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Models for Successfully Applying Space Technology Beyond Its Original Intent (2)

Author: Mr. Mark Dvorscak
National Aeronautics and Space Administration (NASA), United States

Mr. Daniel Lockney
National Aeronautics and Space Administration (NASA), United States

ACCELERATING NASA TECHNOLOGY TRANSFER THROUGH STRATEGIC INTELLECTUAL PROPERTY MANAGEMENT

Abstract

Written into the founding legislation that created NASA in 1958 is a directive to ensure that the technologies created for space exploration and aeronautics also benefit the whole of humanity. To accomplish this, NASA brings together the agency's most capable technical problem-solvers and America's brightest commercial and entrepreneurial leaders to create partnerships that transfer these groundbreaking NASA technologies to the public. NASA has launched multiple new technology transfer initiatives that coordinate the work of the NASA field centers under an agency-directed Intellectual Property strategy that enables more efficient operations while ensuring that more NASA technologies make their way into America's private sector. The agency has taken a strategic and proactive approach to managing its intellectual property assets, and created tools that give the outside world a seamless and integrated interface with NASA, thus leveraging its technology portfolio in ways that will create new businesses in many different industries. The results of these new initiatives can be demonstrated in NASA's growing rate of technology transfer. In five years, NASA has managed a 293 percent increase in annual patent licensing and a 145 percent increase in software releases. The technologies transferred represent not just shared benefits with U.S. businesses, but also a significant return on investment to American taxpayers in the form of jobs created, revenue generated, new products brought to market and an improvement in the quality of life on Earth, right now. In this paper, we will discuss the challenges that faced NASA to increase technology transfer and commercialization of U.S. federally sponsored research and development. These challenges include various U.S. legislative and executive mandates, as well as budgetary constraints, and affect not only NASA, but have world-wide impact on all international space agencies. We will explain how these challenges have been met to increase the transfer of NASA's technology, and will provide examples of successful initiatives along with descriptions of the approach and tools used, results to date, issues addressed, and ongoing changes and concerns.