



**ExoTerra, a Revolutionary Approach to
Space Launch Research and Development**

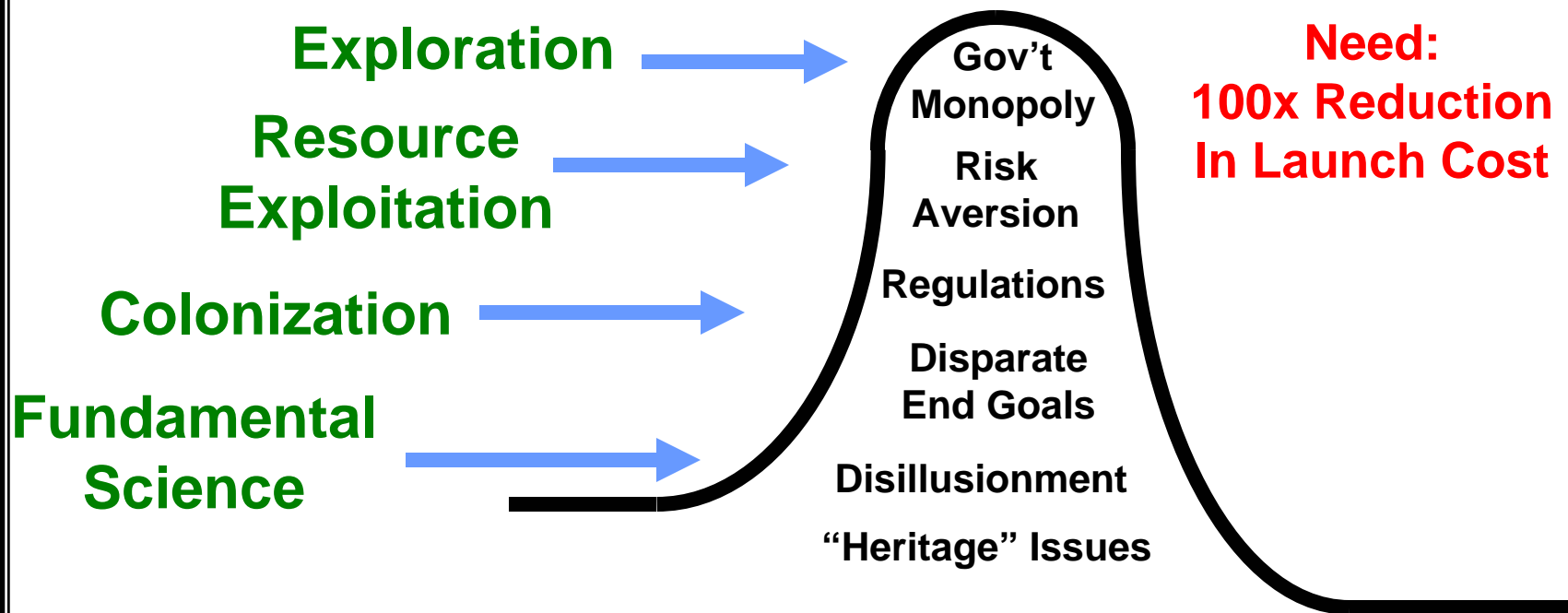
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By Terrance V. Yee

August 11, 2003

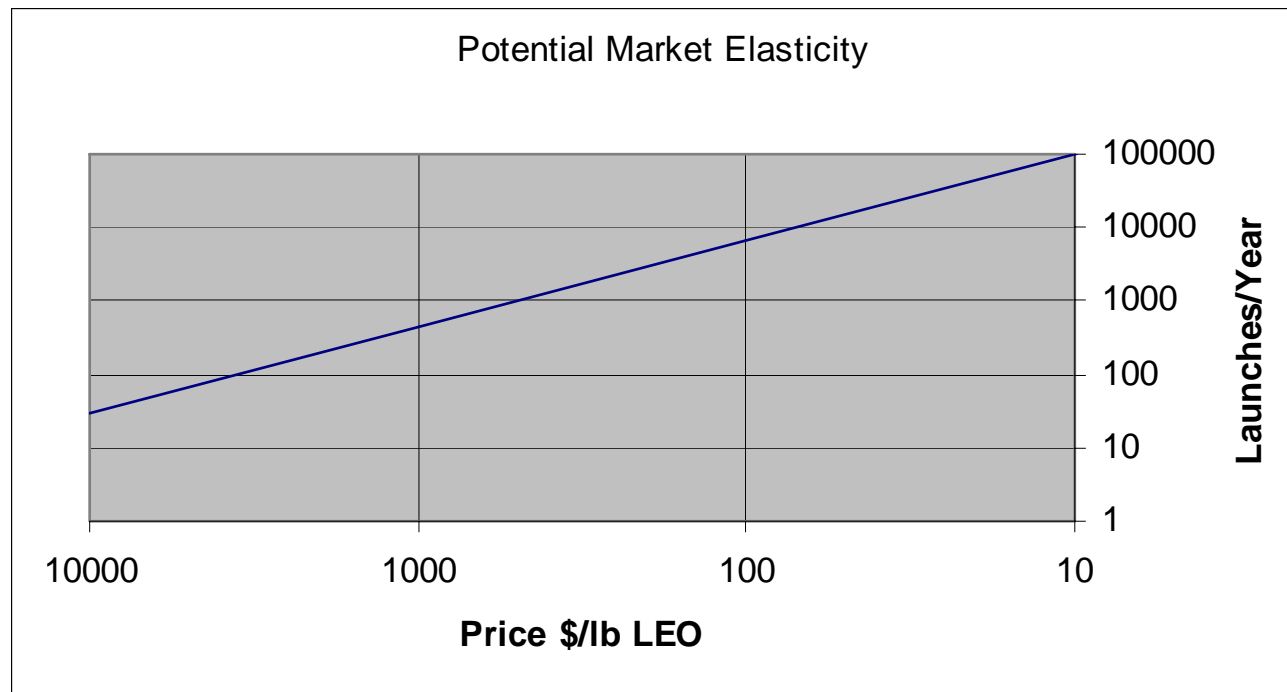
Problem Statement

- There is a huge pent-up demand for crucial space projects but the current industry paradigm makes access prohibitively expensive



Why Is Cheap Space Access Important?

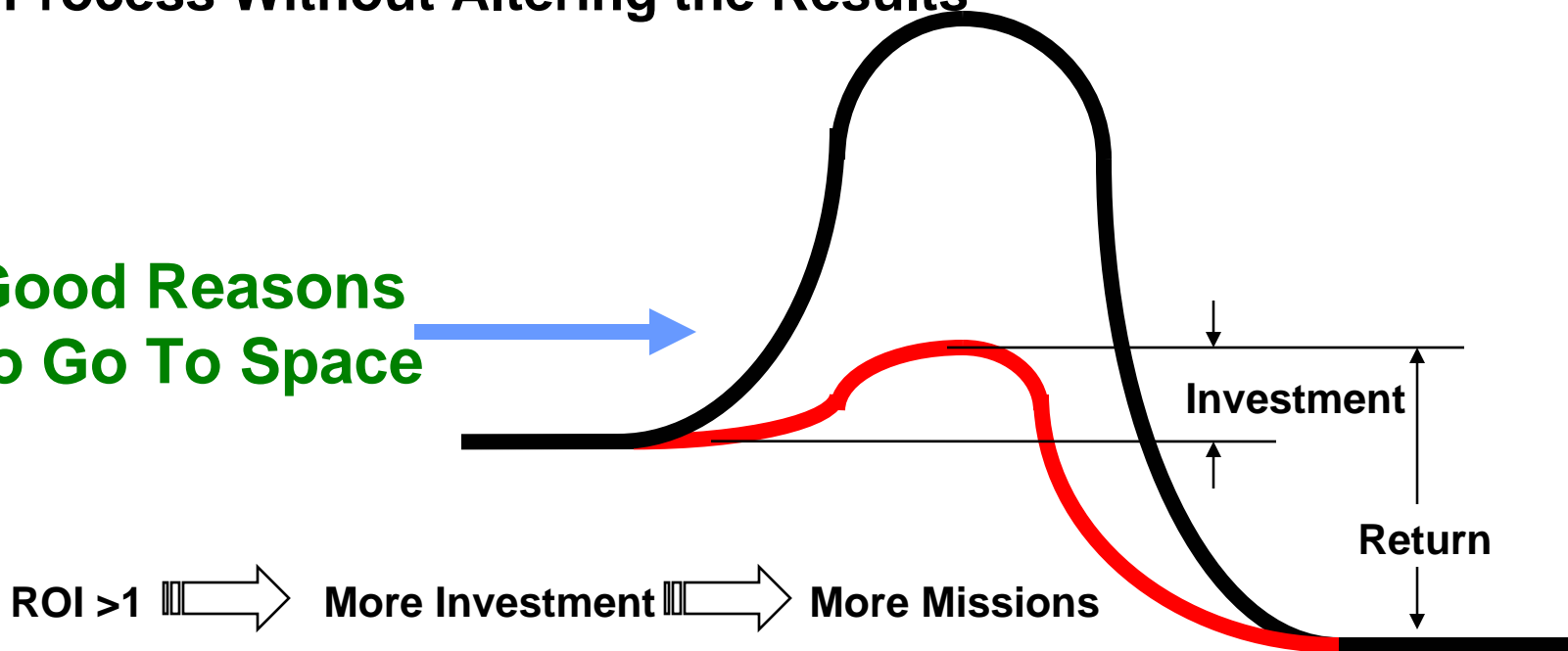
- It is a shared precursor to a large number of important and exciting space applications and therefore represents “common ground”



Catalyzing a Cheaper Solution

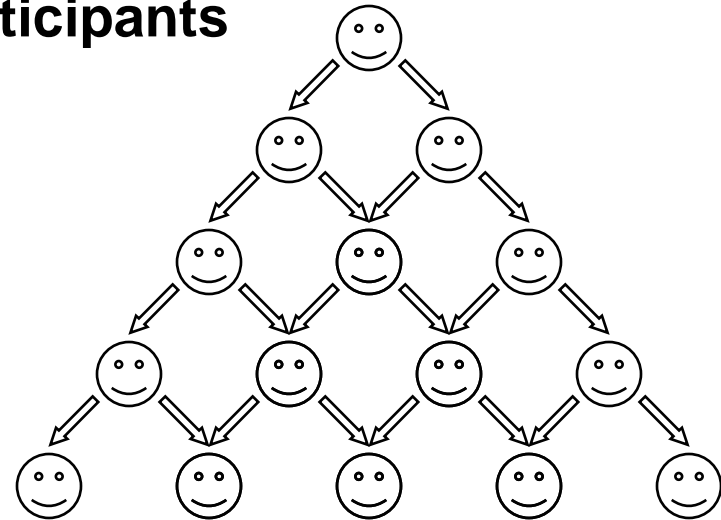
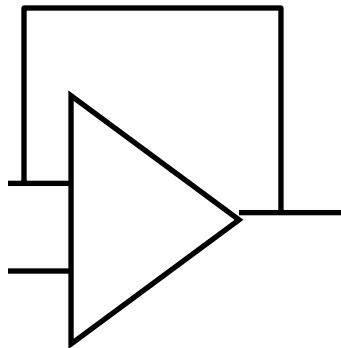
- Catalysts Lower the Energy/Capital Barrier to Increase the Rate of Reaction Without Being Directly Involved
- The Organizational Analogy to Space Facilitates the R&D Process Without Altering the Results

**Good Reasons
To Go To Space**



Exponential Growth Through Feedback

- **Design System which is “High Gain”:** Growth Leads to an Increased Rate of Growth
- **Establish Financial and Other Incentives for Current Participants to Recruit New Participants**





Solution: Synergistically Catalyze Revolution

- **Focus on Common First Problem Only: Orbit Access**
 - Increase Effectivity of Funding by Focusing of First Primary Key
- **Lower Resource Barriers by Providing “No Strings” Funding**
 - Allow Creativity and Invention to Flourish
 - Emphasize the Real Work, not the Paper Work and Bureaucracy
 - Provide Funding without Skewing Research to Prejudiced Results
- **Change Paradigm by Placing Public In Charge**
 - Harness the Strength of Numbers of Space Enthusiasts
 - Incentivize Recruiting and Set Stage for Broad Public Involvement



How?

- **Credit Card Dividends: “Affinity” Programs for Non-Profits Earn ~0.5% of Card Volume, No Fee Cards**
- **Non-Exclusive Program that Benefits Dozens of Organizations Who Share a Common Initial Need for Radically Cheaper Orbit Access**
- **Card Holders Control Grant Money Distribution via Secure Web Voting for Projects**
- **Board of Directors Referees Process and Provides Non-Partisan Evaluations of Grant Proposals**
- **Non-Traditional Participants**
- **Non-Traditional Solutions**
- **Non-Traditional Results**



Process

- **Proposers Submit a 1-Page Summary with Hyperlinks**
 - **Max 1 Proposal per Organization/Individual per Grant Cycle**
- **Proposals Pass a Referendum to Gather a Minimum Number of Electronic Signatures to Advance to the Ballot**
- **Ballot Proposals are Evaluated by the BOD and Rated “Go/No Go” with a few Sentences of BOD Comment**
- **Maximum Number of Proposals on Ballot and Minimum Grant Amount set by BOD Each Election**
- **Patrons (Card Holders) Vote Yes/No on Each Proposal**
- **Funds Are Awarded Based on the % of Yes Votes Received**
- **1 Year Award, Funds Granted up Front**
- **1-Page Hyperlinked Summary After 1 Year, Possible BOD Inspection Visit**

R&D Paradigm Shift

- Working for Gov't
 - FAR's, CDRL's, etc.
 - Programmatic Play Key Role
 - Adapt to Fit Customer Desires
 - Long Funding Decision Times
 - Minimally Risk Tolerant
 - Competition Hurts Your Chances
- 
- A large yellow arrow with a black outline, pointing from the left column of text to the right column of text, indicating a transition or shift in the R&D paradigm.
- Working for Public
 - 1 page report, no rules
 - Focus on Technical Work Only
 - Complete Design Freedom
 - Instant Online Voting Results
 - Encouraged to Innovate and Excite
 - Competition Increases Your Funding Basis



Explosive Growth Potential

- **Rig the System for as Much Positive Feedback to Growth as Possible**
- **Grant Recipients are Encouraged to Cultivate Their own Voting Blocks to Increase Their Share of the Pie at the Same Time as They Increase the Size of the Pie**
- **Get International Participation and Put National Pride to Constructive Use**
- **Focus on the End Goal Only: Cheap Service; Let the Providers Keep All the Entrepreneurial Benefits, Rights**
- **Design for Popularization**
 - **Keep Lay-Person as End Stage Marketing Focus**
 - **Exploit Web Power and Reach to Maximize Traffic and Advertising Revenue**
- **Design for Lean Staff, Low-Maintenance/Overhead**

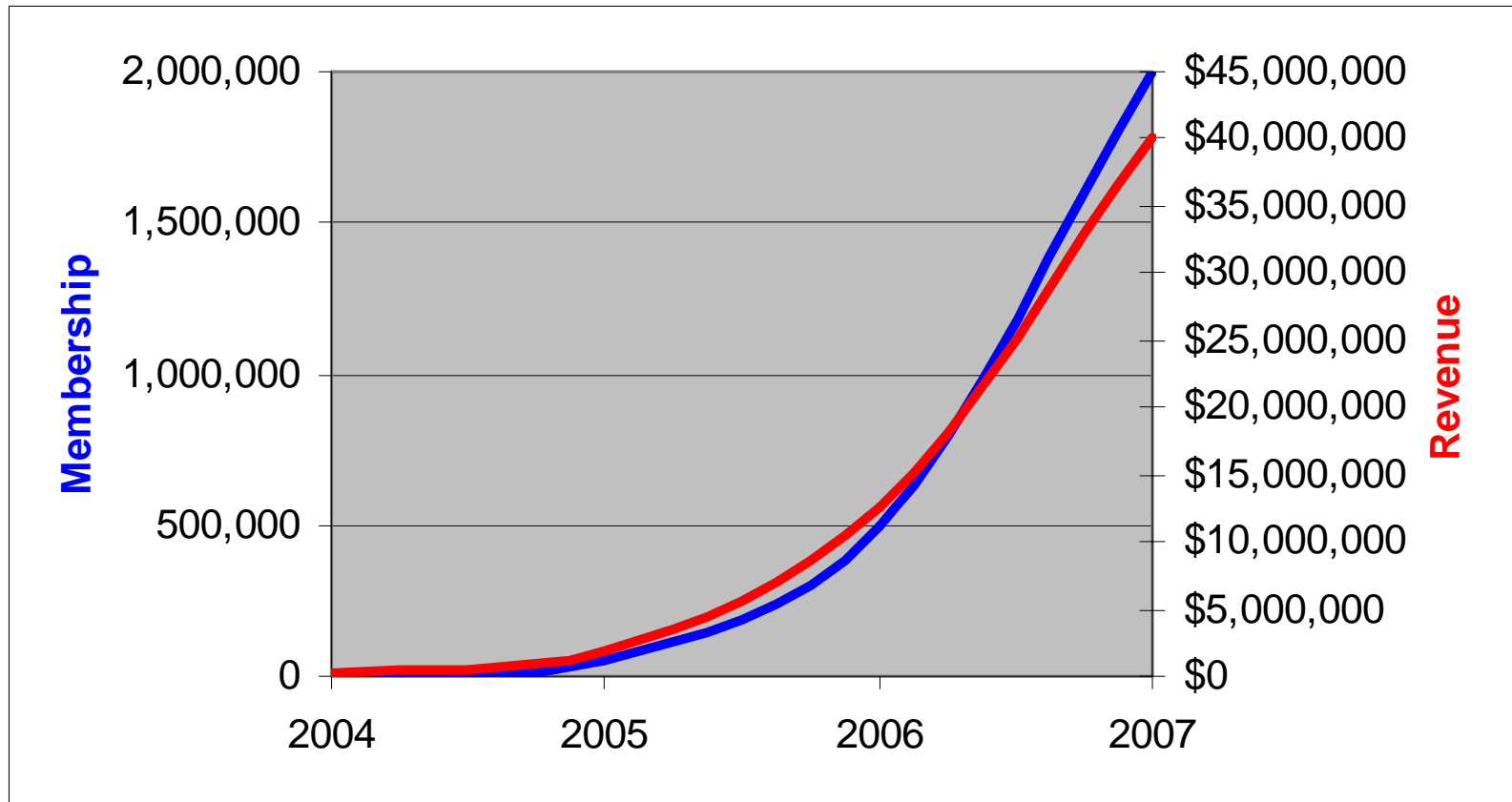


Projection Basis

- **The Planetary Society, the National Space Society, the Mars Society, the Space Frontier Foundation, Prospace, the Space Foundation, the Moon Society, the Artemis Society, et al Number Over 200,000 Active, Paying Members**
- **July 28, 2003 AP Poll Shows 71% of Americans Feel Space is a Good Investment**
- **International Interest in Space is Equally High in Other Regions of the World Including Japan, Russia, India, South America and Continental Europe**
- **Early Adopters are Estimated to be a Potential Market of 600,000 Members Worldwide, with Penetration Estimated at 1/3 (200,000 Patrons) by 2006**
- **At the Same Time, Penetration into the 2 Billion Person General Populations of the “Space Interested” Countries is Estimated to Reach 0.1% or 2 Million by the End of 2007**



Latest Projections





Status

- **Incorporated as Non-Profit in Colorado on March 11, 2003**
- **FEIN Assigned (16-1661466)**
- **Board Selected (5 Members in Seattle, San Francisco, Denver, Vermont, Moscow)**
- **Bylaws Adopted & Officers Selected April 21, 2003**
- **Concept Presented at Space Access Society Annual Meeting in Phoenix, AZ in April 26, 2003**
- **Discussions with Space Frontier Foundation & Mars Society**
- **Website Launched May 4, 2003 (www.ExoTerra.org)**
- **Bank Account Established with Initial Donation**
- **Credit Card Negotiations in Progress: Need to Convince Them we Can Reach Critical Mass**
- **IRS 501(c)(3) Application in Progress, Due in September**



How Can I Get Involved?

- Check out www.ExoTerra.org
- Sign up to Receive a Card Application when Available
- Spread the Word
- Volunteer to Help Build the Infrastructure Behind the Organization
 - Secure Online Voting Architecture
 - Website Content/Updates
 - International Website Translation/Localization
 - Marketing Strategy Development
- Offer Suggestions for Program Features
- Participate in the Online Message Board



Conclusion

- **ExoTerra Offers a Unique Way for Everyone from College Students Through Soccer Moms and Retirees to Participate in Funding and Directing Their Own Space Program**
- **Several Modern Phenomena Combine to Create This Opportunity: Cash Back Credit Cards, Internet Security Tools, a Widespread Common Goal, and Disillusionment with Results and Methods of Traditional Programs**
- **The Time to Cooperate and Take Control of our Own Destiny in Space is Now**
- **The Biggest Barriers are Ideological – Once They Are Conquered the Economic and Technical Challenges are Supremely Solvable**