



**ALASKA
AEROSPACE**



2015 – Year of the Phoenix

*"A phoenix obtains new life by rising
from the ashes of its predecessor."*

2015
ANNUAL REPORT

A full-page background image showing a rocket launch at sunset. The rocket is on the left, ascending diagonally towards the top right, leaving a thick, dark trail of smoke and fire. The sky transitions from a bright orange glow near the horizon to a deep blue at the top. The horizon line is visible at the bottom, with silhouettes of land and water.

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The Alaska Aerospace Corporation team aspires to provide the highest quality, most cost efficient, customer focused service in the global aerospace market.

Board of Directors



DR. ROBERT P. MCCOY, CHAIR

Director, Geophysical Institute
University of Alaska Fairbanks
Fulfills requirement for the membership of the Geophysical Institute 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



BRUCE ABEL

President, Don Abel Building Supplies
Past President, Juneau Chamber of Commerce
Fulfills requirement for a public member



DAVID J. WELDON, MD

Partner, MIMA Physician Group
US Congressman, Florida (retired)
Fulfills requirement for experience in the commercial space industry



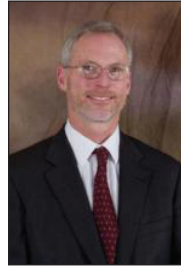
LAUREL HUMMEL

The Adjutant General, Alaska National Guard
Commissioner, Department of Military and Veterans Affairs – State of Alaska.
Fulfills requirement for the membership of the Commissioner or Designee of the Department of Military and Veterans Affairs



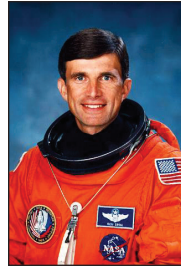
LINDSAY C. KNIGHT

Kodiak Athletic Club, Owner
Past President- Kodiak Chamber of Commerce.
Fulfills requirement for a state resident, and a borough resident with significant experience in the business sector



DR. JIM JOHNSEN

President, University of Alaska Statewide System
Fulfills requirement for membership of the president of the University of Alaska



DR. RONALD M. SEGA

Vice President for Energy, Environment, and Applied Research at the Colorado State University / Former Under Secretary of the U.S. Air Force / Two time astronaut on Space Shuttle Discovery / Major General USAF (Ret)
Fulfills requirement for experience in the commercial space industry and operational space experience



THOMAS D. WALTERS

Maritime Helicopters, Owner (Kodiak)
Fulfills requirement for a state resident, and a borough resident with significant experience in the business sector



GARY L. STEVENS – SENATOR

Ex-Officio
Alaska State Senate
Fulfills requirement for the membership of the state senate



LOUISE STUTES – REP.

Ex-Officio
Alaska House of Representatives
Fulfills Requirement for the membership of the state house of representatives

Chairman of the Board of Directors Letter

To Governor Walker, the Alaska State Legislature and the Citizens of Alaska

This has been a hallmark year for Alaska Aerospace Corporation, and all of us on the Board of Directors are very appreciative of the employees support and dedication as we rebuilt damaged launch facilities; developed a plan to support Governor Walker's desire to change the state-owned corporation into a non-state-owned company; embarked on an exciting contract with Rocket Lab to support their range safety requirements for the initial launches of the Electron rocket from New Zealand; received a Federal grant to complete facility security upgrades, as well as to evaluate and support Autonomous Flight Termination System (AFST) development for future use at the Pacific Spaceport Complex – Alaska; and secured Federal Aviation Administration approval to obtain Certificates of Authority (COA) for unmanned aircraft system (UAS) operations in Alaska.

It has also been a year of transition for the Board, with Representative Louise Stutes joining the Board after being appointed by Speaker of the House Mike Chennault to replace Representative Lori Reinbold as their Ex Officio member. The Board wishes to express our appreciation for the work done by Representative Reinbold during her tenure on the Board and we welcome Representative Stutes, who represents District 32, which includes the Pacific Spaceport Complex – Alaska within her district.

With the change in administration at the end of last year, Governor Walker appointed Brigadier General Laurel Hummel as the new Department of Military and Veterans Affairs Commissioner. As such, she replaced Major General Tom Katkus on our Board. Having active representation for the department in which AAC resides has been a tremendous help in our work this year to align our future with Governor Walker's vision.

Last year we lost an AAC pioneer, Ed Allen. Ed had been an integral part of the AAC team since 1998. His final assignment was that of Chief Engineer and Business Development. Through his vision of what space could be for Alaska, AAC has successfully launched seventeen missions and is currently expanding into the small commercial satellite market. In honor of his tireless work at AAC, the Pacific Spaceport Complex – Alaska Launch Operations Control Center was dedicated and renamed the Ed Allen Launch Operations Control Center on August 24, 2015. During the dedication ceremony, Senator Gary Stevens presented to Ed's wife, Beverly, a framed copy of the Legislative Citation passed by the Alaska Legislature honoring the contribution Ed made to aerospace and the State of Alaska.

Finally, I want to recognize Pat Gamble, who served as the Board Chair until this summer when he retired from the University of Alaska. Under Pat's leadership, AAC has started a diversification plan that includes Alaska imaging data sales, expansion into the unmanned aircraft systems market, and using the Range Safety and Telemetry System (RSTS) at other ranges beyond the PSCA. Pat was a solid advocate for aerospace business expansion in the state and worked with AAC to pursue opportunities for systems support and development of an integrated aerospace "Center of Excellence." The entire board wishes Pat well in his retirement and we want to thank him for his years of dedicated service to AAC.

On behalf of all members of the AAC Board of Directors, I am pleased to present this 2015 Annual Report.



Robert McCoy

Dr. Robert McCoy, PhD
Board Chair

President and Chief Executive Officer Letter

To Governor Walker, the Alaska State Legislature and the Citizens of Alaska

In Greek mythology there was a bird, associated with the sun, which lived a long life and when it died was reborn from the ashes of its predecessor. Over time, the Phoenix has come to represent renewal and resilience. Like the Phoenix, Alaska Aerospace Corporation (AAC) has been undergoing a transformation which started at the end of 2014 with a decision by the State of Alaska to migrate AAC away from being a state-owned corporation into a company no longer dependent upon state funding and with greater flexibility to operate in the commercial aerospace sector as a private company. To say this has been an easy year would be to not recognize the challenges of transforming a state corporation into a private sector company. It has been a daunting challenge, but one that the employees of AAC have pursued with great determination to get right.

This challenge was further complicated by the August 2014 launch failure which resulted in substantial damage to some of the facilities at the Pacific Spaceport Complex – Alaska (PSCA). Being a state corporation, AAC was covered by state insurance. We have worked over this year to remove damaged facilities and equipment and start the reconstruction process. I am proud to say that prime contracts issued for the deconstruction and reconstruction at PSCA have both been to Alaskan firms. To me this is just another affirmation that Alaska has exceptional professional capabilities within the state to complete complex engineering and construction projects.

At the beginning of the year we started an aggressive analysis of alternative structures for AAC to become a profitable non-state corporation. We hired Nossaman, LLP to conduct research and present options to our board of directors. Over the course of numerous board meetings, Nossaman guided the board through a comprehensive analysis of benefits and negative issues related to a plethora of potential company structures. By the end of the year, the Board passed a resolution recommending that AAC be converted to a Public Private Partnership (P3), by which the operating company becomes a non-state owned private sector company. As we start the new year, this recommended course of action has been presented to the Administration for consideration. We look forward to completing the changes in 2016 and giving AAC the ability to fully operate as a private company, retaining the valuable diversification of our state's economy in the aerospace sector. This is a win-win solution.

I wish to thank our Board of Directors for the steadfast support provided in the hours of discussion and consultation required to develop the best solution for the privatization of AAC. Additionally, the support of our Congressional delegation has been terrific in making sure we receive support from the Federal agencies that use our facilities, as well as to include Federal funds in the FY2015 budget which allows us to make improvements to our facilities that will ensure PSCA may continue to support future government operations.

In the meantime, you will read in this annual report of the many new ventures and business development pursuits that provide both me and the aerospace investment community with the confidence that our future remains bright. So like the Phoenix, Alaska Aerospace will be around for a long time to come.



A handwritten signature in dark ink, appearing to read 'J. E. Campbell'.

Craig E. Campbell
President and Chief Executive Officer

Our Legacy

Alaska Aerospace Corporation (AAC) is a state-owned public corporation created in 1991 to develop aerospace-related growth within the State. The Governor appoints the nine members of our Board of Directors. While AAC has a separate and legal existence, for administrative purposes we are part of the Department of Military and Veterans Affairs. AAC works closely with the University of Alaska and other State agencies.

Since our start, we have brought jobs, prestige, and funding to the State far in excess of the State's investment, generating nearly \$300,000,000 in new revenue to Alaska. We have hosted 17 space launches since becoming operational in the late -1990s. Imagine that! Alaska is a leader in space launches!

And most of our launches come from repeat customers. They love the Alaskan workforce and spirit, the capability and flexibility of the launch site, and the opportunity to be part of the Alaska team.

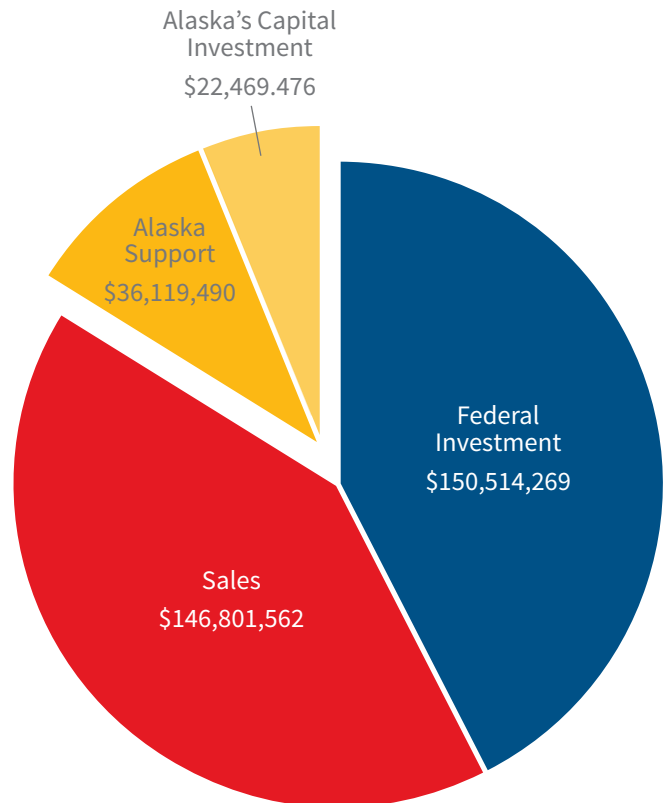
Our FAA-licensed launch site, the Pacific Spaceport Complex – Alaska (PSCA), is on Kodiak Island. It is the largest launch range in the world for Polar orbits, high-inclination orbits, and sun-synchronous orbits, with unobstructed access over the Pacific Ocean. Give us a call – we'd love to talk orbital mechanics with you.

We do more than just space launches. We are working with Alaskan firms to develop safe commercial uses of Unmanned Aerial Systems (UAS). Through our partnerships with international firms, we sell exclusive Alaska satellite imagery to users, wherever they may be in the world – including to State and Federal governments. Installation and operation of satellite data downlink stations are being negotiated, because at the top of the world, we have the best geographical position in the United States for retrieving satellite data.

We are your company. In addition to revenues, jobs, and business, AAC is focused on growing the future. AAC ensures that Alaska has a voice and is present and forward on a national stage in the aerospace industry. We host Science, Technology, Engineering, and Math (STEM) programs for the future of our children. AAC hires and trains college-level interns for the future with an expectation they will stay in Alaska with the skills and will to diversify the economic base of our state by growing the aerospace sector.

“I have devoted my life to the aviation field and economic development for Kodiak and Alaska. I was proud to be a part of development of the Kodiak launch facility that has been an economic engine for Alaska and an important space station for the future of American space exploration and Arctic satellite business. Alaska is poised for space.”

~ Tom Walters, AAC Board Member



AAC'S RETURN TO ALASKA IS OVER 5 TIMES THE STATE'S INVESTMENT.

Funding Changes, Personnel Reductions, Cost Savings

This year AAC experienced significant funding and personnel changes. With state funding ending in 2015, other funding allowed the company to continue operating in a solid financial condition. Reconstruction funding, a Federal appropriation, Space X Dragon tracking funds, Blackbridge image sales, private funding to evaluate potential future Alaska operations, and final contract payments from the 2014 launch provided AAC with sufficient revenues to allow us the ability to ramp down operations and expenses without jeopardizing future business pursuits and market potential.

The AAC senior management team aggressively adapted to the changing fiscal conditions facing AAC in 2015. Operating costs were reduced by twenty percent for 2015. This reduction came from reducing office lease space, deferring the purchase of any new equipment, and implementing a second Reduction-In-Force (RIF) program in the past three years. The decision was made in mid-2015 to proceed with layoffs of 15% of the work force. This resulted in five non-voluntary terminations. Also during the year, AAC experienced another 15% reduction in personnel through voluntary retirements or people who elected to find other employment opportunities.

While the state budget included a Cost-of-Living (COLA) adjustment for all state employees, AAC management elected to not apply this increased adjustment to AAC employees for the fourth year in a row. While this action provided only a minor saving to the company, it was an important aspect of the management teams focus on reducing operational costs and containing personnel costs.

Based on the personnel and cost reduction implemented by AAC in 2015, company expenses were reduced by nearly \$2.0 million in 2015. A more detailed presentation of the 2015 annual financials is included later in this report.



CRAIG CAMPBELL, AAC PRESIDENT AND CEO WITH BOARD PRESIDENT PAT GAMBLE.

CHANGE IN LEADERSHIP

Pat Gamble stepped down from the AAC Board of Directors during the August 2015 meeting. Pat held the board seat reserved for the President of the University of Alaska by state statute. Pat's contributions and commitment to AAC was stellar and he was relentless in vocalizing his vision that Alaska is truly an aerospace state to anyone who would listen. Testifying before the state legislature, advocating for aerospace support within the Administration, or taking a special interest in how the University of Alaska advanced the aerospace capabilities of the state, Pat always made sure people understood the unique value of AAC to the state's economy and diversification opportunities.

Pat also had served as the AAC Board Chair since 2012. With Pat's departure, the Board unanimously elected Dr. Robert McCoy, University of Alaska, Fairbanks, Geophysical Institute Director, as the new Board Chair. The board also welcomed Dr. Jim Johnsen as the newest member of the Board. Dr. Johnsen fills the University of Alaska President seat, replacing Pat Gamble as a voting member of the board.

The Phoenix is Reborn – and Ready to take Flight

“Alaska Aerospace is poised for a great future in an important growing high tech industry. This will be good for all in Alaska, and for our nation.”

~ The Honorable Dave Weldon MD, AAC Board Member

OUR NEW BRAND – THE PACIFIC SPACEPORT COMPLEX – ALASKA

In April of 2015, the Kodiak Launch Complex was rebranded as the Pacific Spaceport Complex – Alaska. Because we are Aerospace, we have an acronym – PSCA.



The new brand, PSCA, reflects the worldview of AAC and our customers and reflects the recent steps to expand beyond traditional launch services. The mission of PSCA is unique. We provide safe, licensed, launch access on the biggest launch

range in the world – the North Pacific. With the size of our range, the relatively low air and sea traffic, and no downrange restrictions, we are geographically the best site for the new generations of polar satellites. PSCA is poised to be the launch site for constellations, “swarms,” and “flocks” of small earth observation and communication satellites.

Our focus is accessing the Pacific area through Alaska. PSCA provides that access to the entire Pacific launch area for polar orbits, sun-synchronous orbits, and highly elliptical orbits. When our customers need the access, we have it to deliver.

We are not just an asset for Kodiak and Alaska. We are an asset for the world. And our customers want access to the world. We are ready and working to give them their access to the world.

In 2015, we entered into our first international contract to support a U.S. team launching a new rocket from a New Zealand site.

As our site reaches its full capacity, we will provide more than the launch site to our customers. AAC and PSCA offer a full scope of mission support services from AAC and the local and state communities, telemetry services for space missions anywhere in the world, satellite tracking, certified launch safety systems to launch operators worldwide, and launch engineering services.

AAC AND PSCA AT A NATIONAL LEVEL

This year, AAC increased our efforts on business development with focused advertising and participation in trade shows and expositions that have traditionally proven to provide high potential customer contacts.

There are two main conferences in the United States for anyone in the Launch business – the National Space Symposium and the Strategic Missile Defense Command Symposium. As part of ensuring AAC and PSCA stay in the forefront of our customers’ minds, we use booths at each of these conferences to ensure that we are where the Last Frontier meets the Final Frontier.



RANGE FAN WHEN LAUNCHING FROM PACIFIC SPACEPORT COMPLEX – ALASKA (PSCA).

AAC had a large, visible presence at the 30th National Space Symposium in Colorado Springs, CO (April 13-16). At the symposium, AAC announced the renaming of our Kodiak facility as the “Pacific Spaceport Complex – Alaska” (PSCA) to reflect the growing capability of AAC to meet customer requirements and its broader aerospace commitment to the Pacific region.

Concurrently with the 30th Space Symposium, we had a full page advertisement in **Space News** to reinforce the name change and introduce it to the thousands of attendees at the symposium. This advertisement alone was seen by many of the 11,000 attendees, all interested in aerospace activities and looking for opportunities to advance both commercial and government space operations.

The announcement generated a lot of positive response and our new booth position in the main hall, just down from Orbital ATK and United Launch Alliance, attracted a lot of traffic. Over 20 meetings were held with potential customers and partners.

Our new panorama background highlights AAC’s unique capabilities and advantages for the customer, the PSCA unchallenged access to the Pacific sphere, our earth-imaging business ventures, and the majesty of the State of Alaska.

But the booth is just a reflection of AAC. While PSCA may have had the name change, AAC is ensuring that we remain in the forefront of the aerospace industry, providing the high quality customer service that has been our hallmark since that first launch in 1998. As one of the first licensed commercial spaceports in the United States, we ensure that Alaska has an outsized voice in the US aerospace community when conversing with the Federal Aviation Administration, the Commercial Spaceflight Federation, and the Missile Defense Advocacy Association.

Besides the 30th National Space Symposium, AAC also presented or participated in a wide number of trade shows this year, including:

- Ilan Ramon International Space Conference (January 28-29, 2015 near Tel Aviv, Israel)
- Small Satellite Conference (August 10-13, 2015 in Logan, UT)
- Space and Missile Defense Symposium (August 10-13, 2015 in Huntsville, AL)
- National Federal Direct Investment Exposition (October 26-28, 2015 in Los Angeles, CA)



THE ALASKA AEROSPACE TEAM (L TO R: JEFF ROBERTS, JOHN ZBITNOFF, CRAIG CAMPBELL, AND MATT STEELE) MET WITH MANY CUSTOMERS AT THE 30TH SPACE SYMPOSIUM, INCLUDING AMBER GELL (CENTER) FROM LOCKHEED MARTIN SPACE SYSTEMS.



CEO CRAIG CAMPBELL PROUDLY SHOWS OFF THE PSCA ANNOUNCEMENT IN SPACE NEWS AT THE 30TH SPACE SYMPOSIUM IN COLORADO SPRINGS, CO.



CEO CRAIG CAMPBELL AT THE ILAN RAMON INTERNATIONAL SPACE CONFERENCE, TEL AVIV, ISRAEL.



JOHN CRAMER AT THE SPACE AND MISSILE DEFENSE SYMPOSIUM IN HUNTSVILLE, AL.

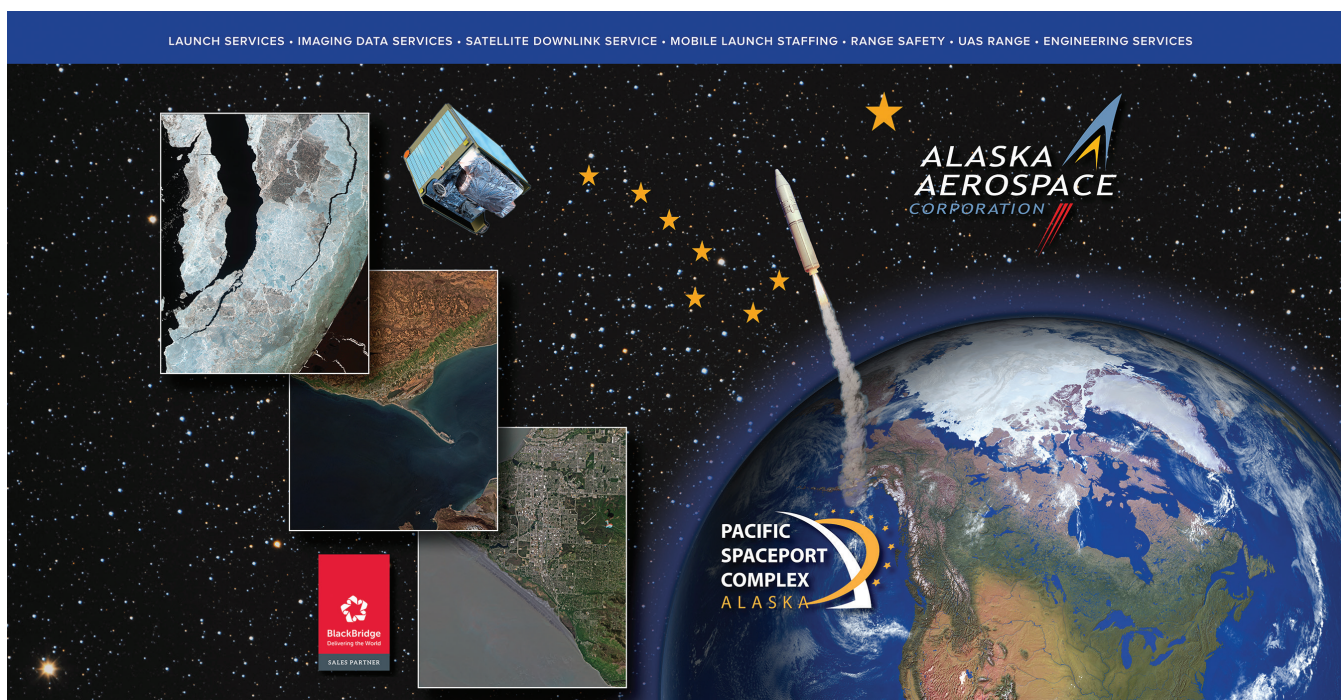
Our attendance at the Commercial Spaceflight Federation and the Space and Missile Defense (SMD) Symposium, held August 11-14 in Huntsville, Alabama has been noted on a national level in publications such as the USA Today, Space News, and the Washington Times. At the SMD Symposium, AAC again displayed our impressive booth, generating significant interest in when PSCA would again be operationally ready to launch government missions.

Our home is in Alaska, so in April, we also highlighted the new name change with an advertisement in Alaska Airlines' Alaska Beyond magazine. We are an aerospace state, and our AAC and PSCA brands are a national and international presence reflecting the majesty of our great state and boundless opportunities.

AAC EXPANDS NATIONAL PRESENCE

Over the history of AAC, the majority of government launches were conducted by agencies with operations in Huntsville, Alabama. As senior management reviewed where the most prospective government launch opportunities existed, Huntsville came to the forefront and became the center for our government marketing plan. With both Space and Missile Defense Command and the Missile Defense Agency headquartered in Huntsville, as well as the NASA Marshall Space Center, it was concluded that AAC needed to have a greater presence in the area. So, in 2015, AAC opened a small office in Huntsville. For the convenience of our east coast customers and government agencies in the Huntsville area, AAC can now be reached in Huntsville:

Alaska Aerospace Corporation
7027 Old Madison Pike NW, Suite 108
Huntsville, AL 35806
256-783-9454 (Barry King)



THE ALASKA AEROSPACE TRADE DISPLAY BOOTH.

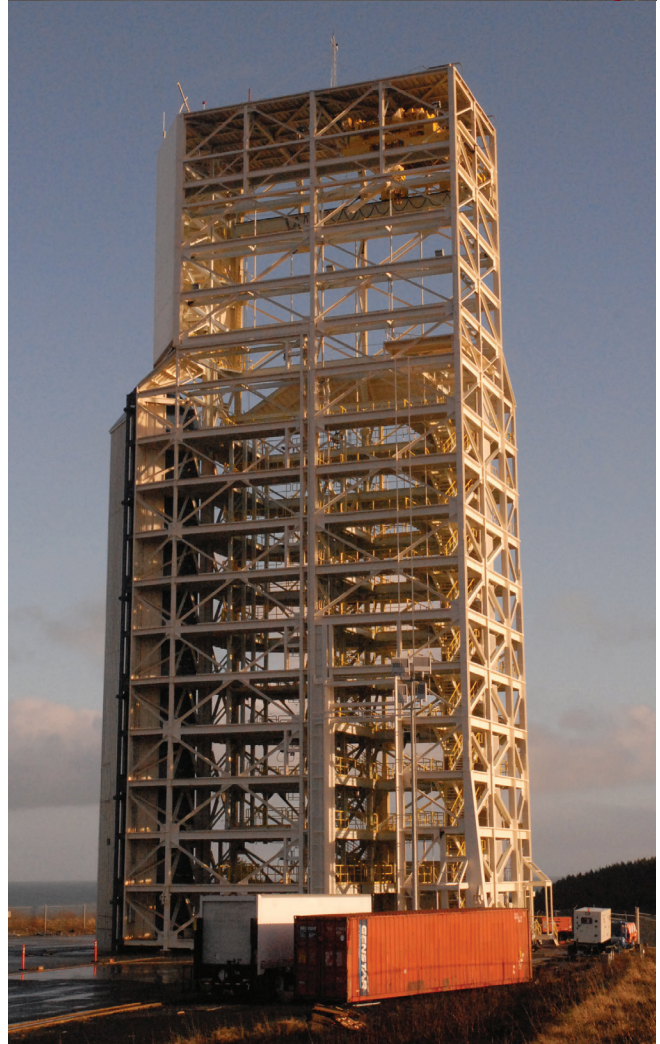
Pacific Spaceport Complex – Alaska (PSCA) Reconstruction

The termination of a rocket on August 25, 2014 at the beginning of flight, resulted in significant damage to PSCA facilities around Launch Pad -1 (LP-1). Engineering inspection determined that the majority of the buildings were structurally sound, but some siding, structural steel, mechanical systems and most electrical components needed to be replaced.

The contractors and personnel from companies like Central Environmental, Inc., Premier Mechanical LLC, Dunkin & Bush Inc., and others have performed extremely well. They were efficient, thorough, on schedule and under budget during the demolition and external painting phases of the project. In September 2015, after our A&E firm of BRPH completed the design specifications and drawings, an extensive competition/evaluation process was undertaken resulting in AAC selecting Davis Constructors & Engineers (DCE) to be our General Contractor (GC) for the reconstruction phase. DCE began the planning immediately with initial mobilization starting in late September. The anticipated completion date for all reconstruction activities is scheduled for June 2016, allowing PSCA to be fully operational for future customers by August 2016.



THE PHOTOS TO THE RIGHT SHOW THE PROGRESS THAT HAS BEEN MADE SINCE THE INITIAL ACCIDENT IN AUGUST 2014, SHOWN IN THE ABOVE PHOTO.



Privatization Initiative

As 2014 came to an end, Alaskans elected a new governor, Bill Walker. Facing a serious fiscal challenge for the state, Governor Walker quickly evaluated places where state government could reduce funding with minimal impact to state services. Since 2011, AAC has received state support for operations and sustainment, with a budget that reduced state funding by \$2.0 million per year through FY2017, when no further state funding would be required. In his budget review, Governor Walker decided that the state should accelerate the state budget support reduction to AAC, and for FY 2016 he recommended that the state no longer provide AAC operations and sustainment funds. The Walker Administration also determined that the AAC should be divested from its current state ownership structure to an organization which operates in a more independent relationship with the State of Alaska, operating more as a private commercial business no longer dependent upon state operations and sustainment funding.

The AAC Board of Directors and management team endorsed this approach and initiated a comprehensive evaluation of potential alternatives for restructuring AAC. AAC hired Nossaman, LLP, to lead the alternative

“The most difficult thing is the decision to act, the rest is merely tenacity.” ~ Amelia Earhart

evaluation and selection process. Throughout 2015, the Nossaman staff developed and presented to the Board of Directors a series of reports addressing potential organizational structures designed to maximize commercial business opportunities for AAC without state financial support.

At the November 2015 Board meeting, the Board of Directors passed a resolution, recommending to the Walker Administration that AAC be converted into a Public Private Partnership (P3) comprised of a non-state owned for-profit company. Under the Board’s resolution, all AAC’s state-owned assets would be transferred to the new non-state-owned company, while the PSCA infrastructure would be retained by the State of Alaska and leased to the new non-state company for operations, maintenance, and sustainment under an exclusive, long term agreement.

To some this may look like a sunset.

But it’s a new dawn.

~ Chris Hadfield, Astronaut



Expanding Horizons

“The Alaska Aerospace Corporation provides world class opportunities for its customers and plays a critical role in the diversification of Alaska’s economy.”

~ Dr. Jim Johnsen, AAC Board Member

LAUNCH OBJECTIVES

During 2015, the space industry experienced drastic changes in their business model. The commercial launch and space industries are coming online with ever smaller and more agile vehicles and satellites. The overarching goals for launch vehicles – total launch costs of less than \$5M for launch with a launch-on-demand capability, offering shorter periods between launches, occurring just weeks to months apart. Current launch costs are in the range of \$40-\$50M per launch, with planning measured in years.

How can such a change be realistic? Because the satellites themselves are changing. While there is still a requirement by the Federal government for large satellites (hundreds of millions to over a billion dollars in cost), the commercial satellite providers are taking a different path by developing and flying much smaller satellites – some smaller than a shoebox. These satellites are then networked together in large groupings known as constellations, arrays, flocks, or swarms, depending on the number (some of the flocks number in the hundreds of satellites, and are flying today).

These small, low-orbiting satellites are far less expensive than the legacy government satellites. Because these smaller commercial satellites are built to be updated with new technology every three to five years, they also require regular replacement in orbit. To cater to those

needs, there are a number of launch vehicle providers developing small, inexpensive, and rapid-ready vehicles such as Rocket Lab’s Electron, FireFly’s Alpha, and the Super Strypi (XBow). These vehicles are highly suited to the type of business model that can be accommodated at PSCA and can generate sustained revenues over a number of years.

Our launch objectives match the marketplace. AAC used this year of industry change and our rebuilding to sharpen our launch objectives. As initiatives for 2015, AAC:

- Partnered with Rocket Lab USA to develop cost-effective launches of their Electron rocket (an international launch support contract)
- Adjusted our business development towards small-lift providers and their needs and initiated active discussions with several of these launch providers for launches in the next year or two
- Initiated development of the site to support the testing and tracking of numerous small vehicles for research and development by the Department of Defense
- Validated that our rebuilt site is able to launch the Lockheed-Martin Athena IIS-6 class of medium lift vehicles with minor modifications
- Partnered with the FAA to finish the Environmental Assessment of a possible medium lift launch pad, with a release expected in early spring of 2016

GARVEY PATHFINDER

AAC and Garvey Spacecraft Corporation (GSC) achieved an important milestone in their collaborative venture to develop and test operations for a commercial nanosat launch vehicle at PSCA. The team worked through the logistics to enable GSC to ship a prototype first stage and then successfully demonstrated liquid oxygen and fuel loading into the vehicle.

According to GSC project manager Chris Bostwick, "To reach our strategic goal of providing commercial cubesat and nanosat launch services, a key step is transitioning our R&D development and test activities to more of an operational mode at a launch range with orbital access.



PHOTO OF GARVEY ROCKET PATHFINDER AT THE PACIFIC SPACEPORT COMPLEX - ALASKA.

AAC has been very responsive in supporting us in this task. Being able to ship our P-19 test vehicle after just a month of preparations and then load LOX one day after our team arrived on site is particularly impressive."

For AAC, expanding services to include cryogenic propellants is also an important milestone. "We are very interested in hosting the small launcher operators now coming on-line," noted Matt Steele, Vice President of Business Development for AAC. "Working with GSC, we have already been able to implement and tailor a number of the logistics, facility, and safety functions that they require to optimize our ability to eventually support launch operations for GSC. We are looking forward to the next phase."

ROCKET LAB, USA CONTRACT

This year saw a marked increase in the development of small launch vehicles with the potential of dramatically changing commercial access to space by providing low cost alternatives. The future in smaller satellites that provide telecommunications, imaging, and navigation has arrived and with the advent of affordable small satellite launch vehicles. The commercial market is going to experience a sea-change in product delivery. AAC is well positioned to be at the forefront of this new generation of commercial space operations.

One of the most exciting ventures AAC has pursued in 2015 is supporting Rocket Lab USA in their initial launch program for the Electron rocket. The Electron is



ROCKET LAB'S ELECTRON ROCKET.

a revolutionary two stage vehicle that uses Rocket Lab's Rutherford liquid engine on both stages. The Electron is designed to place up to a 150kg payload to a 500km sun-synchronous orbit.

AAC is playing a key role with Rocket Lab by providing the range safety component for their New Zealand Mahia launch facility. With initial launches scheduled for 2016, AAC upgraded the Range Safety and Telemetry System (RSTS) to meet all mission requirements for supporting the Electron launches and shipped one unit of the RSTS to New Zealand for operations.

As part of the Rocket Lab relationship, AAC is also working to support development of an Autonomous Flight Termination System (AFTS) by Rocket Lab that would effectively reduce the cost of range safety for future commercial operations. By doing this, AAC expects to improve the cost effectiveness for commercial operations from PSCA.

EQUATORIAL LAUNCH CAPABILITY

Nearly sixty percent of satellite orbit requirements are in the equatorial plane. With PSCA only able to offer launches into polar orbits and some potential customers interested in having AAC support both polar and equatorial orbit launch requirements, AAC received authorization from the Board of Directors to explore developing the capability to launch small rockets, such as the Electron (Rocket Lab) or Alpha (Firefly), into equatorial orbits. The ability to provide both equatorial and

polar orbit launch capabilities by AAC would give AAC an attractive option not available at other locations in the United States for small commercial operators. As the year came to an end, AAC had initiated a site selection process intended to identify the ideal location for developing an equatorial launch capability.

AAC has also been active with a number of other commercial companies in determining the optimum commercialization program that would provide customers with low cost access to orbit using the Super Strypi (XBow) rocket from AAC operated launch facilities for both polar and equatorial orbits.

"I think we are at the dawn of a new era in commercial space exploration."

~ Elon Musk, founder
Space Exploration Inc (SpaceX)

SPACEX

In 2015, AAC successfully negotiated a contract through 2017 with the commercial launch company SpaceX for tracking the SpaceX Dragon capsule. When the Dragon capsule undocks from the International Space Station (ISS) and returns to earth, PSCA is one of the last places that can contact the capsule before it splashes down in the Pacific Ocean west of Los Angeles, CA. Under the new contract, AAC will not only track Dragon return flights, but will also assist in tracking satellite deployments on launches from Vandenberg Air Force Base, CA.



"We're determined to make space accessible for commercial applications."

~ Peter Beck, Rocket Lab founder and CEO

BlackBridge Imaging Data Distribution

One of the first actions taken by AAC to diversify was to establish a new business line for sales of satellite imaging data from the Rapid Eye constellation owned by BlackBridge. AAC had a number of successful sales during 2015 and made excellent contacts in the public and private sectors locally and nationally. During the course of the year, AAC participated in exhibitions and presented BlackBridge Rapideye imagery at conferences.

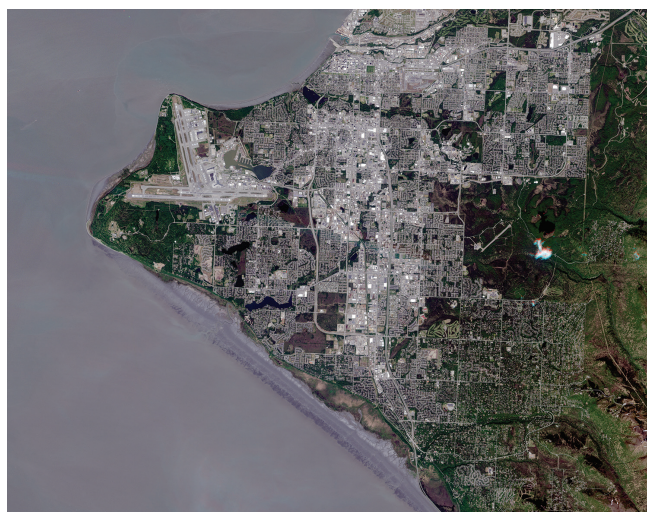
BlackBridge conducted a very robust imaging acquisition of Alaska this year. The RapidEye Constellation was successful at capturing the most complete, cloud free images of Alaska. AAC and BlackBridge collaborated in 2015 to develop a unified mosaic imaging of the entire state. RapidEye mosaics are created by combining images from archived imaging. Each image included in a RapidEye mosaic is geometrically aligned and orthorectified using highly-accurate ground control. The image is then uniformly color-balanced to guarantee a high-quality, natural-color image produced using native red, green, and blue bands. The finished RapidEye mosaic is conveniently formatted into a ready-to-use product, in a standard file format that is GIS-ready and requires no further processing. Using the most current 2015 imaging, the Alaska mosaic will be available in the first quarter of 2016.

BlackBridge and AAC are increasing marketing efforts and speaking with several local and national geospatial firms to develop dealerships that will come through AAC for distribution of Rapideye Imagery. The discussions have already opened doors to possible business when ACC became part of a team responding to a request for letters of interest.

In October of 2015, BlackBridge was purchased by Planet Labs. Planet Labs is a Silicon Valley company that plans to image the entire earth every day, and provide universal access to that data. Just two years after their first satellite entered space, Planet Labs now operates an extensive constellation of earth-imaging satellites, called Doves. The Dove constellation has higher resolution than RapidEye and is expected to be an excellent complement to RapidEye imagery. AAC has already spoken with BlackBridge about the Dove imagery which will be available for R&D in 2016 and commercial use in 2017. AAC is anticipating partner discussions and training in the near future.

“Alaska and the Arctic are of enormous global importance, as evidenced by the historic trip to the Last Frontier by the President. It is exciting to be associated with the Alaska Aerospace Corporation during these dynamic times as we work to garner opportunities for Alaskans.”

~ Drue Pearce, AAC Board Vice Chair



RAPID EYE IMAGE OF ANCHORAGE, ALASKA



RAPID EYE IMAGE OF HOMER, ALASKA

Federal Appropriation and Legislation

FY 2015 FEDERAL APPROPRIATION

This year we are very pleased to be included in the federal funding allocation to the Air Force. Alaska Aerospace along with Mid Atlantic Regional Spaceport (MARS) in Virginia received operational and sustainment funding totaling \$6.0 million split equally between both facilities. AAC thanks Senator Murkowski, Senator Begich, Representative Young, and their staffs for the work and support in getting this funding for the State. This is “new” money that AAC brings to Alaska. The funding is being used on three major programs which support and enhance the capabilities our federal government customers need and desire in support of the National Security Space Program.

This Appropriation reflects the Federal government and Department of Defense recognition that AAC provides a strategic launch asset at PSCA. PSCA is one of only two United States’ locations to launch polar or high inclination orbits. By providing an alternative launch site to Vandenberg AFB, the U.S. reduces its vulnerability to a natural or man-made event – and provides additional launch flexibility in the rapidly growing small-lift class of launch vehicles.

The Appropriation reflects the Federal government’s commitment to improve PSCA for access to space for both commercial and federal needs. The three main projects in this authorization are:

- **Telemetry and Flight Termination Upgrades:** Upgrading our Telemetry and Flight Termination system to develop automatic (autonomous) flight termination systems (AFTS). A flight termination system is a key element for ending a flight to protect people and property in case of an anomaly. We are working with Rocket Lab USA and the FAA to support research and development of an FAA-licensed AFTS for use by any customer. AFTS is important for increasing safety of the public and lowering launch costs for all.
- **Launch Processing Configuration and Preparation:** Developing a process for qualifying a commercial launch support team is essential in attracting low cost commercial operations. Today, virtually all of the Flight Safety teams at PSCA are provided by the Federal government from DoD sources. These Flight Safety teams are expensive and have limited availability for commercial operations, especially at offsite locations away from federally-operated ranges. These funds allow us to work with the FAA to develop a training and qualification process for commercial Range Safety teams con-

sistent with Title 14 CFR 414 (Safety Approvals), 415 (Launch License), and 417 (Launch Safety) to provide commercial flight safety teams at PSCA and other sites. Completion of this project will make PSCA more cost effective for both government and commercial operators.

- **Site Security and Communications Systems**

Enhancements: This project will improve the capability to automate, monitor, and regulate access to sensitive areas of PSCA. In order to protect Alaska’s assets and customer property when on site, we are continually upgrading our security systems. In addition to physical security upgrades, AAC is hardening its electronic systems to provide better protection for the public, our customers, and the site; adding remote surveillance monitoring/recording of sensitive areas of PSCA; expanding and updating secure communications and data transmission systems, suitable for both commercial and Federal security needs associated with any mission; and providing the highest speed secure communications and data transmission systems to ensure safe and secure remote access to site systems, up to and including remote support of launch at a customer’s own site.

FY 2016 NATIONAL DEFENSE AUTHORIZATION ACT (NDAA)

The National Defense Authorization Act (NDAA) for fiscal year 2016 included language specifically pointing out the significant contribution that non-federal spaceports make, and they do play a significant role and provide strategic capability for our nation. Our congressional delegation of Senator Murkowski, Senator Sullivan and Representative Young all played instrumental roles in seeing that this new language was inserted. Some of the actual language in the Act is:

“The Pacific Spaceport Complex, Alaska (PSCA) has supported numerous launches for the Air Force Space Command including specific national security launches. It remains the only commercial polar launch range in the United States and PSCA, a state-of-the-industry spaceport on Kodiak Island, Alaska, provides access to space for vital government and commercial interests...The committee believes that these two facilities can be used, when appropriate, to support the national security space program.”

Having our specific location and infrastructure recognized in this important document underlines what AAC has been saying for years and sets the stage for continued Federal funding to support PSCA’s unique capabilities within the National Security Space Program.

Ed Allen Dedication

The passing of Edward F. Allen in November 2014 was a significant loss to Alaska Aerospace Corporation. Ed first came to Alaska to launch sounding rockets from Poker Flat. In 1998, he was involved with the initial development of the Kodiak Launch Complex at Narrow Cape on Kodiak Island and was hired in 2002 by the Alaska Aerospace Development Corporation to oversee engineering and business development, culminating with his promotion to Chief Engineer and Director of Business Development in 2007.

In recognition of his dedication to Alaska Aerospace Corporation, the Board of Directors approved renaming the Launch Operations Control Center (LOCC) in honor of Ed Allen. On August 24, 2015, Ed's birthday, Alaska Aerospace Corporation dedicated the Launch Operations Control Center (LOCC) at the Pacific Spaceport Complex – Alaska, in honor of Edward F. Allen. Present for the ceremony were his widow, Beverly Allen, and two of his many grandchildren.

During the first session of the 29th Alaska State Legislature, the Legislature passed a citation honoring Mr. Ed Allen for his dedicated service to Alaska and his contributions to the aerospace industry. As part of the dedication, Senator Gary Stevens read the Legislative citation and presented Mrs. Allen a framed copy.

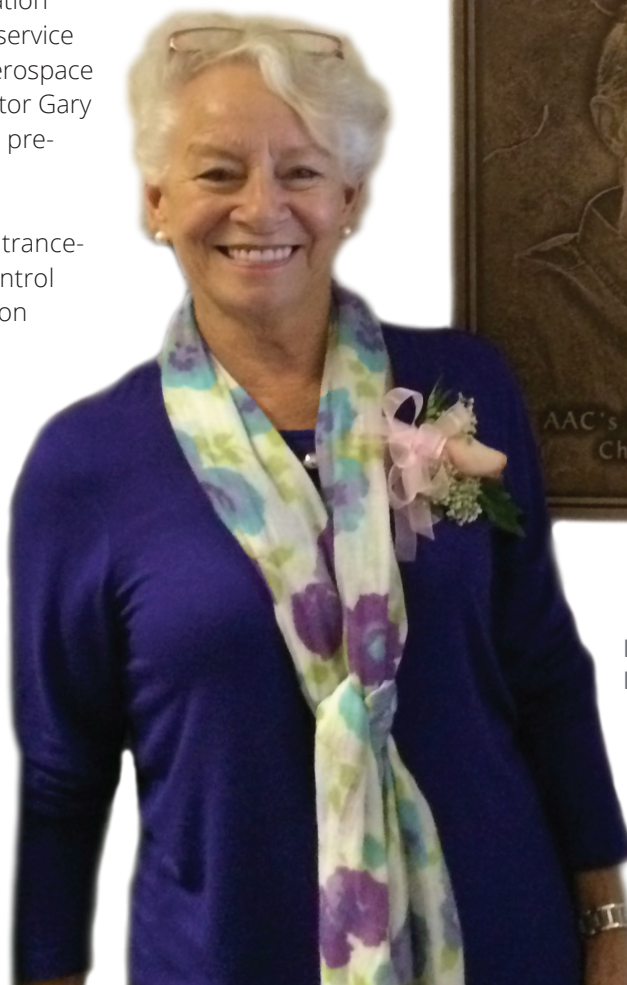
A bronze plaque was installed at the entranceway to the PSCA Launch Operations Control Center (LOCC), with the legislative citation and Ed's picture hung inside the LOCC for all to know of this great man's accomplishments.

“Many a trip continues long after movement in time and space have ceased.”

~ John Steinbeck



BEVERLY ALLEN WITH SENATOR GARY STEVENS



BEVERLY ALLEN WITH ED ALLEN'S PLAQUE.

Science Technology, Engineering, and Mathematics (STEM) Outreach

2015 INTERNSHIP PROGRAM

One of AAC's core values is supporting the development of Science, Technology, Engineering, and Mathematics (STEM) education in young Alaskans. In 2015, AAC continued our involvement in STEM education through supporting an active internship program and public school outreach.



AAC hosted two Alaska Space Grant interns in the summer of 2015, both from the University of Alaska, Fairbanks. Rocky Powers is a mechanical engineer major and an Air Force veteran who worked on F-16 and F-22 avionics in Alaska and deployed to Iraq. Jason Sebring is also a mechanical engineer major and is an Infantryman in the Alaska Army National Guard who deployed to Afghanistan. During their internship, Rocky and Jason learned about the aerospace industry, rocket launch operations, and orbital mechanics. During their six weeks at Kodiak, they worked design projects for rocket transportation and flight safety computer systems. Both interns played a key role in the Garvey Spacecraft Corporation's pathfinder mission. During this event, Jason and Rocky designed and built a launch stool for a twenty foot rocket, and then participated in emplacing the live rocket on the stool and simulating a countdown sequence. Their efforts contributed greatly to the mission success, and set a high bar of excellence for future interns at AAC.

STUDENT STEM CLASS PROJECT

In October, Tatym Doucet, a sixth grade student at Kincaid Elementary School in Anchorage, Alaska built a replica of the Launch Service Structure at the Pacific Spaceport Complex – Alaska (PSCA) as her class project. Tatym, who visits Kodiak each summer, was inspired for the project when she went out to visit the launch site. The Anchorage School District strongly supports the Science, Technology, Engineering, and Mathematics (STEM) curriculum, with one of the primary objectives being to develop in all students the content, skills and practices of STEM disciplines that will prepare all students for future success in STEM college programs and/or careers.

Tatym demonstrated innovative concepts to build both the structure and rocket, creatively using crayons for the rocket booster motors, clay for the payload faring at the top of the rocket, and wood and popsicle sticks to build the launch service structure. This project highlights the positive aspects of inspiring students to strengthen their abilities to research, design, and engineer technical projects. In recognition of the outstanding work done by Tatym in building this model, Craig E. Campbell, AAC President and Chief Executive Officer, and Jeff Roberts, AAC Chief Engineer met with Tatym at Kincaid Elementary School to view the project. She was presented with an AAC hat and shirt, as well as a commemorative coin for her hard work in completing this project. "It is inspiring to see youth excited about technology and interested in Alaskan projects that support a diversified economy" said Jeff Roberts. AAC will also be a sponsor in the schools 2016 STEM night program.

"Exploration really is the essence of the human spirit, and to pause, to falter, to turn our back on the quest for knowledge, is to perish."

~ Frank Borman, Astronaut and former Eastern Airlines CEO



PHOTO WITH JEFF ROBERTS, AAC CHIEF ENGINEER, AND TATYM DOUCET.

Financial Performance

During FY 2015, AAC received \$6.0 million in general fund appropriation from the State of Alaska toward the operations and sustainment of PSCA. This was a \$2.0 million dollar reduction in state funding from the FY 2014 level and in line with AAC management's overall strategic direction to eliminate state operating funding by FY 2018.

In response to the current state fiscal situation, Governor Walker removed state funding to AAC in the FY 2016 operating budget. AAC agreed with this action as a means to accelerate an effort to privatize AAC into a non-state owned operating company. Over the course of the year, AAC has worked with the AAC Board of Directors to develop an alternative corporate structure that ensures Alaska retains a diversified aerospace industry by establishing a Public Private Partnership model for AAC, as was addressed earlier in this report.

Over the past three years, AAC has been reducing operations and sustainment costs through a number of actions, resulting in a savings of nearly \$3.0 million annually. This reduction included reducing staff costs by half and enacting cost saving measures for facility costs. In response to the elimination of state funding for FY 2016, AAC conducted the second Reduction-In-Force and implemented further cuts. These reductions have maintained AAC financial strength through this year of change.

As a state-owned corporation, AAC operates under the state's fiscal year (July 1 – June 30). The financials included in this report are as reported for the state fiscal year 2015. In 2015, AAC's revenues were \$2.39 million less than in 2014. However, tight financial management resulted in 2015 expenses being reduced by \$2.41 million from 2014. Therefore, the corporation was able to maintain service levels required to meet contractual agreements throughout the year. It should also be noted that Net Operating Loss for 2015 was \$3.8 million, while Depreciation for the year was \$4.1 million. This created a positive cash position of \$300,000 for FY 2015.

As AAC operates under a charter of taking a leading role in exploration and development of space-related economic growth within the state, we have been active in broadening a business base for service and support functions within the industry without sole dependence on launch services. With AAC's diversification of service offerings, it is projected that non-launch revenues will slowly start increasing in 2016, off-setting some of the down turn in launch operations revenues. Current estimates show contracts in 2016 totaling \$4.6 million with active pursuits for 2017 and beyond totaling an additional \$7.5 million. As we close out 2015, AAC is retaining a strong financial position and is well positioned to implement a privatization strategy that creates new diversified opportunities for Alaska.

In a very short period of time (2015-2016) AAC has successfully transitioned away from a reliance on state subsidies by expanding capabilities and diversifying into various new business pursuits. Our goal by the end of 2016 is to have established a non-state aerospace company with a solid financial base that provides new job opportunities for Alaskans and keeps Alaska as one of our nation's premier aerospace states.

FINANCIAL PERFORMANCE

Statement of Net Position

June 30, 2015 (With Comparative Amounts for 2014)

<i>June 30,</i>	2015	2014
Assets and Deferred Outflows		
Current Assets		
Cash and investments	\$23,388,422	\$11,440,503
Accounts receivable	467,775	2,506,447
Unbilled receivables	217,772	-
Total Current Assets	24,073,969	13,946,950
Noncurrent Assets		
Capital assets not being depreciated	5,996,928	1,118,446
Capital assets being depreciated/amortized, net	53,787,818	69,725,581
Total Noncurrent Assets	59,784,746	70,844,027
Total Assets	83,858,715	84,790,977
Deferred Outflows related to pensions	394,854	-
Total Assets and Deferred Outflows	\$84,253,569	\$84,790,977
Liabilities, Deferred Inflows and Net Position		
Liabilities		
Current Liabilities		
Accounts payable	\$380,417	\$669,638
Accrued leave and compensation	289,778	456,217
Total Current Liabilities	670,195	1,125,855
Noncurrent Liabilities		
Unearned revenue	8,361,176	6,147,075
Net pension liability	3,433,655	-
Total Noncurrent Liabilities	11,794,831	6,147,075
Total Liabilities	12,465,026	7,272,930
Deferred Inflows related to pensions	396,704	-
Net Position		
Net investment in capital assets	59,784,746	70,844,027
Unrestricted	11,607,093	6,674,020
Total Net Position	71,391,839	77,518,047
Total Liabilities, Deferred Inflows and Net Position	\$84,253,569	\$84,790,977

FINANCIAL PERFORMANCE

Statements of Revenues, Expenses, and Changes in Net Position

June 30, 2015 (With Comparative Amounts for 2014)

<i>Years Ended June 30,</i>	2015	2014
Operating Revenues	\$9,082,770	\$11,472,033
Operating Expenses		
Personnel services	4,135,514	5,656,621
Travel	336,284	409,022
Contractual services	3,603,764	3,496,653
Supplies	581,033	976,923
Equipment	118,796	143,379
Depreciation and amortization	4,073,310	4,579,165
Total Operating Expenses	12,848,701	15,261,763
Net operating loss	(3,765,931)	(3,789,730)
Nonoperating Revenues (Expenses)		
Interest income unrestricted	47,988	492,175
PERS relief from State of Alaska	238,464	421,471
Insurance proceeds, net of loss on impairment	707,138	-
Total Nonoperating Revenues (Expenses)	993,590	913,646
Loss before capital contributions	(2,772,341)	(2,876,084)
Capital contributions - State of Alaska	73,874	262,164
Capital contributions - Federal	-	28,458
Total Capital Contributions	73,874	290,622
Change in Net Position	(2,698,467)	(2,585,462)
Net Position , beginning of the year, as restated (Note 14)	74,090,306	80,103,509
Net Position , end of the year	\$71,391,839	\$77,518,047

A photograph of a rocket launch, showing a large, billowing plume of white smoke and orange fire trailing behind the rocket as it ascends into a clear, dark blue sky. The plume starts from the bottom left and curves upwards towards the top left of the frame.

We are currently not planning
on conquering the world.”

~ Sergey Brin, co-founder of Google



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