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THE ELEMENTAL STUDY OF SPACE ASSETS WITH AN EMPHASIS ON CYBER DEFENSE & JURISDICTION

Abstract

The discussion on the global standpoint over the elements of space is of utmost significance now that nation-states are looking at space assets as potential weapons. The effects of the same on the current geopolitical scenario also needs to be considered. With that being said, it is important to note that there is no set treaty at the international level that exclusively covers the distribution, jurisdiction and use of space assets wisely and for peaceful purposes. With the venture of humanity to outer space, humans will continue to witness exponential growth in a multitude of commercial activities such as space tourism, asteroid-mining to name a few. As we continue to learn about this mystical dimension each day, its scope keeps broadening to new possibilities. Hence the notion of safety of space assets becomes pertinent. Space assets play a pivotal role in multifarious activities ranging from weather monitoring to tactical military operations for the nation's safety. Outer space security is crucial to ensure the stability at global level hence it is pertinent to highlight the importance of cyber security in defending space assets.

This paper aims to highlight the role of critical cyber infrastructure in safeguarding the space assets preventing global tensions and the paper strives to address the issue of jurisdiction of space assets. The co-authors wish to highlight how a treaty at a global level will not only furnish a foundation of security but also open other channels of space exploration with cooperative effort. An attempt has also been made to factor in the threats to the financial standing of each nation state with a stake in the space community. This goes to show how space assets such as satellites, bring within their use an inherent threat to security, but also possess great promise for the future of mankind.