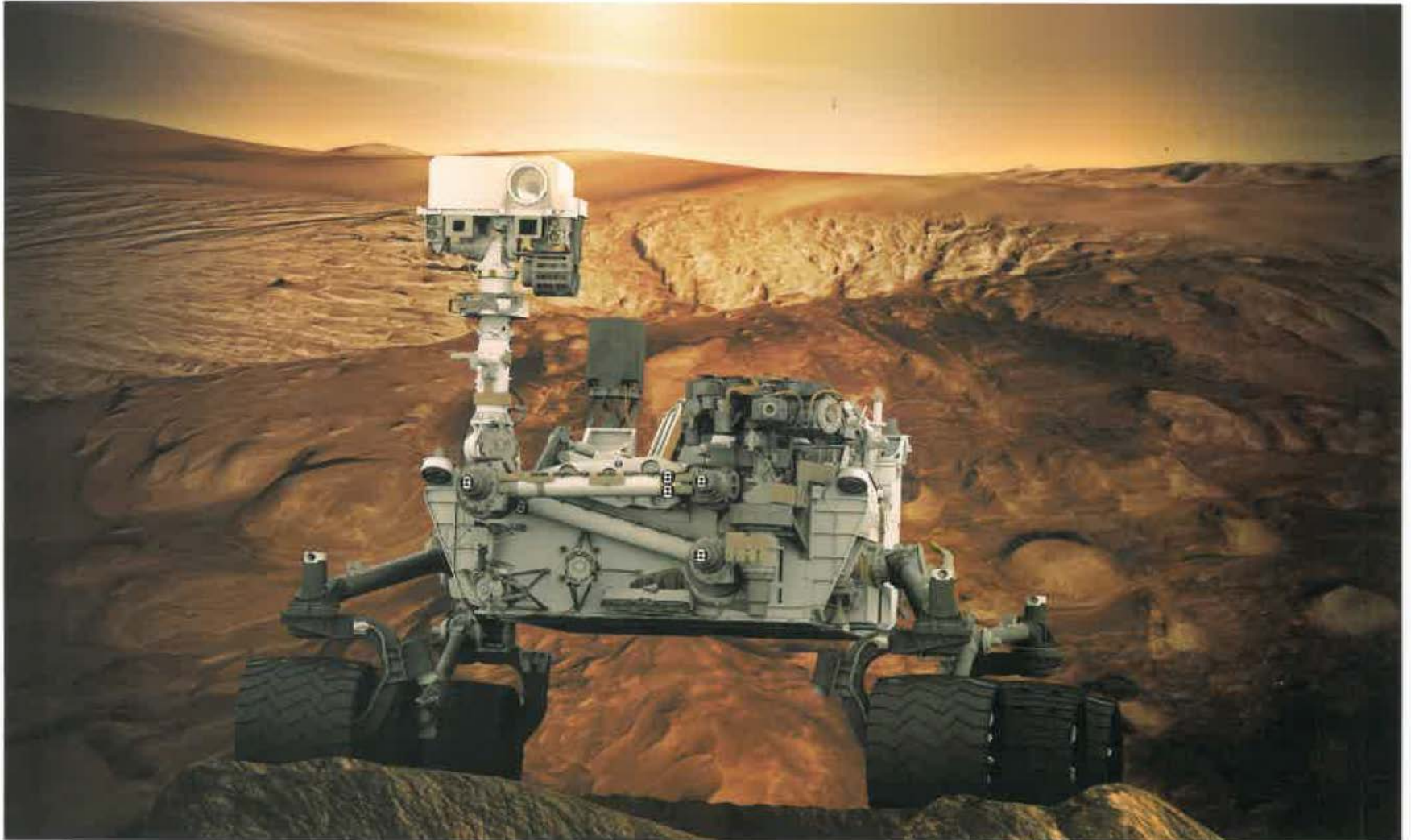


The first x-ray machine flew up to the ISS in 2014. It has allowed NASA to study bone density in rats and can potentially be used to assess the extent of bone injuries in astronauts.

Techshot, Inc.



SBIR Lands on Mars



SBIR Technologies on Curiosity Rover

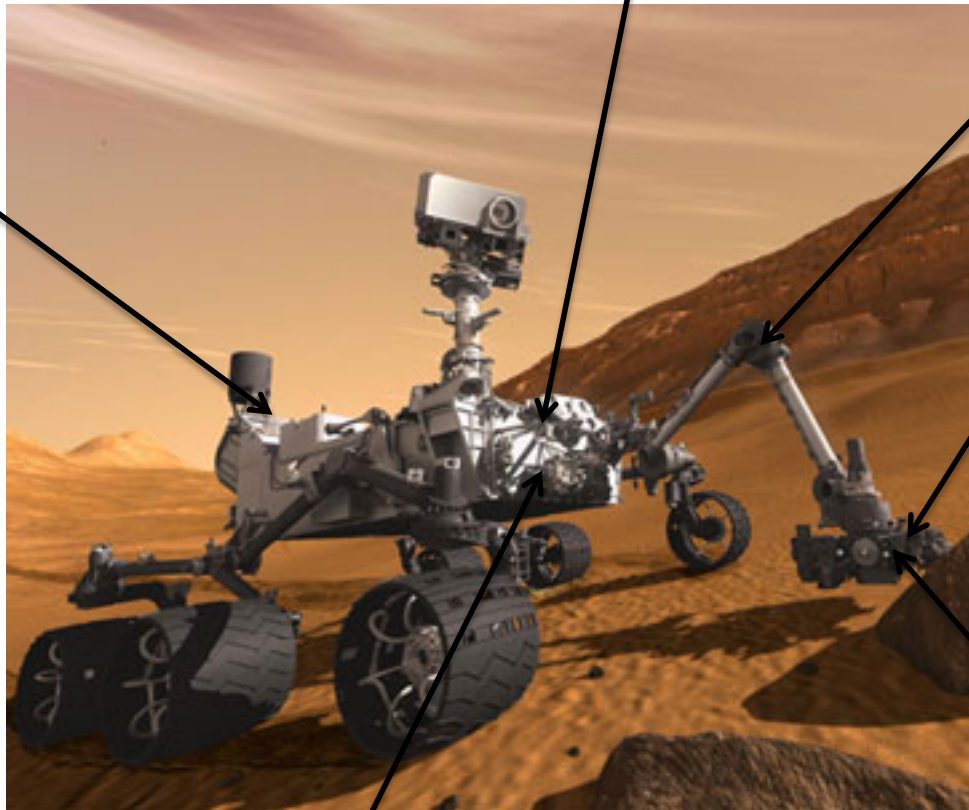


Yardney Technical Products

Lithium ion
batteries

Creare

Space-qualified vacuum pump



Starsys Research, Boulder, CO

Gearboxes for robotic arm

Honeybee Robotics

Dust removal tool

inXitu

Chemistry
and Mineralogy
experiment (CheMin)
instrument

GrammaTech

Software for rover operations

SBIR/STTR Program History



- Created by Roland Tibbetts at the National Science Foundation and signed as a Federal wide program in 1982 by Ronald Reagan
- Created in 1992 by the Small Business Research and Development Enhancement Act of 1992, **STTR seeks to bridge the gap between basic science and commercialization of resulting innovations.**
- SBIR programs have awarded over \$40 billion to research-intensive American small businesses.
- The 450,000 engineers and scientists involved are one of the largest STEM talent concentrations in the world.

Program Eligibility Criteria



Eligibility Criteria

Is your business organized as a for-profit company?

- An SBIR/STTR small business (no more than 500 employees) awardee must be a business concern – it must be organized as a for-profit concern and meet all of the other requirements for a “business concern” in 13 C.F.R. § 121.105.

Is your principal place of business located in the United States?

- All businesses that apply for the SBIR/STTR program must be for-profit companies located in the US.

Must I own a company to receive an SBIR/STTR award?

- SBIR/STTR awards go only to small, for-profit, firms that meet the above definition of an SBC. This includes sole proprietorships.

In addition:

- For SBIR, the primary employment of the principal investigator must be with the small business, and the proposing firm must perform at least 2/3rds of the R&D work in Phase I and at least 1/2 in Phase II
- For STTR, the proposing firm must perform at least 40% of the work with the collaborating research institution performing no less than 30%.

Structure of the Programs



Phase I: **Concept**

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



Phase II: **Full Research, R&D to Prototype**

- Award Guideline: \$750K
- Duration: 24 months
 - Phase II-E → 1:1 Matching up to \$150K
 - Phase II-X → 2:1 Matching NASA up to \$500K



Phase III: **Commercialization/Infusion**

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

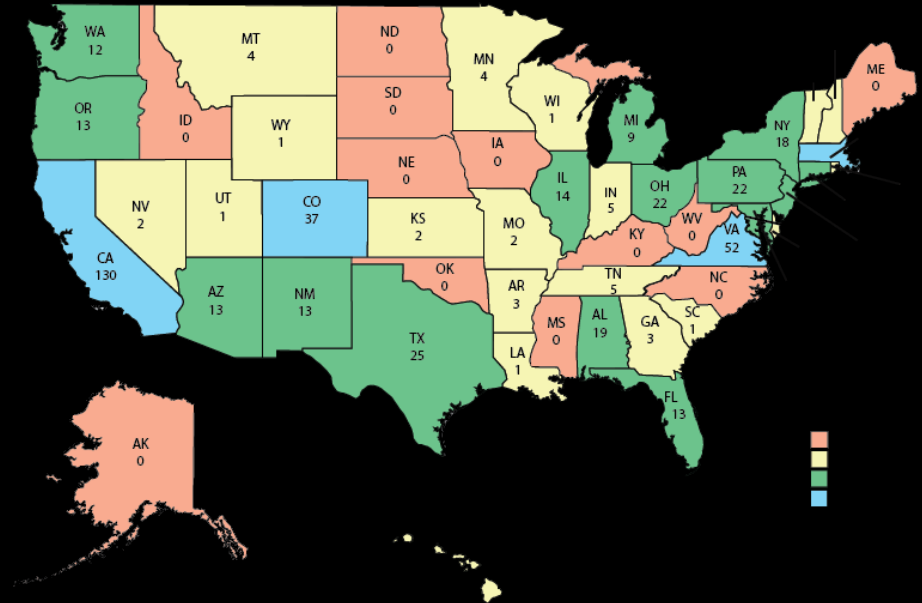
NASA SBIR/STTR Budget



Annual Award Budget FY16:

SBIR & STTR: approx. \$200M

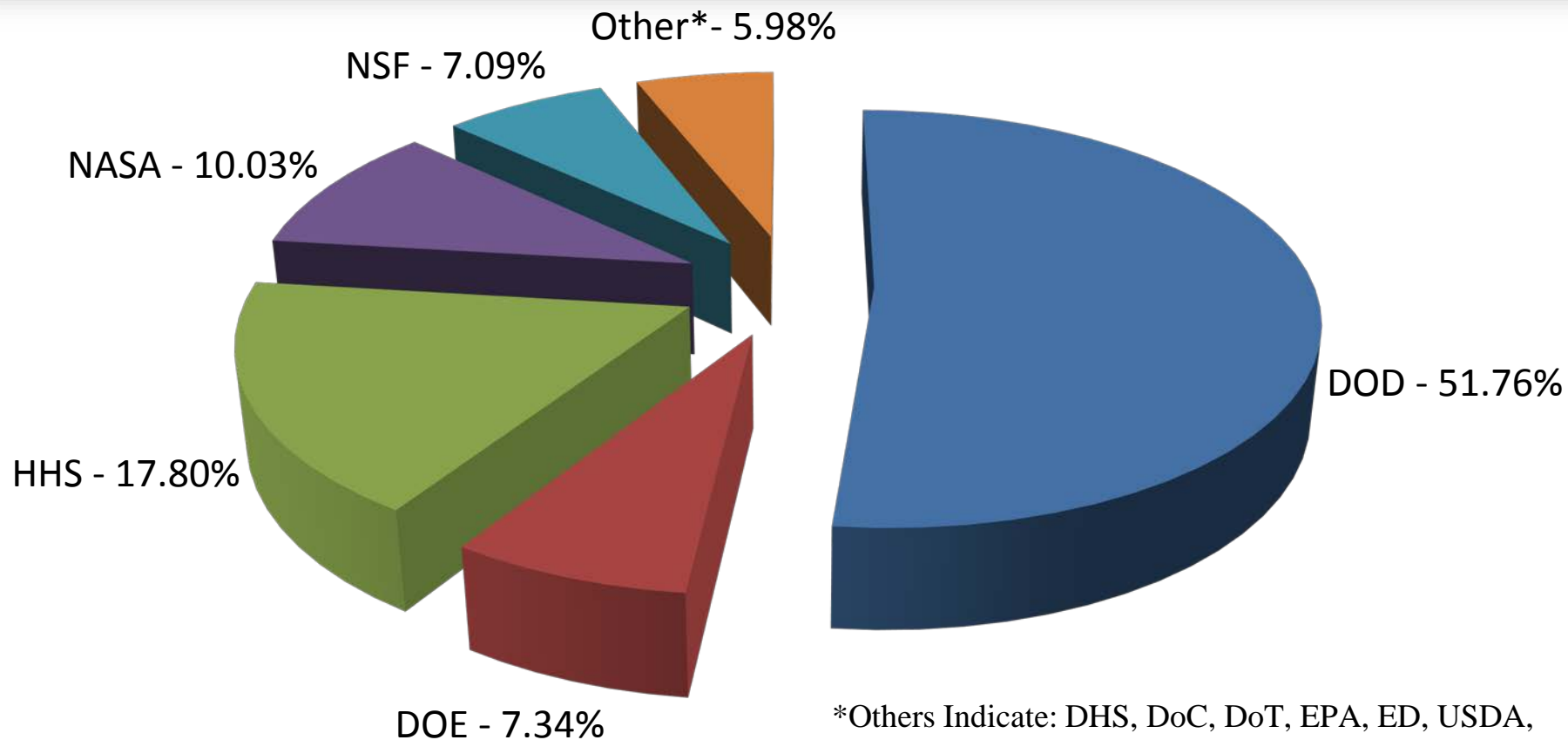
- SBIR is 3.0% of R&D in FY16. In FY17, NASA will increase the SBIR investment to 3.2%.
- STTR is .45% of extramural R&D budget in FY16



FY 16 Awards At-A-Glance:

- SBIR Awards: 341 Phase I and 137 Phase II
- STTR Awards: 58 Phase I, 21 Phase II

Percentage of SBIR/STTR Awards by Agency (last 4 years)



**~ 2.6B in FY15
across all agencies**

Percentages of Extramural R/R&D Budget for SBIR/STTR



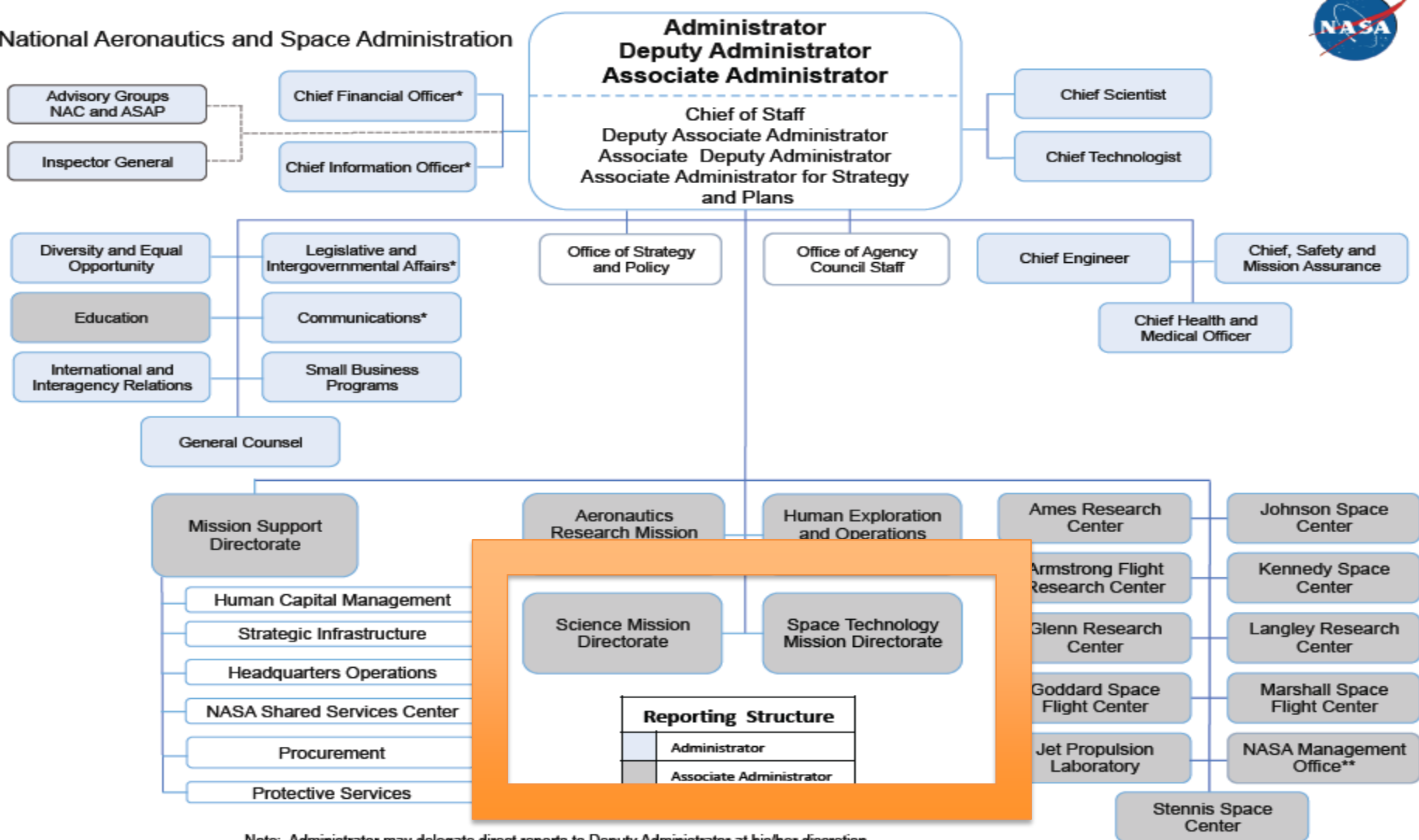
	FY12	FY13	FY14	FY15	FY16	FY17
SBIR	2.6%	2.7%	2.8%	2.9%	3.0%	3.1%
STTR	0.35%	0.35%	0.40%	0.40%	0.45%	0.45%
Combined	2.95%	3.05%	3.20%	3.30%	3.45%	3.65%



By federal law NASA is required to set aside the below percentages of its extramural R/R&D budget for the SBIR and STTR Programs, which increases incrementally until 2017



National Aeronautics and Space Administration



Note: Administrator may delegate direct reports to Deputy Administrator at his/her discretion.

* Center functional office directors report to Agency functional AA or Chief. Deputy and below report to Center leadership.

** NMO oversees the Jet Propulsion Laboratory and other Federally Funded Research and Development Center work

November 2015

Space Technology Programs



Transformative & Crosscutting Technology Breakthroughs

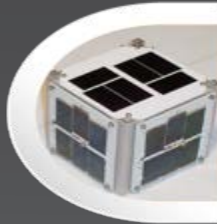
Technology Demonstration Missions

bridges the gap between early proof of concept tests and the final infusion of cost effective, revolutionary technologies into successful NASA, government and commercial space missions.



Small Spacecraft Technology Program

develops and demonstrates new capabilities employing the unique features of small spacecraft for science, exploration and space operations.



Game Changing Development

seeks to identify and rapidly mature innovative/high impact capabilities and technologies that may lead to entirely new approaches for the Agency's broad array of future space missions.



Pioneering Concepts/Developing Innovation Community

NASA Innovative Advanced Concepts (NIAC)

nurtures visionary ideas that could transform future NASA missions with the creation of breakthroughs radically better or entirely new aerospace concepts while engaging America's innovators and entrepreneurs as partners in the journey.



Space Technology Research Grants

seek to accelerate the development of "push" technologies to support future space science and exploration needs through innovative efforts with high risk/high payoff while developing the next generation of innovators through grants and fellowships.



Center Innovation Fund

stimulates and encourages creativity and innovation within the NASA Centers by addressing the technology needs of the Agency and the Nation. Funds are invested to each NASA Center to support emerging technologies and creative initiatives that leverage Center talent and capabilities.



Creating Markets & Growing Innovation Economy

Centennial Challenges

directly engages nontraditional sources advancing technologies of value to NASA's missions and to the aerospace community. The program offers challenges set up as competitions that award prize money to the individuals or teams that achieve a specified technology challenge.



Flight Opportunities

facilitates the progress of space technologies toward flight readiness status through testing in space relevant environments. The program fosters development of the commercial



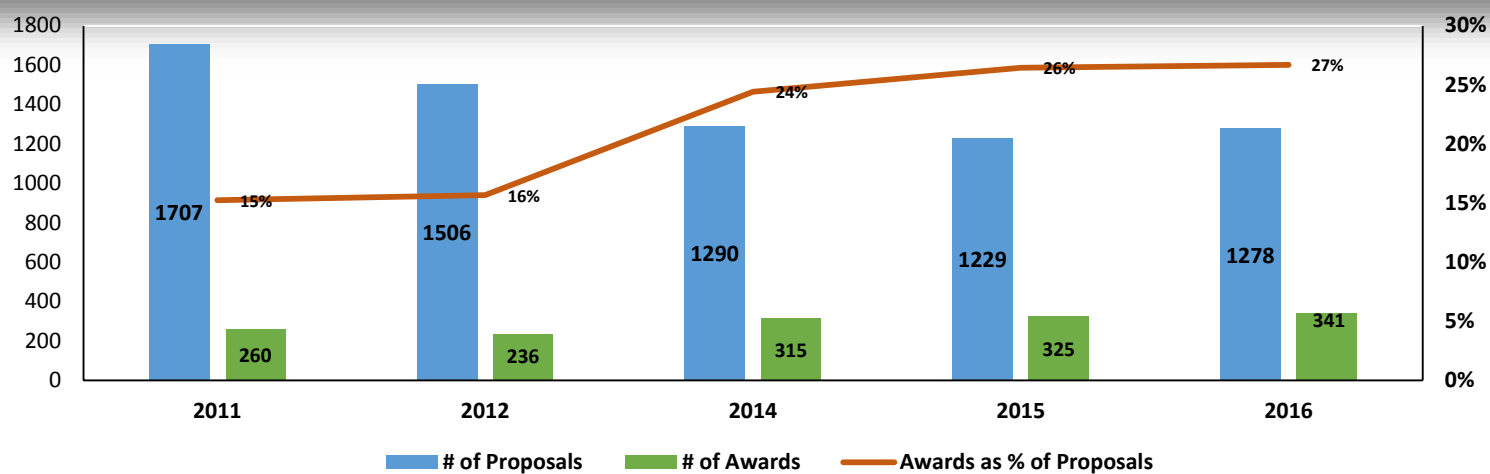
Small Business Innovation Research (SBIR) and Small Business Technology



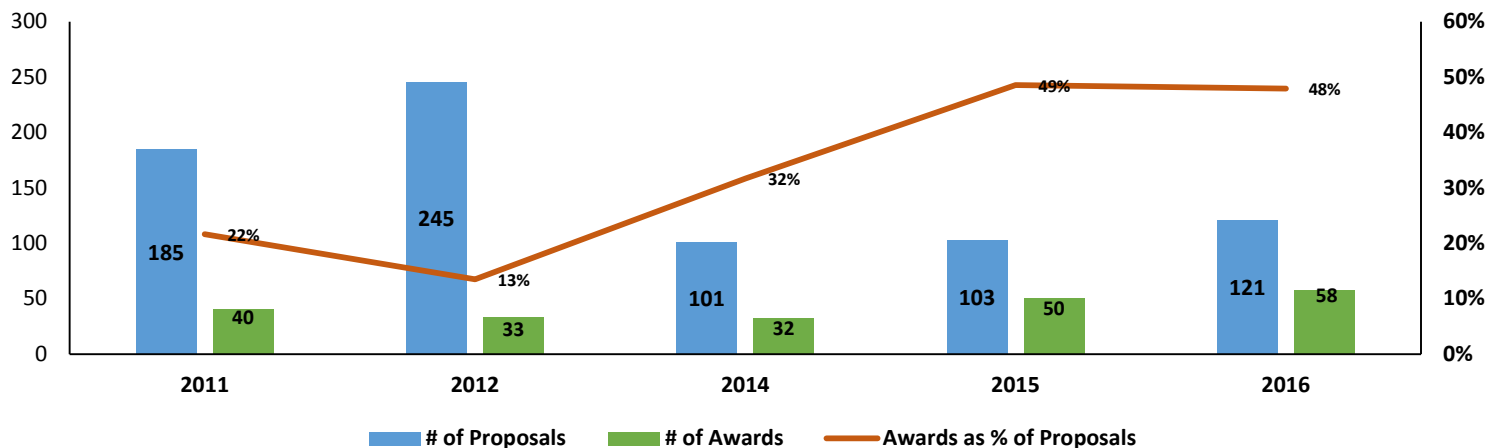
SBIR/STTR Proposals vs. Awards



Phase 1 Proposals vs. Awards for SBIR



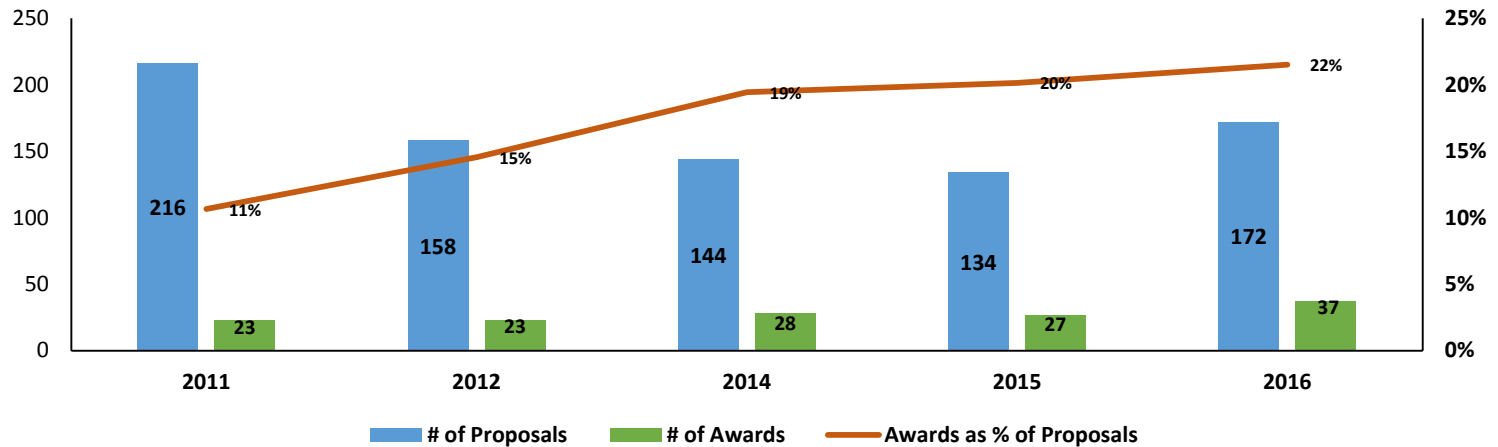
Phase 1 Proposals vs. Awards for STTR



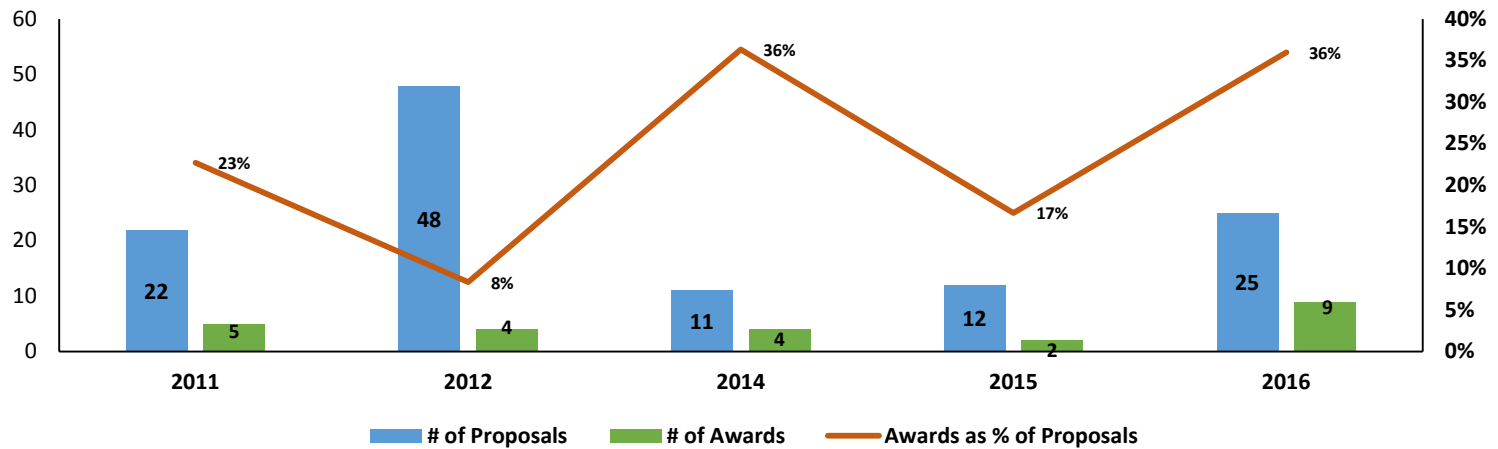
SBIR/STTR Proposals vs. Awards for Disadvantaged Firms



Phase 1 Proposals vs. Awards for SBIR



Phase 1 Proposals vs. Awards for STTR



Post Phase II Investment Activities [2011-Present]



The table below shows data for Post Phase II Activities related to SBIR/STTR awards from 2011 to present.

This data was maintained by individual centers prior to FY16 and has not been validated. Starting in FY16, all post phase II activities where NASA investments are made will be tracked by the EHB and executed by NSSC. Efforts to validate the existing data will be undertaken in FY16.

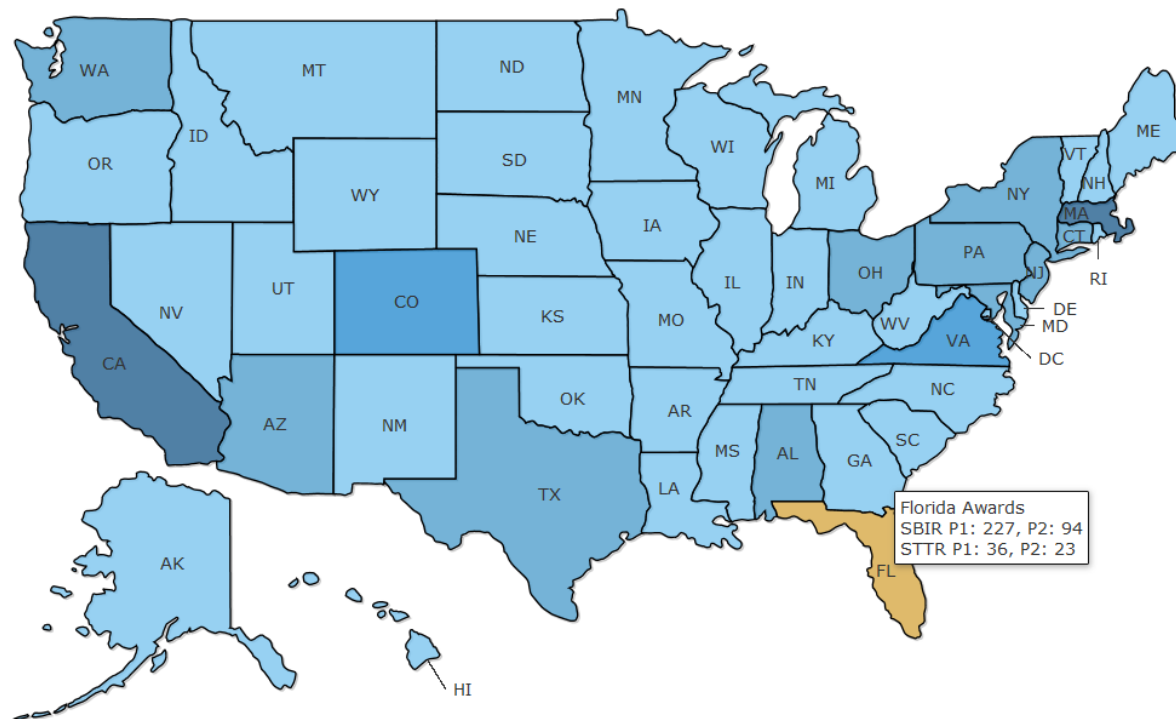
		2011	2012	2013	2014	2015	2016	Totals
NASA	Post PII Activity	118	125	96	84	107	15	545
	Funding	\$55,771,534.30	\$48,559,818.90	\$58,794,949.04	\$29,751,600.84	\$68,635,550.10	\$16,235,032.63	\$277,748,485.81
Non-NASA	Post PII Activity	146	176	185	158	89	42	796
	Funding	\$87,370,374.00	\$155,224,410.80	\$126,616,065.40	\$106,248,511.30	\$103,528,799.60	\$21,840,455.15	\$600,828,616.25

State-Based SBIR/STTR Statistics

[Home](#) >> State-Based SBIR/STTR Statistics

State-Based SBIR/STTR Statistics


Click on the desired State to retrieve proposal and award statistics for that State.



Select a state to view detailed state based statistics.

State Statistical Data for Florida






SBIR/STTR

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[Home](#) >> [State-Based SBIR/STTR Statistics](#) >> Florida Statistical Data 

State Statistical Data - Florida

[\(View Info on State Technical Assistance Programs\)](#)

	SBIR	SBIR Select	STTR	SBIR, STTR, and SBIR Select
Number of Proposals	2199	5	153	2357
Number of Awards	321	0	59	380

SBIR & STTR

[Download as csv](#)

Year	# of Phase 1 Proposals	# of Phase 1 Awards	# of Phase 2 Proposals	# of Phase 2 Awards
2016	53	6		
2015	22	9	10	5
2014	38	7	7	2
2012	60	6	5	4
2011	67	8	8	4
2010	73	16	14	4

NASA SBIR/STTR Website

www.sbir.nasa.gov



NASA SBIR/STTR
Small Business Innovation Research / Small Business Technology Transfer

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Proposers
SBIR/STTR Basics
SBIR/STTR Schedule
Participation Guide
SBIR/STTR Firms Library
Model Contract
Training Resources
FAQs

Awardees
SBIR/STTR Schedule
SBIR/STTR Firms Library
Additional Sources of Assistance
Awardee Firm's EHB
Training Resources
FAQs

Demographics Data
State-based Statistics
Award Search
FY 2012 Economic Impact Report

Access the PY 2016
Solicitations
(Next release date
*November 2016)

Information for NEW
firms available under
"Proposers"

SBIR/STTR program
analytics

Solicitations



Visit sbir.nasa.gov for
prior year solicitations

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>.

Outreach Events

<http://sbir.nasa.gov/events>



Event Name	Dates	Location
NASA SBIR/STTR Subtopic Workshop	September 12-13, 2016	Moffett Field, CA
SCaN/SBIR Commercialization Workshop	September 14, 2016	Ames Research Center, CA
Small Business Association of New England	September 16, 2016	Waltham, MA
HCBU Road Tour for SBIR/STTR and Mentor-Protégé Program	September 27-29, 2016	Tallahassee, FL
MSI Outreach to Navajo Technical University	September 28-30, 2016	Crownpointe, NM
SBA New England Regional Innovation Summit	October 5-6, 2016	Boston, MA
IEEE Women in Engineering (WIE) Conference	October 6-7, 2016	Detroit, MI
KSC Business Opportunities Expo	October 25, 2016	Cape Canaveral, FL



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How To Contact Us



- Online: www.sbir.nasa.gov
- NASA Help Desk: 301.937.0888
- Email: sbir@reisystems.com