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Access to Space for Small Satellite Missions (5)

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RAPID, AFFORDABLE, DEDICATED SMALLSAT LAUNCH TO MEO OR GEO ENABLED BY THE
USE OF LEO DEPOT REFUELING

Abstract

Existing options for delivering smallsat missions to MEO or GEO all have significant drawbacks. Launches using dedicated smallsat launchers with transfer stages tend to be very expensive on a /kg basis, and their payload capacity to GEO or GTO-to-MEO delivery service, typically on a single use tug. Either option can add significant expense to the mission to MEO or GEO, but the set ups are expensive and very slow, taking months to deliver the payload to its final operational orbit. In performance, dedicated interplanetary smallsat missions. By refueling the second stage and transfer stage of a dedicated smallsat like orbit, the launcher's payload to interplanetary destinations can often be increased by 10-12x compared to what the launcher