

Proposal for Forming an IAA Study Group

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Title of Study:

“Hitch-hiking to the Moon: Access and Opportunities for Small Satellite Missions”
(aka Return to the Moon)

Proposer(s):

Leon Alkalai, R. Sandau, B. Foing

Primary IAA Commission Preference:

Commission IV on Space Systems Operations and Utilization

Secondary IAA Commission Interests:

Members of Study Team

Chairs: Leon Alkalai (Chair, JPL), Lance Wu (Co-Chair, NSPO)

Secretary:

Other Members:

| | |
|-----------------------------|-----------------------------|
| Bernard Foing (ESA) | R. Laufer (DLR) |
| Tony Spear (USA) | K. Hermann (U. Berlin) |
| R. Sandau (DLR) | R. Hornstein (NASA HQ) |
| J. Wertz (Microcosm) | H. Tomonao (Chiba) |
| C. Underwood (Surrey SSC) | J.-M. Contant (IAA) |
| P. Willekens (ESA) | J.-S. Chern (NSPO) |
| M. Yarymovych (IAA) | G. F. Bignami (IFCTR) |
| T. Obata (Mitsubishi) | M. Angulo (INTA) |
| H. P. Roeser (U. Stuttgart) | J. Esper (GSFC) |
| L. Paxton (APL) | H. Flemming (Danish NSC) |
| O. Yoshiwo (Chiba) | A. Valenzuela (Media Lario) |
| S. Mostert (Sun Space) | A. B. Melo (Brazil) |

Short Description of Scope of Study

Overall Goal:

Overview and assess the overall opportunity and approach for small, low-cost, secondary or tertiary, missions to the Moon, as part of the overall international strategy for robotic and human exploration of the Moon over the next 2 decades.

Intermediate Goals:

Conduct several meetings at leading lunar international conferences and forums to develop the overall structure of the report (outline), make specific study assignments, and deliver the overall strategy, opportunities, mission set (landers, orbiters, probes, cube-sat university satellites, etc.), and recommended process for integrating such a strategy into future lunar exploration missions.

Methodology:

Conduct about 3-5 meetings at leading international lunar conferences and forums, where many of the study team members will attend; first propose study outline; then make study writing assignments and then deliver first draft for review by the team members, followed by final version.

Time Line:

Draft outline of report: Dec 2006
Review outline of report and make assignments: October 2007
First draft of report: December 2007
Final report: December 2008

Final Product (Report, Publication, etc.):

Publishable Report to be distributed to the space international community.

Target Community:

International space community, universities, small businesses in the aerospace and education communities.

Support Needed:

Communication of meeting opportunities at conferences, including: ILEWG 2007 in Italy, etc.

Potential Sponsors:

NASA, Jet Propulsion Laboratory, DLR, ESA/ESTEC

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

Date: Dec. 31st 2006

Signature: Leon Alkalai

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