

57 Why -- Supplies Daily Launches to CISLunar and Mars

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Descriptor: The ability to release from a 100,000 km long Modern-Day Space Elevator tether enables customers to send logistics to Mars with daily releases at speeds that can reach the Mars arena in 61 days (fastest) with routine travel times between 80 and 150 days. The essential element here is that the traditional rocket approach (with minimum energy leveraged) has a window for launch to Mars that is separated by approximately 26 months. However, Modern-Day Space Elevator's concepts of traditional transportation infrastructures tend to go towards daily, routine and safe. A Space Elevator release towards Mars does not require rockets, just a release at 7.76 km/sec (sufficient energy to go well beyond the Martian orbit). Of course, some trips might be up to 400 days; however, that is when you deliver non-essential supplies.

CISLunar support is simple with 14-hour trip time from the Apex Anchor. Prepositioning of supplies enables emergency responses such as astronaut rescue or day to day logistics to multiple locations upon the Lunar surface or its orbit.

This characteristic illustrates how customer demands can be fulfilled with “just in time” release from the tether in the proper direction for delivery as requested. The simplistic case is daily delivery from the Earth Port to the GEO node as there will be seven climbers on each tether below GEO at all times. This trip is approximately seven days so daily loading at the Earth Port leads to “on-time” delivery to the GEO node, which leads to release from the Apex Anchor to farther destinations as required.

