

# 2012 ANNUAL REPORT



"A robust and competitive commercial space sector is vital to continued progress in space. The United States is committed to encouraging and facilitating the growth of a U.S. commercial space sector that supports U.S. needs, is globally competitive, and advances U.S. leadership in the generation of new markets and innovation-driven entrepreneurship."

The National Space Policy of the United States of America June 2010

With those words, Alaska Aerospace Corporation (AAC) initiated a series of changes this year designed to strengthen our competitive position in the aerospace industry and prepare our company for future growth. While financial and political uncertainty at the National level caused potential customers to be cautious about committing to future launches, our projections for future government and commercial launches from Alaska remains strong. This annual report will walk you through our history and background, our mission, our challenges, our growth plan and our current financial condition.

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## Alaska Aerospace Corporation Board of Directors

The nine member Board of Directors is appointed by the Governor in accordance with the requirements of Alaska Statute 26.27.020

### Patrick K. Gamble, Chair

President, University of Alaska Statewide System General, USAF (Ret)

Fulfills requirement for membership of the president of the University of Alaska

### Drue Pearce, Vice Chair

President, Spill Shield Incorporated Senior Policy Advisor, Crowell & Mooring LLP Former Alaska State Senator and Representative

Fulfills requirement for a state resident with significant high level of experience in growth and marketing

### Dr. Robert P. McCoy

Director, Geophysical Institute University of Alaska Fairbanks

Fulfills requirement for the membership of the Geophysical Institute of the University of Alaska

### David J. Weldon, MD

Partner, MIMA Physician Group US Congressman, Florida (retired)

Fulfills requirement for experience in the commercial space industry

#### Dr. Ronald M. Sega

Vice President for Energy, Environment, and Applied Research at Colorado State University Former Under-Secretary of the Air Force Two time astronaut on Space Shuttle Discovery

Fulfills requirement for experience in the commercial space industry and operational space experience

#### Major General Thomas H. Katkus

Adjutant General, Alaska Army National Guard Commissioner, Department of Military and Veterans Affairs

Fulfills requirement for the adjutant general of the Department of Military and Veterans' Affairs

### James W. Underwood

Vice President, Business Development and Federal Services URS Federal Services, Inc. Rear Admiral, USCG (Ret)

Fulfills requirement for a public member

### Lindsay C. Knight

Kodiak Athletic Club, Owner (Kodiak) Kodiak Chamber of Commerce, President

Fulfills requirement for a state resident, and a borough resident with significant experience in the business sector

### **Thomas D. Walters** Maritime Helicopters, Owner (Kodiak)

Fulfills requirement for a state resident, and a borough resident with significant experience in the business sector

### Senator Gary L. Stevens (non-voting) Alaska State Senate

Fulfills requirement for the membership of the state senate

### Representative Alan D. Austerman (non-voting)

Alaska State House of Representatives

Fulfills requirement for the membership of the state house

## Chairman of the Board of Directors Letter

To Governor Sean Parnell, the State Legislature, and the People of Alaska,

The Alaska Aerospace Corporation (AAC) team has been hard at work preparing for future growth during 2012. Dale Nash, who had been an excellent chief executive officer (CEO) for the past five years, left to become the executive director of the Virginia Commercial Space Flight Authority. Craig Campbell, who had been doing a great job working with Dale as president and chief operating officer (COO), was then appointed unanimously by the AAC board as president and CEO. Craig, in turn, recruited Mark Greby, formerly of ATK Space Systems, as the senior vice president and COO. Mark's exceptional background and space launch technical expertise will be required for realizing our vision of steady corporate growth. John Cramer moved over from the Department of Administration to become vice president and chief administrative officer, another very fine move. The team is set.

*Changes continued with Lindsay Knight of Kodiak joining the AAC Board of Directors. Lindsay provides AAC another fine Kodiak advocate's perspective as the corporation continues to capture more aerospace business development in Alaska.* 

Another significant reason AAC has been able to enjoy a high potential for future growth in aerospace operations is due directly to the tremendous support of the Office of the Governor and his administration. Based on the Governor's recommendation and inspired by his strong support, the Legislature appropriated the FY12 operating budget at \$8 million, which was sufficient to allow the Corporation to sustain development operations in 2012, albeit at a reduced level. The Kodiak Launch Complex, classified as a small lift launch provider in the space marketplace, has experienced reduced government launches due primarily to national fiscal uncertainty, and associated election year national politics. However, sensing growing opportunity, AAC spent much of the year earning the interest and technical respect of several important commercial and government customers looking to their future rocket launch schedules.

Meanwhile, much appreciated confidence and support from the Legislature resulted in the appropriation of \$25 million for the initial construction of Launch Pad 3, with a total cost of approximately \$125 million. Launch Pad 3 is the essential keystone component in AAC's future growth into a medium lift launch site…becoming a national space asset in the process. Lockheed Martin Space Systems has committed to using Launch Pad 3 for its west coast medium payload Athena III rocket launches, and to continue operations out of the existing Launch Pad 1 for its legacy west coast Athena I and II launches. Orbital Sciences Inc. has also expressed a keen interest in launching its new Antares medium lift rocket from Launch Pad 3.

Looking back over the past few years, AAC has grown steadily from a concept into potentially one of only four major national space launch assets. Today it provides the state with employment opportunities in the aerospace industry, attracts diversified business interests into the state, and offers a student pathway into a bright new aerospace future for the next generation of science, math, engineering, and technology students educated right here in Alaska. It is therefore with great anticipation that I look forward to 2013 at AAC. On behalf of the full Board of Directors, I am pleased to present this 2012 Annual Report.

Patrick K. Gamble

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*Chairman of the Board Alaska Aerospace Corporation* 



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## President and Chief Executive Officer Letter

To Governor Sean Parnell, the State Legislature, and the People of Alaska,

On behalf of all the outstanding employees at Alaska Aerospace Corporation (AAC), I am pleased to report that 2012 was a year of tremendous transition, as AAC focused on changing our business direction from exclusive government launch services to a broader government, civil, and commercial market emphasis.

The United States aerospace industry has faced significant challenges over the past few years. In 2012, the United States dropped to third in the number of annual space launches, behind both Russia and China. Today, nearly 80% of United States commercial satellites are launched from overseas facilities, primarily in Kazakhstan and French Guiana. The ongoing federal fiscal situation has placed further strain on the United States ability to grow the space industry. However, changes are occurring that are positive indicators for state spaceports, like our Kodiak Launch Complex (KLC). In 2012, AAC made significant strides towards adjusting to this new market environment which will position us well to secure future launches.

One of our most significant changes was the departure of Dale Nash in July. During Dale's tenure at AAC, he excelled at creating a state spaceport that is second to none in the nation in ability to provide cost-effective launch reliability to our customers. I am grateful to have had the opportunity to work with Dale these past two years and wish him success in his new role as Executive Director of the Virginia Commercial Space Flight Authority. With Dale's departure and to prepare for growth, I hired Mark Greby, formerly of ATK Space Systems, as our Senior Vice President and Chief Operating Officer. I also brought John Cramer on board as our Vice President and Chief Administrative Office/Chief Information Technology Officer, a position that had been vacant for the past couple of years and is essential for us to effectively manage our many internal programs.

One of the highlights this year was the selection of KLC for the launch of an Advanced Hypersonic Vehicle in late 2014. This launch will be in addition to the projected Lockheed Martin Athena II launch in 2014. In other positive news, the Air Force has selected Orbital Sciences and Lockheed Martin to launch small military satellites on multiple missions through 2017, using Orbital's Minotaur family, and Lockheed's Athena family. What's exciting to me is that KLC has already launched Minotaur and Athena rockets and Lockheed has selected KLC as their west coast location for the Athena program. We are projecting this contract will lead to additional launches from KLC through 2017.

Throughout the year, we also worked closely with Lockheed Martin to support the Athena III program. We initiated the environmental and permitting process, completed initial design of the facilities and pursued developing the financing package to allow for construction of our new Launch Pad 3 to begin in 2013. While we had anticipated beginning the construction phase this year, the challenging national financial environment has delayed the initial launch of the Athena III until 2015, at the earliest; therefore, construction was also delayed by a year.

Two major events occurred in Alaska in 2012 which highlight the significant industry interest in aerospace operations from Alaska. The first was the Alaska Rocket and Space Summit, hosted by Senate President Gary Stevens on June 21st in Anchorage. This summit provided major aerospace corporations a forum to present their vision of potential future aerospace opportunities for Alaska. Lockheed Martin Space Systems Company, Orbital Sciences, ATK, Boeing Defense, Space and Security Division, and others participated in a very useful dialogue with members of the Alaska legislature.

This was followed in November by Lockheed Martin conducting an Alaska Suppliers Conference in Anchorage. The Suppliers Conference focused on providing Alaska businesses with an understanding of potential business opportunities available to support the Athena program and other Lockheed Martin business interests in Alaska. AAC was an active participant in the event. Both these events illustrate the renewed interest by national aerospace companies to expand their aerospace market share in Alaska.

On a more challenging note, to meet our 2012 financial restrictions, AAC staff instituted a number of management control programs. These controls resulted in improved financial performance, and include:

- Administratively reorganizing AAC along business units,
- Instituting a business development process to identify business opportunities that have the best chance of being successful, so the appropriate resources can be allocated towards our marketing program,
- Establishing a targeted approach to professional conference participation, increasing our presence at the National Space Symposium and reducing our involvement in conferences that do not demonstrate a clear potential for business development,
- Initiating a senior level monthly review process covering our annual financial plan, business development progress, and status/timeline of our capital projects,
- Conducting a workforce reduction program, and
- Producing significant cost savings by reducing travel, memberships, sponsorships, and even electronically publishing our 2012 annual report to reduce printing costs.

The next decade will continue to be challenging for our nation, as budgets continue to shrink and the demands for space based systems continue to grow. We have been actively working with the Air Force and others to develop a requirements-based standard which validates KLC as a national space asset and provides greater use of the facilities by the federal government. The efforts of 2012 have set the stage for a stronger 2013, with positive developments in both government and commercial space launch opportunities.

I am confident that our business development plan will achieve the results of returning AAC to a healthy financial position, but it will require the continued support of the State of Alaska for the next couple of years. We will be aggressively marketing the unique aspects of launch services from Alaska, supporting Lockheed Martin in the development of the Athena program, and actively seeking partnership relationships with other companies and organizations to grow our non-launch revenues.

I want to join our Board Chair, Pat Gamble, in thanking Governor Parnell for his leadership in supporting our funding requirements. Additionally, we appreciate the solid support of our Congressional delegation, Senators Lisa Murkowski and Mark Begich, and Congressman Don Young and their staffers for their efforts in working with the federal agencies to develop policy changes and federal program requirements that enhance the use of state spaceports by both the government and commercial sectors.

So that's the crux of our efforts this year to refocus our energies to meet the current economic realities and pursue launches and other aerospace opportunities in the coming years. My commitment to you is to expand upon this momentum to return Alaska Aerospace Corporation to the profitable position we held just a few years ago. I trust you will find our 2012 Annual Report very informative and useful.

Sincerely,

*Craig E. Campbell President and Chief Executive Officer* 



# **Our History/Background**

Alaska Aerospace Corporation, created by state statute in 1991, is owned by the State of Alaska and functions as an independent public corporation. The corporation was established to take a lead role in the development of the aerospace industry in Alaska. AAC launched their first rocket from the Kodiak Launch Complex in 1998 and to date has a 100% success rate in sixteen launches of orbital and suborbital rockets with payloads of up to 4,000 pounds from Launch Pads 1 and 2. Launch Pad 3, which will be ready to provide responsive spacelift in late 2015, is designed to launch rockets with payloads over 10,000 pounds, nearly triple the current capability.

The Kodiak Launch Complex (KLC), Alaska's state-ofthe-industry spaceport, is owned and operated by Alaska Aerospace Corporation (AAC). This modern rocket launch facility is designed to launch payloads into Polar, Sun-Synchronous, and Highly Elliptical Orbits (HEO). KLC is an FAA licensed, customer oriented launch facility that provides schedule assurance, an experienced launch team, modern GPS-based metric tracking, and a new rocket motor storage facility that supports responsive launch capabilities. The spaceport provides strategic access to space for national missions as well as commercial launches as one of the four major U.S. orbital launch facilities.

KLC occupies 3,717 acres at Narrow Cape on Kodiak Island. It is an ideal location for southern launches with a wide launch azimuth and an unobstructed downrange flight path over the North Pacific Ocean. These features ensure safe rocket flights over unpopulated areas. The indoor all-weather facilities at KLC allow processing and launch operations year round, and KLC's experienced team can support customers in delivering reduced timelines for launch campaigns. Alaska Aerospace's goal is to increase access to space in a responsive and cost effective manner by leveraging our professional workforce and modern facilities.

### **Our Mission Accomplishments**

Since our establishment in 1991, AAC has taken a lead role in the development of the aerospace industry in Alaska with the construction of the Kodiak Launch Complex and the completion of sixteen successful launch campaigns. We are recognized as the most cost effective west coast spaceport capable of small lift high inclination and polar orbit launches.

As part of our expansion plans for moving into the medium lift market, Lockheed Martin Space Systems has committed to launching their new medium lift Athena rocket from KLC and other launch vehicle providers have expressed a keen interest in using KLC as their west coast medium lift launch site. This has prompted us to design Launch Pad 3 with a capability to accept both solid and liquid fueled medium lift launch vehicles and for the Alaska Legislature to commit \$25M toward the estimated construction cost of \$125M+. We are engaged in the planning and coordination required to raise the additional funding from both private and government backed sources.



## **Our Capabilities Today**

As a small to medium lift launch site, the Kodiak Launch Complex offers our customers the most modern purpose-built launch facility on the US west coast for polar, sun-synchronous, and highly elliptical orbits. The facilities are state-of-the-industry and capable of launching any vehicle in our size class. Our trained and experienced work force is able to quickly respond to customer requirements in providing tailored launch services using the facilities described below.

LAUNCH CONTROL CENTER

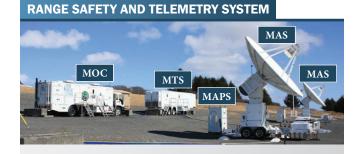


The Launch Control Center (LCC) is the primary mission administration facility at KLC with customer offices and associated office equipment. It also includes our Weather Forecast Center with lightning detection, and our radar and communications hubs. The LCC is large enough to support the program management team in addition to the launch crew and other mission critical support personnel.

### LAUNCH OPERATIONS CONTROL CENTER



The Launch Operations Control Center (LOCC) is KLC's launch control facility. The LOCC is located within the LCC, which conveniently allows administrative and launch operations to occur in one location. The LCC/LOCC is located approximately two miles from the launch pad area, and is outside the pad area Explosive Safety Quantity Distance requirements, thus ensuring the safety of launch personnel during hazardous processing and launch operations.



AAC operates and maintains two complete Range Safety and Telemetry Systems (RSTS) to track and record flight data, and to ensure safety of the public. The RSTS provides S-Band telemetry receipt and recording and command destruct transmission. Each RSTS is fully redundant and can operate independently or in concert with the other. Both RSTS systems can be deployed to provide support from any location. The RSTS is transportable by land, sea, and air. Currently, one system is located at KLC, shown below, and the second system is deployed to Cordova, Alaska, to provide off-axis launch support. When not deployed both systems are located at KLC.

Each RSTS system consists of a Mobile Operation Center (MOC), a Mobile Telemetry System (MTS), two auto-track 5.4 meter S-Band receive and high power Ultra High Frequency (UHF) transmit Mobile Antenna Systems (MAS) with two separate high power omni-directional transmit antennas (not shown) and, two Mobile Antenna Power Systems (MAPS).

### MAINTENANCE SUPPORT FACILITY



Maintaining the specialized equipment, transport vehicles and the many electrical and communications systems critical to operations at KLC requires a skilled team of specialists and tools. This 19,000 square foot facility houses a large customer support bay, mechanical and electrical tools and equipment, shipping and receiving areas and offices for KLC administrative, technical and engineering personnel.

### Capabilities

### PAYLOAD PROCESSING FACILITY



The Payload Processing Facility (PPF) is an environmentally controlled building where payloads can be prepared and integrated. The facility is a Class 10,000 Clean room with two large processing bays and an airlock, and cranes and other handling equipment for the payloads. The PPF has hypergolic fueling capability with spill sumps. Hazardous activities can be monitored through closed circuit television (CCTV) coverage within the Control Room.

### INTEGRATION AND PROCESSING FACILITY



The Integration and Processing Facility (IPF) provides the enclosed and secure temperature and humidity-controlled environment necessary for the assembly and inspection of rocket motors in preparation for launch. The facility is large enough to support horizontal processing on customer provided rail-sets or transporter-erectors.

### SPACECRAFT ASSEMBLIES AND TRANSFER FACILITY



The Spacecraft and Assemblies Transfer (SCAT) facility is roller mounted on rails and provides an environmentally controlled enclosed structure over sub-orbital Launch Pad 2. It is also used to expand the processing area in the IPF or the break-over bay of the Launch Service Structure (LSS). The SCAT's 25-ton bridge crane is used to erect sub-orbital rockets on Launch Pad 2.

### LAUNCH SERVICE STRUCTURE AND LAUNCH PAD 1



The Launch Service Structure (LSS) is a fully enclosed facility with work platforms that are adjustable to accommodate rockets of various diameters and heights. The 75-ton bridge crane supports the transfer of rocket stages for stacking on the launch stool. The LSS supports Athena II, Minuteman and Minotaur class launch vehicles. The 174 ft launch tower and flame trench are sized to handle launches with up to 1.1 million pounds of thrust.

The LSS is a multi-use structure and converts from an assembly building to a launch tower. It consists of two structures that are rotated open on circular rails to clear the launch vehicle.

### Capabilities

### **LAUNCH PAD 2**



Launch Pad 2 is located between the IPF and the LSS and is used for the launch of smaller sub-orbital rockets. Rockets are transferred to Launch Pad 2 from the IPF, and then the SCAT is moved over the pad. The SCAT crane is used to lift the rockets from the transporter-erector onto the launch stool. When final preparations are complete, the SCAT is pulled clear of the launch area.

Launch Pad 2 has been used for the launch of targets and sensors boosted by commercial CASTOR<sup>®</sup> IV class boosters, Polaris derivative rockets, and single and multi-stage combinations of Minuteman derivative rockets.

### ROCKET MOTOR STORAGE FACILITY



The Rocket Motor Storage Facility (RMSF) includes two 89 ft environmentally controlled storage magazines, safe for storage of up to 225,000 lbs of solid propellant. The site has approved plans for three additional magazines. Each magazine is earthcovered with a 10 ft x 10 ft sliding door. Each Earth Covered Magazine (ECM) is equipped with the required Heating, Ventilating, and Air Conditioning (HVAC) systems to maintain the rocket motors at the customer's required temperature and relative humidity with remote monitoring capability. The ECMs have rail systems that are designed to interface with motor transportation rings and launch vehicle transportererectors for fully assembled rockets.

### PLANNED VEHICLE PROCESSING FACILITY, SEGMENT STAGING FACILITY, AND LAUNCH PAD 3



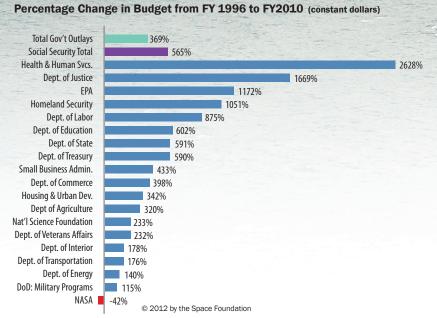
#### Key Features:

- 280 foot Tower with 225 ton Bridge Crane and a Hook Height of 260 feet
- Flame Trench Rated for 2.8 million pounds of Thrust
- Adjustable Work Platforms for Vehicle Stacking Operations
- Supports All Weather Processing and Vehicle Stacking
- Tower Retracts from Pad to Storage Location for Launch
- Staging for Entire Rocket Motor Set in Environmentally Controlled Facility
- Universal Launch Stool Adaptable for Multiple Medium Lift Solid Fuel Vehicles
- Design Is Engineered for Future Liquid Fuel Capability

The Vehicle Processing Facility (VPF) is a fully enclosed tower for stacking and processing operations at the launch pad. The bridge crane supports the transfer of rocket stages for stacking on the launch stool. The entire tower moves on rails between the launch pad/launch stool and its storage location prior to launch. It will accommodate up to an Athena III class solid fuel launch vehicle when completed in 2015, and with future modifications, other planned medium-lift vehicles.

# **Business Environment Assessment**

As a state-owned corporation, Alaska Aerospace Corporation's (AAC) primary purpose is to allow the state to take a lead role in the exploration and development of space, to enhance human and economic development, and to provide a unified direction for space-related economic growth. The ability for AAC to achieve this objective and our ability to fund our obligations depends on a number of external factors, many of which are beyond the control of AAC. This section of our Annual Report is designed to provide an overview of the business environment and our approach to addressing some challenging issues.



**1**. The severe national economic downturn has created tremendous pressures on the national economy, resulting in a constrained environment for federal space activities. Both the Air Force, as the executive agent for space within the Department of Defense, and the National Aeronautics and Space Administration (NASA) are facing slow to no growth funding for space activities in the coming years. Therefore, only high priority government missions are being funded, resulting in a back-log of satellite launches, especially for small and medium class rockets. As the cost of launch has increased, the commercial market has shifted to off-shore launches at locations like Kazakhstan and French Guiana. This has further stressed the U.S. launch infrastructure. As we enter 2013, both the Air Force and NASA are pursuing differ-

ent approaches to space launch which provides more competitive opportunities designed to lower costs and provide for more U.S. launches. Because of the low cost of a launch from KLC and the ability of AAC to fully meet Federal government requirements for launch, we feel the economic downturn and Federal budget challenges present positive opportunities for AAC to secure more launch customers. One of the constants in the space business is that it takes between eighteen and twenty-four months from the time a decision is made to the actual launch. Therefore, while the current economic downturn and Federal budget situation provides an opportunity for AAC to gain market share in the small-lift launch business, initial launches from the Kodiak Launch Complex (KLC) as a result of this national financial situation and our business development efforts are not expected to be realized until late in 2014 or early 2015.

2. Our potential customers are heavily dependent on government contracts and they may not be successful in securing the level of business necessary to retain profitability. The primary commercial rocket launch companies, i.e. Space Exploration (SpaceX), Orbital Sciences, Lockheed Martin, and Boeing are very dependent on government contracts to provide launch services in the United States. Lockheed and Boeing joined together to form the United Launch Alliance (ULA), which has held a monopoly on U.S. government launch services for large, heavy rocket launches from Cape Canaveral and Vandenberg AFB the past few years. The Air Force has been increasingly concerned that the cost of a launch is becoming prohibitive. Therefore, through

"One of the important objectives of my administration has been, and will continue to be, the encouragement of the private sector in commercial space endeavors. Fragmentation and shared authority had unnecessarily complicated the process of approving activities in space. Enactment of this legislation is a milestone in our efforts to address the need of private companies interested in launching payloads to have ready access to space."

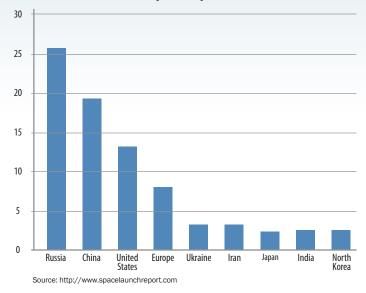
President Ronald Reagan Statement on Signing the Commercial Space Launch Act October 30, 1984

the Orbital/Suborbital Program Three (OSP-3) they have opened the market to other interested companies. Through OSP-3, SpaceX has secured two launch contracts from the Air Force towards certification for future military heavy lift launches. However, the government is also increasing interest in small and medium lift capability for government launches. SpaceX, Orbital Sciences, and Lockheed Martin have been awarded contracts for launch services under OSP-3 intended to lead to more medium and small lift government launches through 2017. Kodiak is well positioned to secure some of these launches, provided the government exercises the launch options with Orbital Sciences and/or Lockheed Martin. SpaceX has already selected Vandenberg AFB for their west coast launches under this program.

3. The space launch business is fiercely competitive in a very constrained marketplace. Companies like ULA, SpaceX, Orbital Sciences, Lockheed Martin, Boeing, ATK, Aerojet, and others are all competing for launch contracts, ranging from small to heavy launches. As already discussed, with nearly 80% of commercial launches occurring off-shore, and the high cost of launches in the U.S., there is tremendous competition between rocket launch companies in the U.S. The U.S. is also facing intense price competition from foreign launch providers, which are often government subsidized. In a very specialized market, competition between current U.S. rocket manufacturers can be intense. SpaceX has established an industry standard for lower cost launches than has been previously available in the U.S. Other companies, like Orbital Sciences, ATK, and Lockheed Martin are working to meet that price benchmark which in turn has increased the competitive nature of space launch.

As we look to secure a new niche in launch services which maximizes the competitive advantage of KLC, AAC is ideally positioned to capture an increasing portion of the Non-Geostationary Satellite Orbit (NGSO) market by offering cost-effective and reliable launch services in this competitive market. However, KLC only offers small-lift capability, which results in a limited market of potential future launch operations. Without expanding to medium-lift capability, sustaining future profitability for AAC will be challenging. AAC has developed a comprehensive business development plan to guide us into this expanding market. Managed by the senior leadership team, the business development plan provides a comprehensive assessment process of potential business opportunities, where the management team can determine the probability of success and then apply the appropriate resources against those potential contracts that the team deems to have the highest probability for success. This allows AAC to avoid pursuing potential business in areas where the probability of success is low, and further provides the ability to concentrate the marketing efforts (both people and money) against those potential opportunities that are aligned with our company's core competencies. AAC management is also aggressively reviewing all pricing models to assure that we offer the lowest launch costs possible, while also ensuring that the company can return to profitability within the next thirty-six months. To accomplish this will require that AAC maintain the high level of technical capability currently available to our customers, while also providing unique launch service capabilities at, or below, current U.S. market prices. With this strategy, we are confident that new business will be generated in future years.

Finally, AAC is continuing to pursue non-launch revenues for future years. Despite our unsuccessful effort to secure a portion of the Ground-based Mid-course Defense contract at Fort Greely last year, we continue to evaluate the potential of expanding into other non-launch revenue programs. High on our list is the Unmanned Aerial Systems (UAS) business line. We are working with the Air Force on their potential divestiture of Block 30 Global Hawk airframes, with subsequent transfer to AAC. Under the AAC proposal, the Air Force would transfer between three and six Block 30 Global Hawks to AAC. The Air Force would retain ownership of the airframes, with AAC being the operator. AAC would sell Global Hawk services to other government agencies on a pay-for-service basis, with the Air Force retaining priority use. We are also pursuing other non-launch programs on a contractor/sub-contractor relationship for government aerospace services in Alaska. It is our intention to develop the non-launch sector as a separate business unit, which would meet our charter purpose of developing the aerospace industry in Alaska.



2012 Overall Launches by Country

4. The external competitive pressures of foreign space agencies has further eroded the United States lead in space. By the end of 2012, the United States ranked third in the number of space launches annually, behind Russia and China. Foreign governments provided national, and in the case of the European Space Agency (ESA), multi-national funding to support space launch operations. As AAC strives to lower launch costs and provide superior launch services, it is expected that some portion of the overseas launch market will return to the U.S. However, the market is very reactive to external pressures generated by the global economic condition and to the level of foreign subsidization provided to overseas launch complexes. Foreign government subsidies of space launch operations inhibit the U.S. ability to compete with costs provided by the foreign space agencies. This indirectly impacts KLC, since KLC receives no Federal funding support which could off-set the price differential offered by foreign space agencies. The 2012 FAA Commercial Space Transportation Forecasts indicate a fairly steady launch market through 2021, with an average of thirteen NGSO Small to Heavy launches per year. Industry projections show that the aggressive pricing model by SpaceX and the competitive efforts of other U.S. rocket companies to match launch costs, will eventually make U.S. based launches more favorable. While it is projected that U.S. launch costs will continue to be higher than off-shore costs throughout the decade, the reduced delta between off-shore and U.S. costs will become less of a factor in launch location determination, potentially resulting in more opportunities for U.S. launches of commercial satellites through 2021. The strategy for AAC is to retain low cost launch opportunities and market the flexibility of launch scheduling to attract both an increased number of government and commercial customers. We have had inquiries from a number of launch service providers, rocket manufacturers, and agencies that sponsor space missions on providing cost

information, which is a positive indicator of a developing interest to pursue more launches from U.S. launch facilities.

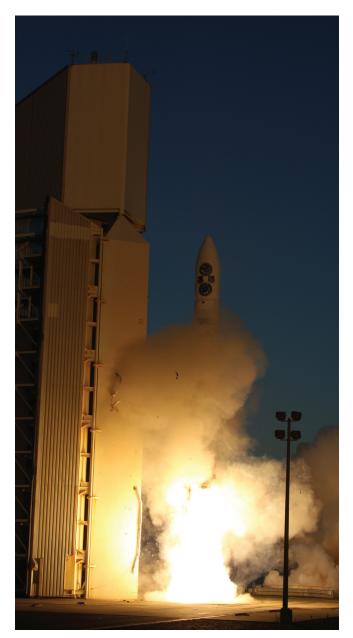
5. There is tremendous pressure for lower launch costs in the United States to compete with foreign launch sites. This is placing pressure on rocket companies to develop lower cost launch vehicles and lower cost launch services. Our business is heavily dependent on providing cost-effective launch services from KLC. However, the total cost of launch includes many factors beyond our control. In recent years the launch costs in the United States have risen to a point where overseas launches are more cost competitive for satellite operators. U.S. rocket companies and launch service providers are striving to lower launch costs to be competitive with foreign launch sites; however, government subsidization of foreign launch sites by foreign governments and agencies remains an issue that may continue to place a stifling effect on the U.S. launch market. These launch cost drivers are creating an improved environment for AAC to market the cost-effective and schedule reliable services provided at KLC.

6. The primary launches from the United States will continue to support Geostationary Satellite Orbits (GSO), which are served by Cape Canaveral in Florida and Wallops Flight Facility in Virginia. Based on recent launch forecasts, approximately 40% of launches in the next decade will require NGSO. In the United States, KLC and Vandenberg AFB are the two launch sites that support NGSO. Currently, Vandenberg AFB is the only west coast facility to offer heavy and medium-lift capability. KLC provides only small-lift capabilities. Construction of Launch Pad 3 at KLC is designed to bring medium-lift capability to Alaska. Once Launch Pad 3 is constructed, AAC will be better positioned to gain a larger market share of west coast launches by offering both small and medium-lift to customers requiring NGSO. There is no corporate strategy that will adjust the percentage of launches that require GSO versus NGSO orbits. To counter the fact that the majority of U.S. launches will be GSO and that the majority of launches in the future will require medium-lift capabilities, AAC is pursuing development of Launch Pad 3, focusing on the NGSO market demands of the next twenty years.

7. We compete against a large federal government sponsored space complex for NGSO orbits. Our competitor is Vandenberg AFB, which currently uses non-standard accounting practices that do not cover the full costs of supporting a launch. This gives VAFB an apparent cost advantage over KLC. The Air Force does not include base operations and sustainment (O&S) costs in the determination of total launch costs from Vandenberg AFB. This creates an uneven launch cost burden, as launches from KLC must include the full cost of services, to include O&S costs. The cost differential of including O&S for KLC launches and excluding these same costs from Vandenberg AFB creates a significant disadvantage for KLC. Vandenberg AFB's fully burdened range costs, including O&S for the base, greatly exceeds the O&S costs of KLC. However, in Federal proposals, range costs for Federal Ranges (Vandenberg AFB) are often not fully costed; therefore the complete cost of services that the taxpayer pays for Vandenberg launches is not equitably compared to the fully burdened cost of launches from KLC. AAC will continue pursuing policy changes that provide a level playing field by ensuring that full cost accounting is transparent when determining the actual cost of launch between KLC and Vandenberg AFB. There is currently interest in Congress to require visibility of all O&S associated with launches from Federal complexes. If successful in changing the current Federal proposal pricing process to providing full transparency of the total cost of launch by both KLC and Vandenberg AFB, AAC would be in an improved competitive position to attract more NGSO launches.

8. The current International Traffic in Arms Regulations (ITAR) must be changed. According to testimony on the floor of the U.S. Senate by Senator Bennett (D-CO) "Under the current law, satellites must be subject to the most restrictive export controls regardless of whether they are sensitive, militarily significant, or widely available outside of the U.S. This has both diminished our Nation's economic competitiveness and our national security. In fact, the State and Defense departments recently concluded that the `current law forces the U.S. Government to continue to protect commonly available satellites and related items on the USML, thus impeding the U.S. ability to work with partners and putting U.S. manufacturers at a disadvantage, but providing no noticeable benefit to national security." Senator Bennett has introduced legislation that will reform U.S. export control laws so that the executive branch has the discretion to determine the appropriate level of export controls for satellites and related items. The executive branch has such discretion for all other types of items whether the item serves a military or a dual-use purpose. The bill also prohibits the transfer of such items to China, North Korea, and state sponsors of terrorism. Passage of this legislation, or any other similar proposal, will increase the potential for U.S. launches, as commercial satellites will be able to be exempt from ITAR restrictions when no clear direct threat to U.S. security exists. The Aerospace States Association (ASA) and others are actively working to change Federal law to enable more competitive commercial satellite launches to occur without causing ITAR violations. AAC supports these changes to ITAR and encourages Congressional action.

**9.** Our objectives to generate additional revenues and to reduce our costs may not be adequate or successful. Alaska Aerospace has developed an aggressive business development plan to attract both launch and non-launch revenues in the next decade. However, the ability to attract new launch customers is dependent on a number of variables that are not under the control of AAC. Whether a launch needs to be in GSO or NGSO is determined by the mission objective of the satellite to be launched. KLC supports NGSO orbits, which account for less than 50% of the future demand. Government selection of the rocket provider is also not within the control of AAC. For a launch from KLC, the mission requires a NGSO orbit and the government must select a rocket company that has identified KLC as their west coast launch



location. Currently Orbital Sciences and Lockheed Martin use or intend to use KLC for west coast launches of smalllift rockets. Lockheed Martin, to date, is the only company that has announced an intention to use KLC for mediumlift operations, although AAC continues to discuss potential medium-lift opportunities with other U.S. companies.

AAC is also pursuing non-launch revenues, but each of these potential markets requires a government contract that is subject to a public selection process, or a cooperative agreement with a Federal agency. Success is highly dependent on the proposal teaming, submitted costs, capabilities, and needs of the government. AAC will seek partners to develop the best potential team to win a bid, but due to the competitive nature of the industry, may not prevail. Therefore, AAC has undertaken a rigorous cost reduction program in 2012, which included reducing our workforce, reducing costs associated with organizations, sponsorships, and travel, as well as deferring any non-critical maintenance or sustainment requirements. Finally, whether our internal initiatives will be successful depends upon factors that are beyond our control, like the number of launches offered each year by the government, changes to Federal policies and regulations that allow for greater use of state spaceports, and the state of the national/global economy and the Federal budget for space operations.

10. We may not be able to retain key personnel. In 2012, AAC conducted a workforce reduction program to lower overall personnel costs and remain within the appropriated state budget. The current workforce level is sufficient to sustain the high level of technical readiness of the site to launch rockets and to secure contracts; however, staffing is not adequate to actually conduct launch operations. Therefore, we have retained the vacated positions in our budget as vacancy factors that will need to be filled once a launch contract is secured. These vacant positions will be filled and paid for through revenues generated by launch services, not by state monies. Without sufficient launch activities in the coming years, AAC may lose experienced staff personnel as individuals seek career opportunities that provide more operational activities, or seek career advancements in positions and/or pay. AAC pay and benefit compensation packages for most employees are below the national average of other launch service providers, placing pressure on our ability to retain personnel. With sufficient launch activities, it is projected that pay and benefit packages can be adjusted more in line with industry averages, but this will occur only after launch revenues project sustained earnings that support pay and benefit adjustments. In the meantime, the state government pay increase in 2012 was applied to AAC employees. This compensation adjustment was favorably received by AAC employees and we do not project any significant personnel departures in 2013.

## NATIONAL SPACE POLICY of the UNITED STATES OF AMERICA

Principle 2 - A robust and competitive commercial space sector is vital to continued progress in space. The United States is committed to encouraging and facilitating the growth of a U.S. commercial space sector that supports U.S. needs, is globally competitive, and advances U.S. leadership in the generation of new markets and innovation-driven entrepreneurship.

> President Barak Obama June 28, 2010

**1 1** . While Federal space policies and regulations encourage federal agencies to use state spaceport assets, the current Federal law creates a gap in providing the legal abilities for Federal agencies to partner with state spaceports. The 2010 National Space Policy (NSP) clearly articulates that a robust and competitive commercial space sector is vital to the continued U.S. progress in space. Likewise, the 2005 U.S. Space Transportation Policy states that the Federal government must sustain and promote a domestic space transportation industrial base, including launch systems, infrastructure, and the workforce necessary to meet on-going United States Government national security and civil requirements. This policy goes further to specifically state that the Federal government shall encourage private sector and state and local government investment and participation in the development and improvement of space infrastructure, including non-federal launch and reentry services. This is exactly what AAC provides with the state-of-the-industry facilities at KLC. However, according to the Department of Defense (DoD), current law limits the ability of the Federal government to directly establish Federal/ Commercial Partnerships for shared facilities and services. The Air Force is now proposing an amendment to the FY2013 National Defense Authorization Act (NDAA) which would allow Federal agencies to fully implement the intent of the 2010 NSP. Titled, Commercial Space Launch Cooperation (CSLC), this amendment would specifically permit Federal agencies to partner with non-federal agencies to lower costs, increase range capabilities, and develop cost sharing relationships which provides increased opportunities for non-federal agencies to secure government business. This proposal is significant to AAC, as it meets the gap identified in 2011 in the ability for the Air Force to enter a state/federal matching fund relationship to cover the O&S of KLC. We are working with our Congressional delegation to support this change.

12. We are increasingly dependent on state-of-theindustry technology but could lose our competitive advantage as other ranges modernize, unless AAC can capitalize technology improvements that keep the Kodiak range at the leading edge of space launch capabilities. The Air Force is evaluating the potential of converting the Eastern and Western ranges (Cape Canaveral and Vandenberg AFB) from radar tracking to GPS tracking. Additionally, the Federal government is testing the capability of using Autonomous Flight Termination Systems (AFTS) in lieu of the current ground based system for U.S. launches. KLC operates a non-federal, FAA-licensed range using state-ofthe-industry GPS tracking. If Federal ranges convert to GPS tracking, that specific advantage to KLC will be reduced. To ensure that KLC remains a leader in flight tracking technology, AAC will need a capital investment in the Range Safety and Telemetry System (RSTS) over the next few years to improve our tracking capabilities to be equal, or better, than the projected improvements being evaluated for the Eastern and Western ranges. In addition, KLC is working with both government and non-government agencies to utilize the AFTS capabilities in the test and evaluation phase so that KLC can be an industry leader in implementing this system once certified by the Federal government.

13. AAC is currently wholly dependent on the State of Alaska to provide Operations and Sustainment Funding. For state fiscal year 2013, the State provided \$8.0 million in General Funds (GF) to support O&S for KLC. With no launches scheduled for calendar year 2013, Governor Parnell has again asked the legislature to provide an additional \$8.0 million of state GF to support AAC. Without new launch service business and/or a Federal government agreement to provide matching funding to KLC for O&S in future years, it is expected that the State of Alaska will eventually conclude that continued state financial support is not in the best interest of the state. When AAC was established, it was understood that the State of Alaska would need to provide limited state funding in order to develop and operate the corporation. Accordingly, since being established, the State has invested nearly \$35.0 million, which includes \$7.0 million for constructing two Rocket Motor Storage Facilities (RMSF) at KLC. From this investment, AAC has received \$145.0 million in Federal funding for facility construction and \$135.0 million in customer generated launch revenues. This totals approximately \$280.0 million against the \$35.0 million in state funding. In the State's 2013 budget, another \$8.0 million was provided for O&S and an additional \$25.0 million was appropriated for development of Launch Pad 3, a new facility to accommodate medium-lift rockets. To date, approximately \$1.0 million of the \$25.0 million capital funding has been spent to cover the initial facility design and Environmental



Assessment (EA) for Launch Pad 3. For State FY 2014, AAC is again requesting \$8.0 million for O&S, as well as slightly less than \$1.0 million for deferred maintenance and \$165,000 for repair/modernization of the KLC weather facility.

It is recognized that KLC is a national space asset and that virtually all launches from KLC will be Federal launches, either by U.S. government agencies or contracts with commercial industry supporting national programs. Therefore, we understand that future state funding for AAC will be highly dependent on the ability of AAC to generate launch revenues and Federal financial support. We have been actively pursuing a proposal with the Air Force to cost share the O&S. To date, the Air Force has been unable to meet this requirement, both by budget constraints and legal restrictions. As previously mentioned, the Air Force is seeking a change in Federal law which will enable the agency to create partnerships with non-federal agencies, to include an ability to cost-share. If this change is adopted by Congress, AAC will re-address the partnership issue with the Air Force, with the message that, since KLC is a national space asset, the State of Alaska may not be willing to continue providing state funding to a complex that primarily serves national interests without an equal financial commitment from the Federal government. With the Federal government supporting 100% of the O&S for Vandenberg AFB, which provides launch services at a significantly more expensive cost to the U.S. taxpayer than launches from KLC, it is reasonable to expect that a state/federal partnership, which provides O&S cost-sharing for KLC, to be attractive to the Air Force. We anticipate this process will take approximately 24 months to conclude.

# **The Year of Transition**

Recognizing the challenging financial situation of AAC, our leadership has taken a number of steps to reduce costs, while ensuring that we maintain the highest state of readiness for future launches from KLC. Below are some of the initiatives started in 2012:

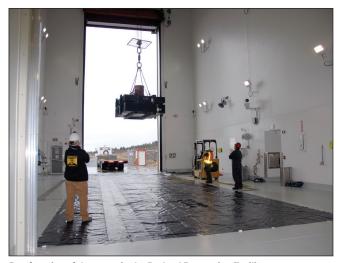
Personnel Changes - Wages and salaries represent over half of the company's annual operating expenses. Due to the challenging financial condition of AAC, we completed a workforce reduction plan to align our operations and sustainment costs within the \$8.0 million in state funding provided for SY2013. This resulted in two voluntary departures and an additional five personnel being laid off in September. Because these positions are necessary for launch operations, but not for operations and sustainment, we retained the Personnel Control Numbers (PCN's) and will keep these positions vacant until we secure contracts which generate additional revenues (other than State funding). Due to the lack of launch operations in 2012 and with the first expected KLC launch projected for late 2014, we will retain 10 positions as vacancies, which accounts for nearly 20% of our workforce. We also transferred our contracted security services to AAC employees, providing additional savings to the corporation.

**Organizational Changes** – The senior leadership team conducted a review of the organizational structure of AAC and proposed to the Board of Directors in October a change from a locational alignment structure between Anchorage and Kodiak, to a business unit structure, whereby employees are aligned based on their specific job descriptions. One of the most significant changes from this reorganization was the consolidation of AAC's Information Technology (IT) functions under the newly created Chief Information Officer (CIO). It is anticipated that this new organizational structure will better serve the administrative and operational aspects of the company.

Business Development Program - AAC leadership completed a comprehensive review of the current business development plan, resulting in substantial changes in the method by which we evaluate and measure business development. In an effort to control business development expenditures, while maximizing efforts on prospective markets that have a reasonable opportunity for development in Alaska, AAC established a quantifiable approach which evaluates each business development initiative against our core competencies, the current market, customer base, national political and economic climate, and past relationships. Opportunities are divided into three sections and resources are allocated only against the prospects with the highest probability of success. It is projected this will reduce overall marketing expenditures and will improve our ability to secure new business through a targeted approach.

**Investment Strategy** – At our October Board of Directors meeting, AAC received approval to change our investment strategy to maximize investment income to the corporation. Prior to the change, AAC investment policy was limited to Money Market accounts, which had historically been earning interest at approximately 3%. However, over the past few years, the interest rate had declined to less than 1%. The Board approved change now allows AAC to expand our investment portfolio to also include investments in Bonds and Bond-Funds rated at Baa or above, returning interest earnings at an average rate of 3.84%, realizing \$97,900 between October and December 2012. AAC management will continue to monitor the rate of return achieved from funds in our accounts to ensure we secure the most favorable rates for the corporation, while minimizing investment risks.

**Cost Saving Initiatives** – Across AAC a number of cost saving initiatives were started in 2012. Reduced travel expenses, lower energy use at KLC by relocating most AAC personnel from the Launch Control Center (LCC) and placing the facility in warm storage configuration; along with reducing scholarships, sponsorships, and contributions to organizations is providing necessary savings to ensure our expenses remain within our revenue limits. We have reduced participation in some conferences, with increased focus on conferences that have the highest probability of generating new business, such as increasing our presence at the National Space Symposium (NSS) and sponsoring a booth at the exhibition. This has resulted in savings and provided a more focused investment of marketing dollars to meet our marketing objectives.



Proof testing of the crane in the Payload Processing Facility.

# **Our Growth Plan**

## LP1/2 Growth

Small lift launches are the existing focus of the Kodiak Launch Complex. AAC is aggressively marketing the modern launch facilities at KLC to small lift launch vehicle integrators, small satellite manufacturers, and U.S. Government agencies to include the National Aeronautics and Space Administration (NASA), the National Oceanographic and Atmospheric Administration (NOAA), and the Department of Defense. Satellites are under construction or in development to accomplish a wide range of missions that require high inclination orbits, such as meteorology, ocean monitoring, ice measurements, gravity mapping, university experiments, terrain mapping, aircraft and ship safety, and arctic communications. Suborbital mission pursuits include heat-shield testing for interplanetary missions and hypersonic research for vehicles that can travel five times the speed of sound in Earth's atmosphere. Potential new customers from major aerospace corporations have also visited KLC to learn how Alaska can be part of a new generation of low cost launch vehicles that aim to reduce the cost of launching into space.

## Medium Lift Growth Plans

Medium lift rockets bridge the gap between small lift rockets and the large Evolved Expendable Launch Vehicles (EELV) that are launched from Cape Kennedy, FL, and Vandenberg Air Force Base, CA. Medium lift vehicles are designed to launch more mission-agile and lower cost satellites that can perform missions such as weather observations, climate change, and communication.

Medium lift rockets are significantly larger than the rockets currently launched from KLC and can carry 4,000 to 12,000 pounds to orbit. Medium lift rockets have historically launched about three times more often than small lift rockets. In March 2012, Lockheed Martin announced that KLC would be the West Coast launch facility for their new medium lift rocket, the Athena III. AAC has begun the initial design and environmental assessment for a medium lift launch pad and associated infrastructure at KLC. Construction of the new facilities will begin when Lockheed Martin secures the launch contracts for missions from KLC.

## Our People

Our growth is planned and controlled by our senior leadership, so we have been carefully selecting experienced individuals to fill key positions. They are backed up by an experienced Board of Directors that sets the overall direction and then supports the senior leadership through their influence in and knowledge of the scientific, technical, administrative and political communities.

## THE SENIOR LEADERSHIP

Our senior leadership team is listed below, as well as general information concerning each of our team members. 2012 saw a tremendous change in leadership, with the departure of the Chief Executive Officer (CEO), Dale Nash. With Dale's departure, the Board of Directors selected Craig E. Campbell as the new CEO. Craig retained his previous responsibilities as President. The CEO serves at the pleasure of the Board of Directors; all other senior leadership team members are selected by the CEO.

### Craig E. Campbell – President and Chief Executive Officer



Craig joined Alaska Aerospace Corporation as President and Chief Operating Officer in February 2011, and was appointed as President and Chief Executive Officer by the Board of Directors in October 2012. He has 35 years aerospace experience in the United States Air Force and Alaska Air National Guard, culminating as The Adjutant General, Alaska National Guard. He was later appointed as the Lieutenant Governor, State of Alaska. He has an

extensive private sector background, with over 15 year's aviation consulting. He has two master's degrees, one in Public Administration, and the other in National Security and Strategic Studies.

### Mark J. Greby – Senior Vice President and Chief Operating Officer



Mark joined AAC in September 2012. He has over 30 years of launch experience, from supervising launch preparations of the Space Shuttle at Kennedy Space Center to the manufacture of solid rocket boosters with ATK in Utah. Mark has Master of Science (MS) degrees in both Systems Management and Technology Management. His experience and expertise will guide the technical approach to our growth. "Leadership is the capacity and will to rally men and women to a common purpose and the character which inspires confidence"

Bernard Montgomery British Field Marshall

### John W. Cramer – Vice President and Chief Administrative Officer/Chief Information Officer.



John joined our team in August 2012 after serving nearly 25 years in various positions with the Alaska state government. He most recently served as the Deputy Commissioner in the Department of Administration. His many years of budget development, legislative presentation and interaction, contract administration, and personnel management are all assets which we can utilize. His areas of responsibility are administration, procurement, logistics and management information systems.

### David C. Whitaker – Vice President and Chief Financial Officer



Dave has been with AAC since 2009 and has assured that our finance and accounting systems have changed and matured to keep pace with the challenging requirements of the financial world. Dave has an MBA from Xavier University. As we grow in this period of restrained budgets, Dave will be closely monitoring our finances to assure that we utilize our resources wisely and to the best advantage.

### John K. Zbitnoff – Vice President of Operations and General Manager of the Kodiak Launch Complex



John has been with AAC since 2007, and prior to that was a contractor involved in the construction of all the facilities at the Kodiak Launch Complex. He owned and operated AK Construction in Kodiak until he sold the business in 2001. John has a BS degree in Construction Engineering from Montana State University. John will be on the front lines of our growth at KLC and will be managing the available workforce to provide launch support services, while simultaneously supporting major infrastructure construction projects.

## THE TEAM

Backing up the senior leadership is a talented team of experts who have been with the company for many years providing the daily support needed to keep a high-tech operation supplied, maintained, manned and operational. Additional support is provided by our talented group of subcontractors, who furnish technically trained individuals to fill positions that are only required during launches.



Anchorage Office: left to right, Doug Hunter, Jeff Roberts, Janet Julsen, Krystal Lunda, Judy Godin, Rob Nebeker, Cherie Anderson, Ed Allen, Lana Dahl, Art Isham



Kodiak Launch Complex: left to right, Paul Friel, Todd Leitheiser, Deric Schmidt, Donnie Andrews, Clyde Hinson, Joe Francisco, Paul Logan, Lori Taylor, Keith Morin, Bernard Rosario, Rich McKinney, Nate Ladd, Nathan Fitzgerald, Gil DeGuzman, Paul Pena, Patty Juhlin, Jason Wood

## Intern Program



Sam Bornstein, Caleb Smith, Joe Hunner

encourages talented AAC people to consider the aerospace industry as a career field, and in support of this we have been sponsoring intern positions since 2003. The number of interns has varied from year to year based on funding availability. The experience has been positive for both AAC and the interns, and we have hired two of our interns as full-time employees since the inception of the program

During the summer of 2012 ps. Two mechanical engineering

we hosted three engineering internships. Two mechanical engineering students from the University of Alaska Fairbanks, were funded by the UAF Space Grant Program, and the third engineer from Washington

University, St. Louis, Missouri, was AAC funded. These interns represent the Alaskan communities of Juneau, Eagle River, and Wasilla. The AAC internship program is based on the philosophy that interns should be afforded the opportunity to learn as much as they can about the launch industry, be exposed to a wide variety of work, and given meaningful assignments that provide a direct benefit to the company. To implement this vision, the interns worked on assignments as varied as technical proposal writing, analyzing data from KLC meteorology, writing code in MATLAB, and interacting with satellite communication providers. In addition to their daily engineering tasks, they worked on capstone projects that impact future AAC programs, to include acoustical mapping of medium lift launch vehicles, wind loading on Launch Pad 3 structures, and evaluating satellite communications with unmanned aircraft operating in the Arctic. All three interns worked directly for the AAC engineering staff in Anchorage and spent two weeks at KLC to gain an appreciation for the launch crew, equipment, and facilities involved with rocket launches.

## **Our Community**

Alaska Aerospace is committed to the long term growth of the communities that we operate in and interact with. We are supportive of their economic, intellectual and personal growth because it helps us in the accomplishment of our mission.

#### **KODIAK**

During the past year Alaska Aerospace purchased over \$1.3M in goods and services from the Kodiak community and paid over \$1.6 M in wages to our 27 full time employees who live in Kodiak and the surrounding borough. We are members of the Kodiak Chamber of Commerce and the Kodiak Convention and Visitors Bureau, and support local events such as Crab Fest, Coast Guard Day, and Business After Hours. We work with the various school districts to sponsor tours of the Kodiak Launch Complex and provide professionals in the classroom that support their Science, Technology, Engineering, and Mathematics (STEM) curriculum.

### **UNIVERSITY OF ALASKA**

Alaska Aerospace has a close relationship with the University of Alaska system, which includes contracts with the Geophysical Institute to perform unmanned aerial surveys of marine mammals to support our agreement with the U.S Fish and Wildlife Service and the National Marine Fisheries Service, a 2012 contribution of \$105,000 to the University of Alaska Foundation to support 21 Alaska Aerospace Corporation scholarships, and coordination with the Poker Flat Research Range on future launch activities that support our mutual interests. AAC also supported the Alaska Space Grant Program with a \$20,000 donation that went toward the support of the intern program.

### **ANCHORAGE AND KENAI**

During the past year Alaska Aerospace purchased over \$1M in goods and services from the greater Anchorage area and paid over \$1.2M in wages to our 13 full time employees who live in Anchorage, Chugiak/Eagle River and Palmer. Alaska Aerospace continues to support the Anchorage area business community with their membership in both the Anchorage

and Chugiak/Eagle River Chambers of Commerce and the Anchorage Economic Development Corporation,

We are supporting the Anchorage School District's STEM curriculum by providing professional aerospace engineers to speak to students in classroom settings and to mentor students that are involved in aerospace related projects, such as the Video Coverage of Earth During Balloon Ascent project undertaken by 6th Grader Corin Katske of Rogers Park Elementary School.

AAC continued to support the Challenger Learning Center of Alaska, located in the city of Kenai, by providing a senior staff member to serve on their Board of Directors and by providing a \$3,000 donation to purchase unique logo T-shirts for their summer camp attendees. The Challenger Learning Center of Alaska (CLCA) is a vital and valuable educational resource for the state and is dedicated to maintaining the highest standards of academic excellence. CLCA is in a position to be the leading resource in STEM education for Alaska's educators and home school organizations with comprehensive curriculum aligned with state standards and grade level expectations, combined with trainings, reference materials and classroom support.

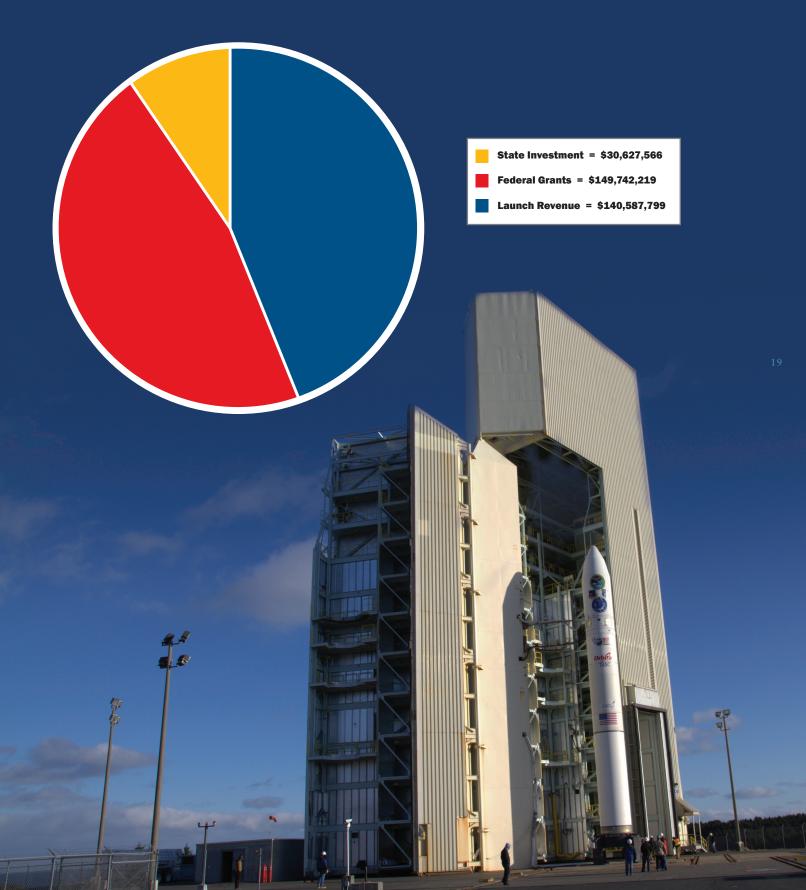


**Challenger Learning Center Robotics Camp.** 



# **Our Financial Status**

Leverage of State of Alaska Investment (Cumulative)



### **OUR FINANCIAL STATUS**

# Statement of Net Assets

June 30, 2012 (With Comparative Amounts for 2011)

|  | 2012                    | 2011                    |
|--|-------------------------|-------------------------|
| Assets   |                         |                         |
|  |                         |                         |
| Current assets:  |                         |                         |
| Cash and cash equivalents  | \$<br>7,153,795         | 9,083,786               |
| Accounts receivable  | 1,253,556               | 2,201,909               |
| Unbilled receivables   | 167,806                 | 397,536                 |
| Inventory  | 510,664                 | 510,664                 |
| Total current assets   | 9,085,821               | 12,193,895              |
| Capital assets net of accumulated depreciation and amortization: |                         |                         |
| Office furniture and equipment                                   | 2,993,248               | 2,917,384               |
| Vehicles and other equipment                                     | 19,493,350              | 21,660,767              |
| Buildings and structures   | 30,358,654              | 29,041,764              |
| Infrastructure   | 8,244,598               | 8,531,470               |
| Construction in progress   | 581,353                 | 3,343,884               |
| Intangible - Software  | 602,000                 | 789,650                 |
| Intangible - Right of Use  | 16,481,722              | 17,305,809              |
| Total capital assets, net  | 78,754,925              | 83,590,728              |
|  |                         |                         |
| Total assets   | \$<br>87,840,746        | 95,784,623              |
| Liabilities and Net Assets                                       |                         |                         |
| Liabilities:   |                         |                         |
| Current liabilities:   |                         |                         |
| Accounts payable   | 332,034                 | 598,184                 |
| Accrued leave and compensation                                   | 441,349                 | 834,996                 |
| Total current liabilities  | 773,383                 | 1,433,180               |
| Noncurrent liabilities - deferred revenue                        | 3,427,485               | 3,676,588               |
| Total liabilities  | 4,200,868               | 5,109,768               |
|  |                         |                         |
| Net assets:  | 79 754 005              | 92 500 729              |
| Invested in capital assets<br>Unrestricted                       | 78,754,925<br>4,884,953 | 83,590,728<br>7,084,127 |
| Total net assets   | 83,639,878              | 90,674,855              |
|  |                         | 30,01 1,000             |
| Total liabilities and net assets                                 | \$<br>87,840,746        | 95,784,623              |
|  |                         |                         |

### **OUR FINANCIAL STATUS**

## Statement of Revenues, Expenses, and Changes in Net Assets Year Ended June 30, 2012 (With Comparative Amounts for 2011)

| Operating revenues   \$   6,862,413   14,172,047     Operating expenses:   Personnel services   5,347,577   6,216,905     Travel   334,741   377,584     Contractual services   3,027,593   4,693,657     Supplies   488,483   714,715     Equipment   17,584   149,640     Depreciation and amortization   4,490,791   6,757,410     Total operating expenses   13,706,769   18,909,911     Net operating loss   (6,844,356)   (4,737,864)     Nonoperating revenues (expenses):   Interest income unrestricted   4,843   4,533     Loss from disposal of capital assets   (753,648)   -     PERS relief from State of Alaska   300,512   213,174     Cooperative agreement   196,018   23,234     Total nonoperating revenues (expenses)   (7,096,631)   (4,496,923)     Capital contributions   61,654   2,054,683     Change in net assets   (7,034,977)   (2,442,240)     Net assets - beginning of the year   \$ 83,639,878   90,674,855 |  | 2012             | 2011        |
|--|--|------------------|-------------|
| Personnel services 5,347,577 6,216,905   Travel 334,741 377,584   Contractual services 3,027,593 4,693,657   Supplies 488,483 714,715   Equipment 17,584 149,640   Depreciation and amortization 4,490,791 6,757,410   Total operating expenses 13,706,769 18,909,911   Net operating loss (6,844,356) (4,737,864)   Nonoperating revenues (expenses): (4,843 4,533   Interest income unrestricted 4,843 4,533   Loss from disposal of capital assets (753,648) -   PERS relief from State of Alaska 300,512 213,174   Cooperative agreement 196,018 23,234   Total nonoperating revenues (expenses) (252,275) 240,941   Loss before capital contributions (7,096,631) (4,496,923)   Capital contributions (7,034,977) (2,442,240)   Net assets - beginning of the year 90,674,855 93,117,095  | Operating revenues                     | \$<br>6,862,413  | 14,172,047  |
| Personnel services 5,347,577 6,216,905   Travel 334,741 377,584   Contractual services 3,027,593 4,693,657   Supplies 488,483 714,715   Equipment 17,584 149,640   Depreciation and amortization 4,490,791 6,757,410   Total operating expenses 13,706,769 18,909,911   Net operating loss (6,844,356) (4,737,864)   Nonoperating revenues (expenses): (4,843 4,533   Interest income unrestricted 4,843 4,533   Loss from disposal of capital assets (753,648) -   PERS relief from State of Alaska 300,512 213,174   Cooperative agreement 196,018 23,234   Total nonoperating revenues (expenses) (252,275) 240,941   Loss before capital contributions (7,096,631) (4,496,923)   Capital contributions (7,034,977) (2,442,240)   Net assets - beginning of the year 90,674,855 93,117,095  |  |                  |             |
| Travel 334,741 377,584   Contractual services 3,027,593 4,693,657   Supplies 488,483 714,715   Equipment 17,584 149,640   Depreciation and amortization 4,490,791 6,757,410   Total operating expenses 13,706,769 18,909,911   Net operating loss (6,844,356) (4,737,864)   Nonoperating revenues (expenses): (6,844,356) (4,737,864)   Interest income unrestricted 4,843 4,533   Loss from disposal of capital assets (753,648) -   PERS relief from State of Alaska 300,512 213,174   Cooperative agreement 196,018 23,234   Total nonoperating revenues (expenses) (252,275) 240,941   Loss before capital contributions (7,096,631) (4,496,923)   Capital contributions (7,034,977) (2,442,240)   Net assets - beginning of the year 90,674,855 93,117,095  | Operating expenses:                    |                  |             |
| Contractual services 3,027,593 4,693,657   Supplies 488,483 714,715   Equipment 17,584 149,640   Depreciation and amortization 4,490,791 6,757,410   Total operating expenses 13,706,769 18,909,911   Net operating loss (6,844,356) (4,737,864)   Nonoperating revenues (expenses): (6,844,356) (4,737,864)   Interest income unrestricted 4,843 4,533   Loss from disposal of capital assets (753,648) -   PERS relief from State of Alaska 300,512 213,174   Cooperative agreement 196,018 23,234   Total nonoperating revenues (expenses) (7,096,631) (4,496,923)   Capital contributions (7,096,631) (4,496,923)   Capital contributions 61,654 2,054,683   Change in net assets (7,034,977) (2,442,240)   Net assets - beginning of the year 90,674,855 93,117,095   | Personnel services                     | 5,347,577        | 6,216,905   |
| Supplies   488,483   714,715     Equipment   17,584   149,640     Depreciation and amortization   4,490,791   6,757,410     Total operating expenses   13,706,769   18,909,911     Net operating loss   (6,844,356)   (4,737,864)     Nonoperating revenues (expenses):   (6,844,356)   (4,737,864)     Interest income unrestricted   4,843   4,533     Loss from disposal of capital assets   (753,648)   -     PERS relief from State of Alaska   300,512   213,174     Cooperative agreement   196,018   23,234     Total nonoperating revenues (expenses)   (252,275)   240,941     Loss before capital contributions   (7,096,631)   (4,496,923)     Capital contributions   61,654   2,054,683     Change in net assets   (7,034,977)   (2,442,240)     Net assets - beginning of the year   90,674,855   93,117,095  | Travel                                 | 334,741          | 377,584     |
| Equipment 17,584 149,640   Depreciation and amortization 4,490,791 6,757,410   Total operating expenses 13,706,769 18,909,911   Net operating loss (6,844,356) (4,737,864)   Nonoperating revenues (expenses): 4,843 4,533   Interest income unrestricted 4,843 4,533   Loss from disposal of capital assets (753,648) -   PERS relief from State of Alaska 300,512 213,174   Cooperative agreement 196,018 23,234   Total nonoperating revenues (expenses) (7,096,631) (4,496,923)   Capital contributions (7,034,977) (2,442,240)   Net assets - beginning of the year 90,674,855 93,117,095   | Contractual services                   | 3,027,593        | 4,693,657   |
| Depreciation and amortization4,490,7916,757,410Total operating expenses13,706,76918,909,911Net operating loss(6,844,356)(4,737,864)Nonoperating revenues (expenses):4,8434,533Interest income unrestricted4,8434,533Loss from disposal of capital assets(753,648)-PERS relief from State of Alaska300,512213,174Cooperative agreement196,01823,234Total nonoperating revenues (expenses)(252,275)240,941Loss before capital contributions(7,096,631)(4,496,923)Capital contributions61,6542,054,683Change in net assets(7,034,977)(2,442,240)Net assets - beginning of the year90,674,85593,117,095  | Supplies                               | 488,483          | 714,715     |
| Total operating expenses13,706,76918,909,911Net operating loss(6,844,356)(4,737,864)Nonoperating revenues (expenses):(6,844,356)(4,737,864)Interest income unrestricted4,8434,533Loss from disposal of capital assets(753,648)-PERS relief from State of Alaska300,512213,174Cooperative agreement196,01823,234Total nonoperating revenues (expenses)(252,275)240,941Loss before capital contributions(7,096,631)(4,496,923)Capital contributions61,6542,054,683Change in net assets(7,034,977)(2,442,240)Net assets - beginning of the year90,674,85593,117,095   | Equipment                              | 17,584           | 149,640     |
| Net operating loss(6,844,356)(4,737,864)Nonoperating revenues (expenses):4,8434,533Interest income unrestricted4,8434,533Loss from disposal of capital assets(753,648)-PERS relief from State of Alaska300,512213,174Cooperative agreement196,01823,234Total nonoperating revenues (expenses)(252,275)240,941Loss before capital contributions(7,096,631)(4,496,923)Capital contributions61,6542,054,683Change in net assets(7,034,977)(2,442,240)Net assets - beginning of the year90,674,85593,117,095   | Depreciation and amortization          | 4,490,791        | 6,757,410   |
| Nonoperating revenues (expenses):Interest income unrestricted4,843Loss from disposal of capital assets(753,648)PERS relief from State of Alaska300,512Cooperative agreement196,018Total nonoperating revenues (expenses)(252,275)Loss before capital contributions(7,096,631)Capital contributions61,654Change in net assets(7,034,977)Net assets - beginning of the year90,674,85593,117,095  | Total operating expenses               | 13,706,769       | 18,909,911  |
| Nonoperating revenues (expenses):Interest income unrestricted4,843Loss from disposal of capital assets(753,648)PERS relief from State of Alaska300,512Cooperative agreement196,018Total nonoperating revenues (expenses)(252,275)Loss before capital contributions(7,096,631)Capital contributions61,654Change in net assets(7,034,977)Net assets - beginning of the year90,674,85593,117,095  |  |                  |             |
| Interest income unrestricted4,8434,533Loss from disposal of capital assets(753,648)-PERS relief from State of Alaska300,512213,174Cooperative agreement196,01823,234Total nonoperating revenues (expenses)(252,275)240,941Loss before capital contributions(7,096,631)(4,496,923)Capital contributions61,6542,054,683Change in net assets(7,034,977)(2,442,240)Net assets - beginning of the year90,674,85593,117,095  | Net operating loss                     | (6,844,356)      | (4,737,864) |
| Loss from disposal of capital assets(753,648)-PERS relief from State of Alaska300,512213,174Cooperative agreement196,01823,234Total nonoperating revenues (expenses)(252,275)240,941Loss before capital contributions(7,096,631)(4,496,923)Capital contributions61,6542,054,683Change in net assets(7,034,977)(2,442,240)Net assets - beginning of the year90,674,85593,117,095  | Nonoperating revenues (expenses):      |                  |             |
| PERS relief from State of Alaska300,512213,174Cooperative agreement196,01823,234Total nonoperating revenues (expenses)(252,275)240,941Loss before capital contributions(7,096,631)(4,496,923)Capital contributions61,6542,054,683Change in net assets(7,034,977)(2,442,240)Net assets - beginning of the year90,674,85593,117,095  | Interest income unrestricted           | 4,843            | 4,533       |
| Cooperative agreement196,01823,234Total nonoperating revenues (expenses)(252,275)240,941Loss before capital contributions(7,096,631)(4,496,923)Capital contributions61,6542,054,683Change in net assets(7,034,977)(2,442,240)Net assets - beginning of the year90,674,85593,117,095  | Loss from disposal of capital assets   | (753,648)        | -           |
| Total nonoperating revenues (expenses)(252,275)240,941Loss before capital contributions(7,096,631)(4,496,923)Capital contributions61,6542,054,683Change in net assets(7,034,977)(2,442,240)Net assets - beginning of the year90,674,85593,117,095  | PERS relief from State of Alaska       | 300,512          | 213,174     |
| Loss before capital contributions (7,096,631) (4,496,923)   Capital contributions 61,654 2,054,683   Change in net assets (7,034,977) (2,442,240)   Net assets - beginning of the year 90,674,855 93,117,095   | Cooperative agreement                  | 196,018          | 23,234      |
| Capital contributions   61,654   2,054,683     Change in net assets   (7,034,977)   (2,442,240)     Net assets - beginning of the year   90,674,855   93,117,095   | Total nonoperating revenues (expenses) | (252,275)        | 240,941     |
| Capital contributions   61,654   2,054,683     Change in net assets   (7,034,977)   (2,442,240)     Net assets - beginning of the year   90,674,855   93,117,095   |  |                  |             |
| Change in net assets   (7,034,977)   (2,442,240)     Net assets - beginning of the year   90,674,855   93,117,095  | Loss before capital contributions      | (7,096,631)      | (4,496,923) |
| Net assets - beginning of the year 90,674,855 93,117,095   | Capital contributions                  | 61,654           | 2,054,683   |
| Net assets - beginning of the year 90,674,855 93,117,095   |  | (7.004.077)      | (0.440.040) |
|  | Change in net assets                   | (7,034,977)      | (2,442,240) |
| Net assets - end of the year \$ 83,639,878 90.674.855  | Net assets - beginning of the year     | 90,674,855       | 93,117,095  |
|  | Net assets - end of the year           | \$<br>83,639,878 | 90,674,855  |

### **OUR FINANCIAL STATUS**

## Statement of Cash Flows

Year Ended June 30, 2012 (With Comparative Amounts for 2011)

|  |          | 2012          | 2011        |
|--|----------|---------------|-------------|
| Cash flows from operating activities:  |          |               |             |
| Receipts from contracts and State appropriations                                 | \$       | 8,040,496     | 14,762,922  |
| Payments to suppliers  |          | (4,134,551)   | (7,652,201) |
| Payments to employees  |          | (5,440,712)   | (5,708,914) |
| Net cash (used) provided by operating activities                                 |          | (1,534,767)   | 1,401,807   |
|  |          |               |             |
| Cash flows from noncapital financing activities - cooperative agreement received |          | 196,018       | 23,234      |
|  |          |               |             |
| Cash flows from capital and related financing activities:                        |          |               |             |
| Capital appropriation received   |          | 61,654        | 2,054,683   |
| Purchase of capital assets   |          | (408,636)     | (2,125,208) |
| Decrease in deferred revenue   |          | (249,103)     | (2,054,683) |
| Net cash used by capital and related financing activities                        |          | (596,085)     | (2,125,208) |
|  |          |               |             |
| Cash flows from investing activities - interest received                         |          | 4,843         | 4,533       |
|  |          |               |             |
| Net decrease in cash and cash equivalents  |          | (1,929,991)   | (695,634)   |
|  |          |               |             |
| Cash and cash equivalents at beginning of year                                   |          | 9,083,786     | 9,779,420   |
|  | <b>•</b> | 7 4 5 0 7 0 5 | 0 000 700   |
| Cash and cash equivalents at end of year   | \$       | 7,153,795     | 9,083,786   |
| Reconciliation of operating loss to net cash                                     |          |               |             |
| (used) provided by operating activities:   |          |               |             |
| Operating loss   |          | (6,844,356)   | (4,737,864) |
| Adjustments to reconcile operating loss to net cash                              |          |               |             |
| (used) provided by operating activities:   |          |               |             |
| Depreciation and amortization  |          | 4,490,791     | 6,757,410   |
| Noncash expense - PERS relief  |          | 300,512       | 213,174     |
| Decrease (increase) in accounts receivable                                       |          | 948,353       | (340,270)   |
| Decrease in unbilled receivables   |          | 229,730       | 931,145     |
| Increase in inventory  |          | -             | (129,592)   |
| (Decrease) in accounts payable   |          | (266,150)     | (1,587,013) |
| (Decrease) increase in accrued expenses  |          | (393,647)     | 294,817     |
| Net cash (used) provided by operating activities                                 | \$       | (1,534,767)   | 1,401,807   |

## OUR INVITATION FOR YOUR SUPPORT

This is the Alaska Aerospace story for 2012. We are preparing ourselves for growth into the next decade by planning and building for the future. Visit our website at http://akaerospace.com/ to find out the latest status on our projects or call us at 907-561-3338. Call or write your legislator in support of our growth. Get involved – this is our opportunity to attract and grow an industry that provides challenging and high paying jobs for future generations of Alaskans.

"Strategic partnerships with commercial firms will continue to enable access to a more diverse, robust, and distributed set of space systems and.....will be pursued in areas that both stabilize costs and improve the resilience of space architectures upon which we rely."

National Security Space Strategy January 2011





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