NASA SBIR/STTR Success Out West

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With ten centers spread out across the country, NASA is comprised of a dynamic group of innovators and engineers working together to solve some of the toughest challenges—and we don’t do it alone. The NASA SBIR/STTR program allows us to tap the minds of entrepreneurs across the country, with program awardees in all 50 states, D.C., and Puerto Rico.

Below are some examples of small businesses in the western U.S. who are making an impact.

“In working with NASA’s SBIR program, we’ve been able to develop new products that address real technological and scientific needs.” –Dr. John Bognar, Founder, Anasphere. Photo credit: Anasphere, Inc.

Anasphere, Inc.
Belgrade, Montana

Innovation
Cultivating a relationship with NASA’s SBIR/STTR program, Anasphere, located in Belgrade, Montana, developed sensors that are helping the agency address the problem of accurately identifying dangerous icing conditions in clouds. In addition to NASA applications, the instruments are also aiding Department of Energy (DOE)–sponsored meteorological research in Alaska, and they have been used commercially from Europe to Antarctica.

Impact
Anasphere’s SBIR contracts with NASA have enabled significant business growth. Not only has the company successfully deployed the innovation in both NASA- and DOE-sponsored programs, but the instruments have been sold globally and catalyzed the expansion of the company’s manufacturing relationships—bringing in valuable expertise while maintaining lean operations.

AdvR Inc.

Bozeman, Montana

“When we first started with SBIR, we were very niche focused. Over the years, we have expanded our capability to provide more value to NASA, which enabled commercial applications as well.”
—Shirley McNeil, Senior Laser Systems Engineer, AdvR

Innovation
Through the NASA SBIR/STTR program, AdvR, located in Bozeman, Montana, developed technology to assist NASA’s ongoing atmospheric studies through collaborative development of a High Spectral Resolution Lidar system for characterization of clouds and aerosols. The core innovation, an optical waveguide circuit, has led to new devices that address a broad range of remote sensing needs sought by government, academia, and industry.

Impact
With sales to universities, U.S. government agencies, and businesses across commercial industries worldwide, AdvR has seen growth in global revenue and increases in company headcount, in addition to subsequent SBIR contracts. Each new contract has enabled increases in the capability and robustness of AdvR’s waveguide-based technology.

Digital Solid State Propulsion (DSSP)

Reno, Nevada

“When working with NASA on an SBIR contract helps to validate a small company’s technology as unique in a space market crowded with entrenched technologies and large competitors.”
—Dr. Wayne Sawka, Founder and CEO, DSSP

Innovation
Through the NASA SBIR/STTR program, DSSP, located in Reno, Nevada, developed a multi-pulse solid rocket motor for NASA in pursuit of stabilized interplanetary flight for small satellites. Another of DSSP’s core innovations with NASA SBIR/STTR roots is the Hydroxylammonium Nitrate-based (HAN-based) Green Electric Monopropellants (GEM) technology. Originally proposed to fuel a microsatellite thruster for Earth observation missions, the technology is powering larger satellites, enhancing oil and gas recovery, and more.

Impact
DSSP leveraged its success with multiple NASA SBIR/STTR contracts to develop space technologies and determine applications on Earth. The company’s research and development involving electric propellants has led to commercial products that power satellites, rejuvenate oil wells, enable safer use of pyrotechnics, and streamline avalanche control. DSSP has also collaborated with the Department of Defense (DOD) and the Air Force Research Laboratory to advance the technologies.