

NASA'S 50TH ANNIVERSARY

A Celebration of Inspiration, Innovation and Discovery



NASA supports the community through corporate and civic partnerships

Did you know that NASA Glenn is having an impact both in space and here at home?

The Glenn Research Center's Technology Transfer & Partnerships Office has formed partnerships with small and large corporations to positively impact the community through NASA's research, development and technology innovations.

Small Business Innovation Research/ Small Business Technology Transfer

The Small Business Innovation Research/Small Business Technology Transfer Program provides an opportunity for small high-tech companies with 500 employees or less to participate in NASA-sponsored R&D efforts in key technology areas.

Since 1983, the SBIR/STTR Program has invested \$62.6 million in Ohio's small companies.

The following is a list of Ohio businesses that are currently participating in the program:

- A&P Technology, Cincinnati
- Alphapart, Inc., Cleveland
- Cornerstone Research Group, Inc., Dayton
- Essential Research, Inc., Cleveland
- H-Cubed, Inc., Olmsted Falls
- HyperTech Research Inc., Columbus
- Innovative Scientific Dayton Solutions, Inc., Dayton
- KJB Consultants, Strongsville
- Lake Shore Cryotronics, Westerville
- Maverick Corp., Cincinnati
- Nastec, Inc., Cleveland
- NSR Engineering, Parma Heights
- NexTech Materials, Ltd., Lewis Center
- Pentalim Corporation, Findlay
- Powdermet, Inc., Euclid
- Sest, Inc., Middleburg Heights
- Sunpower, Inc., Athens
- Sun Valley Technology, Warrensville Heights
- TechLand Research, Inc., North Olmsted
- UES, Inc., Dayton
- WebCore Technologies, Miamisburg
- Zin Technologies, Inc., Cleveland

The following Ohio companies recently received additional NASA funding, totaling more than \$1.3 million, to apply their technologies to the aeronautics and space programs under SBIR Phase 3:

- A&P Technology of Cincinnati for tough, re-

duced-weight, cost-effective, damage-tolerant fan case designs.

- WebCore Technologies, Inc., of Miamisburg for reliable, damage-tolerant material for containing engine fans in supersonic jets.
- Zin Technologies, Inc., of Cleveland for a device that holds astronauts on a treadmill while flying aboard the International Space Station.

Spinoffs and Other Licenses

Innovative technologies from NASA's space and aeronautics missions can be used in other ways to benefit society. That's why NASA is committed to "spinning off" its innovations into new products. It's also committed to providing access to its technologies, facilities, and expertise. The following presents just a few of the Ohio companies that have accessed NASA technology.

ADMA Products, Inc., of Hudson and Hohman Plating and Manufacturing of Dayton licensed and incorporated a NASA Glenn-developed self-lubricating composite technology into their respective product lines.

EGC Enterprises Inc., of Chardon used NASA's Icing Research Tunnel to develop its O-Foil Rapid Response Thin-Film Heater, which can be used for in-flight deicing of aircraft wings and could be used in cooking griddles, small cabinet heaters, and several laboratory uses.

Diebold, Inc., of North Canton licensed a video event trigger and tracking system for use in surveillance systems.

Diversified Services Corp. of Cleveland received help from NASA in developing Nutrigras, a nutritional fat replacement and flavor enhancement product for beef patties and other high-fat meat products, as well as in soups, sauces, bakery items, and desserts.

Kelly Aerospace Thermal Systems LLC of Willoughby collaborated with NASA scientists to develop Thermawing, a lightweight, easy-to-install, and reliable wing and tail deicing system for aircraft.

Innovative Engineering and Consulting Infrared Systems of Cleveland received NASA assistance to develop the NightStalkIR and IntrudIR Infrared Alert Systems, which are now being used abroad to



A researcher examines a tubular Aerogel material sample in its "green" state.

Aerogel Facts:
It is 99.8% Air.
It provides 39 times more insulating than the best fiberglass insulation.
It is 1,000 times less dense than glass.
It was used on the Mars Pathfinder rover.

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