











Alaska Legislative

2015 Overview Presentation

February 2015

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FY 2015 Budget Changes



- New Launch Contract secured
- New Global Imaging Distribution Contract secured
- \$2.0 Million Reduction (25%) in General Funds
- Deleted 3 vacant PCN's
- Huntsville Virtual Office established
- Received \$2.4 Million in deferred maintenance funds



FY 2016 Budget Highlights



- Eliminate \$4.2 Million General Funds for operations and sustainment
- Return \$22.0 Million in capital fund appropriation for medium-lift
- Complete Launch Facility Rebuild with Insurance Funds
- Complete Launch Pad 3 Environmental Assessment
- Pending Executive Branch Approval, complete medium-lift project with remaining \$3.0 Million in previously appropriated capital funds
- Proceed in collaboration with Lockheed Martin, ASRC, and the University of Alaska in developing an Aerospace Integration Complex to support a diversified aerospace industry in Alaska
- Reduce 10 PCN's
- Expand Blackbridge satellite imaging services
- Expand commercial launcher capabilities
- Provide contract Range Services at non-Federal spaceports in the U.S.
- Initiate transition process of AAC to a privatized non-state company



SMDC August Launch



- Advanced Hypersonic Weapon Test Flight
- Aborted Launch August 25, 2014
- Rocket Destroyed shortly after Lift-off Safety measures worked properly
- SMDC Investigation Clears KLC of any issues pertaining to the failure!
- Damage was fully contained on AAC property
- Damaged Facilities
 - Launch Support Structure
 - Integrated Processing Facility
 - Spacecraft and Assembly Transfer Facility
 - Minor damage to Payload Processing Facility
 - Minor damage to Rocket Motor Storage Facility
- Estimated Damage Repair Costs
 - \$29.7 million
- Facilities Fully Insured
- Clean-up of rocket and payload debris mostly complete
- Demolition and clean-up of severely damaged facilities underway
- Rebuild design completed and rebuild contracts are being issued
- Rebuild to be completed by October 1, 2015





Medium Lift Request For Proposals



- In the FY2013 budget, the Legislature approved, \$25.0 Million capital funds to support developing medium-lift in Alaska
 - Legislation specifically stated that the \$25.0 Million in state funding was for infrastructure development specifically for medium payload launches
 - Medium payloads weight in excess of 4,000 pounds
 - The \$25.0 million was "gated" into three phases:
 - Phase One = \$3.0 Million for design, engineering, infrastructure prep, and environmental work
 - Phase Two = \$10.0 Million for infrastructure development, which could not be spent until a firm contract was signed with a launch provider for medium class launches
 - Phase Three = \$12.0 Million for construction which can not be spent until any additional funding is raised to complete construction of a medium lift facility
- Estimated cost for a new medium-lift complex at Kodiak was estimated to be no less than \$125.0 Million.
 - All funds above the state \$25.0 Million would require private/commercial funding



Medium Lift Request For Proposals - Continued



- In September 2014 staff developed a Request For Proposal offering \$21.0 Million of the \$25.0 Million in a competitive source selection to provide commercial launch services for delivering medium class payloads into orbit from the Kodiak Launch Complex
- Proposers must:
 - Describe how the \$21.0 Million state funding would be used
 - Identify the Offeror Infrastructure Requirements
 - Identify the Offeror Infrastructure Investment
 - Guarantee three medium class launches from KLC by 2020
- Proposals were delivered on November 25, 2014
- Four proposals were submitted
- Evaluation of proposals was completed by AAC staff and oral interviews were held on December 9, 2014
- On December 12, 2015, Lockheed Martin was selected for their Athena IIS medium lift rocket proposal
- An "Intent to Award a Contract" notice has been issued to Lockheed Martin.
- Contract negotiations have started, with initial estimates for medium-lift between \$3.0 and \$6.0 Million
- AAC plans to use only the Phase I \$3.0 Million of the \$25.0 Million appropriation, plus other existing Federal funding for medium-lift construction



Administrative Order 271



- Governor Walker issued AO 271 on December 26, 2014
- Specified to halt to the maximum extent possible discretionary expenditure on six "Projects"
 - Kodiak Launch Complex was listed as one of the projects
- Alaska Aerospace Corporation legal counsel reviewed and determined the only "project" currently being pursued by AAC was the medium lift RFP process
- AAC has suspended further actions on medium lift pending approval to proceed by the Executive branch
- AAC has advised the administration that the remaining \$22.0 million is available to be returned to the state
- AAC has requested the governor approve AAC to complete the contract negotiations with Lockheed Martin, not to exceed \$3.0 million of the \$25.0 million appropriation







The medium lift initiative is on hold, per Administrative Order 271, pending approval of the Executive Branch to proceed



Athena IIS6 depicted at Launch Pad 1, Pacific Spaceport Complex - Alaska



Launch Pad 3 – Environmental Assessment



- An Environmental Assessment (EA) is being conducted for medium lift operations from the Kodiak Launch Complex
- The Federal Aviation Administration (FAA) is the sponsor of the EA
- A draft EA was released for public review September 15, 2014
- A public hearing was conducted in Kodiak on October 7, 2014
- The FAA is reviewing public comments
 - 54 written comments were received
 - 20 people testified
- FAA determination expected in early 2015
- AAC has a potential customer interested in conducting west coast launches from Alaska and building LP-3 in the future



Geospatial Imaging Data Distribution Contract



- To diversify AAC, in May 2014 senior staff initiated discussion with BlackBridge for potential distribution rights for imaging data from the RapidEye imaging constellation
- RapidEye is a constellation of five polar orbiting satellites that collect five meter imaging data for commercial sales
- The AAC Board of Directors approved Resolution #14-03 at the August board meeting authorizing negotiation for a new business venture in Geospatial Data and Satellite Imaging Sales and Distribution
- A contract was signed on October 2, 2014 for distribution rights of BlackBridge Alaska imaging data
- AAC has completed initial orientation with BlackBridge and has a staff member dedicated to BlackBridge sales of Alaska imaging
- This contract was a significant step in diversifying AAC with an emphasis on commercial markets
- AAC has initiated discussions with BlackBridge to expand the contract to include data downlink services
- AAC is also working to secure launch services for the next generation of RapidEye satellites, expected to be launched in the 2018/2020 timeframe







Dragon Tracking





- AAC has a contract to track the Dragon capsule during missions to the International Space Station (ISS)
- AAC has tracked the Dragon on all five of it's missions to the ISS
- Last tracking mission was last month, January 2015



Range Safety and Telemetry System (RSTS)



- The RSTS is a sophisticated telemetry tracking system that provides range safety during the launch and telemetry downlink capability to collect data from the launch vehicle
- There are at least three companies in the United States that offer range safety and/or telemetry services worldwide
- AAC has determined that separating the RSTS out from the KLC range and creating a separate business unit for RSTS operations is a viable option
- Discussions are currently underway with other service providers to develop a plan for marketing RSTS services and providing more cost-effective range and telemetry services at KLC for future launches







International Business Development Initiatives



- The international launch market has expanded in the past decade
- Numerous foreign companies now offer both rocket and satellite services
- Eighty percent of the U.S. commercial satellite market is launched overseas
- The only U.S. competitor for KLC polar launches is Vandenberg AFB, a Federal military installation
- Wyoming Aerospace conducted a study for AAC which identified significant opportunity for international business
- AAC has initiated coordination with the State Department for International Traffic In Arms Regulation (ITAR) approval to conduct foreign launches
- Three markets are being pursued for commercial launches:
 - Japan Epsilon rocket
 - Italy Vega rocket
 - Israel Shavit rocket





Unmanned Aircraft Systems (UAS) Initiatives



- For the past six years AAC has pursued acquisition of the Global Hawk Unmanned Aircraft System (UAS) from the U.S. Air Force for commercial use in Alaska
- Initial concept was to acquire three Global Hawks and operate from Eielson AFB
- Primary projected customers were state and Federal agencies
- Peak 3, an Alaskan firm, was hired in 2014 to do a comprehensive analysis of the financial feasibility of AAC acquiring and operating the Global Hawk
- Conclusion of the study found that the acquisition and operating costs probably could not be recovered by the projected customer revenue base
- Decision was made in June 2014 to cease further pursuit of the Global Hawk
- AAC is a partner with the University of Alaska in the FAA UAS Pan-Pacific Test Site.
- AAC has identified KLC as a test location for UAS operations
- AAC is discussing with the University staff means for AAC to become the commercial entity for UAS operations beyond the research, test, and development stages.



Global Hawk





AAC Composite Revenue History



^{*} Figures reflect all revenues from 1993 through June 30, 2014



State of Alaska Funding Snapshot



- **SFY 2013** \$8.0M State Funding (Includes 100% Sustainment Funding)
- **SFY 2014** \$8.0M State Funding *Provided a launch services contract is signed by 31 March 2013
- SFY 2015 \$6.0M Approved State funding
- SFY 2016 \$0.0M Governor's budget request



FY14 through FY16 Operating Budget Comparison



General Funds (RDU Totals FY2014 vs FY 2015)

FY 14 Management Plan \$8,129.2 FY 15 Governor Budget \$6,084.3 FY 14 Management Plan to FY 15 Governor Request

-\$2,044.9 (-25.2%)

General Funds (RDU Totals FY 2015 vs FY 2016)

FY 15 Management Plan \$6,084.3 FY 16 Governor Request \$0.0 FY 15 Management Plan to FY 16 Governor Request

-6,084.3 (100%)

GF & Other Funds (RDU Totals FY2014 vs FY 2015)

FY 14 Management Plan \$10,618.9 FY 15 Governor Budget \$10,125.5 FY 14 Management Plan to FY 15 Governor Request

(-4.6%)

-\$493.4

GF & Other Funds (RDU Totals FY2015 vs FY2016)

FY 15 Management Plan \$10,125.5 FY 16 Governor Request \$11,251.3

FY 15 Management Plan to FY 16 Governor Request +\$1,125.8 (+10.6%)



Federal Funding Pursuit



- The Federal government provides nearly \$1.0 Billion in operations and sustainment funding for the Federal ranges at Vandenberg AFB and Cape Canaveral
- The Federal government does not provide this type of funding to non-Federal spaceports
- This year, Senators Murkowski and Begich, along with co-sponsorship from the Virginia delegation, included in the Defense Appropriations Bill \$10.0 Million for non-Federal spaceports that support the National Space Policy with capability to place satellites into orbit. KLC and MARS are the only two facilities that currently have that capability
- Final action on the Federal FY2015 Omnibus Appropriations Bill included \$6.0 Million for non-Federal Spaceports that launch government mission into orbit supporting the National Security program
- AAC expects to receive up to \$3.0 Million from the Federal (Air Force)
 government in 2015, specifically for operational support of potential national
 security launches into polar orbit from the Kodiak Launch Complex



Conclusion



Alaska Aerospace Corporation is rapidly changing from a state-owned corporation, wholly dependent on government launches and state funding, to a diversified aerospace corporation which has a mix of commercial and government operations in a variety of aerospace related businesses and no longer dependent on state funding.

The new AAC leadership team can not change what happened in the past. However, we have already made significant changes which are showing a positive impact on the corporation, future business potential, and the ability to continue operating.

We are working with the Administration on a transition plan which retains the market viability of AAC, while minimizing requirements for state operations and sustainment funding.

For FY2016, AAC requests no state general funds.

With Executive and Legislative support, we are committed to making AAC a viable industry in Alaska, independent of state funding. We request your support!