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IISL COLLOQUIUM ON THE LAW OF OUTER SPACE (E7)
Recent Developments in Space Law with Particular Focus on Space Debris Remediation (7)

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ENABLING COMMERCIAL REMEDIATION OF SPACE DEBRIS THROUGH EFFECTIVE CONTRACTUAL AND REGULATORY TRANSFER OF ITS OWNERSHIP

Abstract

To employ an ancient principle, we must ensure that old space debris always makes way for the continued utilization of space. Yet, the existing definition of space debris and conceptual ownership of such debris creates obstacles to effectuating this intent. Space debris encompasses specks of paint and millimeter sized fragments as well as fully intact non-functional spacecraft. Similarly, ownership rights in space debris fail to see any distinction. Indeed, the party who owned the operational spacecraft maintains ownership of the spacecraft that becomes space debris through end of mission and/or an unanticipated conjunction event. Consequently, the colloquial reference to "cleaning up" space debris by an actor other than the spacecraft owner can run afoul of international law. Indeed, there exists no "law of finds" within space in relation to space debris. Thus, the existing legal framework discourages or, to the unwary, creates exposure to, those seeking to clean up space. This state exists despite the increasing need to eradicate the "old" space debris. We require something more than reducing (at least in the United States) the "end-of-life" span from twenty-five to five years.

With the foregoing in mind, an enterprising party seeking to capture space debris must obtain the legal rights to collect each item of debris to avoid litigation and potential international conflict. The resolution can perhaps begin simply enough with a contractual relationship between the enterprising party and the owner of the space debris. Presumably, the owner of the space debris can transfer rights to the enterprising party. Of course, this should be solidified through international law to eliminate any ambiguity. At the same time, the effort and expense in tracking, identifying, and contractually addressing each piece of space debris could quickly become burdensome (absent a party assigning rights to all its space debris). And thus, a new framework that enables collection of space debris and transfer of ownership should be developed and implemented where space debris and surrounding circumstances fit into certain metrics (e.g. size, fragments, time in debris-state). That being said, the framework must also address related principles including the complexity of liability during in situ recapture operations. Through examination of these and related issues, this paper and discussion will propose a paradigm that facilitates debris remediation, simplifies contractual processes, maintains a structure of liability and chain of custody, and encourages prompt and immediate commercial endeavors in this sub-sector.