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FUTURE DIRECTIONS FOR INTERNATIONAL SPACE COLLABORATION: AN ANALYSIS OF THE IMPACT OF PRESIDENT OBAMA'S FY2011 BUDGET PROPOSAL

Abstract

On February 2, 2010, U.S. President Barack Obama released his FY2011 budget. In that budget were sweeping changes for NASA, including extending the International Space Station to 2020, and canceling several key Constellation Program efforts and a U.S. human return to the moon. Although the 2007 Global Strategy for Exploration: the framework for collaboration, developed by fourteen space agencies, is a voluntary, non-binding forum for cooperation, it has served as a basis for planning in the intervening years. Recognizing the leadership role the U.S. continues to play in exploration, many of the international partners have made policy and plans that were tied to the recently canceled U.S. human lunar effort. Thus, in wake of such a profound proposed change in U.S. direction in space, this paper considers the question of how the U.S. change will, or should, impact the current and future directions of other spacefaring nations around the world.

Specifically, it examines the plans, capabilities and priorities being pursued by of each of the European Space Agency (ESA), the Japanese Aerospace Exploration Agency (JAXA), and the Canadian Space Agency (CSA), in the time following President Bush's 2004 Vision for Space Exploration. It then assesses the impact of the new U.S. direction on each agency's strategies going forward; it does this both based on the stated positions of agency personnel and also a technical assessment of the flexibility and contingency of the agency's core capabilities and technology trajectories. Finally it proposes alternative future strategic directions for each of the agencies and discusses the longer term policy impacts of unilateral U.S. changes on future space collaboration.