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THE U.S. AND RUSSIAN NATIONAL SPACE PROGRAMS AT A CRITICAL JUNCTURE: HOW
PUBLIC SCIENCE COMMUNICATION CAN SHAPE SUPPORT FOR COLLABORATIVE SPACE
OBJECTIVES

Abstract

This paper details the results and findings of a collaborative research initiative on the role that science communication to the public plays in shaping Russian and U.S. technology policy agendas in space. Space exploration is an expensive, technologically intensive activity that does not immediately produce tangible benefits for most citizens of a country. Despite these policy obstacles, the governments of Russia and the United States have separately and jointly pursued successful national space programs for over half a century that continue to garner public and industry support. Drawing off lessons learned from a year of collaborative research and interviews with government and commercial stakeholders in the U.S. and Russia, this paper shows that effective, participatory science communication has had a substantial role in shaping and legitimizing the U.S. and Russian national space programs, as well as making space an area of fruitful cooperation between the two countries.

Considering historical and current case studies in the U.S. and Russian national space programs, this paper explores the role that scientific communication methods play in shaping and garnering support for space policy agendas, and how methods of framing and presenting scientific objectives have influenced and directed international collaboration in outer space. To understand how scientific investigations are prioritized and translated into national policy, this paper considers four facets of influence: (1) cultural values and societal norms, (2) models of science communication used by stakeholders, (3) collaboration of commercial enterprises, and (4) political will and policy processes. Finally, by analyzing these methods of influence, a strategy for using effective science communication strategies to foster continued support of U.S. and Russian collaboration in space programs at the current critical juncture in their history is discussed.