

Full Report

Introduction

Space is a uniquely valuable environment in which to conduct activities of growing importance to the global economy, to information-based security strategies, to environmental protection, and to other aspects of modern life. But space is also a technologically challenging and expensive environment where satellites are vulnerable to natural hazards, to inadvertent harm caused by other space users' activities, and potentially also to deliberate interference for strategic or tactical military advantage. Most of the same capabilities needed to access and use space for constructive purposes could also be used in hostile or irresponsible ways, often with less technological sophistication and expense. Even before the first satellites were launched, this combination of value, vulnerability, and dual-use potential made it clear that international cooperation would be a pre-requisite for space security—i.e., secure, safe, and sustainable access to, and use of, space for peaceful purposes, coupled with the freedom from space-based threats.

The United States initially led international efforts to develop formal and informal rules to protect legitimate uses of space, to prevent the widespread deployment or first use of space weapons, and to promote cooperation in the safe, sustainable use of space for mutual benefit. One result of its efforts, the 1967 Outer Space Treaty (OST), remains the foundational document of a rule-based approach to space security. The OST's general principles sought to balance diverse interests by ensuring that all states use space for peaceful purposes, respect international law, and avoid causing harmful interference to other space users.

Ensuring space security has grown more complex over time. An increasing number of countries can operate independently in space, and an even larger number have a direct stake in space security. A commercial space industry has developed distinct from government-run civilian or military programs. Moreover, technological advances have raised new questions about which military uses of space are "in accordance with international law" and "in the interests of maintaining international peace and security" and which are intolerably threatening or aggressive.

As these challenges have intensified, the world's capacity to manage them cooperatively has declined. Instead of continuing to lead international efforts to work out rules protecting and enhancing everybody's ability to use space for peaceful purposes, the United States became increasingly interested in its own flexibility of action in space.¹ Indeed, the George W. Bush administration explicitly rejected the possibility that any new international legal constraints on U.S. military uses of space could enhance its national

¹ Both approaches are sometimes referred to as preserving U.S. freedom to access and use space, but the former seeks this freedom through consensual rules protecting legitimate activities from deliberate or inadvertent interference, while the latter rejects rules and relies instead on unilateral power.