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Entering the Space Elevator Era (3)

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FAST TRANSIT TO INTERPLANETARY DESTINATIONS

Abstract

The unique characteristics of Space Elevators with a rapidly moving Apex Anchor (7.76 km/sec) enable remarkable growth for off-planet missions. This combination of three major strengths (massive movement of mission support equipment - a tremendous opening up of launch windows - shorter travel times) will ensure constant support to missions beyond Geosynchronous altitude. With the daily release of payloads towards Mars (and other interplanetary destinations) from the Apex Anchor, the release imparts tremendous velocity with very little drag from Earth's gravity. Periodic fast transit to Mars lowers this time to 76 days. This occurs several times during the two-year orbital dance. In addition, the concept of one launch window every two years is collapsed to multiple launches each week towards Mars. Adding these two characteristics of space elevators to the routine, daily and massive movement of cargo ensures that the human missions off-planet will have the supplies needed to prosper and grow. The bottom line is: Can you imagine? • 76 days to Mars several times each 26 months • multiple releases per week towards destinations (no 26 month window restriction) • massive movements towards interplanetary destinations each day.