National Aeronautics and Space Administration

Innovative Partnerships Program (IPP)

Value for NASA and the Nation

The NASA Innovative Partnerships Program (IPP) works with industry, academia, government agencies, and national laboratories to facilitate the transfer and commercialization of NASA technology for benefit to U. S. citizens, and to support NASA's missions.

IPP is Headquartered in Washington DC, with national offices located at each of NASA's ten field centers. IPP is also responsible for accelerating the development of needed technologies, dual-use partnerships, cost avoidance, and the transfer of technology from the agency to the private sector.

IPP consists of three program elements: Technology Infusion, Innovation Incubator, and Partnership Development.

Technology Infusion

Technology infusion is the process of strategically connecting technical needs to potential solutions. The IPP Technology Infusion initiatives include the NASA Small Business Innovative Research (SBIR) and NASA Small Business Technology Transfer (STTR) programs, and the IPP Seed Fund. These initiatives allow NASA to leverage program and investor funds to maximize R&D and minimize additional program costs, accelerate technology maturation through concurrent R&D, select optimum technologies for programs/projects/missions, and increase marketplace applications of technologies.

Innovation Incubator

The IPP Innovation Incubator includes programs to promote innovation and bring fresh ideas into NASA from diverse sources across America.

- Centennial Challenges is NASA's program of prize competitions to stimulate creative solutions to challenges in air and space technology. Competitions are open to all Americans and prize payments are only made when significant accomplishments are demonstrated. Current competitions include wireless power transmission, high-efficiency aircraft, robotic excavators for the Moon, space suit gloves, super-high-strength materials and reusable lunar spacecraft. New prize competitions are planned for the future.
- The FAST program helps developers of emerging technologies test their innovations in the space environment such as the weightless conditions onboard parabolic aircraft flights. This program will help technologies developed by small companies, universities and individual inventors find applications in NASA programs and also reach the commercial market sooner.
- Innovation Transfusion is a program to stimulate the exchange of new ideas through technology workshops between NASA and the most innovative companies and laboratories in America. The program also supports temporary assignments of creative NASA employees at innovative external organizations.

Partnership Development

Over its history, NASA, through the efforts of its Innovative Partnerships Program (and predecessor technology transfer organizations) has licensed technology the Agency has developed for its own mission use to U.S. industry for commercial application. The benefits resulting from NASA's transfer of its technology now permeate the U.S. economy and reach worldwide.

Commercial products and services incorporating NASA's technology today are common in the fields of health and medicine, transportation, public safety, consumer goods, environmental resources, computer technology, manufacturing, communications, and more. Over 1,500 of these commercial applications have been documented in NASA's Spinoff publication since 1976. Indeed, NASA's many technological achievements that have been inspired by the heavens have been brought down to Earth for the benefit of all mankind.

NASA's Innovative Partnerships Program also seeks solutions to some of NASA's pressing technical challenges by engaging in partnerships with firms from a broad spectrum of U.S. industry sectors to jointly develop technology having both NASA mission use and significant likelihood of commercial application. In this way, NASA obtains needed technology at less cost to taxpayers, and industry develops technology at a lesser capital investment.