

Proposal for Forming an IAA Study Group S3.3

Title of Study: **Space Elevator Feasibility and Impact**

Proposer(s): **Peter Swan, Ph.D. & David Raitt, Ph.D.**

Primary IAA Commission Preference: **Commission III**

(From Commission 1 to Commission 6)

Secondary IAA Commission Interests: **Commission VI**

(From Commission 1 to Commission 6)

Members of Study Team

Chairs: **Peter Swan & David Raitt**

Secretary: **Cathy Swan**

Other Members: **Brad Edwards, Ivan Bekey, Ernesto Vallerani, Eric Shaw**

Short Description of Scope of Study

Overall Goal:

- (1) Determine the Engineering, Scientific and Economic feasibility of a Space Elevator for inexpensive access to space
- (2) Identify the key rationale for a Space Elevator to include the socio-economic, political, environmental and human aspects, as well as possible resistance
- (3) Identify areas for both technology spin-in and spin-off
- (4) Identify the impact on Industry and Society of the Space Elevator

Intermediate Goals:

- (1) Conduct sessions at IAC's (Vancouver, Japan, and Spain) with purpose of understanding the international aspects of the Space Elevator.
- (2) Produce a recommendation for the Academy for future studies and activities to support the development of a Space Elevator.

Methodology: The initial step is to sponsor sessions inside the IAA 3.8 Symposium (Symposium on the Far Future: Renewed Visions). The second step is to create a study group, establish goals, objectives and timelines for a Space Elevator cosmic study. The last step would be to produce a report for the Academy that discussed the feasibility of a Space Elevator and identify the potential benefits to humanity.

Time Line: 1st Meeting March 04 in Paris – to establish study group (achieved)
2nd Meeting: Oct 04 in Vancouver – to discuss progress, identify action items
3rd Meeting: March 05 in Paris – to discuss report outline and timeline
4th Meeting: Oct 05 in Japan – summarize conclusions and recommendations in the report and draft final aspects of Academy product.
5th Meeting: March 06 in Paris – produce the Academy report for signature

Final Product (Report, Publication, etc.):

Academy Publication entitled: International Academy of Astronautics Report on the Space Elevator Feasibility and Impact Upon Society

Target Community: Those organizations wishing to have inexpensive access to space: Mars/Moon program, Life in space believers, geosynchronous satellite owners (communications, solar power satellites, etc.), planetary defense organizations, commercial satellite builders, space tourism companies, and governments.

Support Needed: Minimal at the present time

Potential Sponsors: space agencies, Mars/Moon programs, planetary defense organizations, commercial space organizations, future human habitats and world governments.

To be returned to IAA Secretariat Paris fax: 33 1 47 23 82 16 email: sgeneral@iaaweb.org

Date: 30 September 04

Signature: signed Peter Swan

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