

# NM Finance Authority Oversight Committee

## New Mexico Spaceport Authority

August 13, 2020

### Outline

- Investigation Status
- Intro of Interim Executive Director
- Spaceports and Space Economy Review
- Spaceport Related Jobs
- Customer Activity Review
- Other Site Activities
- Site Improvements
- Capital Improvements

**Scott McLaughlin**

Interim Executive Director /  
Director of Business Development



**SPACEPORT AMERICA**

The Space to Be...

- **WHISTLEBLOWER COMPLAINT**

- Received on June 12, 2020
- General Counsel Melissa Force became acting Executive Director
- CFO resigned June 21, 2020
- Director of Business Development, Scott McLaughlin, took over as interim Executive Director on July 23, 2020

- **INVESTIGATION**

- Investigation started by EDD is continuing, and will likely end in another 3 weeks
- The Office of the State Auditor, under Brain Colón, has started a Special Audit

- **SPACEPORT STATUS**

- SA is operating well, with several activities on site
- CFO and other open positions are being advertised
- It is expected that investigation recommendations will be implemented and will make NMSA a stronger organization.

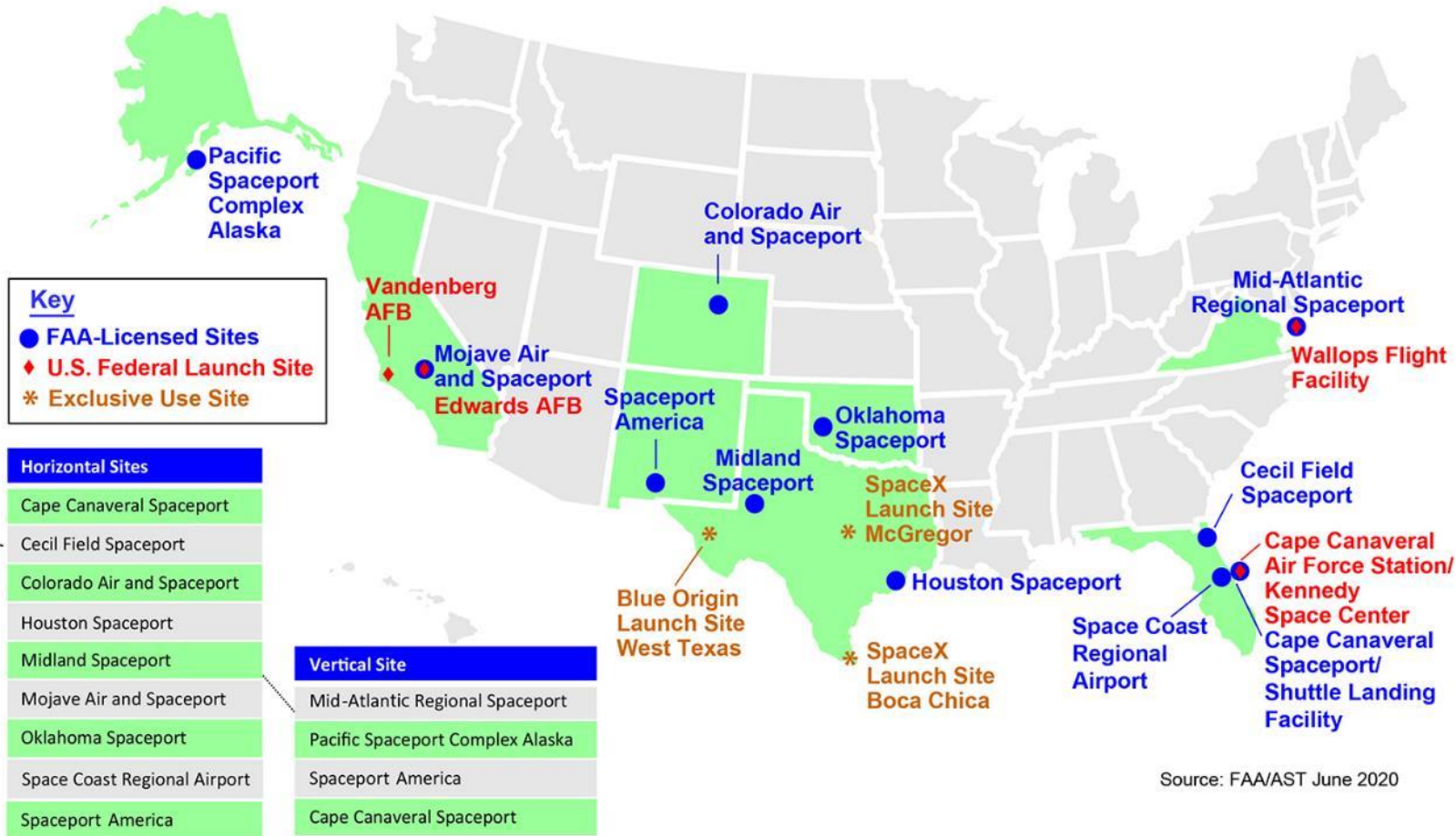
Thanks to the NMSA Board, Chaired by EDD Secretary Alicia Keyes, and the Governor's office for support and guidance while NMSA continues operations.

# INTERIM EXECUTIVE DIRECTOR, SCOTT McLAUGHLIN



- Engineer and entrepreneur with significant experience in both federal service and private industry
- Third generation New Mexican, born in Albuquerque, raised in Las Cruces; graduate of New Mexico State University with B.S. in Electrical Engineering; most of the way thru an M.S. in Business Management
- First worked at White Sands Missile Range (WSMR), also National Oceanographic and Atmospheric Administration (NOAA), private companies, brief stint at NASA
- Have performed executive management, research and development, design, field work, production, sales and business development, proposal creation, papers, presentations, contract negotiation and management, project management, etc.
- Started new small business unit, growing business from home office, becoming part owner, and growing and running virtually all aspects of business
- Significant experience with test ranges, and activities around aerospace, aviation, and lighter-than-air systems; understand how to work with government agencies
- Have traveled extensively and dealt with domestic and international customers
- Am a *Boomerang* – left NM, but came back after 25 years to be Home
- Thrilled to work at Spaceport America... and help NM define its *own* future

# U.S. SPACEPORTS

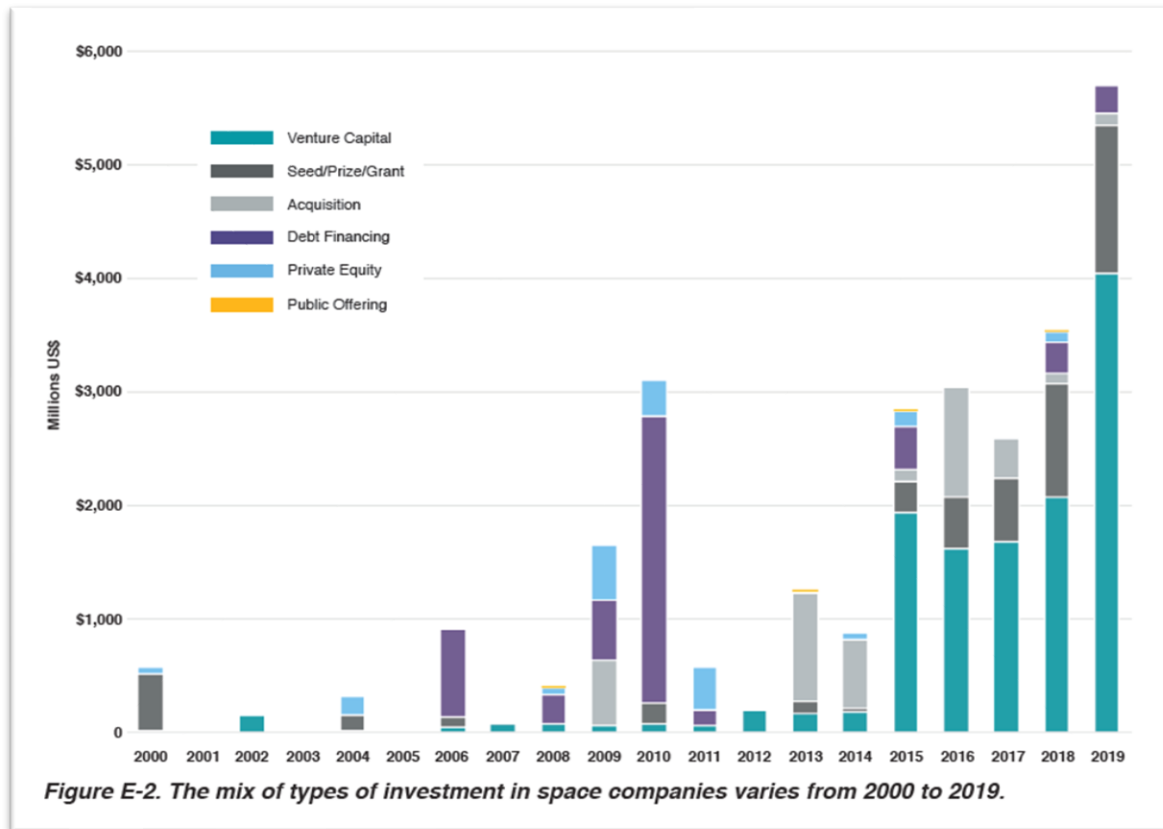
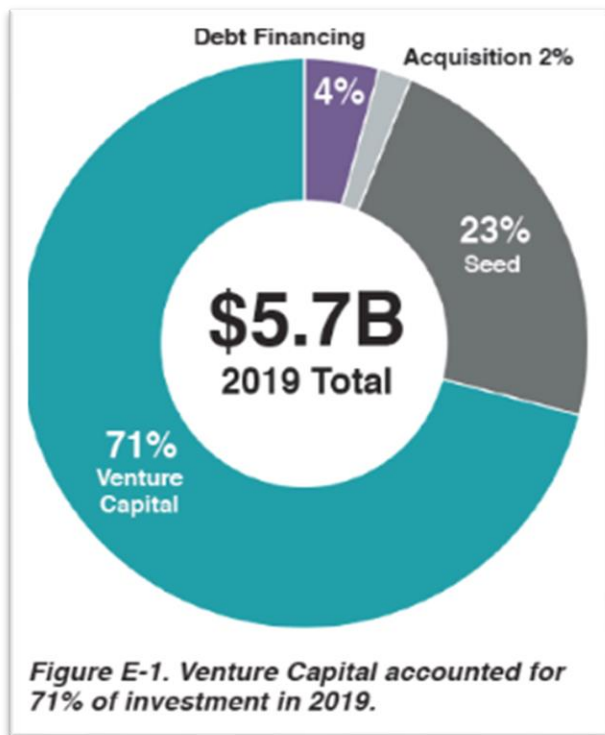


Source: FAA/AST June 2020

Several others spaceport are being developed. New Mexico has several competitive advantages including restricted air space, good weather, remote sparsely populated location, and partnership with White Sands Missile Range.

# SPACE INVESTMENT CONTINUES TO INCREASE

*“Start-up space ventures attracted \$5.7 billion in financing of all types during 2019, shattering the \$3.5 billion record set the previous year. This was largely driven by investors continuing to pour large amounts of capital into a handful of the industry’s largest companies.” Ref.: Bryce Start-Up Space 2020 (<https://brycetek.com/reports>)*



# SPACEPORT AMERICA RELATED JOBS



- ABOUT **230 PRIMARY JOBS** DIRECTLY CREATED DUE TO THE SPACEPORT
  - **Virgin Galactic** moved on site summer of 2019; about 180 employees with about \$9M spent by employees on local real estate
  - **SpinLaunch** began construction summer of 2019, and hopes to complete site by late 2020 (construction jobs not included in above number, but should be ~30 full-time engineers etc.)
  - **AeroVironment / HAPSMobile** constructed new site spring 2020 and made first flight in July; about 35 employees working on site
  - **UP Aerospace** leases are for building rocket motors and launch (periodically on site)
  - Working with **two more prospects** for permanent facilities on site for 2021
  - Expect to grow to over 300 related jobs during 2021

*Primary (private employer) jobs bring “new money” to the local economy and can create two to three secondary jobs. Aerospace related jobs pay significantly higher than mean wages in the area.*



- **SPACESHIP TWO AND WHITEKNIGHT TWO**

- Permanently located in the Gateway to Space Hangar

- **FLIGHTS**

- Many flights by *VMS Eve* (mother ship) aircraft
- Two glide flights of *VSS Unity* (spaceship)
- Rocket powered flight expected later this year
- Expect FAA certification in 2021, as well as flight by Richard Branson



- **SOLAR-POWERED HIGH-ALTITUDE PLATFORM-STATION (HAPS)**
  - Began conversation in late summer 2019, began construction in February 2020
  - Over \$8M in construction paid by customer for unmanned aerial vehicle (UAV) test site
  - Includes large hangar, offices, mission control, maintenance space
  - Airplane has 260' wingspan, 10 electric motors, and can fly to 80,000'
  - Eventually two will be on site; multi-year effort for FAA certification



Press release: <https://tinyurl.com/y49ksmuv>



# AEROVIRONMENT NEW TEST SITE



About 35 people on site, with increase when flight operations – up to 100

- STATUS

- Continuing construction of 30-meter (world's largest) evacuated centrifuge
- This is suborbital, but technology will act as 1<sup>st</sup> stage for eventual larger orbital version
- Expect stable workforce (~30) and numerous tests a year
- 2021 should be a big year...



- UAV TEST FLIGHT

- Important test flight of High-Altitude Long-Endurance (HALE) to help secure further development and funding, partnered with NASA Ames



# EMERGENCY PREPAREDNESS EXERCISE

- **CRISIS SIMULATION**

- Three-day exercise, which involved all spaceport personnel, local law enforcement, county partners, NM State Police, DHS, many volunteers; 14 agencies in total
- Instructors from and paid for by NCBRT/LSU (<https://www.ncbrt.lsu.edu/>)
- Prepares site personnel for larger events such as first powered VG flight and other
- Excellent training for all, not just related to spaceport events





# OTHER ACTIVITY IN LAST YEAR

- **VERTICAL LAUNCH ACTIVITY**
  - Several launch events including NM Tech, UP Aerospace, EXOS Aerospace, Boeing CST-100 (balloon), USC Rocket Propulsion Lab, Princeton, Operations Space, and other small aerospace companies
- **NON-AEROSPACE**
  - Several non-aerospace events bringing in important revenue and hotel stays, including Harpers Bazaar (photoshoot), Infiniti (new model year car reveal), Ad Astra movie DVD release, ECTA Racing (Note: only scheduled on non-interference basis for aerospace activity)







- New outreach effort... online videos on STEM topics
- Designed to be helpful during COVID-19

- Various STEM events on-site
- Visit to all local middle schools
- Fall 2019 Road trip to northern New Mexico
- Shifting to all virtual STEM outreach



**Strato Journey- STEM+C**  
October 12-13, 2019

6 teams, 1 Goal:

Tow a student built, FAA approved experimental UAV, tethered to a weather balloon up to an altitude of 100,000 ft. Then release the UAV from the weather balloon and fly the UAV back for a landing at Spaceport America.

# SITE IMPROVEMENTS

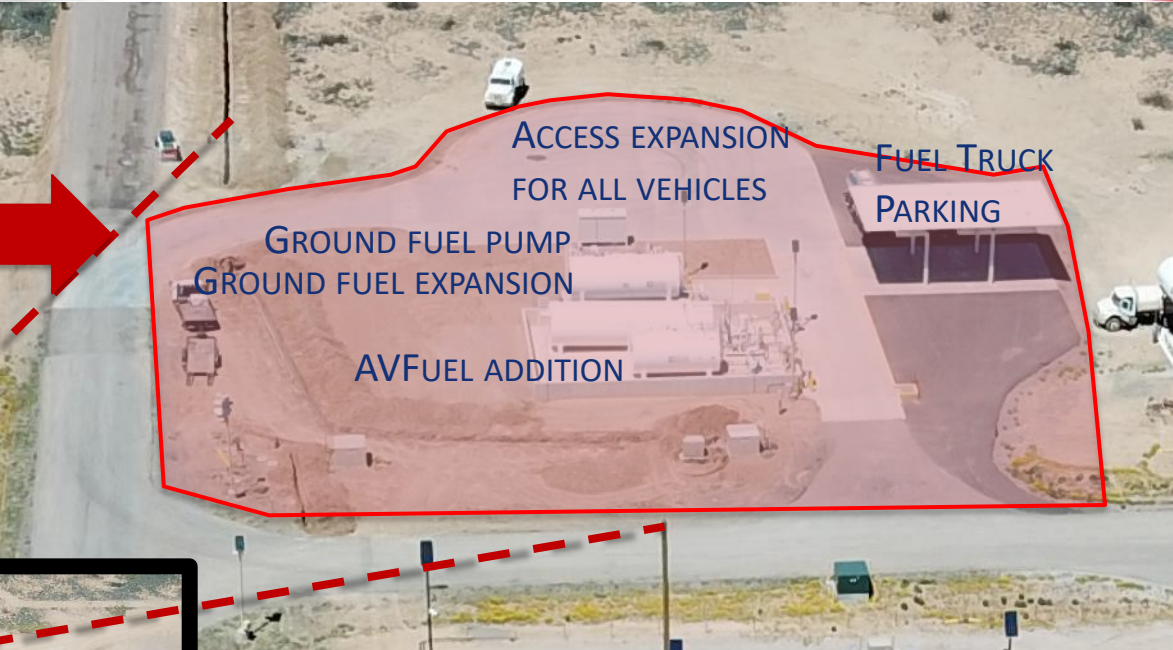
- Fuel farm upgrades
- Radio system (coordinating with DoIT)
- Runway painting
- Parking lots and road work
- General improvements in getting ready for ongoing commercial operations
- Working on refresh of T or C visitor center and visitor experience
- Ongoing updates to utilities, IT, buildings, roads





# FUEL FARM IMPROVEMENTS

- NMSA ground and aviation fuel upgrade:
- Phase 1 Complete: Oct. 2019
- Phase 2: Fence line and Access Control installation:
- Completion Nov. 2020



- Unleaded
- Diesel
- Avgas
- Jet fuel

## VG INVESTMENT UPGRADE FOR SUPPORT OF SFS GASSES

- Nitrous Oxide
- Oxygen

# Spaceport America Cup

- SPACEPORT AMERICA CUP



- Could not hold in 2020 due to COVID
- Usually over 1500 college students from 17 different nations
- Fills up hotels in area for over a week
- Good marketing for New Mexico and Spaceport America



# Spaceport America Cup Sponsors



## Blast Off Sponsors



## Awarding Sponsors



## Apogee Sponsors



Introduces sponsors to NM and Spaceport America  
Also large recruiting event for sponsors



- **CANCELLATIONS AND POSTPONEMENTS**

- Cancellation of SA Cup
- Postponement of multiple vertical launches and other events scheduled this spring, summer, and fall (11 and counting)
- Slowdown of various activities in order to help to prevent coronavirus spread (travel restrictions, working from home, etc.)
- Customers seem to also be slowed in some efforts
- All tourism visits suspended

- **SILVER LINING**

- Everybody knows how to use cloud and virtual office technology...

# CAPITAL PROJECTS IMPROVEMENT PLAN FY21-FY25

- **CURRENTLY PAUSED...**
  - Due to open investigation, all CapEx projects are under review
  - Possible scope changes and reprioritization
  - IT equipment refresh was removed in Special Session
- **CAPITAL IMPROVEMENTS TASKS AND PROJECTS INCLUDE:**
  - Sidewalks, roads, parking lots
  - Security and safety improvements
  - Related environmental work (archeology, geotechnical/soils boring, etc.)
  - IT Center and Access Control Facility
  - Payload Processing Facility (Horizontal Launch Area)
  - Launch Rail and related site improvements (Vertical Launch Area)
  - General Purpose Hangar
  - Utility improvements and repairs (water, electricity, IT)
  - Future: Visitor Center, Taxiway, Rocket Motor Test Stands, Range Instrumentation, Warehouse/Maintenance building

# SPACEPORT AMERICA

THE SPACE TO BE....

THANK YOU  
FOR YOUR TIME

