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SYMPOSIUM ON VISIONS AND STRATEGIES FOR THE FAR FUTURE (D4)
Space Elevator Feasibility and Technology (3)

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COSMIC STUDY OVERVIEW – SPACE ELEVATOR FEASIBILITY

Abstract

The International Academy of Astronautics, a Paris based organization with about 1000 elected members from around the world, has initiated a Cosmic Study that addresses the feasibility of a space elevator. Key to this tremendous global activity is a realization that if significant growth in global space enterprises are to occur, access to space MUST become more economical. Many options have been proposed – reusable launch vehicles, magnetic levitation, rail guns and gravity alternations. The authors of this study dream of 100 dollars per kg to Geosynchronous Earth Orbit (GEO) and are working on one alternative. It is too early in the development cycle to declare success; however, this study will show a path that could succeed. There are many engineering, social, legal and financial challenges yet to be solved; but, these authors believe there are solutions and understand that the rewards to the global environment would be remarkable. It is very difficult to predict the future; but, the potential for space elevator success is REAL! This paper will organize the big picture of the study and show the major items of interest.