

## Speech Topics for Dr. James S. Logan

### **Frontier and Destiny:**

Risks, Riches and Renaissance in the Solar System

### **Potential Showstoppers for Human Interplanetary Spaceflight and How to Overcome Them**

### **Innovative Mission Architectures for Human Interplanetary Spaceflight**

### **The Perfect Places for Human Space Settlement:**

Selection Criteria and Prime Candidates

### **Ultimate Survivor:**

The Five Cosmic Tests Any Intelligent Species *Must* Pass to Avoid Extinction

### **Destination Deimos:**

A Design Reference Architecture for Initial Human Exploration of the Mars System

### **GRAVITY: It's the Law**

Why Artificial Gravity Is Likely Essential for Human Interplanetary Spaceflight

### **The Space Colony: A 21<sup>st</sup> Century Reboot**

How a Hundred Person Years of Human Spaceflight Experience Has Transformed the Concept of Self-Sustaining, Self-Replicating Colonies in Space

### **Secrets of Practical Human Interplanetary Spaceflight:**

The Synergy of Multi-use Propellant and Advanced Propulsion

### **Robots vs. Astronauts:**

The Ideal Mix of Robotics and Human Presence in Advancing Space Settlement

### **Are We (Still) Alone in the Universe?**

Implications of a Decade of Discovery

### **NASA From Apollo 11 to Columbia:**

#### **The Demise of the Greatest Organizational Culture in History**

An Insider's Perspective on Lessons Learned

### **Spaceflight as Psychological Projection:**

Politics, Salvation, Immortality and the 'Religious Fervor' of Space Enthusiasts