

FAR FUTURE (D4)
Space Elevators and Tethers (2)

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SPACE ELEVATOR DEBRIS MITIGATION POLICY

Abstract

As we described in our paper last year in Glasgow and at the ISEC conference earlier this year, space debris will pose a hazard to a 104,000 km long, one meter wide space elevator. Many questions arise as to how to mitigate and, clearly, debris mitigation must be addressed through the establishment of requirements for the knowledge of the debris location and the propagation of that knowledge into the future. This paper will review the risk of debris (focusing on the LEO environment) and the mitigation strategies are enabled by the space elevator for the elevator itself and for all objects in earth including operational spacecraft. Then we will address some of the policy issues that must be addressed to enable development of “rules of the road” for operation of the space elevator.