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Share the Work, Share the Results

NASA Advisory Council Recommendation:
The Council strongly urges NASA to quickly engage with other Federal Agencies and Departments as it develops its new technology programs. NASA can both benefit from and contribute to research and development in other parts of the U.S. Government.

Major Reasons for the Recommendation:
NASA can both benefit from and contribute to research and development in other parts of the Government. The benefit will redound not just to NASA and the other agencies, but to the entire country.

NASA Response:
NASA concurs with the Council's recommendation. NASA has a strong legacy of interagency partnerships that we will build on. During the past five years, NASA has had approximately 364 interagency partnerships with over 30 partners, about two thirds of which were partnerships with Department of Defense agencies. NASA's Office of the Chief Technologist (OCT) has actively engaged a number of Federal agencies and departments in planning and formulating its new Space Technology programs. To date, OCT has engaged the U.S. Defense Advanced Research Projects Agency, the Advanced Research Projects Agency – Energy, the National Science Foundation, the Intelligence Advanced Research Projects Activity, the Department of Defense's Director for Defense Research and Engineering, and the U.S. Air Force Research Laboratory. Senior, as well as working-level, discussions concerning NASA research and technology programs/plans and possible collaboration with these U.S. Government agencies are ongoing and will continue on a regular basis. Recently, NASA received Congressional approval to reallocate $36.5 million in FY 2010 funding to accelerate eight high-priority research projects. Three of these research and technology projects will be system studies conducted in collaboration with DARPA to investigate horizontal launch capabilities, in-orbit satellite servicing, and power-beam propulsion. Additionally, a key element of the OCT organization is the Partnerships, Innovation, and Commercial Space office. Building on the success of NASA's Innovative Partnership Program, this functional element has the specific responsibility of increasing NASA's collaboration with industry, academia, and other Government agencies.

NASA will also engage other U.S. Government agencies in the development of NASA technology roadmaps. This integrated set of technology-area roadmaps are under development by the OCT, with the goal of providing long-term recommendations and prioritizations for the Agency's technology investment "pathways." The approach involves using NASA's Strategic Goals, Outcomes, and Objectives, as well as the strategic plans of the NASA Mission Directorates, with substantial inputs from other Government agencies, academia, and industry,

to identify the highest-priority technology investments. NASA has engaged the NRC to develop technology inputs from academia, industry, and other Government agencies, and to conduct the formal review process of the roadmaps. The key is to ensure that these roadmaps have full involvement and vetting by the space technology partners and stakeholders both internal and external to the Government. By relying on the NRC to perform this input collaboration and review function, we provide for credibility and openness in this roadmapping process. Once established, this agency-level technology roadmap will be visited each year to assess performance and make mid-course corrections. In addition, these roadmaps will be fully revised every four years (consistent with NASA Strategic Plan updates) through a formal peer-review process. A formal release of the first complete (externally peer reviewed) version of this planning material will occur by October 1, 2011.

NASA has played, and will continue to play, a significant role in interagency efforts to transfer technology from Federal research laboratories to the private sector. NASA is one of the key agency participants in the Federal Laboratory Consortium, a national organization chartered by Congress to foster technology transfer from Federal agencies to state and local governments, academia, and the private sector.

NASA will also continue collaborative efforts with other Federal agencies and local government/economic development organizations to help make more visible the technologies emerging from Federal laboratories that may benefit the private sector. Recent technology partnership forums have included renewable energy, bioinformatics, robotic technology for first responders and homeland security, biomedical technology, and nanotechnology.

A recent example of interagency partnerships is the LAUNCH initiative, which is a partnership between NASA, the U.S. Agency for International Development (USAID), and the State Department, as well as private entities. LAUNCH is a global initiative to identify and support the innovative work poised to contribute to a sustainable future and accelerate solutions to meet urgent challenges facing our society. This is achieved through a series of forums. The first was *LAUNCH: Water* in March 2010, and the next was *LAUNCH: Health* in October 2010.