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Conceptualizing Space Elevators and Tethered Satellites (3)

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MARS LIFT UPDATE

Abstract

In previous work we sketched out an innovative space elevator concept for the red planet. Mars Lift is conceived as an off-equator elevator drop line that delivers standardized containers from an Arestation at its top to the Mars surface, saving precious propellant. Empty rappellers, the descender frames for the containers, are folded and recycled to the top with a big transport ship such as a SpaceX ITS. This eliminates one direction for the single elevator and some of the difficulties climbers face on regular space elevators when climbing. Mars Lift is one component in the Omaha Trail scenario, in which other components, such as a Deimos Dock for refueling, support an efficient path to Mars and to and from Earth. The presentation contains updates and details on our investigations of the Mars Lift concept.