

Executive Summary

Date Prepared: 22 August 2007

Presenter's Name: Rodney (Rod) Wilks
Presenter's Title: ATK Exploration Beyond LEO Manager
Presenter's Organization/Company: ATK

Presentation Title

International-Commercial Involvement in Lunar Robotic Mission

Key Ideas

Significant costs of all needed lunar robotic exploration missions discourage full participation from various space agencies. International-Commercial collaboration can enable full participation at significantly reduced cost.

Supporting Information

The full scope of what is required to prepare for manned exploration of the moon and to conduct significant worthwhile science missions is beginning to emerge. To sufficiently help drive down the risk of landing crews on the lunar surface and to conduct statistically sound scientific assessments of the moon, significant resources have to be made available. For most if not all space agencies, the cost of such missions prohibit their total participation. This presentation will discuss alternative ways that could be used to allow full participation by interested space agencies and commercial interest. The presentation will cover proposed collaboration efforts between the various space agencies. This collaborative effort should lead toward a common international architecture that can be used as a basis for cost and data sharing. Further it will cover some ideas about how launch and landing cost can be reduced by using a common design framework that could be the standard for all types of robotic and cargo delivery missions. By using a common design framework and sharing both cost and data between participating agencies or commercial customers, the envisioned scope of lunar robotic and cargo type missions can be conducted at a significantly less cost to each participant.