

SENATE FINANCE COMMITTEE  
February 11, 2015  
9:01 a.m.

[9:01:51 AM](#)

CALL TO ORDER

Co-Chair MacKinnon called the Senate Finance Committee meeting to order at 9:01 a.m.

MEMBERS PRESENT

Senator Anna MacKinnon, Co-Chair  
Senator Pete Kelly, Co-Chair  
Senator Peter Micciche, Vice-Chair  
Senator Click Bishop  
Senator Mike Dunleavy  
Senator Lyman Hoffman  
Senator Donny Olson

MEMBERS ABSENT

None

ALSO PRESENT

Craig Campbell, President and Chief Executive Officer, Alaska Aerospace Corporation, Department of Military and Veterans Affairs; Patrick Gamble, President, University of Alaska, and Chair, Board of the Alaska Aerospace Corporation.

SUMMARY

PRESENTATION: ALASKA AEROSPACE CORPORATION OVERVIEW;  
ADMINISTRATIVE ORDER 271

OVERVIEW: UNIVERSITY OF ALASKA FY 16 BUDGET

^PRESENTATION: ALASKA AEROSPACE CORPORATION OVERVIEW;  
ADMINISTRATIVE ORDER 271

[9:03:43 AM](#)

CRAIG CAMPBELL, PRESIDENT AND CHIEF EXECUTIVE OFFICER,  
ALASKA AEROSPACE CORPORATION (AAC), DEPARTMENT OF MILITARY

AND VETERANS AFFAIRS, discussed the presentation "Alaska Legislative 2015 Overview Presentation," (copy on file). He stated that the last year had been very dynamic for the corporation. He hoped the committee would recognize that it had some innovative ways to change the corporation, given the challenging fiscal climate. He wanted to answer questions regarding the accident that had happened the previous August, the subsequent re-build, and future plans.

Mr. Campbell looked at slide 2, "FY 2015 Budget Changes":

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

Mr. Campbell detailed that AAC was under contract with Miltec Corporation for a second launch of the failed mission. There had been no date chosen, and AAC was aggressively working on a rebuild of the launch site. During the year, AAC had also completed a contract with BlackBridge for global imaging distribution. BlackBridge had a constellation of five rapid-eye satellites in polar orbit that imaged the world, and was the only company that could provide full coverage of the state without cloud cover. He added that AAC was the distributor of the imaging data worldwide.

Mr. Campbell specified that there was an individual hired on contract for AAC's virtual office in Huntsville, who had extensive experience and had good connections with NASA and the U.S. Department of Defense, and was developing a new business market with the Huntsville market.

Mr. Campbell spoke to the deferred maintenance funds received the previous year, which were used for basic renovation and much-needed repairs. He relayed that until two years previously, AAC had not received any deferred maintenance funds, so some facilities had been in need of repair.

[9:06:16 AM](#)

Mr. Campbell highlighted slide 3, "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

Mr. Campbell conveyed his excitement for the coming year, and asked the committee's support for the governor's budget request. He stated that AAC was in concurrence with the governor in reducing its GF by \$4.2 million. He had asked for AAC to retain budget authorization for \$11 million, with the \$4.2 million in GF to be shifted to receipts. He clarified that the switch would allow AAC to earn the funds. He pointed that the total budget would reflect an increase but the \$4.2 million in GF would remain zero.

Mr. Campbell discussed the environmental assessment pending for Launch Pad 3, and specified that the Federal Aviation Administration (FAA) was about to release its final determination on the assessment. He discussed the various activities that would be consolidated under the collaborative Aerospace Integration Complex. He noted that he did not plan on any position reductions beyond the ten that were listed on the slide. He discussed the potential revenue generation from providing contract range services to other airports.

Mr. Campbell asked the committee to focus on the last bullet of the slide, which pertained to initiating a transition of AAC to a privatized non-state company. He relayed that he had conversations with the governor's chief

of staff Jim Whitaker, and had been working to identify how to keep AAC as a value to the state. He did not support shutting down AAC; and referred to investment that had been made in the corporation, as well as the job opportunities it offered. He did not think an outright sale would generate significant revenues, or even recover the cost of state investment to date. For these reasons, the corporation was starting a process to privatize AAC and create value that would provide a return on investment in the future. He clarified that privatization of AAC was a new concept that had only been developed in the previous week. He reiterated that he had been working with the executive branch to determine the boundaries, and thought there was concurrence that a privatization plan was the right answer for AAC in the future.

Co-Chair MacKinnon asked Mr. Campbell to use specific language rather than acronyms. Mr. Campbell agreed.

Mr. Campbell continued that when he had mentioned PCNs he had been referring to personnel control numbers or personnel in the company. He reiterated that AAC would be reducing by 10 positions through retirement, vacancy and attrition rather than layoffs. He was unsure what changes would result from an ongoing conversation on privatization, and thought the discussion might change how AAC was organized.

Vice-Chair Micciche asked if anyone from the private sector had expressed interest in a partnership with AAC or a purchase of its facility.

Mr. Campbell stated that there had been no interest in the purchase of AAC or any of its facilities.

[9:13:25 AM](#)

Vice-Chair Micciche asked if Mr. Campbell had witnessed any excitement from other entities regarding the possibilities engendered through privatization. He wondered if a partnership would be advantageous.

Mr. Campbell had not received any expressions of interest, and thought the aerospace market was very small in the United States, and posited that no aerospace companies that he knew of were interested in owning a launch complex. He added that there were only four launch complexes (that

launched rockets into orbit) including three federal facilities and the Kodiak Launch Complex (KLC). He had no indication that any of the facilities wanted to convert into a private operation at the current time. He suggested that the privatization of AAC would be a hybrid model under which the operations side would develop business and utilize KLC, and selling for a value return for the state would be evaluated at a later date. He thought selling AAC was a longer term proposition, and the corporation's assessment was that putting AAC on the market would lead to a disappointing response.

Mr. Campbell looked at slide 4, "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

Mr. Campbell pointed out the fourth bullet point and highlighted that the command that had owned the rocket and payload had completed an investigation and found no fault with the KLC. He continued that AAC had been paying in to the state insurance pool since it started, and had put in a claim to rebuild the facility for completion in October 2015.

[9:16:32 AM](#)

Mr. Campbell highlighted slide 5, "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

Mr. Campbell described medium lift as a controversial topic. He discussed interest from the Orbital Sciences Corporation and Lockheed Martin to do medium lift. At the time, the rockets being considered (Lockheed Martin's Athena III rocket and Orbital Sciences' Antares rocket) were fairly large. He relayed that neither company found the financing that would allow them to profitably sell the rockets. He had seen other movements in the industry, including international rockets of smaller size but with ability to launch a medium sized satellite.

Mr. Campbell turned to slide 6, "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

Mr. Campbell elaborated that the Lockheed Martin Athena IIS model rocket (that was selected in the competitive source selection) was larger than the Athena I, and had increased payload capability from additional engines to give it the medium lift capability and ability to be launched from the existing launch pad.

Mr. Campbell spoke to slide 7, "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

Mr. Campbell turned to slide 8, "Medium Lift RFP," which showed an artist's rendition of what the Athena IIS would look like on the existing AAC launch site. He confirmed that AAC was on hold, pending approval of the executive branch to proceed. He pointed out that the rocket being considered was thin but with a fairly large payload. He discussed features of the launch structure and boost capability.

Mr. Campbell spoke to slide 9, "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

Mr. Campbell stated that an environmental assessment was being conducted for a new launch pad, and he was expecting a determination within the next two months.

[9:20:15 AM](#)

Mr. Campbell highlighted slide 10, "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

Mr. Campbell pointed out that the geospatial imaging data distribution contract referenced on slide 10 was the first step for AAC in diversifying the company away from solely rocket launch activities. He thought one problem the corporation had created for itself was focusing only on launching small rockets from Kodiak. He referred to the original intent of AAC as written in statute; and clarified that the corporation was not designed to be a launch complex, but rather focused aerospace development and working closely with the University.

Mr. Campbell directed attention to the bottom of slide 10, and noted that the next step in diversification was possibly expanding the data distribution contract to include data downlink services. Further, AAC was working to secure launch services for the next generation of RapidEye satellites.

Senator Dunleavy referred to the bottom of slide 9, and asked if the potential customer was interested in underwriting the entire cost of building launch pad 3 (LP-3).

Mr. Campbell clarified that AAC had a potential customer that wanted to launch from Kodiak sometime in the future, and AAC had not yet discussed the financing arrangement. He

could not say if the customer expected AAC to pay for LP-3, expected to pay for it themselves, or collaboratively finance the project.

Senator Dunleavy asked if it was the goal of AAC that the customer underwrite the entire cost of LP-3.

Mr. Campbell stated that his goal was to privatize AAC and no longer return to the state to request funding to expand the business.

Senator Bishop commented that the potential contract expansion with BlackBridge was intriguing. He referred to state mapping with the Alaska Division of Geological and Geophysical Surveys (DGGS) and thought there could be synergy between it and the potential expansion project.

Mr. Campbell stated that AAC was hoping for such synergy, and furthered that RapidEye and BlackBridge had a very good product. He thought the state would be purchasing some of the product. He discussed how the imaging product would work in Alaska for private industry as well as government.

[9:22:59 AM](#)

Mr. Campbell discussed slide 11, "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 its missions to the ISS
- Last tracking mission was last month, January 2015

Mr. Campbell added that AAC would continue tracking the Dragon capsule, and that the corporation was using its facilities for activities other than rocket launches from Kodiak.

Mr. Campbell addressed slide 12, "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

Mr. Campbell explained that the Range Safety and Telemetry System (RSTS) was used by AAC to track launches from Kodiak. He reminded the committee that AAC had gone three years without a launch, and the system was unused for that period of time. He reported no launches for 2015, which would be another year of the system not being used. He explained that the RSTS was made of equipment that could be used anywhere in the world, and AAC had started to talk with other providers of range services as to how the system could be used elsewhere to create additional revenue. He reported discussions with two companies as to how the system could be utilized, and emphasized the deterioration that was possible when systems lie dormant.

[9:24:21 AM](#)

Mr. Campbell highlighted slide 13, "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

Mr. Campbell discussed the new initiative that AAC was taking in the international launch market. He relayed that the corporation had hired a consultant who had identified that the three rockets listed on the bottom of the slide (in Japan, Italy, and Israel) were all solid-fuel small launches which were looking for commercial opportunities. All three rockets were launching from their native countries, but as they expanded in the commercial market, may need additional range capability. He furthered that AAC was entering discussions with the three entities about the potential of using KLC as an overflow facility should the commercial market expand to a level that the capacity could not be met in their own country. He thought AAC would get very few foreign launches, but considered that an established relationship as an overflow facility would create some income.

Senator Dunleavy wondered why such a large portion (80 percent) of the U.S. commercial satellite market was launched overseas.

Mr. Campbell replied that the U.S. had raised the cost of launch to an unacceptable level for the commercial market. He noted that Cape Canaveral and Vandenberg Air Force Base (both federal facilities) were utilized as primary launch sites, predominantly using very large rockets. He furthered that the commercial satellite industry had changed; and had much smaller satellites for imaging, communications, navigation, and weather. The U.S. did not have the type of facilities for the satellites to meet the cost for making a profit. He added that AAC was looking at the Vega rocket (from Italy) and Epsilon rocket (from Japan), because they were lower cost rockets. If the rockets could be attracted to Kodiak for launch, the commercial satellite company could get a low-cost rocket at a low-cost launch facility.

Senator Dunleavy asked if the majority of overseas launch sites were private or government owned.

Mr. Campbell stated that the sites were all government owned.

[9:26:46 AM](#)

Mr. Campbell discussed slide 14, "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.

Mr. Campbell noted that AAC had been working on unmanned aircraft systems for a number of years. He directed attention to the picture in the upper right corner of slide

14, depicting the large unmanned aircraft Global Hawk. The system was very expensive to operate.

Mr. Campbell spoke to slide 15, "AAC Composite Revenue History":

- Federal Grants=\$150,646,770 (43 percent)
- Launch Revenues=\$146,325,065 (41 percent)
- State Investment=\$58,627,566 (16 percent)
- Total =\$355,599,401

Figures reflect all revenues from 1993 through June 30, 2014

Mr. Campbell referred to comments in the media which had alleged that AAC had never made any money. He did not understand the allegation and stated that if depreciation was not considered, there was a number of years in which AAC had made money. He mentioned a problem in 2012, and stated that AAC had operated for a dozen years with its own cash flow and had never before come to the state with a funding request. He stated that the slide reflected a composite picture of revenue as of June 2014.

Mr. Campbell emphasized that he considered the \$58 million in state investment to be a lot of money, but did not think it was fair to say that because of the investment the AAC had not generated any money. He revealed that the corporation had generated almost \$300 million in funding. He referred to a launch in Kodiak in August of 2014, and pointed out that about \$250 thousand was spent on rental cars in the area. Close to \$1 million had been spent on hotel and restaurant sales in a 90-day period. He thought AAC was capable of being a revenue generator for the state. He qualified that the last few days had not demonstrated the capability, but wanted to recognize AACs successes.

[9:29:28 AM](#)

Senator Dunleavy asked about AACs corresponding operations and maintenance costs.

Mr. Campbell stated that payroll, utilities, and rent was approximately \$6 million per year.

Vice-Chair Micciche referred to the aborted launch that took place in August 2015. He thought it was unusual that KLC was not found to be at fault, yet the entity launching the rocket was not responsible for any damage to the facility. He wondered if both parties in a launch agreement were contractually held harmless.

Mr. Campbell stated that AAC was receiving the rebuild funding from the insurance company, and was unsure as to whether there would be a claim against any other party. He thought the information could be clarified by the risk management department.

Co-Chair MacKinnon clarified that AAC would continue forward, and the state's internal risk management would be making a claim with the federal government and trying to resolve issues from an insurance perspective.

Mr. Campbell understood the process was as Co-Chair MacKinnon described.

Vice-Chair Micciche wondered about the impact and future cost of \$29 million [estimated damage repair cost] coming out of the state insurance pool. He thought it might change the state's risk profile.

Mr. Campbell was not sure of the impact, and thought the question of future costs and risk management was best answered by the Department of Administration and risk management.

[9:31:52 AM](#)

Co-Chair MacKinnon thought that Vice-Chair Micciche had raised a great question, and stated that the committee would author a letter on the subject.

Vice-Chair Micciche thought perhaps the committee and AAC might have different definitions of the phrase "generating revenues." He wondered if launch fees were sufficient to cover the state, considering the risk of a launch failure.

Mr. Campbell stated that AAC made a profit from the fees charged for a launch, and the profit covered the ability to pay for insurance and fees for each year. He qualified that a launch was a profitable operation, but more were needed.

Senator Dunleavy asked for clarification about the \$6 million in annual maintenance and operations.

Mr. Campbell affirmed that the \$6 million included the cost of payroll (for approximately 40 employees), electricity to run the sites, the lease cost for offices, and administrative fees paid to the state.

Mr. Campbell discussed slide 16, "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

Mr. Campbell highlighted slide 17, "FY 14 Through FY 16 Operating Budget," pointing out the middle column of governor's budget and request for GF and the total of GF and other funds. He clarified that the difference of \$4.2 million between the two years would be moved into AAC receipts.

[9:34:29 AM](#)

Mr. Campbell looked at slide 18, "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

Mr. Campbell relayed that AAC had been working hard with the congressional delegation for the three previous years to get federal funding to support the aerospace operations of non-federal space ports. He highlighted the first bullet on slide 18 to emphasize that non-federal space ports launch for the federal government. He continued that AAC had made the argument that for equity purposes, if the federal government expected a launch facility to be available for its use, it needed to provide some funding. The corporation anticipated approximately \$3 million in federal funds to come to the state later in the year.

Mr. Campbell discussed slide 19, "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!

Mr. Campbell relayed that he had made a commitment to change AAC - the corporation would not operate as it had in the past, it would not be dependent upon state dollars, and it would create a diversified aerospace business. He pointed out that AAC had accomplished much of the commitment; and highlighted diversification, reduced need for state dollars, and steps towards privatization. He was pleased to lead the company and mentioned his support of the board and board chairman Pat Gamble. He asked for the committee's support of AAC's budget request.

Senator Dunleavy asked who owned the Mid-Atlantic Regional Space port (MARS) facility.

Mr. Campbell responded that MARS was owned by the commonwealth of Virginia, and was co-located with the federal NASA Wallops flight facility.

[9:36:42 AM](#)

Co-Chair MacKinnon communicated that she had been tasked with authoring a letter requesting additional information pertaining to the AAC insurance claim. She let the committee know that she would distribute the letter and wondered if there was any other information that members wished to be conveyed.

Senator Dunleavy asked about the failed rocket launch, and wondered if it was commonplace that facilities were damaged during an aborted rocket launch.

Mr. Campbell reflected that historical rocket failures had generally happened farther from the facility than the KLC rocket failure. He qualified that 75 days after the KLC rocket launch failure, the Antares rocket (launching to go to the ISS) suffered from nearly identical circumstances at the MARS site. The rocket had traveled under 500 feet after having engine malfunction and falling straight back upon the launch facility. He was unable to provide statistics, but emphasized that within 75 days the same circumstance [rocket failures close to launch facilities] had occurred twice.

Senator Dunleavy asked if the incident at KLC was a launch failure in combination with a decision to destroy the rocket.

Mr. Campbell explained that KLC had a range safety and telemetry system which had tracked the rocket from liftoff. He specified that there were safety boundaries observed by a federal official known as a Mission Flight Control Officer (MFCO), which if exceeded or approached, would result in destruction of the rocket. The investigation had revealed the rocket had not had a payload or rocket problem, but rather the external blanket that peeled off the body of the rocket had caused something to happen with one of the thrusters, which in turn caused the rocket to swerve off course and ultimately be destroyed by the MFCO.

[9:39:24 AM](#)

Co-Chair MacKinnon asked if Mr. Gamble had any comments about the AAC.

PATRICK GAMBLE, PRESIDENT, UNIVERSITY OF ALASKA, AND CHAIR, BOARD OF THE ALASKA AEROSPACE CORPORATION, commented that the AAC board had two roles: the hiring and firing of personnel, and determining the vision of the future of the corporation. Without resolving the vision of the state, AAC was not sure of its vision. He queried whether AAC was just a business deal, or was Alaska "an aerospace state" which was investing and committing and growing across a wide spectrum of aerospace investments. He thought it was important for the vision to become clearer; so that the issues of risk, investment, and organizational construct would resolve. He discussed models that the state could consider, with privatization being the newest model gaining the most attention. He emphasized that privatization was not the only model that could be in the future, especially depending upon what the legislature would like to see considered. He expressed that the attitude of the board was that there was more happening at KLC currently (with regard to its future) than in the entire history of the site.

Mr. Gamble thought the uniqueness of Alaska's geographical position had much to do with the increased activity. He discussed the surge of commercial space for the industry and the positive attributes of AAC that corresponded to the market needs. He emphasized the corporation's ability for a low-cost rapid turnaround launch capability that was attractive to a number of potential customers. He suggested that AAC, in the current market, could be viewed almost as a start-up company; one that had a great product and had

demonstrated its ability to customers to be cheap, reliable, and safe.

Mr. Gamble stressed that AAC had a geophysical position that was unlike the other launch sites that were previously mentioned, and thought AAC and KLC were very important for polar orbits. He mentioned other sites that operated at greater cost. He thought that if AAC signed a contract with Lockheed Martin, it would be a huge commitment in terms of polar launches, and would bring more business to the corporation. He thought it was probable that clusters of customers would form after AAC secured a major customer who would "break trail" for smaller companies that could settle in Alaska or partner with larger companies. He thought the priority for AAC was to get through the next two years, at which time there would be increased commercial success. The board was comprised of individuals who had extensive experience in the industry. He was confident, yet concerned about the budget realities being considered by the legislature.

Mr. Gamble thought the board would be discussing privatization with Mr. Campbell. He reiterated that the activities of the following two years would be significant in determining the future success of the corporation. He shared that Mr. Campbell intended to propose to the board that AAC zero its budget immediately rather than after two years as planned. He suggested that the idea was considered a "preemptive surrender" by some AAC board members. He thought it was possible, from a business perspective, to invest while simultaneously cutting back and reducing. He expressed confidence about having Lockheed Martin as a customer.

Co-Chair MacKinnon clarified that the budget issue being faced by the legislature concerned FY 15 as well as FY 16. She clarified that AAC had been cutting \$2 million from its budget, rather than \$2 thousand.

[9:46:47 AM](#)

Vice-Chair Micciche referred to the AAC budget request and asked if there was an over-supply of launch capacity. He wondered at what point a determination could be made that KLC was unable to generate interest from customers in the near future. He asked wondered what sort of information might precipitate the decision to cease operations.

Mr. Campbell clarified that the \$3 million request was money that was previously appropriated, and AAC was merely asking for the funds to be released. There was no new appropriation being requested for medium lift. He furthered that the \$4.2 million requested was not state funds, but rather an authorization request so that AAC could have the ability to receive the money through aerospace receipts. He summarized that AAC was asking for zero state funds for the FY 16 budget.

Mr. Campbell addressed Vice-Chair Micciche's question about the point to consider ceasing operations. He thought the topic was for discussion between himself and the board, and would result in the board concluding that he had not been able to generate sufficient business to indicate success. He shared that he currently had non-disclosure agreements with a dozen different companies, including the federal government, to discuss services through Kodiak (and Alaska) including and beyond rocket launch services. He was optimistic about the future of AAC as described by Mr. Gamble, and mentioned the recent contract signed with BlackBridge as an example. He thought it was important to communicate that Alaska was an aerospace state; while recognizing that the state could not contribute financially, but without discouraging business. He discussed the repercussions of ongoing proposals and talks about shutting down KLC.

[9:50:15 AM](#)

Vice-Chair Micciche thought that Mr. Campbell had made an important statement, and expressed appreciation for the answer to his question. He wanted to clarify that the board was focused upon moving forward, with the realization that if AAC was not able to follow through with diversification and other plans, it would be recognized and action would be taken.

Senator Olson asked what the AAC vision was ten years previously. He wondered if producing profit for the state, providing a societal service, or advancing intellectual knowledge were part of the original plan.

Mr. Campbell thought that the vision of AAC had changed over time. The legislation that initially established AAC was designed with close ties to the university, to engage

in business development marketing, and perhaps the operation of the Poker Flat Research Range [the largest land-based rocket research range in the world and the only high-latitude rocket range in the United States, located in the Interior]. He thought the vision had changed rapidly in the late 1980s and early 1990s, as the country changed.

Mr. Campbell recounted that former U.S. Senator Ted Stevens saw the need for missile defense and the capability of a larger launch facility that would need to have polar capability, and had identified Alaska as the location. The vision had changed into an aerospace company that would provide the lift (from KLC) for the federal government and commercial business, as well as providing other aerospace opportunities. Consequently, AAC had ended up focusing primarily on KLC. In the mid-1990s, the commercial market for satellites had collapsed in the U.S. because of the high cost of launch, and much of the business had gone overseas. At that time the commercialization of AAC had suffered a setback, and it had ended up being very dependent upon just federal government launches. He referred to former Senator Ted Stevens' vision to provide launch capability from Alaska for polar orbit, as well as providing a diversified economy in aerospace in additional locations than Kodiak. He mentioned the integration facility that AAC was discussing with Lockheed Martin, and thought it would provide some more business in Anchorage and support work in Fairbanks. He discussed additional diversification opportunities in the state, and thought that was the intent of Senator Stevens.

[9:53:48 AM](#)

Senator Olson mentioned other launch sites, and noted that many or most were federal facilities. He commented on the financial prowess of the federal government, and thought the state was disadvantaged by not having the same benefit. He thought Alaska was present as an aerospace state, but did not envision success in the long run due to financial constraints.

Mr. Campbell thought that Senator Olson's premise was not incorrect, and observed that AAC could survive on the earnings of KLC and expect to have enough launches for Alaska to be a profitable aerospace state. He considered that launches were but part of the portfolio that AAC should provide. He continued that if the federal government

was identifying KLC as a launch facility for federal space missions, it should be partnering with the state to make sure KLC was available and provide some funding for operations and sustainment.

Mr. Campbell discussed diversification of AAC and suggested that if KLC had one launch per year, federal funding, diversified work with unmanned aircraft systems, data downlinking, and other services, Alaska could be a very profitable aerospace state. He remarked on the competitive advantages of KLC, stating that the only competitive U.S. facility was Vandenberg Air Force Base. He illustrated an example of the Vandenberg site, in which a commercial launch was postponed for a national security mission, resulting in deferred revenue. Conversely, the federal government could not usurp launches at KLC, and customers would benefit. He reiterated that launches would not be the mainstay of business for AAC, but were a valuable commercial service niche for the country.

[9:56:56 AM](#)

Senator Dunleavy commented on the drastically low price of oil and the resultant economic impact. He suggested that the state needed to separate its hobbies from its money-making ventures.

Mr. Campbell agreed with Senator Dunleavy, and reiterated that AAC was requesting no state funding and asking for flexibility for the board to make decisions in order to move towards diversification and profitability.

Co-Chair Kelly discussed economic diversification and suggested that opportunities for such were frequently not well timed. He used an analogy to suggest that AAC was important for future development.

Senator Bishop concurred with Co-Chair Kelly.

Co-Chair MacKinnon thanked Mr. Campbell and Mr. Gamble for their presentation.

[9:59:30 AM](#)

AT EASE

[10:01:47 AM](#)

RECONVENED

^OVERVIEW: UNIVERSITY OF ALASKA FY 16 BUDGET

PATRICK GAMBLE, PRESIDENT, UNIVERSITY OF ALASKA (UA), AND CHAIR, BOARD OF THE ALASKA AEROSPACE CORPORATION discussed the PowerPoint, "FY16 Budget Overview" (copy on file).

Mr. Gamble discussed slide 4, "Top Level Organizational Chart," and noted that the University was in a period of turnover. He directed attention to position titles listed in red; highlighting new board members and vacant leadership positions including the University of Alaska Southeast (UAS) chancellor, the UA vice president for Academic Affairs and Research, the University of Alaska Anchorage (UAA) provost, and his own position as UA president. He discussed the importance of continuity despite the impending change in leadership.

[10:04:18 AM](#)

Mr. Gamble looked at slide 5, "Shaping Alaska's Future":

A strong university system is essential to a healthy and growing economy and way of life.

That strength is measured by:

- The number and quality of our graduates at every level
- Our results in meeting the workforce and research needs of Alaska
- Our partnership with others in tackling the state's challenges and opportunities

Mr. Gamble referred to a set of guiding principles which would allow for continuity, contained a document entitled "Shaping Alaska's Future" (copy not on file) as well as listed on slide 5. He clarified that the slide was an overview of ongoing themes, and it was expected that the themes would be used as a guide through the transition period.

[10:04:37 AM](#)

Mr. Gamble discussed slide 6, "FY 16 - FY 18 Budget Strategy":

Focused on a core, continuing to deliver best ever results, building a reputation for excellence.

- Student experience, retention, and success
- Data-driven decision making, program and training prioritization, meeting Alaska's business requirements
- Research and partnerships to enhance Alaska's communities and economic growth

Mr. Gamble stated that normally the University briefed the finance committees on incremental budgets, but currently there were no budget increments to discuss. He stated that the capital budget was greatly reduced from the governor's proposed budget.

Mr. Gamble wanted to discuss how the University would be getting through the following three years. He strongly emphasized that the University was in the workforce development business, and it was an important component of the overall budget strategy.

Mr. Gamble highlighted the importance of research to the university system and the state. He pointed out that research funding not only came from the federal government, but also came from the state.

Mr. Gamble addressed slide 7, "'The Core' and the FY16 Budget":

Our core programs, those where demand is high and the university demonstrates strength, are essential to continue meeting state and student needs.

- Workforce Development
- Research and Development
- Cultural Scholarship and Preservation
- Community and Industry Partnerships

Mr. Gamble pondered that the University was the keeper of a large portion of the cultural preservation of the state, and did not foresee a change in that arena due to budget

cuts. He mentioned diversification, and companies that might want to hire Alaskans. He used an example from the previous presentation by the Alaska Aerospace Corporation as to how a partnership with the University could work.

[10:08:49 AM](#)

Mr. Gamble looked at slide 8, "Recognize and Maintain Results":

Graduation rate nearly 12 percent higher than FY10

Degrees and certificates awarded in FY14 at an all-time high - up 31 percent from FY10

- Engineering degrees up 25 percent from FY10
- Degrees in high-demand job areas up 22 percent
- Teacher education degrees up 27 percent since FY10

Received more than \$650 million in competitive research grants since FY10 - \$118 M in FY14 alone

Mr. Gamble thought that budget language did not always reflect the relationships between line items that might have unintended consequences if cut. He discussed the connections between programs that grew as a budget decreased. He mentioned increased graduation rates, academic advising, and other methods that would connect output to priorities. He added that the University had a list of priorities that went beyond what was shown on the slide.

Mr. Gamble discussed slide 9, "Preserve and Enhance Reputation":

- UA percentage of total degrees that are STEM, 6th in the U.S for public institutions.
- UAA 2015 list of the best online programs for master's degrees in education.
- UAA ranked by US News and World Report in the top 5 percent out of 1421 institutions in the Western Region.

- UAA Experimental Economics ranked 10th in the nation.
- UAS 2015 list Best Online Teaching Degrees.
- UAF Homeland Security and Emergency Management (HSEM) program, ranked as 2nd in the US for affordability of program and 5th in the US for quality of program.
- UAF research publications and citations on Arctic research top not only the nation, but are also number one in the world

Mr. Gamble discussed the reputation of the University and its role in success. He thought reputation was an important factor in hiring good faculty and garnering funding for research. He discussed the University's positive reputation.

[10:11:43 AM](#)

Vice-Chair Micciche noticed a growing proportion of Alaska-educated engineers and technicians. He thought the product was impressive. He asked if the state had investigated the university system as a profit center and an international service provider, and as a means to off-set in-state costs.

Mr. Gamble thought there was great potential, as yet unlocked, for the University to be an international service provider. He thought that UAA and UAF had set up a commercialization and intellectual property organization that would allow the University to take a share of profits that would come from the research and development. He used the example of an algorithm developed by a faculty member that could be sold for profit. He thought the number of submissions for patents that had been submitted by the two schools was impressive, and recounted that each had received money for a share in the product.

Mr. Gamble recounted that the University had started programs in the past without knowledge of the potential return on investment. He elaborated that future considerations for new programs would always include an evaluation of whether a program would add value and whether it would break even, since it was no longer possible to subsidize programs with GF.

10:15:17 AM

Mr. Gamble addressed slide 10, "How to Strengthen the Core?"

Address the higher education paradigm shift:

- keep building value and showing accountability
- balance tuition and fees
- compete, stay relevant, embrace institutional academic excellence, and student service

Establish partnerships:

- State of Alaska, federal government, commercial businesses
- K-12 schools; other universities
- private industry

Build an institutional reputation for excellence:

- college and workforce ready students, excellent faculty, and robust research dollars
- earn a well-deserved seat at the academic table with peers

Mr. Gamble qualified that the slide addressed the University's "niche." He thought that Alaska's geography contributed greatly to the University's strength. He wanted the University to maintain its excellence without disassembling during the fiscal crisis.

President Gamble displayed slide 11, "'Niches' = Aim Points":

- Research for Alaska's needs
- Fisheries, Seafood and Maritime Initiative (FSMI)
  - Alaska's largest workforce
- Arctic Policy
- An Aerospace State
- Health Sciences

- Geo Sciences
- Land grant initiative

Mr. Gamble pointed out that the University was formally introducing the land grant initiative to the legislature in the current legislative session.

[10:17:07 AM](#)

Senator Hoffman referred to slide 10, and felt that the tuition and fees had attracted attention over the recent years. He asked about strengthening the core of the University, and asked Mr. Gamble to expand on the bullet point "balance tuition and fees." He wondered what the concept meant to the average student that was attending the University.

Mr. Gamble commented that the University could not solve its financial problems by raising tuition. He discussed the tuition increase from the previous year, which was the smallest increase in over 10 years. He reported that the University was looking at a small increase in the current year, but it was not expected that increasing budget shortfalls would be solved on the backs of the students. He thought that students needed to have a stake in the period of financial hardship as well. He thought a 5 percent tuition increase was not as low as some other states, and compared it to other tuition change scenarios, both higher and lower.

Co-Chair MacKinnon queried where Alaska's tuition ranked against the other states.

President Gamble discussed the group of states included in the Western Interstate Commission for Higher Education (WICHE) and the regional differences in other states. He estimated that the University was 75 percent lower than the average of its peer universities in the WICHE group. He estimated that the University was perhaps slightly below average in terms of total fees.

Co-Chair MacKinnon considered that Mr. Gamble had used two different sets of criteria in his answer. She wondered how University tuition compared to all other states.

Mr. Gamble estimated that the University's tuition was perhaps fourth from the lowest in the U.S. He stated that Alaska had gone up somewhat in the ranking, but now certain states such as North Dakota were subsidizing more.

[10:21:24 AM](#)

Co-Chair MacKinnon wondered if the presentation reflected President Obama's proposal to provide free community college education. She wondered if the proposal would drive up costs for students, and if the federal government would be carrying student loans for the program.

Mr. Gamble replied that there were no current details pertaining to that impact. He furthered that the UA tuition was charged at the same rate for the two-year and four-year colleges. He thought it would be a wonderful goal to cut the cost of Alaska's two-year programs in half, and thought it would attract a lot more students.

Co-Chair MacKinnon expressed concern that if there was federal funding for higher education and a corresponding belief that the education would be free, would it end up causing a raise in the cost.

President Gamble agreed that there would be a price tag associated with that proposal. He hoped that the proposal would lead to a higher graduation rate.

[10:24:26 AM](#)

Mr. Gamble addressed slide 12, "The Model: Eliminate Cost + Generate Revenue":

- Prioritize and reallocate resources
- Space utilization: reduce leased space, consolidate
- Long-term facility management plan... Sightlines, university building fund, land grant initiative
- Control energy use
- System-level collaborations ... IT
- Commercialization

- Investment opportunities...unmanned aerial systems, alternative energy, arctic research, climate research, fisheries, oceans, space physics, and public-private
- Enroll and retain more students

Mr. Gamble commented that there was currently a sense of urgency with regard to driving down costs and generating revenue, and thought that it tended to drive things more so than advanced thinking. He highlighted collaboration between the three universities in the UA system, and emphasized the leadership group made of the chancellors and provosts of each unit. He recounted that the University had been able to move forward on a number of initiatives that had never gained traction in the years past. He discussed the necessity of the University paying for its own utilities, which would be a significant additional cost.

Mr. Gamble mentioned that a number of companies that had wanted to partner with the University and commercialize. He highlighted that the University was internationally renowned for the number of published and cited articles pertaining to the Arctic. He reiterated his point about dismantling positive achievements of the University as an unintended consequence of budget savings. He added that it was important to preserve the goal of enrolling and retaining more students.

Senator Bishop thought the University was doing a great job, and discussed programs that were full and collaborating on the use of resources.

Mr. Gamble highlighted slide 13, "Challenges":

- "Readiness"
- "The Core"
- Communicating a positive message of quality and excellence while rightsizing staff, faculty, programs and departments
- Aging infrastructure
- Meeting the terms, expectations of public and private partners

- Preserving an essential ability to invest

Mr. Gamble asserted that Alaska did not have a standard for readiness for higher education. He thought most other states had a definition of readiness, and reported that the University was working with the state to identify the meaning of college or workforce readiness.

[10:28:13 AM](#)

Mr. Gamble thought that some Alaskan high school graduates were not ready at a level to enter a union apprenticeship program after high school. He considered the issue was important in order to reach goals of the University in fisheries, mining, and skill sets for the North Slope. He thought alignment with K-12 education would be an advantage for students of all kinds.

Mr. Gamble thought that the University needed to maintain a positive message. He discussed downsizing facilities and the importance of receiving community feedback. He commented that although there was aging infrastructure, deferred maintenance was still a top priority. He pointed out that the University utilized deferred maintenance funds as soon as they were received.

Mr. Gamble continued to discuss slide 13, and alleged that from a business point of view, the most difficult task was to identify future opportunities for investment.

Senator Hoffman looked at the last three points of slide 13. He referred to programs in health and science which provided essential services for public and private partnerships. He asked about the future of the Alaska Native Science and Engineering Program (ANSEP), WICHE, and the WWAMI program [a cooperative program of the University Of Washington School of Medicine and the states of Washington, Wyoming, Alaska, Montana, and Idaho] in the context of the last three points on the slide.

Mr. Gamble opined that ANSEP, WICHE, and WWAMI were core programs, and were essential to the reputation of the university system.

Co-Chair MacKinnon asked if Mr. Gamble was anticipating an increase or decrease in the operating budget for the University.

[10:33:21 AM](#)

President Gamble addressed slide 14, "UA view of the FY16 Operating Budget; Short-term Challenges and Long-term Implications." He qualified that the information on the slide was assembled by the University rather than by the Legislative Finance Division (LFD). He continued that LFD documents looked at appropriations through a particular lens, and the University viewed it differently. He identified a decrement of \$43 million from the governor's proposed budget, and stated that the amount was the target for cuts throughout the three universities in the UA system. He identified the shortfall as the near-term problem, and specified that the long-term problem was the declining GF baseline. He estimated that the University would continue to get reductions.

Co-Chair MacKinnon thought that the slide was confusing to the general public since every other department presented a baseline budget from the appropriation number provided by the department. She wanted to see what the University had received the previous year; and how the current budget request would be an increase, decrease, or flat-funded. She acknowledged Chancellor John Pugh and Chancellor Brian Rogers were in attendance.

[10:36:11 AM](#)

Co-Chair MacKinnon remarked on the position vacancies that had been discussed earlier in the presentation. The committee was interested in whether recurring costs were being removed from the budget, or if they were positions being held in the budget from past appropriations.

Co-Chair MacKinnon asked if Mr. Gamble wanted to comment on the recent closure of the child care facility at UAA. She had heard about the recent closure in the media.

Mr. Gamble directed attention to the 4.6 percent reduction in GF in FY 15, and recounted that the University had to cover a \$28.4 million budget shortfall, which had increased to \$42.9 million the following fiscal year. He explained that the cuts were necessary to account for the budget shortfall. He reiterated that the University focused on the amount of decrement to work with rather than the funding amount in any given budget cycle.

Mr. Gamble discussed the employee authorizations at the University, stating that of 4,900 authorizations, there were approximately 4,500 total employees. He continued that the number of staff was decreasing, the number of faculty was being reduced, and some programs had begun to close.

Mr. Gamble addressed the child care center closure, indicating that he wanted the matter to be dealt with entirely as a campus issue. He thought the issues were clear, and discussed the lack of accreditation of the academic program associated with the center. He thought there was more to the issue than was immediately apparent.

Co-Chair MacKinnon expressed appreciation for Mr. Gamble's presence at the meeting.

#

ADJOURNMENT

10:40:30 AM

The meeting was adjourned at 10:40 a.m.