Space Exploration Logistics Workshop
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Omni Shoreham Hotel, Washington, DC

Discussion Area Introduction

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Breakout Sessions

**Breakout Session I**

- **Group A**  RFID and Information Architecture for Remote Logistics
- **Group C**  Database Management
- **Group D**  Logistics Implications of Space Vehicle Design and Manifesting

**Breakout Session II**

- **Group E**  Technology Impacts on Logistics Requirements
- **Group F**  Spares Management
- **Group G**  Space Logistics Network Design

**Breakout Session III**

- **Group I**  Spaceport and Earth-To-Orbit Logistics
- **Group J**  Space Depot Maintenance
- **Group K**  Space Logistics Regulations
Workshop Desired Outcomes

- Important logistics considerations and/or issues identified by each breakout session
- Potential impacts, risks, opportunities, and mitigations identified for each issue for each exploration mission type
- Better understanding of current research efforts and logistics technology trends
- Lively exchanges of information
- New ideas from log community
Issues –
Long Lunar Mission

1. Issue:
   Predicted Impact:
   Potential Mitigation:
   Testing Methods:
   Impact on Other Systems:
   Potential Solutions:

2. Issue:
   Predicted Impact:
   Potential Mitigation:
   Testing Methods:
   Impact on Other Systems:
   Potential Solutions:

3. Issue:
   Predicted Impact:
   Potential Mitigation:
   Testing Methods:
   Impact on Other Systems:
   Potential Solutions:
Lunar Sortie (Short) Mission

- Crew Size: 4
- Crew On-Surface: 4
- Surface Duration: 4 to 7 days
- EVA Operations: 4 days x 4 crew
- Mission Design: EOR – LOR
- Transit Time: 3.5 days (outbound) 3.5 days (return)
- Logistics Strategy: Carry-along
Lunar Outpost (Long) Mission

- **Crew Size:** 4
- **Crew On-Surface:** 4
- **Surface Duration:** 6 to 12 months
- **EVA Operations:** 130+ days x 4 crew
- **Mission Design:** EOR – LOR
- **Transit Time:** 3.5 days (outbound) 3.5 days (return)
- **Logistics Strategy:** Pre-positioning, Re-supply, ISRU, Carry-along
Mars Mission

- Crew Size: 6
- Crew On-Surface: 6
- Surface Duration: 500 days
- EVA Operations: 400 days x 4 crew
- Mission Design: 4 – 5 assembly flights to LEO
- Transit Time: 158 days (outbound) 180 days (return)
- Logistics Strategy: Pre-positioning, Re-supply (push), ISRU, Carry-along