



NASA's Impact in Florida: A Tech Transfer Perspective

You know that NASA studies our planet, our sun, the solar system, and the Universe. But did you know about the space program's economic impact here on Earth?



In 2011, NASA invested nearly **\$900 million** in the state of Florida.

Since 2001, NASA's SBIR/STTR Program has invested almost **\$34 million** in **54 Florida companies** and more than **\$1.2 billion** nationwide.

How NASA's SBIR/STTR Program Benefits Florida

NASA is committed to moving technologies and innovations into the mainstream of the U.S. economy, and the Small Business Innovation Research/Small Business Technology Transfer (SBIR/STTR) program helps fulfill this goal.

SBIR/STTR stimulates technological innovation by encouraging small, high-tech companies—particularly minority and disadvantaged businesses—to partner with NASA to help meet its research and development needs in key technology areas. At the same time, this program strengthens small companies by enabling them to bring cutting-edge new products into the U.S. economy.

The list to the right highlights Florida businesses that received SBIR/STTR contracts from NASA since 2001. (Visit <http://sbir.nasa.gov> for more information on the SBIR/STTR program.)

NASA SBIR/STTR Companies in Florida

Accellogic, LLC.....	Weston
Adastra Labs, LLC.....	Orlando
Advanced Engineering Solutions, Inc.	Ormond Beach
Advanced Materials Technology, Inc.	Tampa
Advanced Technologies Group, Inc.	Stuart
Aeronix, Inc.....	Melbourne
Aligned Concepts, LLC.....	Longwood
American Remote Vision Company.....	Titusville
ApECOR.....	Orlando
AppliCote Associates, LLC.....	Lake Mary
Argonide Corporation.....	Sanford
Beam Corporation.....	Winter Park
Command and Control Technologies, Inc.	Titusville
Constellation Technology Corporation.....	Largo
Crossfield Technology, LLC.....	Orlando
Design Interactive, Inc.	Oviedo
DMD Concepts.....	Rockledge
Eclipse Energy Systems, Inc.	St. Petersburg
Engineering Acoustics, Inc.	Winter Park
Florida Maxima Corporation.....	Winter Park
Florida Turbine Technologies, Inc.	Jupiter
Fractal Systems, Inc.	Belleair Beach
Infoware Systems, Inc.	Satellite Beach
Innovative Decision Technologies, Inc.	Jacksonville
Interdisciplinary Consulting Corporation.....	Gainesville
Ion Applications, Inc.	West Palm Beach
Keystone Synergistic Enterprises, Inc.	Port Saint Lucie
Krystal Engineering, LLC.....	Titusville
Mabells Prototyping and Coffeeshop.....	Treasure Island
Mainstream Engineering Corporation.....	Rockledge
Maracel Systems & Software Technologies, LLC.....	Crestview
Medical Education Technologies, Inc.	Sarasota
Micro Aerospace Solutions, Inc.	Melbourne
Mnemonics, Inc.	Melbourne
New Era Technology.....	Gainesville
New Span Opto-Technology, Inc.	Miami
nScript, Inc.	Orlando
OptiGrate Corporation.....	Orlando
ORTEC Ltd. Company.....	Key Biscayne
PHD Research Group, Inc.	Coral Gables
Prioria Robotics, Inc.	Gainesville
Proton Aerospace Corporation.....	Jupiter
RINI Technologies, Inc.	Orlando
RSK Assessments, Inc.	Orlando
Sol-gel Solutions, LLC.....	Gainesville
Soneticom, Inc.	West Melbourne
Spiritech Advanced Products, Inc.	Tequesta
Streamline Numerics, Inc.	Gainesville
Summation Research, Inc.	Melbourne
Theseus Logic, Inc.	Maitland
United Materials and Systems.....	Orlando
Vcom3D, Inc.	Orlando
Zaubertek, Inc.	Orlando
Zyberwear, Inc.	Ocoee

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Sensor Detects Explosives and Chemical Agents (West Palm Beach)

A sensor created to detect chemicals during NASA's future exploration of distant planets, moons, and asteroids is now being used by Ion Applications, Inc. to protect the military and other public safety organizations. U.S. soldiers rely on the hand-held device to detect explosives and chemical warfare agents. The sensor also enhances public safety by enabling law enforcement and airport security to detect narcotics and explosives.



Water Purification System Improves Public Health (Sanford)

NASA SBIR funding enabled the Argonide Corporation, a nanomaterials company, to develop a unique filtration system with the potential to revolutionize water purification in the U.S. and around the globe. The system, developed to help astronauts recycle and purify water while in orbit, removes 99.99% of dangerous bacteria, viruses, cysts, organic debris, parasites, and dissolved and particulate metals such as iron and lead. With the help of NASA's technology, Argonide is helping to purify the Earth's water supplies.



Thermal Insulation Provides Smart Energy Solutions (Tampa)

NASA's lightweight, flexible aerogels, originally developed to insulate the space shuttle's main engines, are now being used by Acoustiblok, Inc. to insulate buildings and reduce energy consumption. The aerogels—fabricated into 3/8-inch thick thermal strips—can increase building insulation by over 40 percent. NASA's cutting-edge technology is providing smart energy solutions for homes and businesses throughout the U.S.



Air Purifier Preserves Food and Helps Allergy Sufferers (Jacksonville)

An air purifier originally developed by NASA to help astronauts preserve plant life in space is now being used by major U.S. supermarkets, restaurants, wineries, and flower shops to preserve product freshness. The Akida Holdings purifier dramatically reduces the airborne mold and bacteria that lead to product spoilage. Units have also been installed in medical clinics, hotels, offices, and homes to maintain healthy air, reduce airborne germs, and eliminate allergens.



High-Performance Foam Insulation (Hialeah)

A technology originally developed to insulate NASA's cryogenic propellant tanks on the space shuttle is now being sold commercially in the U.S. to provide thermal, acoustic, and fire insulation on marine vessels. The lightweight, low-cost foam produced by PolyMAC, Inc. does not produce smoke or harmful byproducts, a critical concern on boats, submarines, airplanes, and other contained environments. The innovation shows promise for use in aircraft, spacecraft, electronics, automobiles, recreation equipment, and building and construction materials.



NASA Spinoff Controls Vibration and Noise (Sarasota)

NASA created its Macro-Fiber Composite (MFC), an innovative, low-cost piezoelectric device, to alleviate tail buffeting in aircraft, control helicopter aerodynamics and noise, and reduce vibrations on aerospace vehicles. Smart Material Corporation licensed the technology and has since sold MFCs to over 120 customers, including such industry giants as Volkswagen, Toyota, Honda, BMW, General Electric, and the tennis company, HEAD. Smart Material company estimates that its customers have filed at least 100 patents for their unique uses of the technology.



NASA actively seeks partnerships with U.S. companies that can license NASA innovations and create "spinoffs" in areas such as health and medicine, consumer goods, transportation, renewable energy, and manufacturing. When businesses leverage NASA technologies to develop new products, it not only benefits the regional economy, but significantly strengthens the nation's competitiveness in the global marketplace.

NASA's centers across the country—including Kennedy Space Center in Florida—have helped 126 Florida companies develop revolutionary spinoff technologies.

Learn more about how NASA innovations benefit the public in *Spinoff*, an annual publication that highlights NASA's most significant technology transfer successes. (Available at: <http://www.sti.nasa.gov/tto>)

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