National Aeronautics and Space Administration

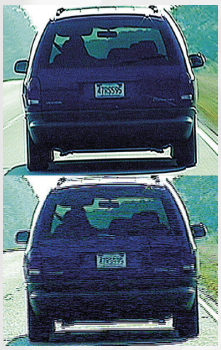
Space Technology Hall of Fame

Spinoffs

Each year, the Space Foundation recognizes a select few space-derived technologies by inducting partnering organizations into its Space Technology Hall of Fame©. The inducted technologies are outstanding representatives of the over 1,600 NASA-derived technologies being put to work beyond their initial purpose in aeronautics and space exploration, for economic development and public benefit.

Cooling Suits Provide Comfort

Cool suits, which kept Apollo astronauts comfortable during moon walks, are today worn by race car drivers, nuclear reactor technicians, shipyard workers, people with multiple sclerosis and children with a congenital disorder known as hypohidrotic ectodermal dysplasia, which restricts the body's ability to cool itself.



Video Stabilization Software Enhances Surveillance

Video Image Stabilization and Registration (VISAR) technology, which allows users to enhance shaky video, has been used on many high profile law enforcement cases, including locating missing children, helping the FBI analyze footage of the 1996 Olymp ic Summer Games bombing, and allowing the Pentagon to confirm the capture of Saddam Hussein.

Filtration System Provides Clean Drinking Water

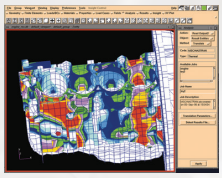
A filtration system providing safe, affordable drinking water is the result of work done to create a wastewater remediation unit for the International Space Station. The commercial version of the technology yields clean water from the most challenging water sources, such as in underdeveloped regions where water may be heavily contaminated.

Noninvasive Test Detects Cardiovascular Disease

A NASA team adapted Agency-invented software, originally designed to handle imagery gathered by space probes, to assess ultrasound images of arteries for plaque buildup. The software is now part of a diagnostic system for accurately predicting heart health.

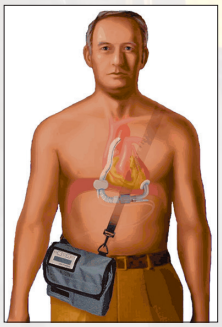
Space Research Fortifies Nutrition Worldwide

Experiments with algae as a food source for long duration space flight led to the discovery of a nutrient now found in over 90 percent of the infant formulas sold in the United States, as well as those sold in over 65 other countries.



Software Aids in Design, Improvement of Products

Developed for NASA in the 1960s, the NASA Structural Analysis computer software, or NASTRAN, is now used extensively in multiple industries for the design and analysis of everything from windmill blades to consumer electronics to toys. Its original source code has been incorporated into a range of powerful engineering programs.



Rocket Engine Technology Keeps Hearts Pumping

Supercomputer simulation of fluid flow through rocket engines, combined with medical industry collaboration, resulted in a lifesaving heart pump for patients awaiting heart transplants. The pump circulates blood throughout the body to keep patients alive until a donor heart is available and has been successfully implanted in over 445 patients.

Memory Foam Cushions and Comforts

Originally developed to increase comfort and safety in NASA aerospace vehicle seats, temper foam now appears as cushioning in protective sports gear, footwear, prosthetics, and body-conforming mattresses and pillows.

Blankets Keep People Warm in Harsh Conditions

NASA developed a metallized plastic film with an infrared-reflective coating of aluminum to protect spacecraft, equipment, and personnel from the extreme temperature fluctuations of space. Blankets of the material now prevent hypothermia at marathon finish lines and provide thermal protection in extreme situations, such as after natural disasters.

Tensile Fabrics Enhance Architecture

A remarkable fabric originally developed to protect Apollo astronauts is now used to craft highly durable, safe, environmentally friendly, and architecturally stunning tensile membrane roofs for over 900 landmark structures around the world.

For more information about NASA spinoffs, please visit **spinoff.nasa.gov**.

NP-2009-10-625-HQ