Executive Summary

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Presenter's Title: Vice President
Presenter's Organization/Company: Lunar Transportation Systems, Inc.

Presentation Title

Commercial Transportation and Lunar Surface Mining

Key Ideas

Commercial Transportation of Non-Essential Cargo
Logistics Development of Company Town and Lunar Resource Recovery
How can risk/cost be reduced through cooperation and partnerships in technological developments and demonstrations?

Supporting Information

Lunar Transportation Systems, Inc. offers a commercial logistics perspective to lunar mining, base operations, camp consumables and the future commercial sales of propellant from lunar mining operations. Our goal is a logistics architecture proposed with sustainable growth over 50 years, financed by private sector partners and capable of cargo transportation in both directions in support of lunar resource recovery. The author's perspective includes 5 years in remote sites and lessons learned in logistics. Lunar logistics may be the most complicated logistics challenge yet to be attempted. The price paid, if a single system does not work well is significant. In Alaska, we had four different logistics transportation systems and none work successfully all the time. The private sector has, in the past, invested large sums of risk money, $20 billion for example, in resource recovery ventures, when the incentive to do so was sufficient to provide a return on the risk investment. Stimulating an even larger private investment is needed for the moon's resource development. The development of the moon can build on mankind's successes in remote logistics bases on Earth and learn from Alaskan oil experience. The proposed commercial lunar transportation architecture uses new innovations for modularity and flexibility leading to reduced development and logistics costs, faster development schedule, and better evolvability. This new trade lunar route for mankind utilizes existing Expendable Launch Vehicles (ELVs) available and a commercially financed small fleet of new trans lunar and lunar Lander vehicles. This commercial transportation offers ways for small payloads early & larger payloads later. Commercially, this new lunar logistics route permits capability and technology growth as the market grows, offers affordable transportation for the commercial sector and the later recovery of lunar resources. After NASA moves on to other destinations in our solar system, commercial markets and this "in place" commercial logistics system can service, stimulate and sustain a lunar commercial market environment.