



# **Alaska House of Representatives Military and Veterans Affairs Subcommittee**



Alaska Aerospace Corporation  
2017 Overview Presentation  
February 9, 2017





# AAC 2016 Accomplishments

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- Completed reconstruction of damaged Pacific Spaceport Complex (PSCA)-Alaska facilities from 2014 launch failure
- Signed \$2.2 million launch services contract with Rocket Lab USA for supporting test and development launches of the Electron rocket from Mahia Peninsula, New Zealand
- Signed \$80.4 million multi-year contract with Missile Defense Agency (MDA)
- Rocket Lab USA designated the PSCA-Alaska as their US polar launch site
- Signed contract with Vector Space Systems for planning and programming of future PSCA launches
- Signed a Letter of Commitment with a third (“New Space”) commercial aerospace company to support launches from PSCA in late 2017
- Using a Department of Defense appropriation, AAC invested \$2.6 million in upgrades to PSCA capabilities designed to enhance the ability to cost effectively support future US government and commercial launches
- Ended 2016 with an end-of- year Net Position of \$76.3 million, an increase of seven percent (\$4.9 million) over 2015



## Pacific Spaceport Complex – Alaska Reconstruction

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- Launch failure – August 2014
- Deconstruction and environmental clean-up started in October 2014
- Reconstruction substantially completed in August 2016
- **Davis Constructors & Engineers was primary General Contractor**
- **Ninety percent of work completed by Alaskan companies/contractors**
- Total cost of reconstruction to date is \$33 million
  - Cost is covered by insurance
  - Approximately \$29 million paid by insurance to date
  - Expected cost at completions is \$34.9 million

# August 2014 Damage



2/9/2017



# Integration and Processing Facility (IPF) Damage



# Space Craft and Assembly Transfer (SCAT) Damage





## Deconstruction in Early 2015



## Reconstruction 2016





# SCAT Razing



# IPF Reconstruction





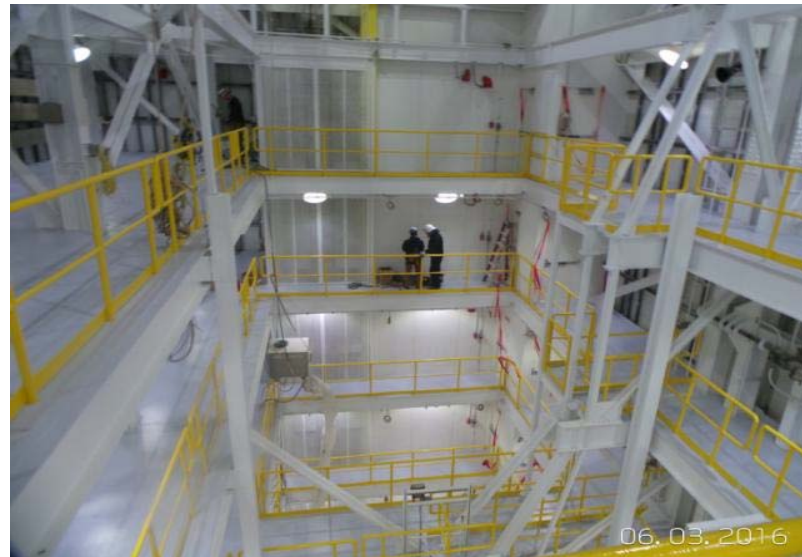
# IPF Rebuilt







# Launch Services Structure Reconstruction



2/9/2017

# Reconstruction Completed



## *Return To Flight Ceremony – August 13, 2016*



# New Customers



- **Missile Defense Agency**

- \$80.4 million Multi-Year, Multi-Launch Indefinite Delivery/Indefinite Quantity Contract
- Terminal High Altitude Air Defense (THAAD)
- \$13.9 million on support and launch contracts through FY2017

- **Rocket Lab USA**



- New Zealand Range Safety Contract (\$2.2M for support of 8 launches)
- PSCA Launch Contract

- **Vector Space Systems**



- PSCA Launch Contract in 2017 (Launch Date Not Releasable)

- **A “New Space” Customer**

- PSCA Launch Contract for 2017 (Launch Date Not Releasable)





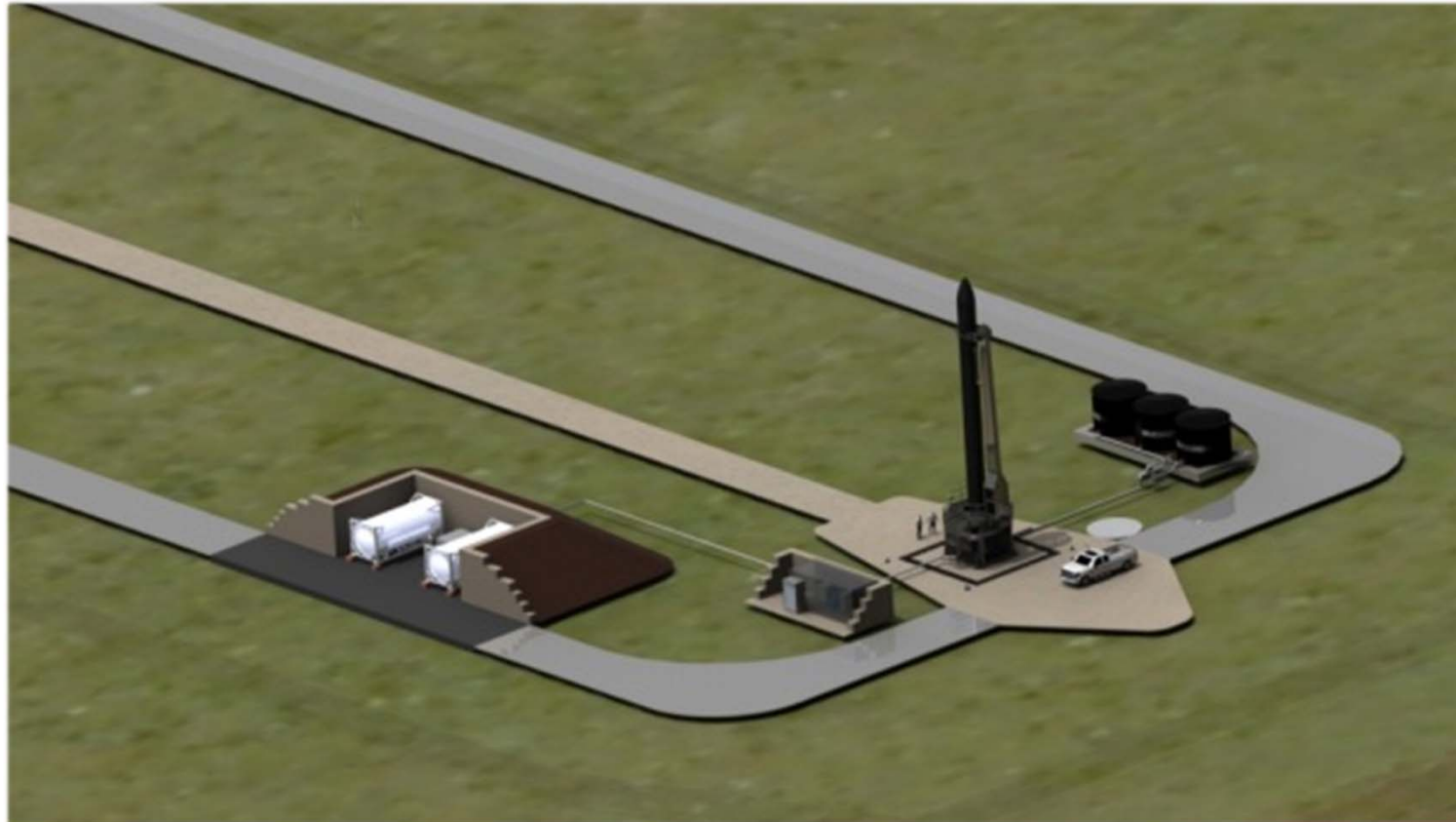


# Equatorial Launch Site Initiative



- Sixty percent of satellite launches are for equatorial orbit
- PSCA can only launch into polar orbit
- AAC Board of Directors passed Resolution #15-07 authorizing the company to proceed with preliminary site evaluation for an equatorial launch facility in the Pacific region
  - Must be located in US territory
  - Must not be co-located with a Federal range
  - Must not overfly populated areas
- Objective of this initiative is to position AAC as the only launch company in the United States that can offer both polar and equatorial launch services to both government and commercial customers
  - Creates niche market with no contemporary competitors
  - Provides unique marketing advantage over other spaceports
  - Provides single cost, procedures, and regulatory framework; lowering costs and increasing efficiencies
- Two primary candidate sites
  - East Hawaii, Big Island, Hawaii
  - Saipan, Commonwealth of the Northern Mariana Islands (CNMI)
- No state appropriated funds are being used for this initiative
- Will not build until customer contracts are secured
- Initial projected operational date is no earlier than late 2018

# Conceptual Equatorial Launch Site





# AAC Self-Sufficiency Pathway

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- Support up to eight Rocket Lab USA Electron launches from the Mahia Peninsula, New Zealand launch facility
- Rocket Lab USA multi-year launch contract for PSCA launches starting in 2018
- Vector Space Systems multi-year launch contract with first test launch from PSCA in early 2017
- “New Space” multi-year launch contract starting in late 2017
- Support MDA THAAD launches from PSCA in early summer 2017 and planning and programming for second THAAD launches in 2018 from PSCA
- Secure MDA program requirements for additional operations from PSCA 2018-2022
- Secure a \$4.5 million FY2017 Federal appropriation for infrastructure improvements at PSCA
- Secure a \$4.5 million FY2018 Federal appropriation for additional infrastructure enhancements at PSCA
- Develop liquid-fuel launch infrastructure capabilities for small and ultra-small launch vehicle operations at PSCA
- Establish Aurora Launch Services, LLC, a wholly owned AAC company, to provide low-cost commercial launch services worldwide
- Pursue an equatorial launch site to create a distinct marketing advantage offering both polar and equatorial launch capabilities to both the government and private sector customers



# Privatization



- AAC Board of Directors passed Resolution #15-06 recommending to Governor Walker that AAC transform into a Public Private Partnership (P3) on November 2015
  - Under this concept the infrastructure at the Pacific Spaceport Complex - Alaska (PSCA) would remain State of Alaska property
  - A private company would be formed as the operating company with the exclusive rights for use of PSCA for a designated period of time
  - The private company would be under a Board of Directors, with the seats aligned to the percentage of investment in the company. The State of Alaska would initially hold all seats on the BOD
- AAC Board of Directors passed Resolution #16-04 to form a wholly owned subsidiary, Aurora Launch Services LLC to provide launch services on a commercial basis to AAC and another commercial launch facilities worldwide
  - Aurora Launch Services, LLC would be managed by a separate Board of Directors
  - The AAC Board of Directors would hold at least one seat on the BOD
- Primary purpose for establishing Aurora Launch Services LLC is to provide a greater range of launch services to a wider customer base, at a lower cost than is currently available on the market, thereby creating a positive income flow and increasing AAC's competitive advantage and profits
- Aurora Launch Services, LLC is being incorporated as an Alaskan company and should be fully operational by the end of 2017



# Department Alignment



- In 2012, Governor Parnell realigned Alaska Aerospace Corporation (AAC) from the Department of Commerce, Community, and Economic Development (DCCED) to the Department of Military and Veterans Affairs (DMVA)
- AAC is presently aligned under DMVA for administrative purposes only; as a state corporation AAC reports to a nine member board of directors appointed by Governor Walker for operations and strategic direction
- Rational for the realignment was based on the fact that all seventeen launches conducted by AAC were in support of US Government agencies, with the significant majority being conducted by the Department of Defense (DOD)
- Having DMVA as the executive agent for DOD funding to AAC provided a clear line of authority for Federal funding from DOD to AAC
- While AAC has started to diversify our customer base, signing in 2016 the first truly commercial customers for launch services contracts, the primary customer remains a DOD agency – the Missile Defense Agency
- Over the past five years, the working relationship between DMVA and AAC has been strong, with DMVA providing excellent administrative support
- With AAC's primary customer still a DOD agency and the fact that the support relationship from DMVA to AAC is excellent, *it is recommended that AAC not be realigned to DCCED at this time*, as the external perception by our DOD customers may raise questions which result in unintended consequences to future contracting opportunities



## Our Path to Success



- Alaska Aerospace Corporation has received no General Funds since FY2015
- Reconstruction of the site has been successfully completed, preserving the State's resources without use of State funds
  - Site has been refreshed and updated, increasing the actual value to the State
- \$19 million spent in-state in FY2016; \$9 million spent in-state in FY2017 so far
- New Federal and Commercial contracts in place
  - Two MDA launches scheduled in FY2017
  - One commercial launch in negotiation for FY2017 launch (Vector Space Systems)
  - FY2018 launches in negotiation for 3-5 commercial launches and two DoD launches
- AAC is broadening our marketability by lowering costs and offering fully commercial launch support services
- Public Private Partnership efforts are continuing, with Aurora Launch Services being active in CY2017





# Thank You

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