



# ***Mid-Atlantic Regional Spaceport***

***VA JCOTS  
Aerospace Advisory  
Committee***

***“History and Current Activities”***

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Virginia Commercial Space Flight Authority***



# *The Beginnings*

- ***Virginia Commercial Space Flight Authority***
  - ***Established by General Assembly: July, 1995***
    - ***Code of VA Sec 2.2-2201 to 2217***
  - ***In Response to opportunity to stimulate economic development and education in aerospace sector***
    - ***Expected growth in commercial space enterprise***
    - ***Federal “dual-use” initiatives***
    - ***Inventory of VA resources by VA CIT***
  - ***Preservation and viability of Federal activities in VA***
  - ***To level the opportunity for VA among states competing for federal initiatives***
    - ***FL, CA, AK***
  - ***Primary focus became Wallops Flight Facility and establishment of a “commercial spaceport”***



# *The Beginnings*

- **Formative Milestones**

- **University based Center (ODU, 1992)**
  - **Competed for USAF Dual-Use Infrastructure Grants**
  - **Developed commercial spaceport concept with industry, NASA**
- **VCSFA formed (7/1995)**
- **Awarded \$5M USAF Launch Services Contract (4/1996)**
- **Awarded \$900K from Federal EDA for Pad 0-B construction (10/1996)**
  - **VA matched funds**
- **Awarded \$406K NASA infrastructure grant (1/97)**
- **Established Space Act Agreement with NASA (3/1997)**
  - **Land and facilities use, Range Tracking and Safety services**
- **VA Sales/Use Tax Exemption (7/1997)**
  - **Effective until 6/2011**
- **Obtained FAA Launch Site Operators License (12/1997)**
- **Began Phase I Construction of Pad 0-B (12/1997)**



# *The Beginnings*

- **Formative Milestones**
  - *Established VA Space Flight Academy (7/1998)*
  - *Established Public-Private Partnership with DynCorp/DynSpace (9/1998)*
  - *Completed construction of Pad 0-B, Phase I (12/1998)*
  - *Purchased Pad 0-A Gantry (4/2000)*
  - *Foreign Trade Zone designation (8/2000)*
  - *Entered into \$535K Cooperative Agreement with NASA Wallops (5/2002)*
    - *Worked with NASA Wallops in doing \$10M In Facility Improvements*
  - *Awarded \$5M NASA Launch Support Contract (7/2003)*
  - *Governor's of VA & MD Sign MOA (7/2003)*
    - *VCSFA & MD DBED Sign Inter-Gov't Agreement (4/2004)*
      - *Name Change: VSFC to MARS*
      - *Two MD members on VCSFA Board*
      - *Equal representation on VCSFA Spaceport Committee*
      - *\$150K per year from MD*
      - *Establish Mid-Atlantic Institute of Space and Technology*



# *The Beginnings*

- **Formative Milestones**
  - **NASA/MARS Awarded NFIRE Launch Contract (9/2003)**
  - **Completed Pad 0-B Gantry (5/2004)**
  - **NASA/MARS Awarded DARPA FALCON Program Support (5/2004)**
  - **Awarded \$40M USAF Launch Services Contract (8/2004)**
  - **Conducted NFIRE Mission Pathfinder (5/2005)**
  - **MARS Receives \$500K Federal Earmark for Congressional Study (11/2005)**
    - **Funding received/ study begun (9/2006)**
  - **MARS Awarded NASA ALV-X1 Mission (11/2005)**
    - **Conducted Pathfinder (9/2006)**
  - **NASA/MARS Awarded TacSat2 Launch Mission (6/2006)**
    - **Launched Successfully (12/2006)**
    - **Many “First’s”**
  - **NASA/MARS Awarded TacSat3 Launch Mission (1/2007)**
    - **Launch scheduled for 3/15/2008**



# *The Beginnings*

- **Formative Milestones**
  - **Successfully Launched NFIRE Mission (4/2007)**
  - **General Assembly passes Space Flight Liability and Immunity Act (4/2007)**



PAD 0-A

PAD 0-B



# *Summary Status*

- **Fully Operational, FAA licensed Spaceport with demonstrated capability for small-to-mid class launch vehicles/payloads to Low Earth Orbit**
  - **Two launch pads/gantries, interfaces, Range support agreements**
  - **10,000 lb to LEO**
- **Possess Key Competitive Enablers**
  - **Licenses, leases, permits**
  - **Business attractors – tax exemptions, FTZ, Enterprise Zone, low cost**
  - **LOCATION, LOCATION, LOCATION**
- **Weaknesses**
  - **Mass to orbit capability**
  - **Transportation connectivity**
  - **Incentives for prospective businesses**
  - **Limited real estate**
  - **Staffing**
- **Threats**
  - **Encroachment**
  - **Lack of stabilizing funding**



# *Current Activities*

- ***Pursue Opportunities/Business in Three Strategic Areas***
  - ***Small to Mid-Class Space Launch***
    - ***ORS Missions***
    - ***Falcon Class Missions***
    - ***Academic/Student Sub-Orbital & Secondary Payloads***
  - ***Medium to Heavy Class Capability***
    - ***Cargo to Low Earth Orbit***
    - ***NASA COTS Demonstrations***
    - ***Deep Space Exploration Platforms***
    - ***Moon/Planetary Robotic Missions***
  - ***Human Space Flight/Space Tourism/Point-to Point Cargo***
    - ***Sub-Orbital & Orbital Space Tourism***
    - ***“When It Absolutely, Positively Must Be There Today”***



# *Current Activities*

- ***Complete Congressional Study – “Expansion of the Wallops Flight Center into a Next Generation, Commercial Cargo Spaceport”***
  - *Assessment to validate feasibility and viability*
  - *Identifies resource requirements*
  - *Presents a roadmap*
- ***Pursuit of resources to rapidly achieve medium class lift capability***
  - *Extend Pad 0-B Gantry*
  - *Modify Pad 0-A for COTS class demonstrations*
- ***Pursuit of resources for planning, conceptual design of heavy lift***
  - *NEPA, site selection, permitting and approval*
  - *Preliminary design*
- ***Pursuit of space tourism and point-to-point cargo companies***
  - *Needs and requirements definition by company*
  - *Proposals to viable opportunities*



# *Current Activities*

- *Prepare for upcoming launches*
  - *ALV-X1 10/5/2007*
  - *TacSat3 3/15/2008*

