Virginia Space & MARS

- Virginia Commercial Space Flight Authority
- VCSFA is a political subdivision of the commonwealth of Virginia
- Legislatively modeled after Port of Virginia with corporate headquarters located in Norfolk
- Virginia Space owns and operates the Mid-Atlantic Regional Spaceport (MARS) where the majority of the workforce is located
- The MARS Spaceport is collocated on Wallops Island where Virginia Space is a tenant of the NASA Wallops Flight Facility
- MARS facilities include launch pads, a Payload Processing Facility (PPF), secure offices, control rooms and a UAS Airfield
A Brief History of Virginia Space

1995 – VCSFA Created by Virginia
1997 – NASA Space Act Agreement
1997 – FAA Launch License for Orbit
1997 – Spaceport Established
2006 – First Flight MARS Pad 0B (TacSat-2)
2012 – MARS Pad 0A Completion
2013 – First Flight MARS Pad 0A (A-One)
2013 – First Lunar Flight from MARS Pad 0B (LADEE)
2016 – Antares Return to Flight MARS Pad 0A (OA-5)
2016 – UAS Airfield Completion
2017 – PPF Approval, Design, & Ground Breaking
2018 – PPF Construction; Rocket Lab Launch Agreement
2019 – Antares Late Load & First ThinSat Flight (NG-11)
2019 – PPF Operational; LC-2 Construction
Virginia Space Team

- ~78 Virginia Space Direct Employees
  - MARS (68) & Norfolk (10)
  - Engineers, Technicians, Inspectors, Logisticians, and Support Staff
  - Strong experience in construction, testing, and operations

- Wide Range of On-site Subcontractors:
  - Full Suite of Engineering Services
  - Precision Fabrication & Cleaning
  - Construction & Mobile Crane Services
  - Control System & Software Development
  - Small Satellite Design, Build, Test and Fly
  - Unmanned Systems

- Developed a local talent pipeline through training and successful internship programs for sustainable and expandable workforce

- Partnerships with regional universities and local technical college

- > 20% of workforce at MARS are former interns

Virginia Space Employees Areas of Expertise

- GSE for Liquid/Solid LVs
- Facility Design/Construction
- Maintenance and Calibration
- Data Analysis
- Project Management
- Systems Engineering
- High Pressure and Cryogenics
- Certified Electricians
- Certified HVAC Technicians
- Forklift/ Manlift Operations
- Crane Operators and Riggers
- Safety & Quality Programs
- Environmental Compliance
- FAA Coordination
- Documentation Development
- Government Contracting
Rocket Lab announced the selection of Virginia Space and MARS for LC-2 on October 17, 2018.

LC-2 will be the first launch facility for the Electron vehicle located in the United States.

Virginia Space is also building an Integration & Control Facility (ICF) for Rocket Lab vehicle processing and launch operations.
MARS Payload Processing Facility (PPF)

- Mission processing for multiple payloads in one facility from arrival to encapsulation.
- Multiple Segregated Processing Spaces
- Payload Integration & Fueling
- Stage Integration
- Building Designed to Separate LV and SV
- SV Space Built per ICD-705
- ISO 8 (100K) Cleanroom Standards
- Multiple Overhead Cranes

Design Key: ISO 8 (100K) Cleanroom Standards
Tree clearing began in December 2017
Ribbon Cutting July 11, 2019
Operational testing in work now
Customer operations to begin this summer
MARS UAS Airfield

- UAS Runway 14/32 - 3000’ x 75’
- Access controlled by Virginia Space
- Reinforced Vertical Take Off and Landing (VTOL) Pad
- *Future Water Access
The Economic Impact of Wallops Island

- Total economic impact of Wallops Island is estimated at $1.37B
  - Direct impacts are estimated at $820M
  - Indirect impacts are estimated at $284M
  - Induced impacts are estimated at $265M
- The installations and organizations currently associated with the Wallops Island Aerospace Cluster are NASA WFF, the U.S. NAVY SCSC, NOAA, the U.S. Coast Guard, Virginia Space, Northrop Grumman Innovation Systems, and Rocket Lab, USA.