

SPACEPORT AMERICA
OUR NATION'S GATEWAY TO SPACE!

Rural and Economic Development Committee

New Mexico Spaceport Authority update

Spaceport Update - Outline

- 1 chart Bottom line Upfront
- 2 chart NMSA activity status – good news
- 5 charts The Commercial Space Industry - NMSA's vision going forward
- 6 charts Sub-Orbital, Orbital, Transportation, Partners
- 2 charts STEM initiatives
- 3 charts Signature events
- 2 charts Financial charts

Dan Hicks
CEO, Spaceport America



SPACEPORT AMERICA

BOTTOM LINE UPFRONT

Three Facts

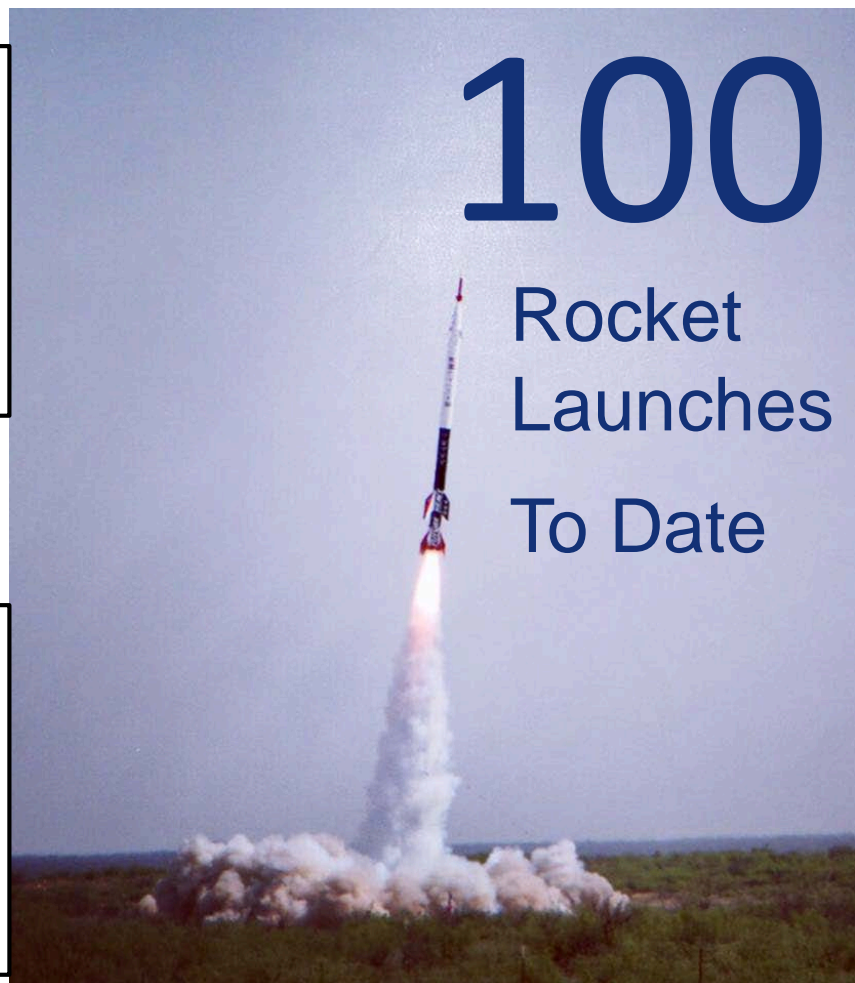
- Spaceport America is creating jobs!
- \$9.2M customer revenue to date!
- Commercial Space Industry continues to grow!

Two Requests

- Revert to prior year funding level
\$375k (FY18) + \$625K = \$1M (~FY12)
- Support the Commercial Space Protection Act Legislation

100

Rocket
Launches
To Date



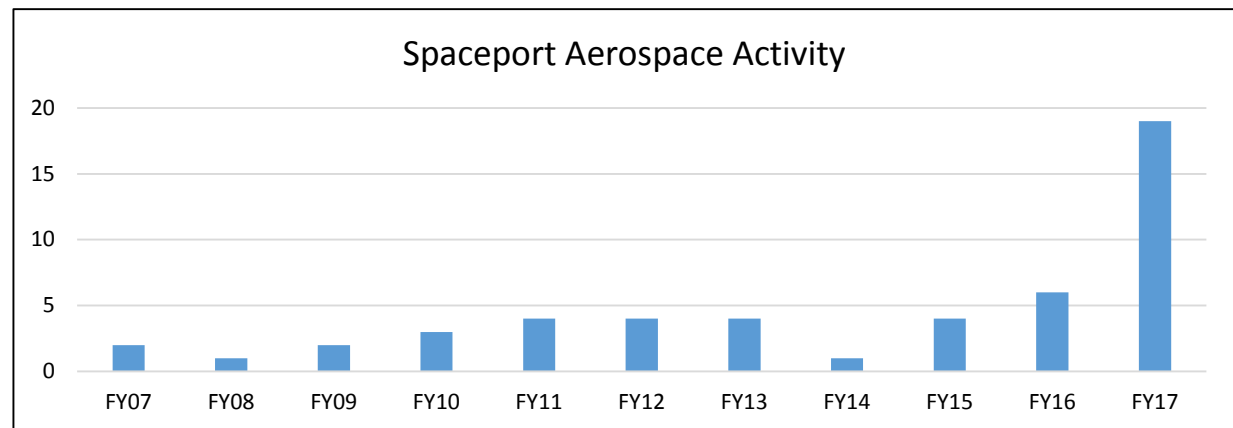
Spaceport America is successful and Operational!

AEROSPACE ACTIVITY



- FY17 Aerospace activity breakdown
 - 14 Launches from VLA
 - 60 Launches during the inaugural Spaceport America Cup
 - 2 Launch system tests
 - 1 Flight mission from HLA
 - 2 Balloon missions

- **Spaceport activity over time**



*Does not include 60 launches from SA Cup Event

- New jobs created each year
- Estimated **100 new jobs** in FY18

Estimated Avg 60k salary generates 6M in first-order economic stimulus in FY18

| | <u>FY16</u> | <u>FY17</u> | <u>FY18</u> |
|-------------|-------------|-------------|-------------|
| Total | 50 | 75 | 175 |
| SA | 18 | 18 | 20 |
| VG | 15 | 25 | 120 |
| Contractors | 20 | 32 | 35 |

U.S. COMMERCIAL SPACEPORTS

The Commercial Space Industry is **\$330B** per year & growing



Key

- ◆ U.S. Federal Launch Site
- Non-Federal FAA-Licensed Launch Site
- * Owned by University of Alaska Geophysical Institute
- * Sole Site Operator

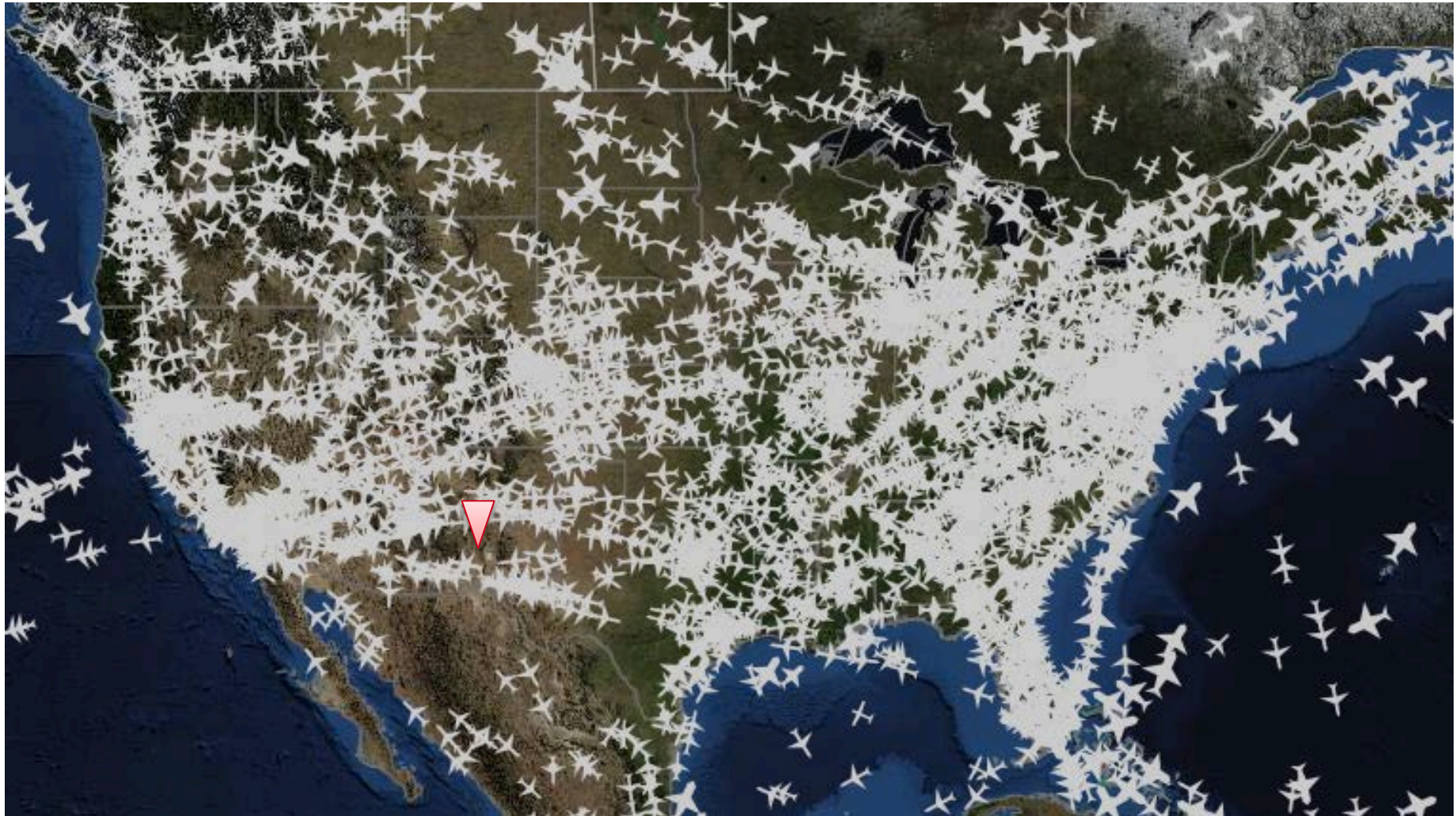
Sea Launch Platform
Equatorial Pacific Ocean

Reagan Test Site
Kwajalein Atoll, Marshall Islands

Spaceport America = 40 Vertical launches, 10 were to space; IREC another 60 Vertical launches; 7 major Horizontal Flight efforts

| | | | | | | |
|---|---|----------------------------|---|---|------------------------------------|--|
| <p>Cecil Field Houston Midland Oklahoma</p> | } | <p>No launches to date</p> | <p>Cape Canaveral Mid-Atlantic California</p> | } | <p>Large rocket, orbital focus</p> | <p>Mojave => Three air launches to space Kodiak => Seasonal launch site for target missiles Blue Origin => Single customer only Poker Flat => Arctic research only</p> |
|---|---|----------------------------|---|---|------------------------------------|--|

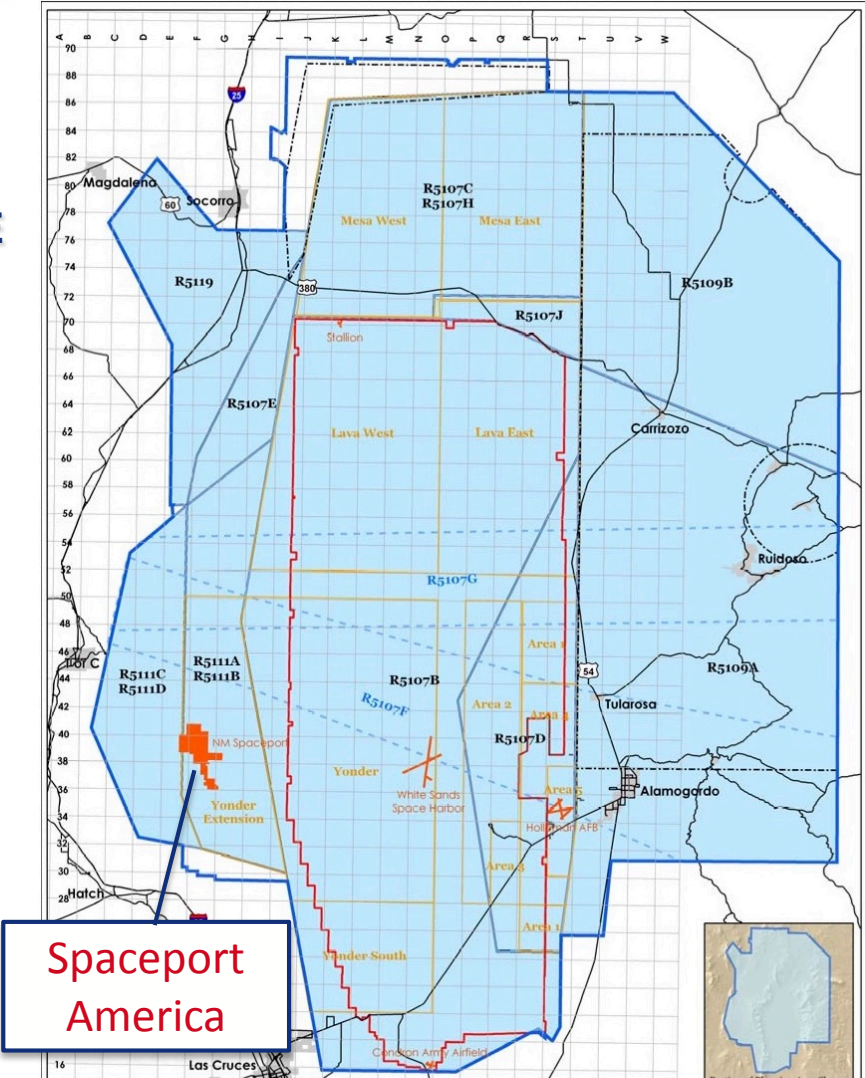
NATIONAL AIR TRAFFIC



 Spaceport America's strategic advantage = 6,000 sq. miles of restricted airspace in collaboration with U.S. Army White Sands Missile Range

SPACEPORT AMERICA IS A NATIONAL TREASURE

- **WE ARE UNIQUELY LOCATED AND PROVIDE ROUTINE ACCESS TO SPACE THAT DOES NOT EXIST ANYWHERE ELSE IN THE COUNTRY!**
- **WSMR AND NMSA HAVE A STRONG PARTNERSHIP TO SUPPORT BOTH THE COMMERCIAL SPACE INDUSTRY AND OUR NATION'S NATIONAL SECURITY INTERESTS!**
- **THE R5111 & R5107 COMPLEX ARE SURFACE TO UNLIMITED**



Access to Space - 24/7 through our WSMR partnership!

SPACEPORT AMERICA VALUE PROPOSITION

- **340+ DAYS OF SUNSHINE**
- **LAUNCH STARTS AT ELEVATION OF 4,600 FT ABOVE SEA LEVEL**
- **NO DAMAGE FROM SALT AIR CORROSION**
- **FIRST PURPOSE BUILT COMMERCIAL SPACEPORT**
- **LOW POPULATION DENSITY**
- **REMOTE LOCATION AND 24/7 SECURITY OFFERS PRIVACY**
- **ACCESS TO 6,000 SQ MI OF RESTRICTED AIRSPACE**

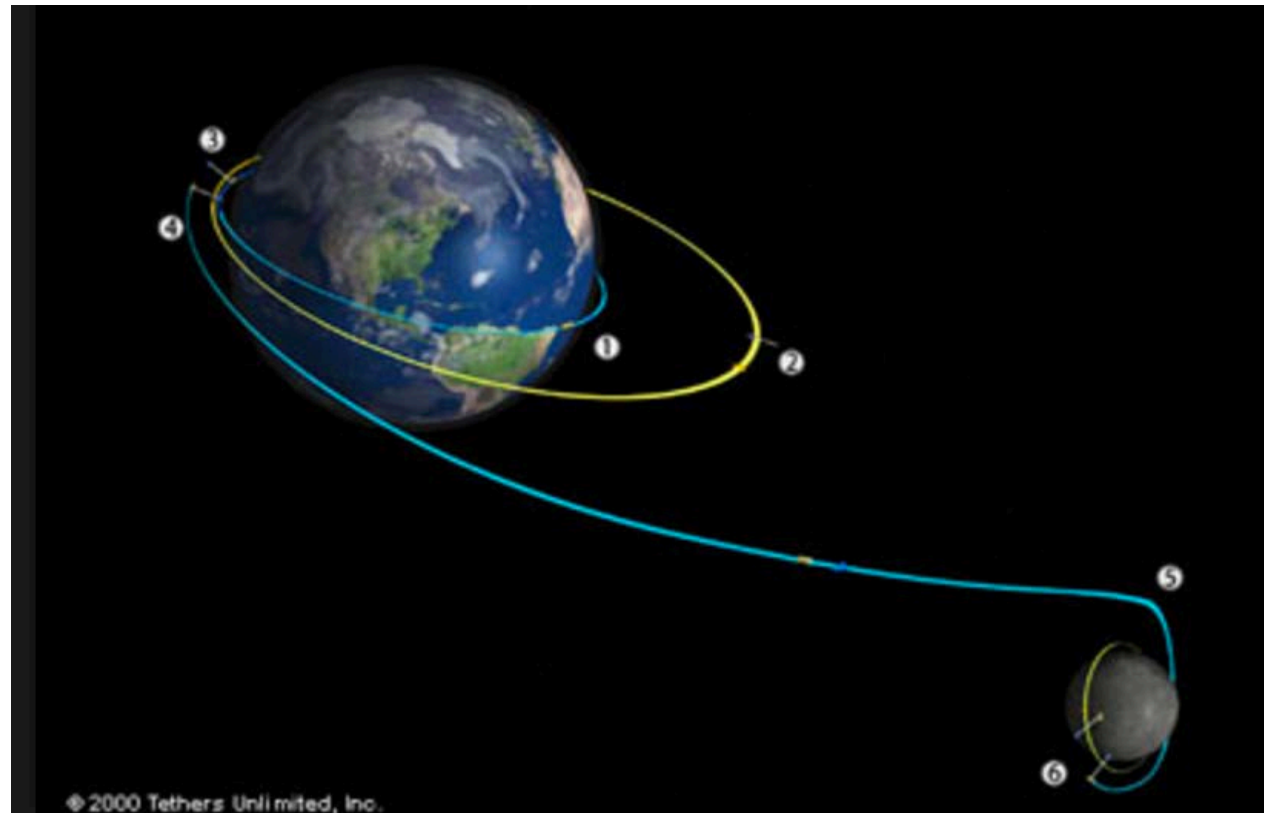
WE HEAR FROM OUR CUSTOMERS, "THERE IS NO OTHER PLACE LIKE SPACEPORT AMERICA FOR OUR OPERATIONS."

Unique attributes make Spaceport America a National Treasure

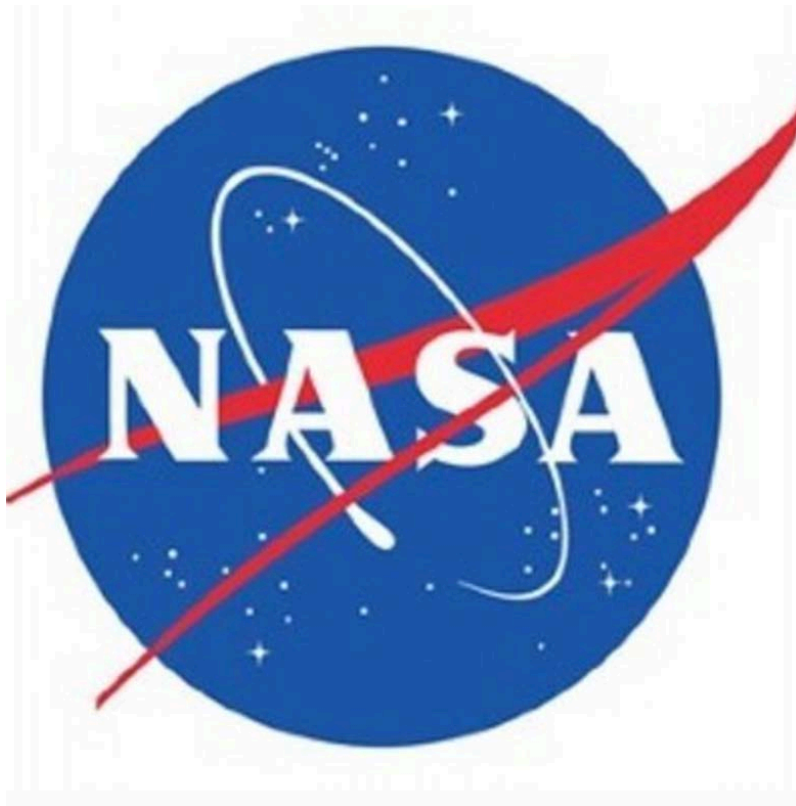
CURRENT & FUTURE GROWTH

- **SUB-ORBITAL- FOCUS ON RESEARCH/ASTRONAUT EXPERIENCE**
We have three of the top four Sub-orbital Launch Operators as tenants!
- **ORBITAL – WITH THE RIGHT TECHNOLOGIES**
Spaceplane, Single-Stage to Orbit, Returnable Booster, etc
- **TRANSPORTATION HUB – A FULL SERVICE SPACEPORT!**

**GOAL IS TO DEVELOP
PRIMARY INLAND
SPACEPORT TO SUPPORT
OUR NATIONS
COMMERCIAL, NASA AND
DoD INTERESTS**



WE HAVE 3 OF THE TOP 4 SUB-ORBITAL LAUNCH PROVIDERS AS TENANTS



SOME EXPERIMENTS CAN'T TAKE PLACE HERE
ON EARTH OR WOULD TAKE MUCH LONGER

It is going to take a lot of advances in life and material sciences to send humans to Mars by the 2030's...

Spaceport America is in an **excellent position** to support the micro-gravity research needed for the Commercial Space Industry and NASA's exploration efforts

THIS MICRO-GRAVITY RESEARCH IS IMPORTANT AS IT WILL LEAD TO MANY ADVANCES SUCH AS CANCER FIGHTING MEDICATIONS



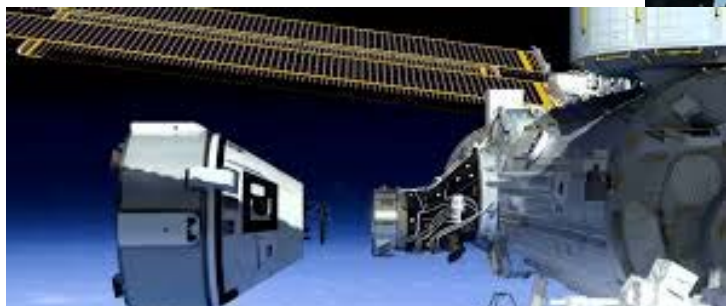
Photo credit: Team Daniela Grim
Poorly differentiated follicular thyroid cells shortly before launch. The cells were then exposed to microgravity aboard the International Space Station for the Cellbox-Thyroid investigation.

PIPELINE2SPACE (SMALL SAT CONFERENCE)

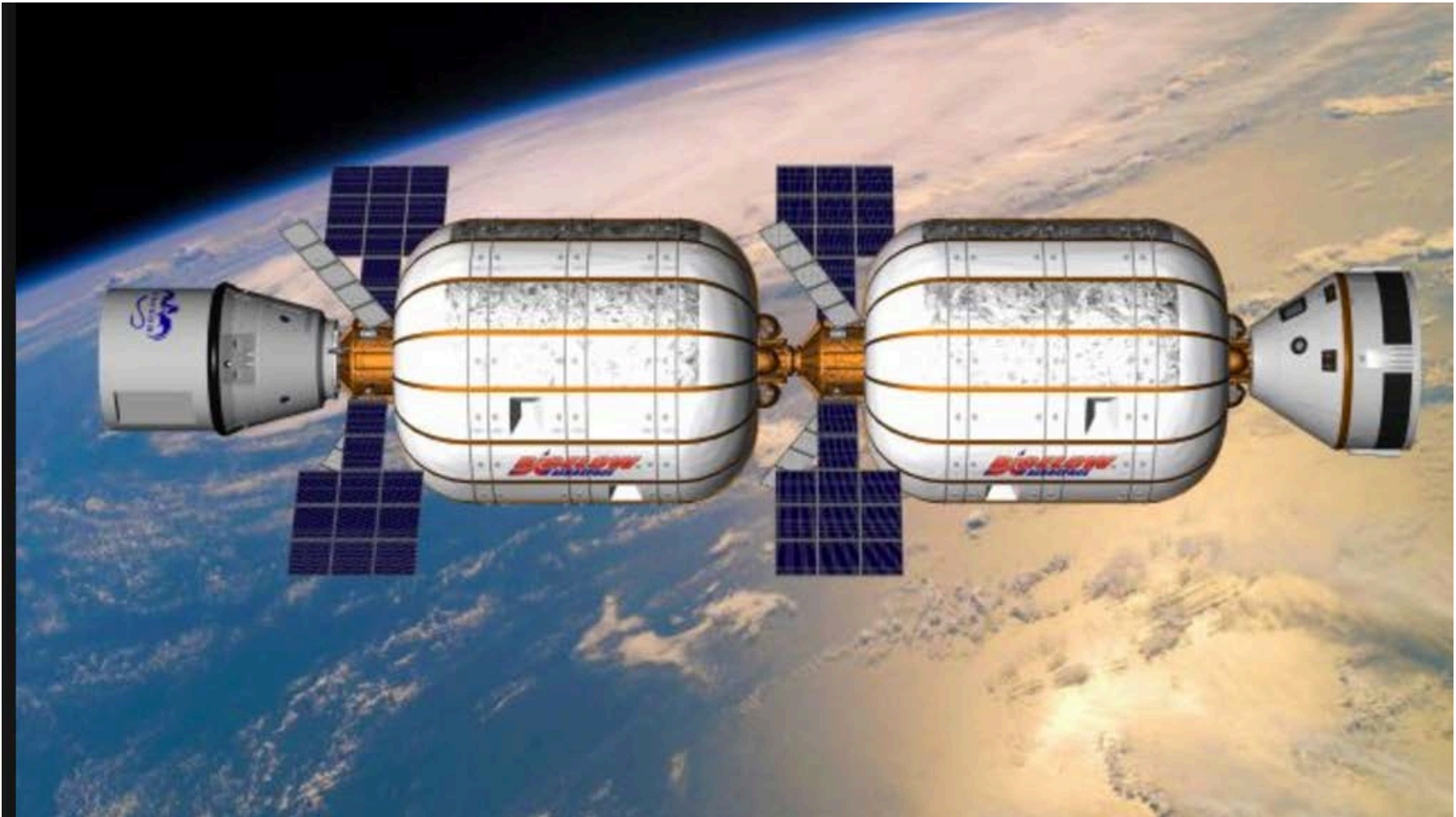


HIGH VISIBILITY SPACE TESTING

- Working with WSMR and Boeing on multiple drop tests of the new Crew Transportation Capsule for the International Space Station – 2016 – 2017
- First successful launch Feb 2017



Launch of Low Earth Orbit (LEO) Satellites and habitats

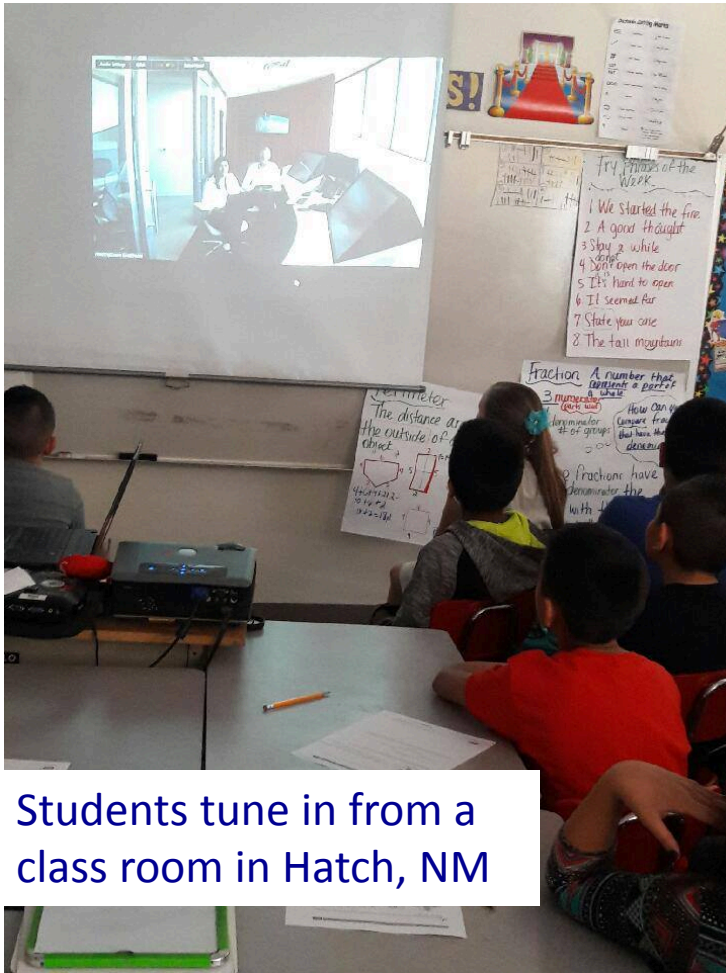


NEAR-MID TERM FOCUS

Point-to-Point transportation with spaceplanes



STEM: VIRTUAL FIELD TRIPS



Students tune in from a class room in Hatch, NM



“WHAT IS SPACEPORT AMERICA” PROGRAM”

17 classrooms across NM i.e. Aztec, Moriarty, Albuquerque, Deming, Las Cruces, Hatch and others

FieldTripZoom is a Unique Educational Partnership to make Spaceport America STEM content available to educators across the world!

No cost to every school in New Mexico! Launched February 2017.

STEM: USC LAUNCH MARCH 2017



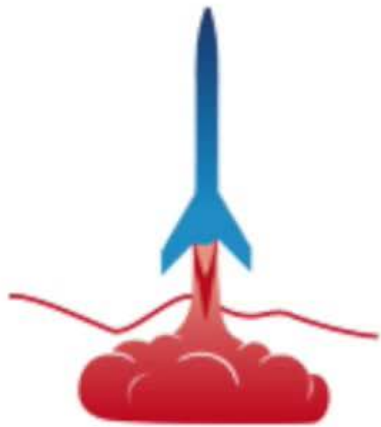
SPACEPORT AMERICA RELAY RACE

- April 8-9, 2017
- 22 running teams performing relay race (247 runners)
- El Paso, La Union, Gadsden, Chamberino, Vado, Mesquite, Mesilla, Las Cruces, Radium Springs, Rincon, Hatch, Salem, Garfield, Arrey, Williamsburg, Truth or Consequences, Spaceport America
- Community organization with local law enforcement



- June 19-24, 2017
- 60 student rocket launches
- 91 university teams from 12 countries on 6 continents
- 1,622 visitors on site
- 82% out-of-state visitors
- Event revenue of \$188,852

SA CUP SIZZLE REEL



SPACEPORT AMERICA®
CUP

BUDGET SUMMARY



Revenues

| | | <u>FY18</u> | <u>FY19</u> |
|-----|------------------------|---------------------|---------------------|
| 111 | General Fund Transfers | 375,900.00 | 1,000,000.00 |
| 130 | Other Revenues | 5,466,600.00 | 6,610,000.00 |
| | Total | 5,842,500.00 | 7,610,000.00 |

Expenses

| | | | |
|-----|--------------|---------------------|---------------------|
| 200 | Personnel | 1,814,000.00 | 2,534,200.00 |
| 300 | Services | 2,285,700.00 | 2,883,900.00 |
| 400 | Other Costs | 1,742,800.00 | 2,191,900.00 |
| | Total | 5,842,500.00 | 7,610,000.00 |

- **Requesting 30% budget increase for agency in FY19**

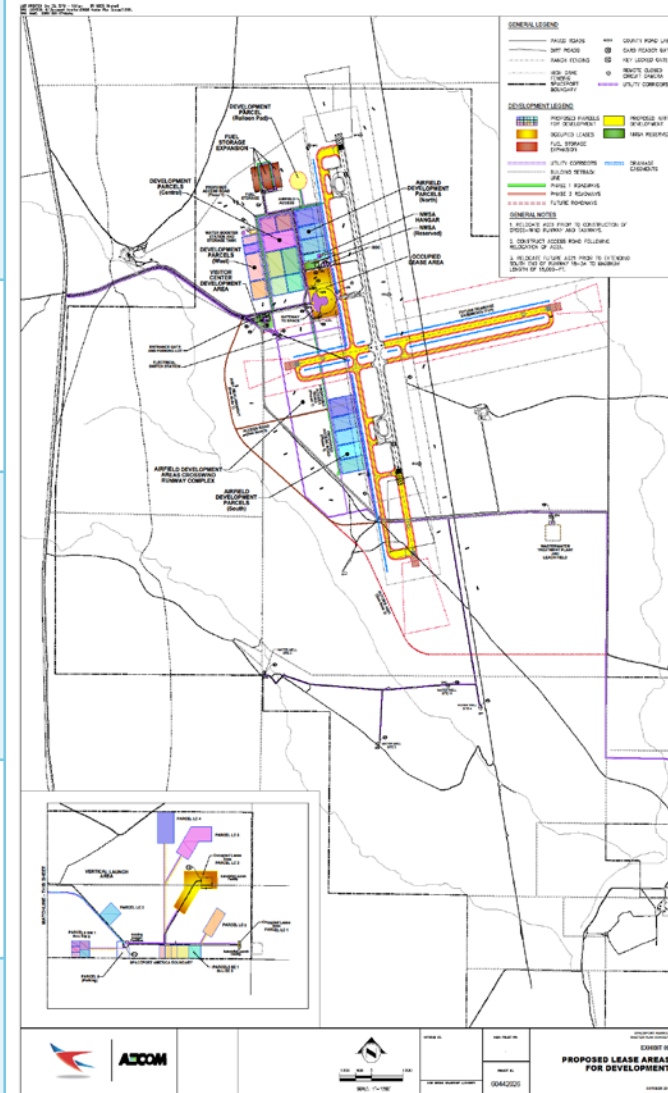
Increased Airspace Management Rqmnts (VG flights, HAFB, FAA coord, etc)

Increased Rocket Launches & Events

Required Preventative maintenance

CAPITAL IMPROVEMENT PLAN

| Name | Description | Amount |
|---|--|---------------------------------|
| SA Facilities Upgrades | Major repairs and upgrades on existing facilities at Spaceport America to include electrical, HVAC, fire suppression, water, sewage, security, mission control and other building systems. | 500,000 |
| Launch Vehicle Integration Facility | Construction for a new facility at Spaceport America for launch vehicle payload integration | 20,000,000 |
| Fuel Farm Installation | Construction for new fuel farm installation to include planning, design, and construction of concrete foundation, fuel tanks, electrical, support vehicles, and other infrastructure. | 5,000,000 |
| Spaceway Taxiway | Construction for improvements to the Spaceway at Spaceport America including taxiway infrastructure | 20,000,000 |
| Vertical Launch Area (VLA) Improvements | Major repairs in the Vertical Launch Area at Spaceport America to include electrical, communications, security, launch infrastructure/facility upgrades. | 500,000 |
| | | Total cost: \$46,000,000 |



SEE YOU IN SPACE!

