52nd COLLOQUIUM ON THE LAW OF OUTER SPACE (E8) Peace in Space: Transparency and Confidence Building Measures (2)

Author: Mr. James Rendleman United States

LAWFUL RESPONSE TO ATTACKS ON SPACECRAFT AND THEIR SUPPORT SYSTEMS

Abstract

The complete mix of civil, military and national and multinational commercial space capabilities are important enablers for successful 21st century militaries, economies, information transfer, diplomatic communication and collaboration. Space-based capabilities (precision navigation and timing, battlefield and battlespace characterization, missile warning and defense, weather, communications, intelligence, surveillance, and reconnaissance) enable the nations and their allies to efficiently and effectively reach out, shape, support and control events in any part of the globe. Taking down these space capabilities offers means by which adversaries can eliminate this significant asymmetric advantage. Given their importance, some argue capabilities presented by national and allied space systems must be protected. The international approach to securing and protecting the space domain has been and will continue to be rooted in rational policy making and international and domestic (municipal) law. Long-standing treaties, customary law, and policy support the peaceful uses of space by civil, commercial, and military systems. But these approaches may fail; some states and non-state actor may not respect the virtues of preserving the peaceful uses of the space domain. Some argue against the use of force to protect access to space, suggesting such actions are violations of treaty, custom, domestic law, policy, or the laws of armed conflict. They clamor for more international treaties and agreements on the subject. In contrast, current United States National Space Policy concepts and space control doctrine suggest the US should proactively control the space environment—assuring access to space by US and allied systems, defeating threats to them, and denving adversaries access to their own space capabilities if required. This suggests the United States will not wholly depend on current passive defense capabilities, or diplomatic engagement and awareness, to deter threats. It remains to be seen whether the new US administration will continue this policy. This all envisions possibilities of space combat. If so, policy makers and commanders need to balance the benefits and tremendous risks of such conflict. A myriad of responses can be employed against those who attempt to deny access with the use of force-active defense such as jamming, interdiction, kinetic kill interceptors, blinding; or passive, such as movement, hardening or the like. When developing satellitedefense strategies, one must also consider a particularly important factor — the law. Assuming the United States or any other nation believes it is compelled to respond to threats or attacks on its system and those of its allies, the proposition to be examined in this paper is, What means may a nation lawfully employ to defeat threats to its space systems and punish potential and actual aggressors. This paper will examine how relevant treaties, customary law, the law of armed conflict, and other legal principles already substantially restrict space warfare options and the potential for such conflict among law-bidding nations. It will identify the legal principles supporting the right to defend a national or allied space system. Applying these principles, the paper will then discuss lawful and unlawful means and methods to prosecute this right of defense and to defeat threats. It will argue: (1) conflict and warfare activities involving space-based systems are lawful; (2) the right to conduct conflict and warfare activities involving space systems is constrained by the operation of current international treaty, customary law, and policy, and that result is rooted in the physical, technical, and environmental realities of operating in space; (3) certain satellite systems and their supporting ground-based, and command and control systems may not be lawfully engaged; and (4) even if lawful means and methods are employed and targets engaged,

fundamental underlying policies should constrain conflict involving space systems, specifically, the when, where, and how adversary space systems can, or should not, be engaged.