Legacy of Apollo

Harrison H. Schmitt
February 9, 2011
And It Worked Every Time!
Serenitatis Basin

750 km diameter

Valley of Taurus-Littrow

Apollo 11
APOLLO’S COLD WAR LEGACY

• Cold War Political Goals of Eisenhower and Kennedy Met

• Soviet Union Leadership Intimidated
  – Reagan’s Strategic Defense Later Became Creditable

• America Could Succeed - Soviets Could Not

• U.S. Pride and Confidence Enhanced

• Other Peoples Encouraged About Their Future
APOLLO’S LEGACY TO CIVILIZATION

• New Evolutionary Status
  – Human Species Can Live on Moon and Mars

• Rapid Improvement in Human Condition on Earth
  – Acceleration of Technological Expansion

• Future Terrestrial Energy and Environmental Improvement
  – Conversion Efficiencies Enhanced
  – Helium-3 Fusion Power Made Feasible Through Lunar Resources

• Space Settlement Resources Identified
  – Hydrogen, Oxygen, Water, and Food
APOLLO’S SCIENTIFIC LEGACY

• First Order Understanding of Origin and Evolution of the Moon
• Basis for Interpretation of Post-Apollo Information About the Moon
  – Foundation for Comparative Planetology
• Record of History of Inner and Outer Solar System
  – Guide to Early History of Earth and Mars
• Delineation of Lunar Resource Potential
APOLLO’S KEYS TO SUCCESS

• Sufficient Base of Technology
  – WWII / Cold War / Eisenhower Decisions
• Reservoir of Young Engineers and Skilled Workers
  – 1957 “Sputnik” Generation
• Pervasive Environment of National Unease
  – Campaign of 1960
• Catalytic Event That Brings Focus to Effort
  – Gagarin’s Flight
• Articulate, Trusted and Persuasive President
  -- John F. Kennedy
• Adequate Management Reserves of Funding
  – OMB and Congress
• Tough, Competent and Disciplined Management
  – Post-Apollo 204 Fire

Deep Space Operations Still Require These Keys!
Potential of Lunar Helium-3 Fusion Power

- No Waste
- Efficient
- Technically Feasible
- Affordable
- Not Yet Under Foreign Control
If a Lunar Helium-3 Initiative Began in 2012 with Assured Investor Funding, the First Human Mission to Mars Could Be Launched by 2025, Largely Using Technology Paid for by The Helium-3 Initiative.

More importantly, the United States Would Not Give Up the High Ground Of Space and World Perception of Leadership to Non-Democratic Regimes.
It is time to Return!