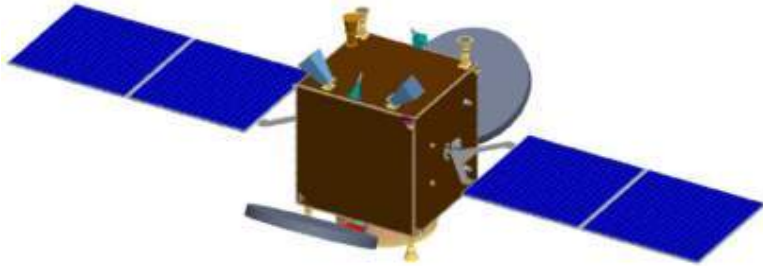
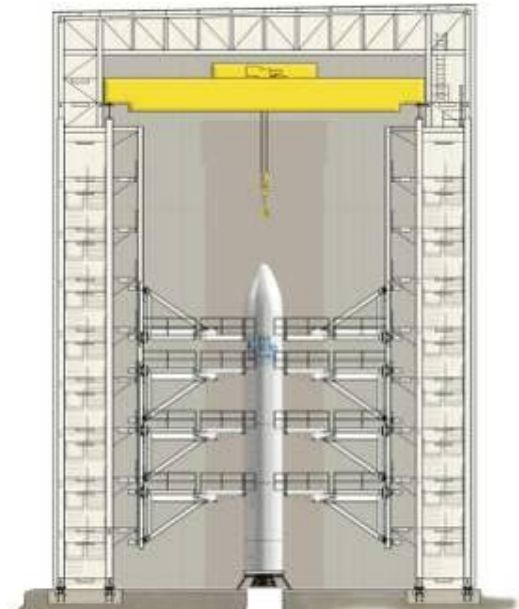
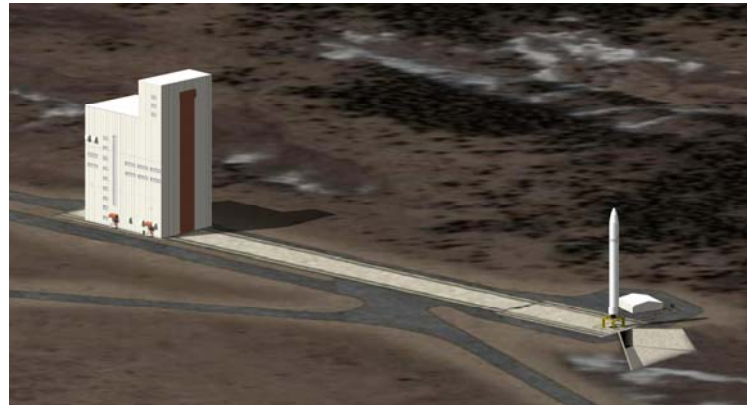
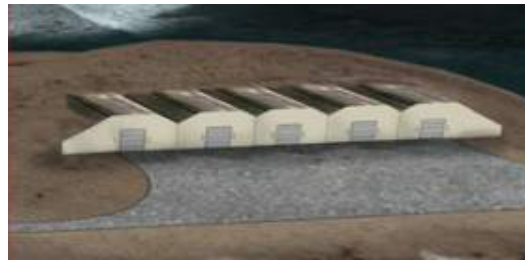


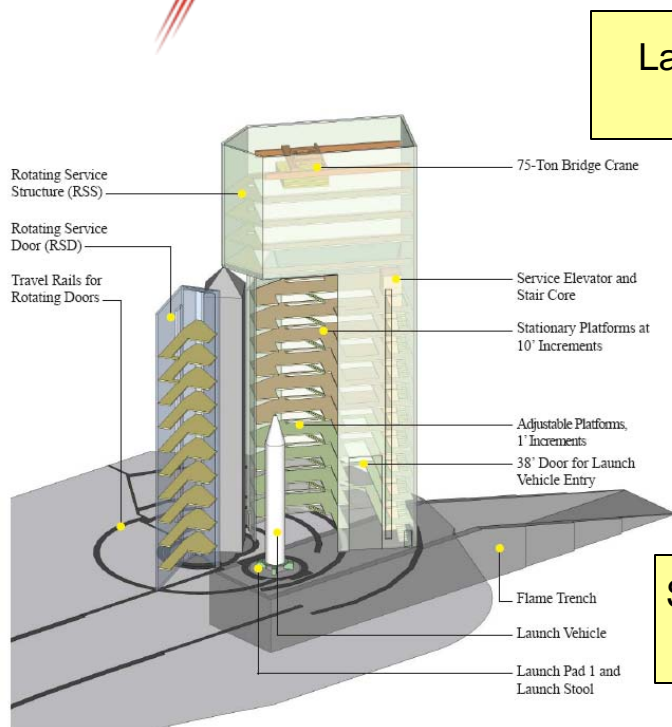
Alaska Aerospace Development Corporation briefing to the Senate Finance – Capital Budget



Dale Nash, CEO
Tom Case, LtGen (Ret), Pres/COO
17 March 2009



Current Launch Complex



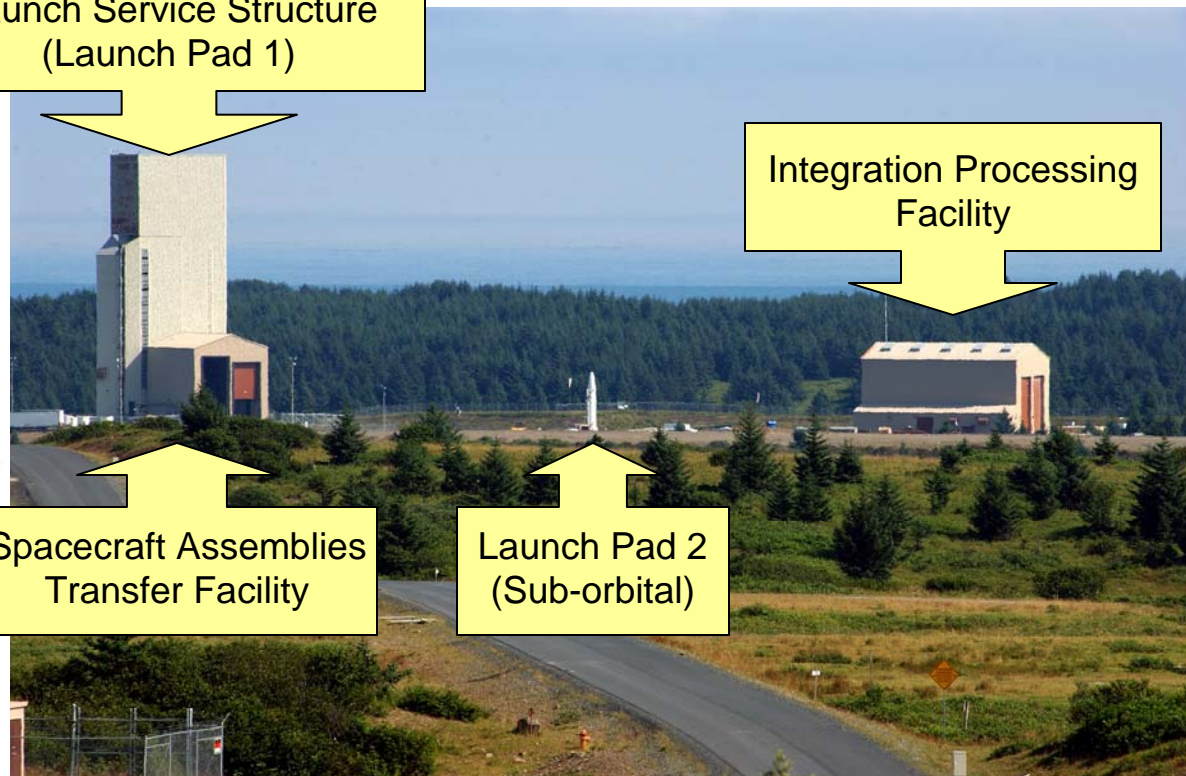
Kodiak Launch Complex
Launch Service Structure and Launch Pad 1

Launch Service Structure
(Launch Pad 1)

Spacecraft Assemblies
Transfer Facility

Launch Pad 2
(Sub-orbital)

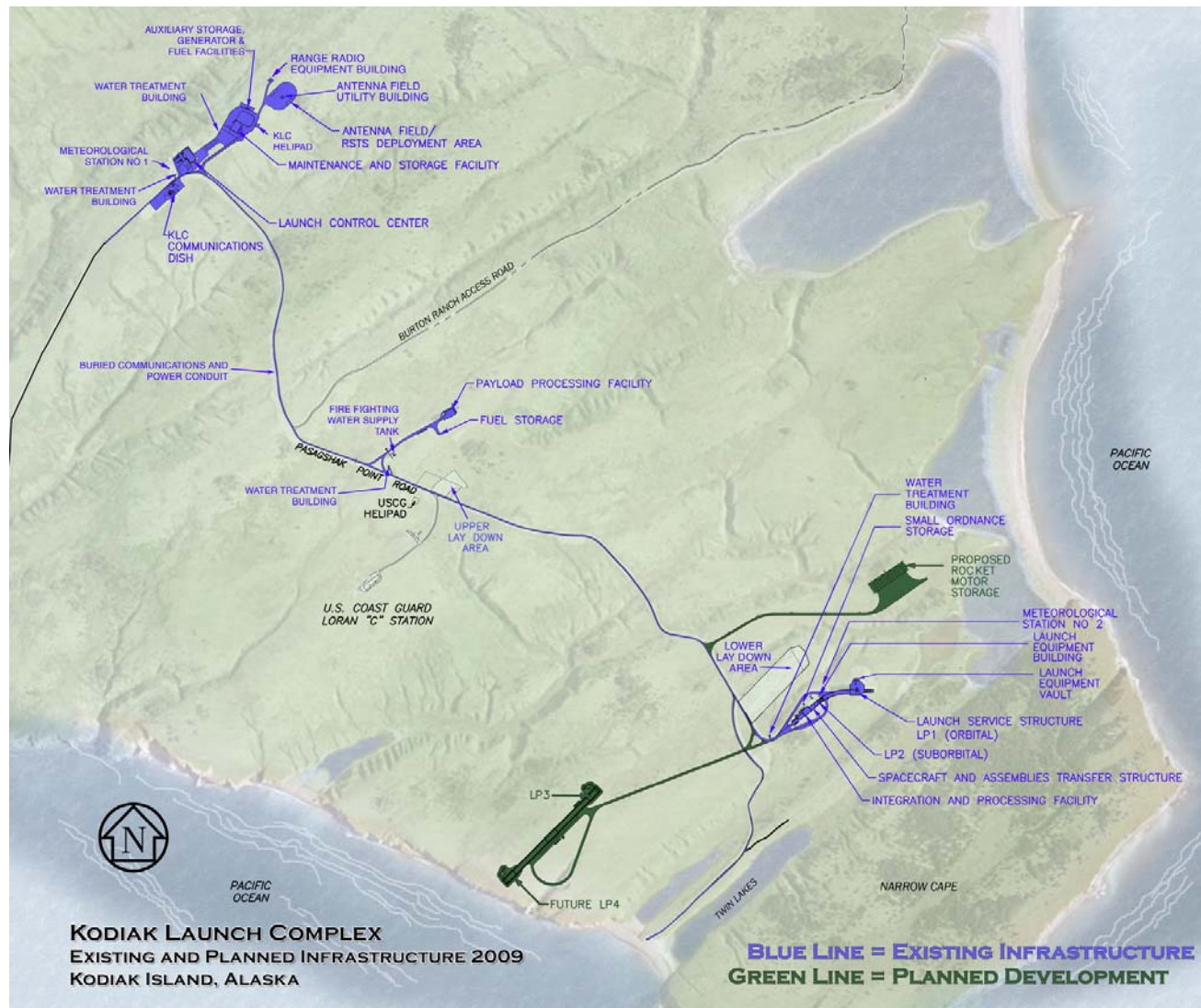
Integration Processing
Facility



The current launch complex includes three buildings and two launch pads. The Launch Service Structure (LSS) houses Launch Pad 1 which is capable of supporting up to Castor 120 boosted (Minotaur, SLV, Athena, & Taurus), Trident C-4 Class vehicles and Minuteman derivatives.

Launch Pad 3

Rocket Motor Storage Facility



Launch Pad 3 Rocket Motor Storage Facility



Launch Activity

Successful Launches

Year	Date	Launch
1998	5 Nov	AIT-1, USAF
1999	15 Sep	AIT-2, USAF
2001	22 Mar	QRLV-1, USAF-Northern Edge
2001	29 Sep	Lockheed/NASA Kodiak Star
2001	9 Nov	SMDC STARS, U.S. Army
2002	24 Apr	QRLV-2, USAF-Northern Edge
2004	14 Dec	IFT-13C, MDA–Target Missile
2005	13 Feb	IFT-14, MDA–Target Missile
2006	23 Feb	FT04-1, MDA–Target Missile
2006	1 Sep	FTG-02, MDA–Target Missile
2007	25 May	FTG-03, MDA–Target Missile
2007	28 Sep	FTG-03a, MDA–Target Missile
2008	18 Jul	FTX-03, MDA–Target Missile
2008	5 Dec	FTG-05, MDA–Target Missile

Planned Launches

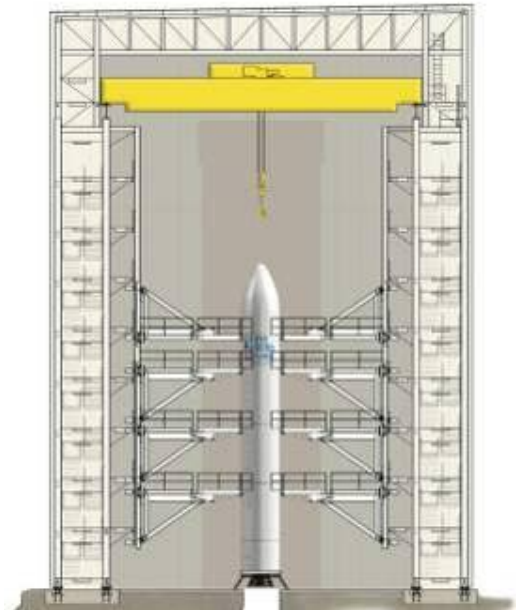
Year	Date	Launch
2009	Sep	TacSat-4, USAF–Orbital Sat
2009	Dec	STP-S26, USAF- Orbital Sat.
2010	Mar	FTG-07, MDA–Target Missile

- 14 Successful launches to date
- 3 future launches on contract
- AADC is conducting proactive business development to win launches in the growing small and medium satellite industry.
- Several major telecommunication companies and rocket providers are expressing active interest in using KLC



Rapid Launch

- Rapid launch is a proposal to build a new Launch Pad and Rocket Motor Storage Facility that to allow payload launch into orbit 24 hours after notification.
- Rapid launch has many unique applications
 - Replace damaged or aging satellites in days, not years.
 - Provide responsive satellite communications to areas damaged by natural disasters
 - Increase satellite communications for peacekeeping forces.
- No other launch facility in the US has rapid launch capabilities.



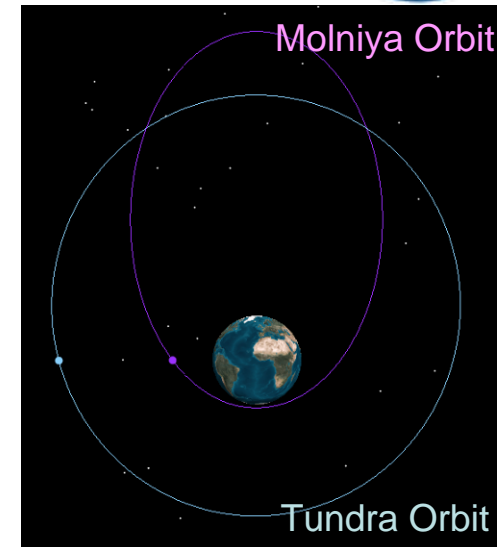
Unique Orbits from KLC Tundra and Molniya



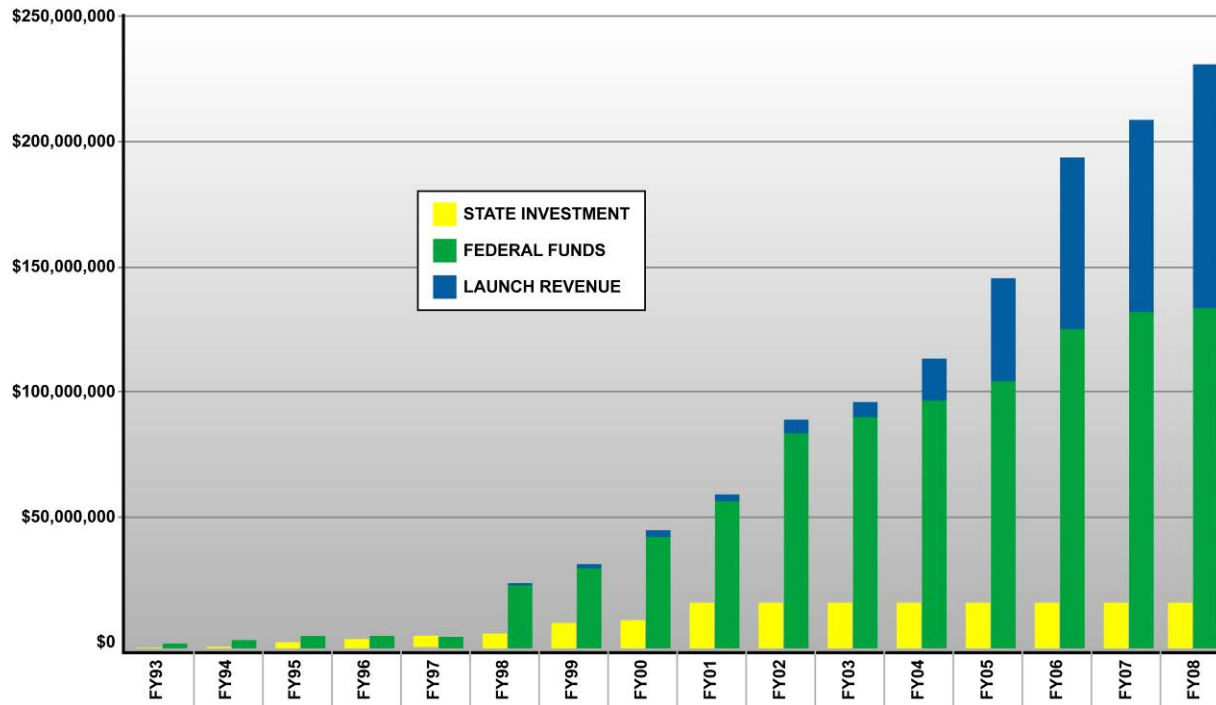
- Near polar (high inclination-63.4 degrees) elliptical orbits
 - Tundra orbit allows geosynchronous coverage because orbital period is timed with the earth's rotation.
 - Molniya has a long dwell time over two geographic areas
- Developed by the Russians because they do not have a launch complex close enough to the equator to allow equatorial geostationary orbits.

• Advantages

- **2 to 3 satellites can provide continuous coverage over a single area**
- High “look angle” for northern latitudes, not low on the horizon
- **Good for communication and earth-monitoring**
- Avoid crowding of equatorial geosynch orbits and their associated regulations
- **Ideal for northern launch complexes** (less horizontal velocity from the Earth's rotation)
- US has not used these orbits because there has not been a major northern launch facility until KLC.
- Sirius Satellite Radio uses three satellites in Tundra orbit to cover the entire US.
- **KLC's latitude and launch azimuths make it the best launch facility in the U.S. for these orbits.**

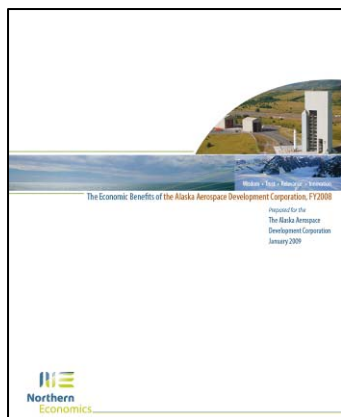


Leverage of Initial State of Alaska Investment



- Every Alaska dollar invested has been leveraged
- Initial financial investment of \$15.6 million provided by State of Alaska
 - Alaska Science and Technology Foundation (ASTF)
 - \$9 million for capital expenditures; \$6.6 million for operations
- The initial State of Alaska investment has returned a total of \$232.5 million
 - \$93.5 million in launch revenues (MDA, Air Force, Lockheed Martin)
 - \$139 million in capital investments (NASA, US Air Force and US Army)

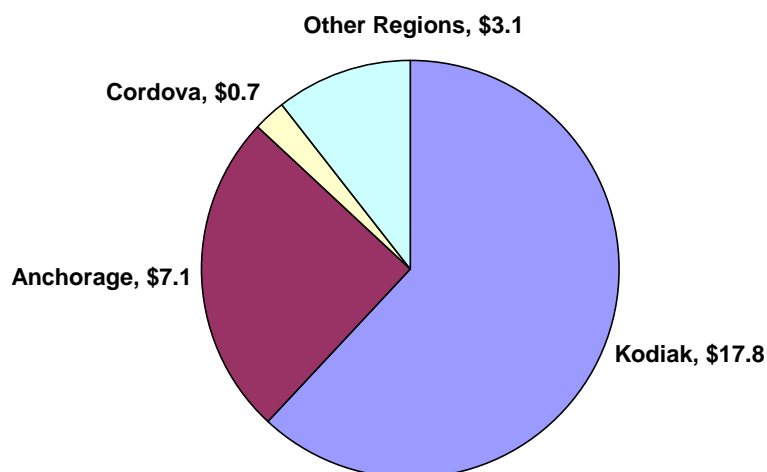
Economic Benefits



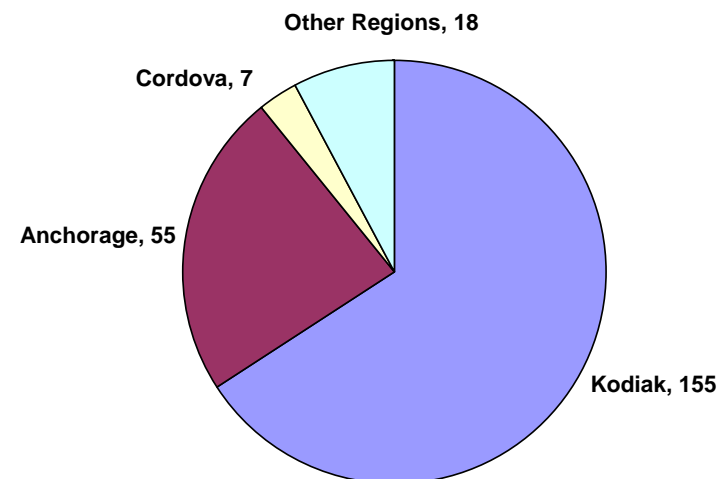
2008 Economic Impact Report

- 2008 Economic Impact Report prepared by Northern Economics, an independent economic consulting firm.
- AADC activities contributed \$17,800,000 to the Kodiak economy.
- AADC activities generated 155 jobs in Kodiak.

FY08 Total Economic Contribution (\$millions)
Total Impact: \$28.7 million



FY08 Total Jobs Generated



Summary

- Launch Pad 3 and the Rocket Motor Storage Facility upgrade at KLC
 - More than Doubles the Launch Capacity
 - Rapid Launch Capability (Only US Spaceport)
 - Meets National Strategic Need
 - Concurrent Customers and Launches
 - Reduces OH Costs per Launch
 - Will help attract more Customers/Launches
 - Construction can begin this Spring
 - RMSF can complete Fall 2009
 - Launch Pad 3 with Vehicle Processing Facility can be fully operational Summer 2011
 - Continuing to Pursue Federal Funding
 - Congressional Delegation, Governor, Key Customers