ALASKA AEROSPACE

2019

Annual Report

Contents

ALASKA AEROSPACE CORPORATION

Alaska Aerospace is a state-owned company established to create a viable space industry in Alaska and expand aerospace opportunities statewide. Alaska Aerospace operates the Federal Aviation Administration licensed commercial Pacific Spaceport Complex – Alaska (PSCA), located on Kodiak Island. PSCA is a satellite launch facility on the United States West Coast offering all indoor, all weather, processing and providing optimal support for small lift rockets and satellites into sub-orbital and polar, sun-synchronous, and highly elliptical orbits over the North Pacific Ocean. The company was founded in 1991 and is based in Anchorage, Alaska.

Our primary operational hub is at Narrow Cape, Kodiak Island, Alaska with corporate headquarters in Anchorage, Alaska, and a regional presence in Huntsville, Alabama.

Photos courtesy of Missile Defense Agency

Board of Directors

DR. ROBERT P. MCCOY, CHAIR
Director, Geophysical Institute
University of Alaska Fairbanks

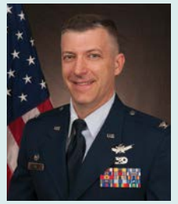
Fulfills requirement for the membership of the Geophysical Institute of the University of Alaska

LINDSAY C. KNIGHT, VICE CHAIR
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

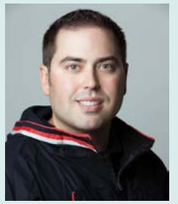


MAJOR GENERAL
TORRENCE "TORY" W. SAXE
The Adjutant General, Alaska National Guard
Commissioner, Department of Military and Veterans Affairs - State of Alaska

Fulfills requirement for the membership of the Commissioner or Designee of the Department of Military and Veterans Affairs

THOMAS D. WALTERS
Maritime Helicopters, Owner (Kodiak)

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



LEE RYAN
President, Ryan Air

Fulfills requirement for a public member with significant experience in growth and marketing

DR. JAMES R. HEMSATH
Managing Director, IntegrityOne, LLC

Fulfills requirement for a public member with significant experience in the Aerospace Industry

COLONEL (RETIRED) JACK ANTHONY

Fulfills the requirement for a professional from the Aerospace Industry (Replaces Ron Sega) - Col. Jack Anthony (retired) has nearly 41 years of space research, engineering, operations, leadership, program management, and education experience.

BRUCE ABEL
President, Don Abel Building Supplies
Past President, Juneau Chamber of Commerce

Fulfills requirement for a public member

GARY L. STEVENS - SENATOR
Ex-Officio
Alaska State Senate

Fulfills requirement for the membership of the State Senate

LOUISE STUTES - REPRESENTATIVE
Ex-Officio
Alaska House of Representatives

Fulfills requirement for the membership of the State House of Repersentatives

AAC photo

Executive Summary

This year denoted a substantial step towards our goal of sustained balanced growth, positive cash generation, and leadership direction focused on strengthening our ability to operate America's premier spaceport without the need for state or federal sustainment funding. We are structuring our company to provide the most competitive launch services in the nation, with the most advanced technology to lead America's dynamic commercial spaceport development by being the benchmark for measuring industry excellence.

Financial

With our Operating Revenues exceeding $25.5 Million this year, 2019 was our highest launch revenue earning year. Operating revenues rose 10% year-over-year while operating expenses of $26 Million (including depreciation) only increased by 4% year-over-year. This resulted in a Net Position increase of $668k over FY 2018. While we still have work to ensure long-term financial strength of the Corporation, demonstrating strong revenue combined with constrained expenses provides a model for the future.

Operations

Revenue gains were a direct result of the record number of launches we conducted or supported. Marking a "first ever" we completed nine launches in 2019: three from PSCA and six from New Zealand.

This year concluded our four-year support commitment to Rocket Lab USA, when on December 6th they launched "Running Out of Fingers" from Launch Complex One – Mahia, New Zealand. With this launch completed and our commitment to Rocket Lab finished, we will be returning our Range Safety and Telemetry Systems to Alaska for modernization. This closed out our first international and most innovative and successful deployment in our company's history.

Continuing our support to the National Security Strategy, we supported test operations of the Arrow 3 Interceptor for the Missile Defense Agency (MDA) and their foreign military partner. Throughout the year we conducted mission planning with five federal government offices for launches that are projected for PSCA over the next several years.

Infrastructure Investments

To ensure we are prepared for future commercial and government operations; we continued an aggressive infrastructure development program. This included reconfiguration of Pad C to provide multi-user capability for both commercial and government, liquid and solid fuel launch vehicles. Concurrently, adjacent to Pad C we built Pad B in only four months, specifically designed to support a new entrant commercial launch vehicle operator. This increased the number of useable launch pads at PSCA to four and added significant flexibility for customer operations.

Using federally appropriated spaceport enhancement funding, we also executed several other projects to improve PSCA operations. To improve public safety during launches, we upgraded command destruct system (CDS) antenna systems and improved our range surveillance system's capabilities. We installed a new X-band weather radar system, providing enhanced weather observations and forecasting at PSCA. The Ed Allen Launch Operations Control Center display capabilities were upgraded to improve launch controllers situational awareness and data integration needs. To reduce power requirements, we automated facility control, operation, and maintenance systems to maximize energy efficiency and lower utility costs. We will continue to invest in infrastructure that is specifically designed to enhance our operational capabilities and meet future customer requirements.

Pacific Spaceport Complex – Hawai`i (PSCH)

Over the past few years we have pursued potential development of a near-equatorial launch facility that would complement our polar launch capabilities at PSCA. Through an extensive review of potential sites across the Pacific Region, East Hawai`i was determined to be the best location due to proximity to the equator; existing infrastructure; and business, academic, and political interest in aerospace development. The State of Hawai`i funded an environmental assessment process towards determination of whether a small commercial spaceport could be established in East Hawai`i. Unfortunately, opposition to the project provided a challenging environment for success. Towards the end of the year the private landowner, where the site was being considered, withdrew from the project. We continue to believe that a spaceport organization that provides low-cost access to both polar and low inclination/equatorial launch capability has a market advantage. As we look for ways to remain a leader in the commercial launch business, we will be reviewing other alternatives to provide customers greater launch capabilities to meet their operational requirements.

Community Engagement and Outreach

As an example of our innovation in spaceport development and customer service, Alaska Aerospace initiated a Spaceport Master Plan process. Since there is no spaceport master plan framework in the federal system, we are using the Federal Aviation Administration (FAA) Airport Master Plan guidelines to develop a ten-year development plan for PSCA. This is ground-breaking in the space industry. Using a Spaceport Planning Advisory Group, along with public informational meetings, we are developing a comprehensive planning document to guide facility development over the next decade.

Our goal is to be an industry leader in community stewardship and outreach. To that end we held another open house at PSCA on October 24th. That same evening we conducted our second annual Town Hall meeting in Kodiak to present a community update on this year's activities and preview what was anticipated for the coming year. We engaged with the Kodiak Fisheries Working Group on spaceport operations and worked with the aviation community to reduce the safety zones for commercial launches, thereby opening some mountain passes between Kodiak and Old Harbor/Ahkiok to air traffic. AAC views such coordination as an ongoing process.

We met with several Kodiak native communities to better understand native culture, respect broader shared uses of Narrow Cape, and ensure spaceport operations do not impede subsistence activities on the land and in nearby waters.

Aurora Launch Services

Continuing our cost streamlining of the company, Aurora Launch Services has increased employment to 39 full and part-time employees. Serving both our Anchorage and Kodiak locations, Aurora Launch Services has allowed us to increase personnel flexibility and reduce costs, making Alaska Aerospace one of the most cost competitive spaceports in America.

Our Future

We have established a solid base for growth in the market-place. Projections for commercial and government launch requirements at PSCA remain strong for the upcoming years. Our infrastructure investment program has netted benefits, secured our ability to meet customer needs, and provided us an opportunity to attract new launch providers to PSCA. We will continue to evaluate spaceport expansion beyond PSCA, to meet commercial and government space access needs.

AAC photo

Letter From Chair

It is very exciting serving as the Alaska Aerospace Board of Directors Chair during this period of growth and expansion. The pace of operational activity and the expansion of infrastructure to support government and commercial markets has been unprecedented in our history.

For any organization to achieve greatness requires a team of dedicated and talented people. This year has been the busiest in our history, conducting three launches from our Pacific Spaceport Complex - Alaska, while also supporting six launches from New Zealand for Rocket Lab. This could not have happened without the total commitment of all our employees and contractors. Alaska Aerospace employs some of the finest professionals in the space launch industry, as demonstrated from the sterling performance supporting the most complex government mission ever conducted at PSCA while concurrently supporting launches for Rocket Lab in New Zealand.

On behalf of the entire Board of Directors, I want to thank the employees, contractors, subcontractors, and consultants of Alaska Aerospace for their dedication and extreme professionalism in building a world-class aerospace company operating our nation's most modern and dynamic spaceport. While this report will cover the significant accomplishments of our company this past year, it all could not have been done without our people. They are the best in the business, and we are very proud of their successes this year.

With this year's accomplishments and projections for the coming years, it is clear the space industry is recognizing Alaska Aerospace's key differentiators. Our location provides the optimum site for cost effective launches placing small satellites into sun-synchronous and low earth orbits. We have the most modern spaceport in America, providing launch capabilities for both government and commercial customers. Last year we retrofitted Launch Pad 2 to enable launches of small liquid fuel launch vehicles and repurposed another launch pad that had previously been solely used by the government to allow launches of small liquid-fuel commercial vehicles. This year we built a new launch pad exclusively for use by small liquid-fuel vehicles increasing our capabilities to simultaneously service both government and commercial customers at PSCA.

We are fully aware that the new small launch vehicle market is extremely price sensitive, seeking low cost launches. To compete in the emerging commercial space launch market, we restructured our organizational capabilities, tailored to the requirements defined by that market and continued our trend of migrating personnel services to Aurora Launch Services. These steps allowed us to keep launch costs down and create a more competitive environment within the commercial sector.

At our June board meeting, Dr. Ron Sega announced his resignation from the Board of Directors. Ron has a distinguished aerospace career, retiring from the Air Force Reserve as a Major General. He was an astronaut who twice flew on the Space Shuttle. Launched on February 3, 1994, his first mission was on the Space Shuttle Discovery for STS-60, the first joint United States/Russian Space Shuttle mission. This was followed on March 22, 1996 when he was Payload Commander on the Space Shuttle Atlantis for STS-76. This mission was the third joint United States/Russian mission to dock with the Russian MIR Space Station.

In 2001, Ron became acting Assistant to the Secretary of Defense for Nuclear, Chemical and Biological Programs and from 2005 until 2007 he served as Under Secretary of the Air Force as Executive Agent and Milestone Decision Authority for Space. On behalf of the entire Board of Directors and Alaska Aerospace leadership, we want to thank Ron for his commitment and leadership during his tenure on the Board of Directors.

We are very pleased Governor Mike Dunleavy appointed Colonel (retired) Jack Anthony to fill the position for *experience in the commercial space industry and operational space experience* to our board, replacing Dr. Sega. Col Anthony has nearly 40 years of space research, engineering, operations, program management in space operations in both the US Air Force and private sector. Since retiring from the Air Force, he has worked in the aerospace industry supporting DoD and National space program operations and engineering analyses as well as serving in astronautics education and operations positions, including teaching at the Air Force Academy.

With the retirement of Craig E. Campbell in March, the board appointed Mark D. Lester as President and Interim Chief Executive Officer. As Interim Chief Executive Officer, Mark demonstrated exceptional leadership and at our June meeting, the board confirmed Mark as the permanent President and Chief Executive Officer. Alaska Aerospace is in good hands and we look forward to continuing business expansion with Mark at the helm.

Our future looks bright, with 2020 expected to eclipse 2019 in activities and accomplishments. I speak for all board members when I say that Alaska Aerospace is one of Alaska's true gems and is emerging as the nucleus for diversifying our economy in the aerospace sector. I trust as you read this year's report you will agree with me that Alaska Aerospace is on the right path for economic expansion and making Alaska a twenty-first century aerospace state. Thank you for taking the time to read our annual report and support this vibrant and growing business.

Robert P. McCoy, Phd

Chair

AAC photo

Letter From President/CEO

Leading Alaska Aerospace during these dynamic times is a "dream job." I want to thank the Board of Directors for entrusting me with the responsibilities of President and Chief Executive Officer for the Corporation. Our future, while challenging, provides us the opportunity to secure our destiny as a world-class, multi-user spaceport, offering affordable and reliable launch to both commercial and government customers.

To stay focused on our objective and ensure quality performance in everything we do, we established five corporate values for Alaska Aerospace that define who we are:

- Safety First
- Respect the environment
- Collaborate with the community
- Provide value to our customers
- Be financially sustainable

These five corporate values form the bedrock for defining our company. As we move forward, we will always reflect back to ensure that our direction and performance is consistent with these values.

One of the tenants of good leadership is recognizing that success is due to others. Employees, directors, and customers all contribute to the success of a leader and organization and I am pleased to report that our stakeholders were instrumental in our accomplishments in 2019.

While we have sustained a positive cash flow position for the past five years without any state or federal sustainment funding, it is time for us to get Alaska Aerospace into a secure financial position where we have sufficient reserves to support future contingencies and facility maintenance and replacement requirements. Once we have firmed up our balance sheet, we will be in a position to start providing dividends to the State of Alaska and initiate Payment in Lieu of Taxes to the Kodiak Island Borough. To accomplish this, we will maintain fiscal discipline and concentrate on further reducing the cost of launch for customers and establishing PSCA as the spaceport of choice for polar orbit and sub-orbital launches.

With the development of low cost, small and cube satellites, demand for affordable launch capabilities from non-government launch sites is increasing. Our pivot from serving solely government customers, to aggressively pursuing the new small and light lift commercial launch vehicle market is paying dividends. This year we constructed our first non-government funded launch pad designed specifically for a commercial launch operator who also signed a long-term commitment to launch from PSCA.

I want to specifically thank Senator Lisa Murkowski, Senator Dan Sullivan and Congressman Don Young for their steadfast support of our operations and the federal spaceport enhancement appropriations that have added essential infrastructure at PSCA. This new infrastructure allows us to support a wider range of government test and development operations, providing benefits to our National Security Strategy and increased economic investments in the community.

Our Spaceport Master Plan process is ground-breaking in the space industry. The process is progressing well in defining projected demands and using an organized, public process to identify the optimum spaceport layout to accommodate future growth while being sensitive to public access issues and minimizing our impact on the natural environment at Narrow Cape.

In closing, I want to extend my sincere appreciation to our customers; employees, past and present; contractors; our Board; and the residents of Alaska for making Alaska Aerospace a shining star of success.

Mark D. Lester

President and Chief Executive Officer

"In addition to demonstrating the value of space transportation into our daily lives, I would also say we need to continue to be respectful of the environment."

~ Mark D. Lester

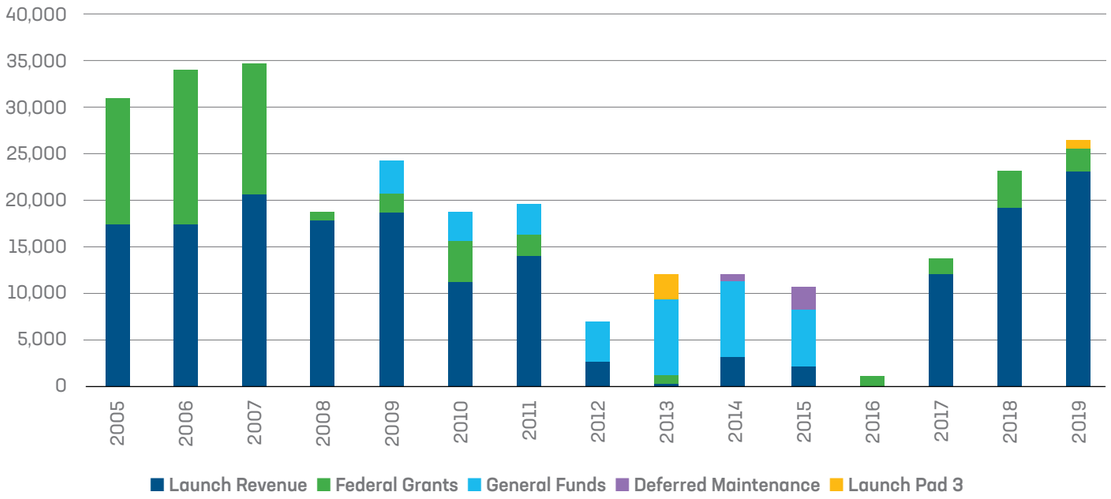
Photo courtesy of Alaska Airlines ramp agent

PSCA Launch, as seen from Kodiak Airport.

Operational Highlights

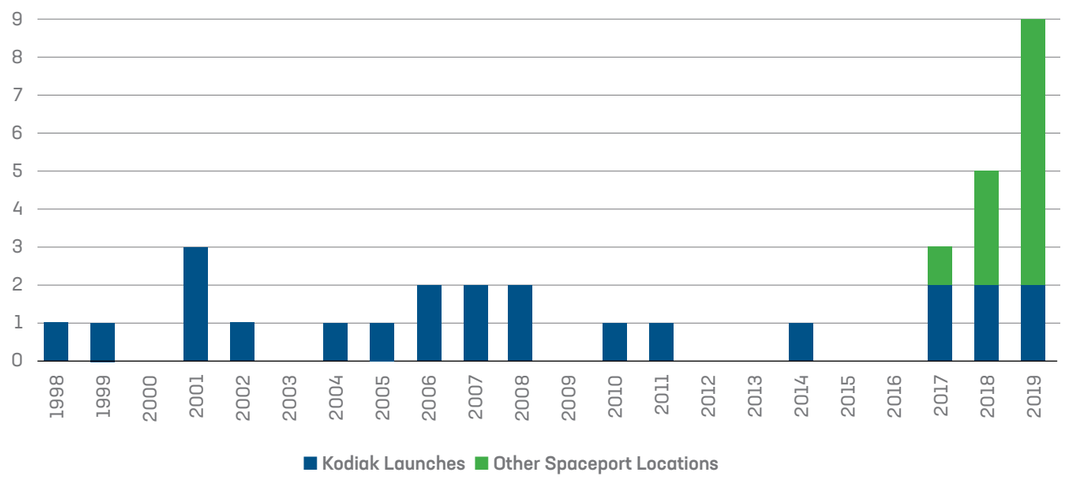
AAC Revenue History by Type

- Operating Revenues Exceeded $25.5 Million this year. A milestone, as we reached the highest level for launch revenues in the history of the company.



Number of AAC-supported Launches by Calendar Year

- Record year in operations. Conducted/supported nine launches in 2019: three launches from PSCA and six launches from New Zealand. This is the most significant number of launches conducted/supported by Alaska Aerospace in our history.



2019 Operations

Competition in the space industry is intense and unpredictable. Alaska Aerospace has used our geographic location, state-of-the-industry capabilities, customer-focused reputation, and low-cost delivery to develop a sustainable market of both commercial and government customers. We have learned from the past that reliance on a single customer, whether government or commercial, creates a high-risk factor. For example, commercial companies are often susceptible to investor funding and testing of new capabilities that can often be delayed. As such, cultivating numerous customers is paramount.

Our ability to diversify our customer portfolio helps mitigate the risks of launch unpredictability and has been a key factor in our agility to accommodate schedule changes without significantly impacting our cash reserves. During 2019, AAC conducted mission planning, hosted spaceport site visits, and/or held technical discussions with at least half-dozen government customers, over a dozen commercial launch companies, and two international entities. This customer diversity resulted in strong 2019 performance and will strengthen the Corporation's business model in years to come.

Rocket Lab USA

Continuing our support to Rocket Lab USA, we deployed to Launch Complex One on the Mahia Peninsula, New Zealand six times to provide telemetry and flight safety services for launches of the Electron rocket. Launches on March 25th, May 5th, June 29th, August 19th, October 17th, and December 7th, marked a significant milestone in our ability to perform successive operations from an international launch site and provided Rocket Lab the ability to develop and deploy an Autonomous Flight Termination System (AFTS) for future launches. By years end our team had completed all requirements for Rocket Lab and the Range Safety and Telemetry System (RSTS) is being removed from Launch Pad One and returned to the United States for refurbishment and upgrades. This closed out the most innovative and successful deployment in our company's history.

Photo courtesy of Rocket Lab

Electron Rocket at Launch Complex One - Mahia, New Zealand.

Government Support

Photos courtesy of Missile Defense Agency

PSCA Arrow 3 Launch – both images.

Supporting the National Security Strategy is a core business for Alaska Aerospace. With over twenty years of experience in supporting government missions, we remain a committed partner in national security programs. This year marked another milestone. In addition to the six launches supported in New Zealand, we supported test operations for a United States foreign military partner. Covering a period of almost five months, we provided outstanding support to our government customer, including demonstrating our surge capability to increase staffing by two-fold for short periods to accommodate complex mission requirements.

As stated by the Missile Defense Agency, "The Israel Missile Defense Organization (IMDO) of the Directorate of Defense Research and Development (DDR&D) and the U.S. Missile Defense Agency (MDA) completed a successful flight test campaign with the Arrow-3 Interceptor missile. Flight Test Arrow-01 demonstrated the Israeli Arrow Weapon System's ability to conduct a high altitude hit-to-kill engagement. Interceptor tests were conducted that successfully destroyed target missiles. These tests were conducted at Pacific Spaceport Complex-Alaska (PSCA) in Kodiak, Alaska."

Federal Spaceport Enhancement Appropriations

In support to the National Security Strategy objective of increasing the use of commercial launch vehicles, we received appropriations in both FY 2018 and FY 2019 for enhancement projects designed to provide infrastructure and facility upgrades that meet the operational requirements of the emerging small launch vehicle market. These appropriations ensure that PSCA is prepared for the future with capabilities required to provide the U.S. Government with low cost launch options for suborbital and orbital missions.

With the FY2018 Spaceport Enhancement Appropriation we completed weather system upgrades and installed an X-band weather radar at PSCA for more accurate weather forecasts, rain rate data along the trajectory, and improved triggered lightning calculations. Air and marine surveillance radar upgrades were completed to enhance the existing radar's electronics and interface to provide enhanced air and marine surveillance which effectively increases range and sensitivity of the returned signals by adding an ADS-B receiver for tracking and identification of aircraft and AIS receiver for identification of vessels.

Vehicle processing system upgrades allowed for streamlining and simplifying the horizontal processing of launch vehicles to better accommodate customer launch vehicles and reduce throughput times. This project provides the government with greater flexibility in achieving rapid launch response capability. Additionally, new pad system improvements provided FAA-compliant liquid fuel and oxidizer staging areas and required weather/lightning measurement systems at the commercial launch pads.

To improve the data quality and provide a shared common operating data environment between our staff and customer mission personnel, the Ed Allen Launch Operations Control Center video display capabilities were upgraded. This improves the display systems to support more complex and data intensive government customer data requirements on test missions and provides enhanced display capabilities for improved mission situational awareness.

Being a good steward of the environment and keeping our facility operational costs low is a key element in providing low cost launch services. This year we automated facility control, operation, and maintenance systems to maximize energy efficiency and lower utility costs. This improvement is projected to provide up to a twenty percent decrease in electricity consumption. A savings that will be passed on to our customers in terms of lower facility costs.

The FY 2019 Defense Appropriation Act included funding for additional spaceport enhancements at PSCA to support the National Security Strategy. While the government partial shutdown and delay in passage of the FY 2019 authorization bill resulted in Alaska Aerospace receiving delayed authority to initiate work on the FY 2019 Spaceport Enhancements, all projects were underway by the end of the year. Complimenting the FY 2018 projects, we are expanding our commercial launch site with infrastructure improvements that include commercial launch site upgrades, such as extending three-phase industrial electrical distribution system support, water deluge support capabilities, and improving fiber optic capabilities.

With the planned return of the Range Safety and Telemetry System from New Zealand in early 2020, improvements to the system includes replacing older, unsupported command destruct system hardware and electronics with new procured items, such as: high-power amplifiers, exciter-encoders, modulator-demodulator components, high-speed secure recording, and digital communication components.

Continuing our initiative to provide full-service capabilities to the small, liquid fuel launch vehicle market, we will be establishing on-site consumable availability for liquid launch vehicles, such as liquid oxygen (LOX), helium, and hypergolic fuels at PSCA, as well as facilities and mission-appropriate launch support commodity sites at the Pad areas.

Increased development at PSCA for launch operations that support government missions creates additional security requirements. Additional projects include adding additional camera monitoring at launch facilities and installing physical road-barrier improvements to the commercial area by removing the old gate and providing improved security systems to restrict public vehicular activity. We recognize the public interest in maintaining access to this area during non-launch periods, so installed barriers will not restrict pedestrian access to the area.

AAC photo

Newly Installed X-band Weather Radar.

Technology advancements are providing the industry with opportunities to reduce costs by conducting launch operations from remote locations, operating from multiple, locations, increasing situational awareness of both air and marine traffic, and generally improving the scalability of operations. To meet this rapidly changing environment, Alaska Aerospace has initiated a Digital Connectivity Planning process to provide a phased roadmap for technology improvements, upgrades, and system modernization.

Being a good steward of the environment and keeping our facility operational costs low is a key element in providing low cost launch services. This year we automated facility control, operation, and maintenance systems to maximize energy efficiency and lower utility costs. This improvement is projected to provide up to a twenty percent decrease in electricity consumption.

Launch Pad Improvements

This year our focus remained on increasing capabilities to serve the emerging commercial liquid fuel small and light-lift launch vehicle market at PSCA.

Two of our most significant improvements were the repurposing of Launch Pad C from solely government use to provide capability to support light-lift commercial launches and development of a new commercial launch pad, Launch Pad B. These two pads are west of the launch tower of Launch Pad 1 (LP1) to allow for unencumbered southerly access for launch.

Pad B – With our focus on developing a vibrant and diversified commercial launch market, we entered into an agreement with a commercial launch vehicle company to jointly fund development of a second launch pad for small and light-lift liquid fuel launch vehicles. Using a combination of federal infrastructure appropriated funds, private sector funds, and a financial arrangement with Alaska Aerospace, Pad B was developed in only four months. This pad is larger than Pad C and includes a small soft-sided vehicle integration and processing facility.

Pad C – Built to support government test launches, Pad C was reconfigured to provide launch capability for the commercial liquid fuel launch vehicle market. Originally developed as a 10,000 square foot (100'x100') compacted gravel pad, it has been modified to support commercial liquid fueled light lift vehicle launches by installing concrete pads for a launch stool, vehicle transport erector, a liquid oxygen (LOX) fuel pad and a propylene fuel pad. To the west of the LOX fuel pad, there is an additional 5,525 square feet of compacted gravel for fuel tank access and storage along with an earthen berm between the LOX and the launch pads. To the east of the propylene pad is also an additional 3,750 square feet of compacted gravel for fuel tank access and storage, also separated from the launch pad by an earthen berm.

AAC photo

Aerial view of Pad C.

AAC photo

Aerial view of Pad B.

Pacific Spaceport Complex – Hawaii (PSCH)

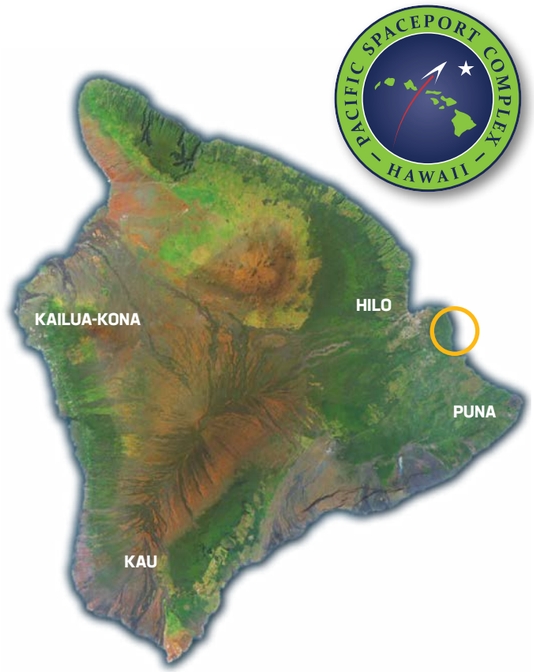
Our initiative to establish equatorial launch capability advanced through the environmental process this year, with KFS, LLC developing the first draft FAA Environmental Assessment for our proposed East Hawaii site. Public outreach and working with local officials to ensure there is awareness of the project and the economic and educational benefits associated with building PSCH are fully understood was a high project priority. In January a team comprised of both Alaska Aerospace and our Hawaiian partners visited a number of Hawaiian state and county elected officials to present the project. Later the staffers for the Hawaiian congressional delegation were briefed on the project and expected benefits to the local East Hawaii community.

There was significant public interest in this project, especially from a cultural and environmental aspect. Consistent with one of our core values, we have been diligent in conducting professional evaluations of any potential cultural and environmental impacts that may be created by development of PSCH. Alaska Aerospace respects the heritage of the area being considered and is proud to be working with W.H. Shipman, Ltd in evaluating and mitigating any cultural or environmental issues that may be found.

On February 6th we conducted a Public Informational Workshop for the project. Held at the Grand Naniloa Resort (Doubletree Hilton Hotel), Hilo, Hawaii, the workshop provided attendees with the opportunity to learn about the project and submit comments.

As KFS continued development of the EA, the project team reviewed the feasibility of the project based on market demand and public acceptance in East Hawaii. Ultimately, in October the W.H. Shipman Board of Directors elected to withdraw from the project. As W.H. Shipman President Peggy Farias stated, "We began the preliminary discussions with Alaska Aerospace with an open mind and without a long-term commitment; only the understanding that we would explore the concept of building the proposed Spaceport Project on our land in Kea'au. Our hope was to support a nucleus for the development of the aerospace industry in Hilo and Kea'au, in order to provide jobs and educational opportunities. After evaluating all available information, at this time we do not feel that the proposed project is the best fit for W.H. Shipman, Limited."

Alaska Aerospace appreciates the teamwork of all project team members in considering the feasibility of developing a small launch vehicle facility in East Hawai`i. We wish to publicly thank the University of Hawai`i Spaceflight Laboratory, the Pacific International Space Center for Exploratory Systems, The Hawai`i Department of Business, Economic Development and Tourism, and the Hawai`i Office of Aerospace Development, KFS, and W.H. Shipman, Limited for the effort put forth to ascertain the feasibility of this project.



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Public Outreach and Media

Summer Internship Program

Providing an industry experience to students pursuing an engineering or aerospace focused career path is a core value of Alaska Aerospace. We take great pride in being able to nurture the next generation of space leaders by supporting the NASA Space Grant Program through the University of Alaska. This year we invited two college professionals, Nicole Sola and Helen Segura, to intern with Alaska Aerospace during the summer break.

They provided tremendous value by developing a Space Launch Educational Kit for use by schools and community groups to demonstrate the principles of space launch. The kits allow hands-on, interactive activities that advance Science, Technology, Engineering, and Mathematics (STEM) education and are available from both our Anchorage and Kodiak staffs. They also had the opportunity to work at PSCA during the government mission in July. While at PSCA they were introduced to a variety of technical aspects of space launch operations and the complex process required to successfully launch a series of test missions within a compressed timeframe.

Spaceport Master Plan

A primary corporate value of Alaska Aerospace is to collaborate with the community through open communication and providing timely information on PSCA activities and developments. In 2018, our Board of Directors approved the company to proceed with development of a Spaceport Master Plan to address development projections between 2020 and 2030 with the intention of providing more transparency of spaceport development over the next decade.

A Spaceport Planning Advisory Group (SPAG) was established consisting of 30 stakeholders. The first meeting of the SPAG was conducted in Kodiak on January 30, 2019, followed by a meeting on May 15, 2019. In conjunction with this meeting, Alaska Aerospace provided interested SPAG members with a tour of PSCA. A Public Informational Meeting followed in Kodiak on June 25, 2019, at which time the process and work accomplished to date was shared with the public.

Following development of future demand forecasts, facility requirements were established and several potential development alternatives were created. At the SPAG meeting on December 4, 2019, positive comments and recommendations were received, such as future development should be as concentrated as possible to avoid sprawl and unnecessary disturbance to the lands; trails should be protected from incursion by spaceport development; access to Fossil Beach and retaining the natural topography are important; clear and timely sharing of launch information with the public to minimize launch impacts on the aviation and fishing communities; and reducing the footprint of the spaceport at Narrow Cape while concurrently permitting safe and efficient operations of the spaceport were primary community desired outcomes of the planning process.

We encourage public participation at all meetings. Early in 2020 another Public Informational Meeting will be held to present the work accomplished to date and to review additional public input. At both the SPAG meetings and Public Informational Meetings, public comment is obtained and used by staff to modify and improve the planning document. As we move into 2020, the potential alternatives will be refined into a preferred alternative and presented to the SPAG and public before being submitted to our Board for approval.

PSCA Open House

Continuing our effort to provide the community with the popular open house from 2018, we held another open house at PSCA on October 24th. With the increased level of activity at PSCA and the expansion of facilities, this year's open house highlighted the changes at the site while also providing guests with tours of the facilities. Over two hundred (200) residents participated in the event, including over seventy (70) local students.

Kodiak Town Hall Meeting

Community outreach is a core value of Alaska Aerospace and our team strives to communicate as much information about operations and developments with the public as permissible. On October 24th, we conducted our second annual Town Hall meeting in Kodiak to present a community update on this year's activities and preview what was anticipated for the coming year. Held at the Kodiak Convention Center, the event attracted about two dozen people. We believe this forum is an important aspect in community engagement and were pleased with the robust conversations. PSCA is an integral part of the Kodiak economy and our commitment is to be as transparent with the community as possible to ensure people are aware of our operations and the value we invest back into the community.

Mitigating Closure Impact on Other Kodiak Industries

The regulatory need to close land, air and waterways during launches to protect the public can put a burden upon other resource users, especially those with economic interests to include the commercial fishing community and air taxi services. Community awareness and coordination of launch-related closures is vital to ensure spaceport operations integrate into Kodiak's way-of-life. As such, AAC provides regular updates to the Kodiak Fisheries Working Group on spaceport operations, including safety closures, and maintains relationships with various fishing stakeholders to coordinate closure dates and times. In addition, we briefed the safety closure process at Kodiak's Commercial Fisheries Trade Show (ComFish) in March 2019. This helped clarify the need, size and duration of closures to dispel myths and misinformation. Furthermore, AAC worked with the aviation community in late 2019 to make the safety zones for commercial launches smaller which opened mountain passes between Kodiak and Old Harbor/Ahkiok to better facilitate air traffic. AAC views such coordination as an ongoing process. AAC will continue to coordinate with various stakeholders in the fishing and aviation community to best deconflict launch operations from important fishing events, such as fishing openers and closings and air service to Akhiok and Old Harbor.

Native Community Engagement

In 2019, Alaska Aerospace met with several Kodiak native communities to better understand native culture, respect broader shared uses of Narrow Cape, and ensure spaceport operations do not impede subsistence activities on the land and in nearby waters. In addition to one-on-one meetings with various organizations, Mark Lester briefed at the Native Community Roundtable in April 2019 to provide an overview of operations and listen to feedback and concerns from the native community. AAC will continue to work with the Kodiak native communities to identify opportunities for collaboration and shared interests.

Trade Shows/Symposiums/Conferences

Business development and customer relations are essential elements in business success. As the adage for business goes – "When you stop growing, you start dying." Getting your message out and repeatedly reminding potential customers of your services and capabilities are critical. We have learned that a few select trade shows, symposiums, and conferences provide the greatest opportunity to present our story and expand our presence within the industry. This year we reduced our participation to five targeted events.

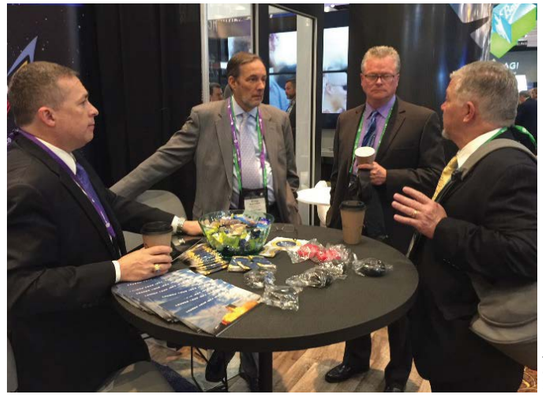
February 12-13, 2019 / Washington D.C.

FAA Commercial Space Transportation Conference, DC

Due to the U.S. Government shut-down, the FAA Office of Commercial Space Transportation (AST) was not able to host this annual conference. The Commercial Spaceflight Federation, that had co-hosted previous conferences, stepped-up and hosted this annual event in Washington D.C. Despite the government shutdown, the conference was well attended. Alaska Aerospace continued to pursue business opportunities through aggressive networking.

While AST was not able to sponsor the event, senior Alaska Aerospace staff were able to visit with AST staff to discuss a number of issues. The relationship between Alaska Aerospace and AST is very solid and these meetings consistently move issues forward in a positive direction.

We are very pleased that AST has assigned, Ms. Leslie Grey, a staff member from the Anchorage FAA office as our primary coordinator on all issues pertaining to our license and operations. Having an Alaska based representative within the AST greatly improves our communications and problem-solving capabilities.



AAC photo

Alaska Aerospace Booth at Space Symposium 2019.

April 8-11, 2019 / Colorado Springs

Space Symposium 2019

This was the seventh year that Alaska Aerospace has hosted a booth at the Space Symposium. We were pleased that four board members attended the symposium this year. Featured as the nation's premier space-oriented forum, estimated attendance topped 15,000 people representing both government and industry. Activity at the Alaska Aerospace booth was the highest ever, with a number of new contacts made for future potential business.

During the conference, Mark Lester and Craig Campbell were invited to a private meeting with the new Associate Administrator, Federal Aviation Administration, Office of Commercial Space Transport, Wayne Monteith. During this meeting Alaska Aerospace was able to articulate the unique aspects of the Pacific Spaceport Complex – Alaska and discuss proposed regulatory changes that would improve the efficiencies and operations of non-federal spaceports in the United States. Maintaining personal relationships with both government and commercial leaders is a core management value that ensures Alaska Aerospace remains a customer service focused company.

July 29, 2019 / Los Angeles Air Force Base

Space and Missile Systems Center (SMC) Presentation

The Air Force conducted a forum at Los Angeles Air Force Base (LAAFB), California focused on the viability of rapid launch capability in today's space environment. On July 29, 2019 Max Halverson presented at SMC's government day bringing to the forefront the flexibility and cost-effectiveness of operating at PSCA. By being a FAA licensed spaceport, the past and ongoing addition of spaceport enhancement projects, and the flexibility of our personnel lends undeniably to the fact that PSCA is currently the only space launch location which could provide the support for rapid launch in the near future. His presentation was unique, as it provided the US Government with insight into capabilities offered by a U.S. commercial spaceport that ensures the U.S. has redundant domestic capability for both orbital and sub-orbital launch capacity for sun-synchronous, highly elliptical orbits

August 6-8, 2019 / Huntsville, Alabama

Space and Missile Defense Conference

Huntsville "Rocket City USA," Alabama is the technical center for a significant number of government agencies and commercial companies supporting our National Security Strategy. Alaska Aerospace is proud of our support to the Missile Defense Agency and Space and Missile Defense Command, both major government organizations in Huntsville, as they enhance the defense of the United States through space related programs.

The Space and Missile Defense Conference is focused on programs tailored to the advancement of our nation's strategic and tactical defense systems. With over a decade of MDA and SMDC launches from PSCA, Alaska Aerospace has recognized the importance of participating in this conference as a means for networking and meeting with partners to continue expanding our opportunities to support new and emerging programs. This year was the sixth year we had a booth at the conference. Maggie Minton, Tom Steele, and Barry Colclough represented Alaska Aerospace during the conference, providing us with a visible presence and meeting with a variety of government officials.

November 13-15, 2019 / Fairbanks, Alaska

Alaskan Command Arctic Symposium 2019

The Arctic Domain Awareness Center hosted the Arctic Symposium at the University of Alaska Fairbanks on a fitting week where temperatures dropped below zero. Led by Alaskan Command (ALCOM) on the behalf of US Northern Command (NORTHCOM) and North American Aerospace Defense Command (NORAD), this event provides an opportunity for an Arctic community of interest to come together to examine the challenges presented by a changing and dynamic Arctic region. Mark Lester presented the participants an overview of Alaska Aerospace's efforts and PSCA capabilities. This stimulated follow-up discussions and interest from participants for future operations.

AAC photo

Alaskan Ben Kellie, CEO of The Launch Company (pictured 3rd from left) is honored as a finalist in Global Spaceport Alliance's space entrepreneur competition.

November 19-21, 2019 – Houston, Texas

Global Spaceport Alliance's Space Commerce Conference

This annual event is "America's Commercial Space Conference and Exposition" and provides spaceports and their related ecosystem of suppliers, launch vehicle operators, and payload customers a forum to discuss and meet on important topics. The Global Spaceport Summit of existing and aspiring member spaceports was held on the first day to provide focused conversations on spaceport development and operational topics. Mark Lester presented to the participants an update on the Pacific Spaceport Complex – Alaska and led a session on lessons learned and best practices in managing public opposition to spaceports. This discussion highlighted AAC's experience in working closely and authentically with local industries and community stakeholders to minimize the impacts of launch activities.

The conference also featured a space entrepreneur competition. From a field of 50 applicants, Alaska-based The Launch Company, was selected as a finalist. Led by CEO Ben Kellie, The Launch Company, provides enabling technology and professional services to streamline launch operations, reduce costs, and enable the value proposition multi-user spaceports, like PSCA. Not surprisingly, The Launch Company, has supported launch operations at PSCA and is a wonderful example of Alaska's emerging space industry.

Our Governance and Management Team

At the heart of Alaska Aerospace is the dedicated work force of full-time and part-time employees and contractors who work together as a single team to deliver superior service to our customers. Whether it is rapidly responding to fix a system failure in New Zealand ensuring there is no delay in a scheduled launch; to being stretched beyond traditional work skills to develop innovative solutions to customers problems; to taking the time to mentor the next generation of aerospace leaders, our TEAM has demonstrated consistent exceptionalism and dedication to the mission. We could not achieve these successes without them.

Our transformation from a state government model to a private sector model presented the need for several personnel changes, both to reduce cost, as well as to expand capabilities within the company. One of the most significant changes was migrating a number of Alaska Aerospace personnel position over to Aurora Launch Services, LLC.

AURORA LAUNCH SERVICES

Aurora Launch Services is a wholly-owned subsidiary of Alaska Aerospace that specializes in providing personnel to PSCA exclusively for spaceport sustainment and operations. As this year came to an end, Alaska Aerospace had reduced personnel by fifty percent over 2018, down to seven state employees. All others supporting the facility sustainment and operations at PSCA are either employees of Aurora Launch Services or independent contractors.

The rapid pace of business expansion this year caused us to have to move quickly in making personnel adjustments to meet the challenges. Aurora Launch Services experienced unprecedented growth in 2019. By the end of the year, Aurora Launch Services employed 39 full-time and part-time employees designated to support operations at PSCA and support Alaska Aerospace requirements.

Shanna Bloom

As Aurora Launch Services expanded support to Alaska Aerospace, the position of Financial Management Director was transferred from Alaska Aerospace to Aurora. We were very fortunate to gain the commitment of Shanna Bloom to serve in this role. Shanna brings the background and expertise essential in managing the complex accounting and budget aspects of the company. She has a distinguished career in the Alaska financial sector, having previously served as a Chief Financial Officer, Financial Advisor, and Operations Director at a number of Alaskan and Lower 48 firms.

Tom Steele

In support of our operational requirements, Tom Steele was hired by Aurora Launch Services in June as Mission Integrator, primarily responsible for government operations. Tom brings a strong legacy of space operations experience, having served in the United States Air Force as a Flight Test Operations Director, ICBM Missile Combat Crew member, Operations Officer for the 2nd Space Launch Squadron, Commander of the National Reconnaissance Office (NRO) at Vandenberg Air Force Base, and NRO Deputy Director Office of Space Launch. Following a distinguished Air Force career, Tom was a Program Management Senior Manager for Lockheed Martin and subsequently Launch Site Lead for Booz Allen Hamilton. Under Aurora Launch Services Tom is the senior management official responsible to provide oversight on all government programs.

Robert Greene

In July, the PSCA Facilities and Maintenance Director, Bruce Walter, resigned from Alaska Aerospace. We were very fortunate that Robert Greene, former Alaska Department of Transportation Regional Manager from Kodiak, accepted an Aurora Launch Services offer to serve as PSCA Spaceport Manager. Born and raised in Kodiak, Rob brings over twenty years direct leadership experience in Alaska. His professional relationships with the local community, as well as his knowledge of PSCA operations, are solid attributes that will provide us with the focused leadership needed as we continue transitioning our spaceport operations more towards a private sector model and leveraging airport management experience. Robert's vast leadership experience continues our employing people with a standard of excellence in customer service second to none.

AURORA
Launch Services

Adobe Stock

Our Market Opportunities

We are at the threshold of a fundamental change in the space launch industry with the expansion of the small launch vehicle market and the commercial need for rapid deployment of small and cube satellites into polar orbit to support imaging, communications, data, navigation, research, and academic requirements and market opportunities. The market we operate in is becoming extremely competitive, with a number of communities and businesses pursuing spaceport development. To maintain our leadership in launch excellence requires maintaining state-of-the-industry facilities and an exceptionally skilled workforce.

With over fifteen million dollars in federal facility and infrastructure investment at PSCA over the past five years, we have one of the most state-of-the-art spaceports in the world, tailored specifically to serve the small and light-lift commercial and government launch markets. We continue to support federal investments in non-federal spaceports to ensure our nation maintains sufficient capabilities to provide operational resilience for national security and meets the needs of the commercial market.

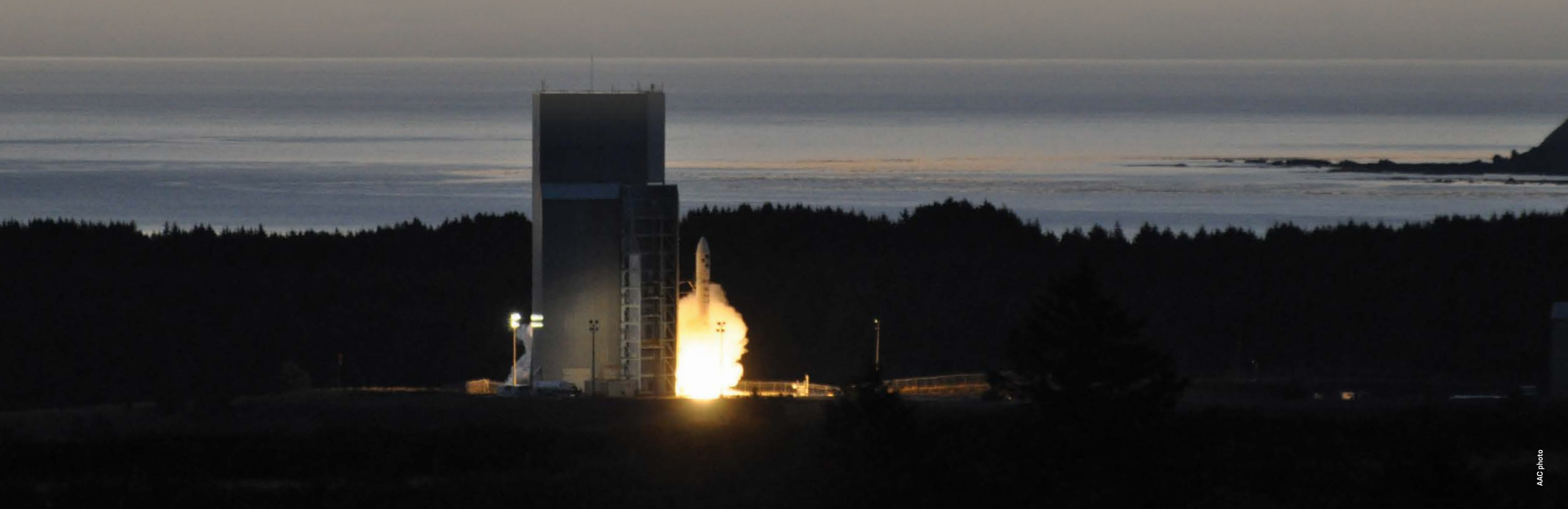
As the only west coast alternative to Vandenberg Air Force Base for polar launches, PSCA provides expansion capabilities for customers seeking affordable and reliable launch schedules. With Vandenberg projected to experience a significant increase in operations over the coming years, having PSCA available as an alternative for the small and light-lift commercial operators provides a strong market opportunity for growth.

Our Future

We have developed a successful business strategy, expanding from solely supporting U.S. Government launches to a diversified aerospace portfolio. This is a winning approach. The five years since we last received state general funds has solidified our business model of profitably serving both government and commercial launch needs, along with providing supplemental services to the space industry.

The future for Alaska Aerospace has significantly improved these past four years. With three launches from PSCA and support to Rocket Lab's six launches this year, along with the considerable infrastructure improvements of the past few years to support small liquid fuel launch vehicles, Alaska Aerospace is now in a growth direction. Next year we expect up to nine commercial launches from PSCA and, as projected in the Spaceport Master Plan, this growth has the potential to increase over the next decade. We will also be working with a number of federal agencies for test launches from PSCA over the next few years.

We see 2020 being relatively level in launch operations, with our support to Rocket Lab ending in 2019, but a more robust commercial launch schedule from PSCA. We project strong demand in 2021 for both commercial and government operations at PSCA. Providing excellence in service and offering the most affordable access to space for our small launch market customers remains our objective.



AAC photo

Financial Review

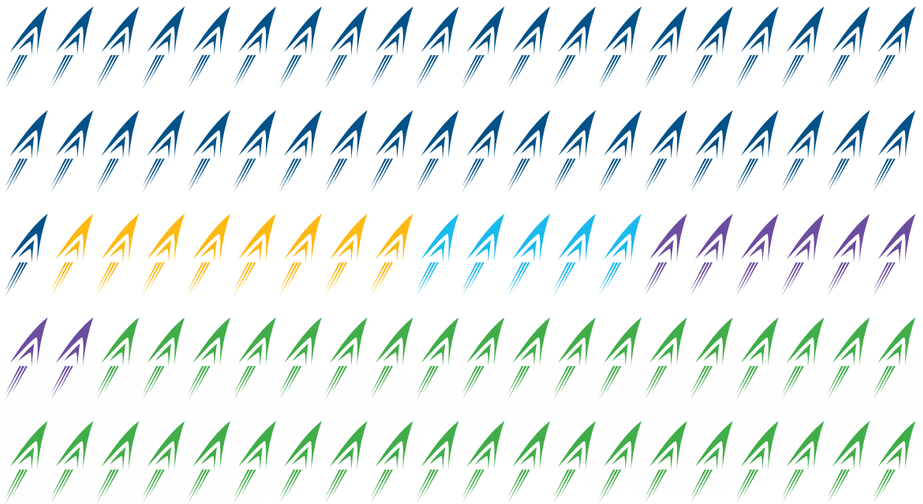
2019 was a turning point for Alaska Aerospace both operationally and financially with a net income of $4,327,984 prior to depreciation. Operating revenues of $25.5 Million were 10% higher than 2018 with operating expenses of $26 Million only increasing by 4%. In 2019, we saw an increase of $668k in our Net Position over FY 2018.

Our current assets position at year end was stronger with assets of $10 Million increasing 37% with only a 14% increase in our current liabilities of $5.6 Million. At June 30, 2019, AAC had $ 83.4 million in net capital assets at its locations in Anchorage and Kodiak that support the mission to foster the aerospace industry in the State of Alaska. This amount is net of accumulated depreciation and amortization.

We have continued to develop Aurora Launch Services, LLC, to reduce our operating costs while still maintaining our excellent operational quality of our staff. We are implementing a comprehensive benefits program and stabilizing staffing positions. Using Aurora Launch Services this past year helped Alaska Aerospace reduce personnel costs and was a significant factor in realizing the Net Position increase. Establishing this wholly-owned subsidiary is proving to be a very strategically sound move.

During FY2019, AAC again received no funding from the State of Alaska toward the operations and sustainment of the Pacific Spaceport Complex - Alaska (PSCA). 2020 will prove to be another year of successes and challenges as AAC continues to cut costs and develop the commercial side our business model.

CONSOLIDATED HISTORIC REVENUES



41% Launch Revenue $190,955,554

8% State O&S Investments $37,255,500

5% State Capital Investments $24,040,819

8% LP-3 Reconstruction $34,857,079

38% Federal Grants $173,090,641

Adobe Stock

FINANCIAL PERFORMANCE

Statement of Net Position

YEARS ENDED JUNE 30, 2019 (WITH COMPARATIVE AMOUNTS FOR 2018)

Years Ended June 30,	2019	2018
Assets and Deferred Outflows of Resources		
Current Assets		
Cash and investments	$2,260,086	$1,683,324
Accounts receivable	4,291,868	2,563,649
Accounts receivable	11,793	13,223
Unbilled receivables	3,765,931	3,228,997
Total Current Assets	10,329,678	7,489,193
Noncurrent Assets		
OPEB Asset	13,705	11,732
Capital assets not being depreciated	7,523,290	6,251,292
Capital assets being depreciated/amortized, net	76,301,981	79,829,443
Total Noncurrent Assets	83,838,976	86,092,467
Total Assets	94,168,654	93,581,660
Deferred Outflows of Resources		
Related to pensions	315,909	353,502
Related to OPEB	201,103	82,334
Total Assets and Deferred Outflows of Resources	$94,685,666	$94,017,496
Liabilities, Deferred Inflows of Resources and Net Position		
Liabilities		
Current Liabilities		
Accounts payable	$2,600,786	$3,981,390
Accrued leave and compensation	840,356	915,227
Unearned revenue	2,224,433	50,000
Total Current Liabilities	5,665,575	4,946,617
Noncurrent Liabilities		
Net OPEB liability	583,869	528,588
Net pension liability	2,784,010	3,207,804
Total Noncurrent Liabilities	3,367,879	3,736,392
Total Liabilities	9,033,454	8,683,009
Deferred Inflows of Resources – related to pensions		
Related to pensions	69,873	434,874
Related to OPEB	227,537	294,156
Net Position		
Net investment in capital assets	83,825,271	86,080,735
Unrestricted (deficit)	1,529,531	(1,475,278)
Total Net Position	85,354,802	84,605,457
Total Liabilities, Deferred Inflows of Resouces and Net Position	$94,685,666	$94,017,496

Financials are consolidated with wholly owned subsidiary Aurora Launch Services, Inc.

FINANCIAL PERFORMANCE

Statements of Revenues, Expenses, and Changes in Net Position

YEARS ENDED JUNE 30, 2019 (WITH COMPARATIVE AMOUNTS FOR 2018)

Years Ended June 30,	2019	2018
Operating Revenues	$ 25,536,246	$23,147,552
Operating Expenses		
Personnel services	1,213,470	1,367,670
Travel	762,923	141,103
Contractual services	17,572,527	16,910,590
Supplies	760,848	766,203
Equipment	898,494	1,260,879
Depreciation and amortization	4,793,766	4,494,334
Total Operating Expenses	26,002,028	24,940,779
Net operating loss	(465,782)	(1,793,227)
Nonoperating Revenues (Expenses)		
Investment income (loss) unrestricted	105,540	28,710
PERS relief from State of Alaska	77,886	42,086
Other revenue	-	-
Loss on disposal of capital assets	-	(613,817)
Insurance proceeds, net of loss on impairment	1,031,701	-
Total Nonoperating Revenues (Expenses)	1,215,127	(543,021)
Income (loss) before capital contributions	749,345	(2,336,248)
Capital contributions - State of Alaska	-	-
Change in Net Position	749,345	(2,336,248)
Net Position, beginning of the year	84,605,457	86,941,705
Net Position, end of the year	$85,354,802	$84,605,457

Financials are consolidated with wholly owned subsidiary Aurora Launch Services, Inc.

PSCA Arrow 3 Launch.

Photo courtesy of Missile Defense Agency

PSCA Arrow 3 Launch.

Photo courtesy of Missile Defense Agency

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