



GREATER LAS CRUCES  
CHAMBER OF COMMERCE



COMMERCIAL SPACE COMMITTEE

# NEW MEXICO 2012 THE EVOLUTION OF SPACE

# NM - The Evolution of Space

- GLCCC Commercial Space Committee
  - ▣ Formed by the Chamber in July 2008
    - Encourage / Support / Facilitate Growth of Commercial Space Industry in So. NM
    - Create a Welcoming, Knowledgeable Business and Community Environment for Location and Growth of Commercial Space Businesses
    - About 30 Members of the Local / Regional Business Community
- What We've Been Up To
  - ▣ Educational Presentations on Industry, Spaceport, Players / Companies
  - ▣ Sponsor Community Spaceport Forums, Industry Mixers, B2B Activities
  - ▣ Representing Las Cruces / Region at ISPCS and Industry Conferences
- Come Join Us: 2<sup>nd</sup> Thursday, 9am, Chamber Offices



# NM - The Evolution of Space

## □ Commercial Space

- What Does it Mean “To Commercialize” –
  - To Open a Product / Service to New Markets and Consumers,
  - To Make Available in Commercial Quantity,
  - To Provide at a Lower Cost
- Government and Industry Have Been “Commercializing” Component Technology From Space Industry for Decades
- Space Has Been “Commercial”
  - Communications / Weather / GPS / Entertainment
- Launch Services Now Being Commercialized
  - New Markets & Customers / Commercial Quantity / Lower Cost



# NM - The Evolution of Space

## □ Market Drivers

- Necessity Now for Commercializing Space Launch / Space Services
  - Political Realities / Budgets
  - Shuttle Retirement
  - Need for Crew / Cargo to ISS
  - Allow NASA Priority Focus on Exploration – Moon, Mars, Asteroids
- Privatized Technology Development / Private Capital
- Space Tourism Viability / Popularity
  - Sub-orbital / Orbital Access Realistic / “Safe”
  - Rare / Visceral Thrill-Seeker Experience
- Lower Cost of Access / New Opportunities for R&D



So.....Why Here?

Goddard



Ham



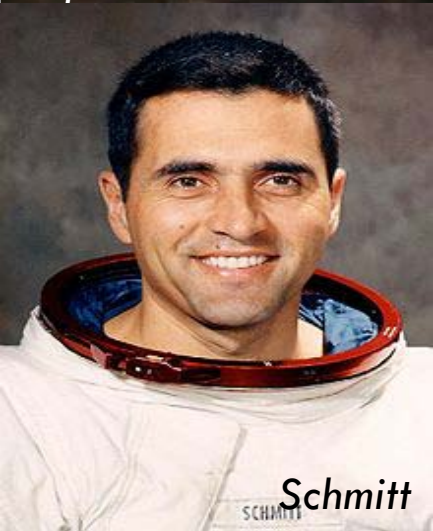
Apollo 17

# New Mexico's Spaceflight Heritage

Kittinger

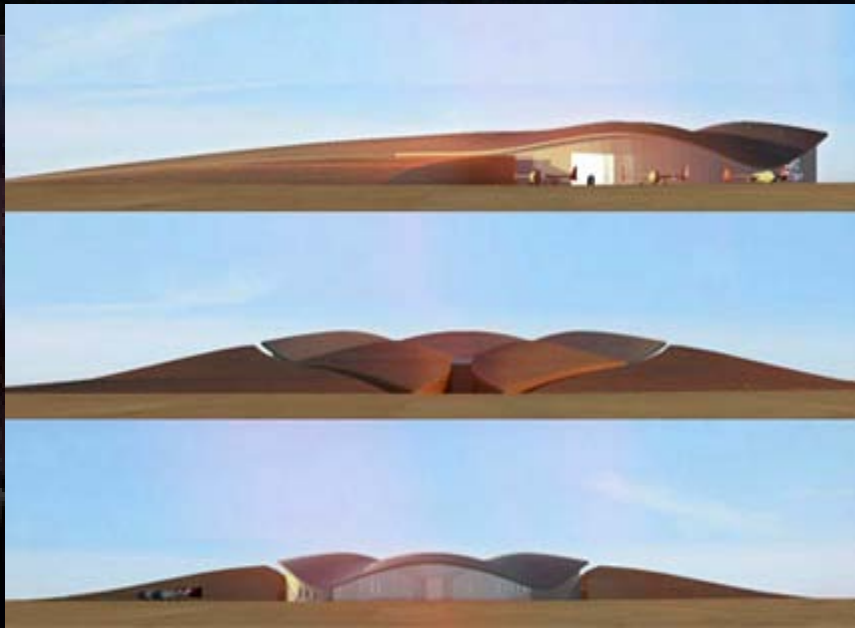


Von Braun



Schmitt

# Back To Our Future.....Spaceport America



*Invest...Design...Construct...Staff...*



*And, Finally...A Finished Product!*



# NM - The Evolution of Space

- **Spaceport America Happenings**
  - ▣ **Phase I Construction Complete, Systems Operational in Q2**
    - Key Operational Contractors On-Board
      - Safety / Security - Fiore Industries      Site Operations - EASi
      - Over 30 Subcontracts Expected – Local Commitment
    - Higher Launch / Test Activity in 2012
  - ▣ **Spaceport GRT \$ Contributions To Local Education**
    - Project Lead The Way / Custom Curricula - Over \$2,000,000 to Date
  - ▣ **Virgin Galactic - Anchor Tenant Preparing to Move In**
    - VG Office Open in Las Cruces
    - Local Presence / Visibility / More Local Hiring and Procurement
  - ▣ **Visitor Experience Preparing to Move Forward**
    - Welcome Centers / Branding / Marketing



# NM - The Evolution of Space

- If We Build It, Who Will Come?
  - Anchor Tenants *(can't have a port without one...or two..)*
    - Virgin Galactic
      - 20 years, \$1M / yr Rent
      - User / Flight Fees > \$100M?
    - UP Aerospace
      - Up to 10 launches in 2012/13
  - Test / Evaluation *(low cost / flexible)*
    - Lockheed Martin – Long Term MOU for Reusable Booster Development
    - Armadillo – Repeat Customer
    - Boeing
  - Marketing / Advertising *(a little buzz is a good thing...more is better...)*
    - Three Marketing Events / Commercial Shoots to Date
    - Dozens of International Press Interviews / Photo Shoots



# Current / Potential Spaceport America Operators

Rocket Racing League



Armadillo



Sierra Nevada



XCOR



UP Aerospace



# NM - The Evolution of Space

- The Future of Commercial Spaceflight *(as we see it...)*
  - ▣ In 3 years....
    - Flying People to Space Weekly Here at Spaceport America
    - Private Resupply of Cargo and Crew to ISS (*SpaceX / Orbital*)
    - Access to New Suborbital / Orbital Research Opportunities
  - ▣ In 5 -10 years....
    - Satellite Deployment from Spaceport America
    - Flying Tourists / Scientists to *New Space Stations* Regularly
  - ▣ In 10 - 15 years....
    - Flying on Rocket-Planes from New Mexico to Sweden in 2 Hours
  - ▣ In 20 years....
    - Buy a Ticket to Go to the Moon!



# NM - The Evolution of Space

- The Future in Commercial Terms.....
  - ▣ In 3 years....
    - 300 Jobs
    - Mostly Spaceport / VG Direct Hires
  - ▣ In 5 -10 years.....
    - 500 – 750 Direct / Indirect Jobs
    - Additional Tenants Set up To Operate at Spaceport America
    - Supply Chain Kicks in.....New Businesses, Services, Real Estate Grow
  - ▣ In 10 - 15 years.....
    - 750-1000 Direct / Indirect Jobs
    - Over \$20M Contributed to Local Education via GRT (est.)
    - Direct Spaceport Revenues Exceed Project Cost (est.)
  - ▣ What is The Economic Impact? What Are The Limits?



# NM - The Evolution of Space

- What is Our Response? When?
  - Understand The Timelines / Needs / Impacts
    - Community / Region / State
    - Supply Chain: Local Business Growth / Global Recruitment
  - Identify / Respond to Critical Needs
    - Infrastructure Where Necessary
      - HRTM
      - Spec Space?
      - Workforce Training
    - Branding / Marketing
  - Align Our Businesses - Be Ready
- Community Leadership / Cooperation
  - Regional / Statewide Efforts to Maximize Benefit
    - Discussions Beginning...





*Questions?*

*Answers?*

Come Join Us / Get Involved:

GLCCC Commercial Space Committee

2<sup>nd</sup> Thursday, 9am

760 W. Picacho, Las Cruces, NM