

Strategic Opportunities and Partnership Development Office

Yolanda Marshall, Johnson Space Center
Douglas A. Terrier, Johnson Space Center

David C. Leestma, Johnson Space Center
John E. James, Johnson Space Center

Building Alliances to Shape Our Future

The Strategic Opportunities and Partnership Development Office (SOPDO) at Johnson Space Center (JSC) uses partnerships to drive the infusion of technology, creative partnerships to develop technology, and traditional business partnerships to license and transfer NASA-developed technologies to the U.S. marketplace, each with the goal of enabling NASA's missions toward human space exploration. By successfully pursuing and maintaining strategic business opportunities and partnerships for JSC that maintain, enhance, or develop key competencies and technologies required for future space exploration, and leveraging other resources to maintain NASA's objectives for space exploration, JSC is establishing itself as a global innovation leader in human space exploration.

For decades, the space agency has triggered U.S. innovations and inventions, while nurturing partnerships to facilitate the transfer of NASA-developed technologies to the private marketplace. JSC is now increasing its efforts to partner with outside partners to drive innovation and foster collaboration, in addition to traditional technology transfer efforts.

The newly established SOPDO provides a clear entry point for external aerospace and non-aerospace entities interested in partnering with JSC, and seeks to establish new partnerships and integrate partnership efforts across JSC's directorates, including international and academic partnerships. The office also manages processes and policies associated with establishing external partnerships. For more information about JSC's capabilities and partnership opportunities, visit: <http://www.nasa.gov/centers/johnson/partnerships/index.html>.

Technology Partnerships

The SOPDO assists in the coordination of alliances, partnerships, and new business opportunities to grow future competencies and to leverage the capabilities outside of JSC. The SOPDO serves as the Office of Prime Responsibility for the JSC Procedural Requirement 1050.1, Space Act Agreement (SAA) process. In this role, SOPDO serves as the facilitator for the development of all institutional SAAs for JSC and the White Sands Test

Facility, as well as the official repository of all executed JSC SAAs. SAAs are used primarily to collaborate with entities other than NASA for everything from lending personnel and expertise to equipment and other facilities and resources. The SOPDO also sponsors initiatives to encourage cross-discipline innovation that benefit human exploration and life on Earth.

The Technology Transfer & Commercialization Office at JSC, part of the SOPDO, is working on innovative partnership models to enhance and to initiate technology research and development for infusion into the agency as well as to allow access for industry, commercial space, and academic partners, to world-renowned subject matter experts, as well as to testing, laboratory and research facilities.

The methods and tools used by the SOPDO to infuse technology, spin out technology, and to partner with business and universities include SAAs, Memorandums of Understanding, and Patent Licensing Agreements.

Technology Transfer and Intellectual Property Portfolio Management

SOPDO is also the interface for NASA headquarters' Innovation Partnerships Office. As a part of NASA's statutory charter, the SOPDO facilitates the transfer and commercialization of NASA-sponsored research and technology development including industrial use of unique NASA capabilities and facilities. This includes managing JSC's Intellectual Property Portfolio from new technology reporting, to licensing patented JSC technologies, to public outreach, to educating the American taxpayer about the benefits of space.

For more than 50 years, NASA has developed technologies to orbit the Earth, to land on the moon, and to explore the stars and galaxies. This human need to explore and its attendant curiosity create new ideas and innovations that benefit everyone on Earth through spin-offs. Spin-offs are the resulting commercial products whose inventions originate with NASA funding, research, licensing, facilities, and assistance. The founders of the U.S. space program, through the Space Act Agreement of 1958, required NASA to transfer its technologies to the

marketplace so that the U.S. taxpayer can benefit from the advancements. For more information about JSC's Technology Transfer and Commercialization office, visit: <http://technology.jsc.nasa.gov>.

Strategic Technology Investments

The SOPDO oversees the Small Business Innovative Research/Small Business Technology Transfer (SBIR/STTR) projects. The SBIR/STTR programs, established by law, exist to stimulate technological innovation in the private sector by increasing participation by small business in federal research and technology development. A competitive proposal process is launched annually via a solicitation of proposals with the focus of the NASA technology program needs coupled with the potential for commercialization. Since January 2010, JSC's SBIR/STTR awards have totaled 117 with a value of \$22.4 million. For more information on the SBIR/STTR programs, visit: www.sbir.nasa.gov.

The SOPDO also interfaces with NASA's headquarters Office of Chief Technologist. JSC's chief technologist, who is a part of JSC's management team, identifies the technology priorities for the center's Independent Research & Development activities and manages the center's investment funds for selected advanced technology projects.

Another NASA program is the Inventions and Contributions Board (ICB). Also established by the Space Act of 1958, the ICB Space Act Awards rewards and promotes outstanding scientific and technical contributions sponsored, adopted, supported, or used by NASA that are significant to aeronautics and space exploration. ICB is authorized to approve awards up to \$100,000 without congressional notification. With the help of its staff and legal counsel, the ICB reviews and evaluates contributions to the government and the nation. Many of these inventions and contributions will help humanity explore the universe and improve life on Earth. The ICB approved more than 3,319 individual cash awards totaling nearly \$1.8 million in 2010. For more information on ICB awards, visit: <https://nen.nasa.gov/web/oce/icb>.



Human health and performance technology development.

Contact Us

General Inquiry:

Strategic Opportunities and
Partnership Development Office
Phone: 281.483.3000
Email: JSC-Partnerships@mail.nasa.gov

Mailing Address:

National Aeronautics and Space Administration
Johnson Space Center
Mail Code: AO
2101 NASA Parkway
Houston, Texas 77058