

STATE OF ALASKA
DEPARTMENT OF NATURAL RESOURCES
Division of Mining, Land and Water

Administrative Decision

ADL 226285

Alaska Aerospace Corporation

Interagency Land Management Assignment

AS 38.05.020

Requested Action

On May 15, 2023, the Department of Natural Resources (DNR), Division of Mining, Land, and Water (DMLW), Southcentral Regional Land Office (SCRO) received an application for reissuance of an Interagency Land Management Assignment (ILMA) from the Alaska Aerospace Corporation (AAC; the applicant) for the pre-existing Pacific Spaceport Complex – Alaska (PSCA) on state-owned, DMLW-managed lands near Narrow Cape in Kodiak, Alaska. The purpose of the proposed ILMA is to facilitate the operation and maintenance of an orbital launch facility. The applicant has requested an ILMA approximately 10,853 acres in size.

This total acreage includes 3,805¹ acres for the operating area for the Core Launch Facility, 5,581 acres for the Narrow Cape Safety Zone located to the north and west of the Core Launch Facility, and 1,467 acres for the Ugak Island Safety Zone located to the south of the Core Launch Facility. As proposed by AAC, closure of the two safety zones would be infrequent, and would only occur during active launch activities.

Background

AAC originally applied for an ILMA to develop the PSCA on April 4, 1994, which was later issued for a term of 30 years on May 18, 1994. On October 28, 2002, AAC submitted a new application requesting an amendment to the ILMA to add approximately 640 acres to the authorization to construct a new storage and maintenance facility, which was later approved on February 6, 2003. A second amendment to the ILMA was authorized on October 21, 2008, which incorporated approximately 5,581 acres for the Narrow Cape Safety Zone, and approximately 1,467 acres for the Ugak Island Safety Zone, to allow for closures during launch operations to ensure public safety.

An application for reissuance of the ILMA was submitted on August 25, 2022, and was distributed for public and agency review on August 26, 2022. Substantial public input was received in response to the application, particularly related to road closures associated with launch events and questions regarding whether additional acreage would be included in the reissuance. In response, AAC chose to voluntarily withdraw their application on October 6, 2022, in order to update their application and development plan to provide better clarity on the topics raised by the public. On

¹ This total includes the 3,717 acres previously authorized under the existing ILMA, as well as the 88-acre U.S. Coast Guard LORAN site, should it ever be remediated and relinquished.

May 24, 2023, ACC submitted a revised application with updated graphics and explanations pertaining to road closure actions and the difference between the footprint and scope of the Core Launch Facility and the Ugak Island and Narrow Cape Safety Zones. To ensure that the ILMA did not lapse during DMLW's adjudication of the revised application, AAC requested a five-year extension of the term of the original ILMA, which was made effective on May 18, 2024.

Recommended Action

DMLW recommends that an ILMA be reissued to AAC with the following parameters:

Core Launch Facility

- Grantee: AAC
- Width: Variable
- Length: Variable
- Acreage: 3,717 acres
- Term: 30 years
- Additional actions: An additional 88 acres may be incorporated into the Core Launch Facility footprint should the U.S. Coast Guard ever remediate and choose to relinquish the LORAN site serialized as ADL 67915

Narrow Cape Safety Zone

- Grantee: AAC
- Width: Variable
- Length: Variable
- Acreage: 5,581 acres
- Term: 30 years

Ugak Island Safety Zone

- Grantee: AAC
- Width: Variable
- Length: Variable
- Acreage: 1,467 acres
- Term: 30 years

Scope of Decision

The scope of this decision is to determine if it is in the State's interest to reissue an ILMA for the proposed use. The scope of administrative review for this authorization is limited to (1) reasonably foreseeable, significant effects of the uses to be authorized; (2) applicable statutes and regulations; (3) facts pertaining to the land or resources; and (4) issues that are material to the determination that issuing the authorization is in the interest of the State of Alaska. All other aspects of the applicant's project are outside the scope of this decision.

Statutory Authority

This ILMA application is being adjudicated pursuant to AS 38.05.020(b)(2).

Administrative Record

The administrative record for the proposed action consists of the Constitution of the State of Alaska, the Alaska Land Act as amended, applicable statutes and regulations referenced here-in, the 2004 Kodiak Area Plan and other classification references described herein, and the casefile for the application serialized by DNR as ADL 226285.

Location Information

Geographic Location

The applicant has requested that DMLW authorize an ILMA located within Narrow Cape on Kodiak Island, AK.

Township Range

The applicant has applied to use state-owned, DMLW-managed uplands within the following areas as depicted on Figure 1.

Core Launch Facility:

- Seward Meridian, Township 31 South, Range 19 West: S1/2 of Section 29, S1/2 of Section 30, Sections 31-34
- Seward Meridian, Township 32 South, Range 19 West: Sections 3-6, 9

Narrow Cape Safety Zone:

- Seward Meridian, Township 31 South, Range 19 West: S1/2 of Section 19, S1/2 of Section 20, S1/2 of Section 21, S1/2 of Section 22, Sections 27-28, N1/2 of Section 29, N1/2 of Section 30
- Seward Meridian, Township 31 South, Range 20 West: Sections 25, 34-36
- Seward Meridian, Township 32 South, Range 20 West: Sections 1-4, 9-10

Ugak Island Safety Zone:

- Seward Meridian, Township 32 South, Range 19 West: Sections 23-27, 34-35

Other Land Information

Municipality: Kodiak Island Borough

Regional Corporation: Koniag, Inc.

Federally Recognized Tribe: Sun'aq Tribe of Kodiak

Title

The State of Alaska holds title to applicable portions of lands within:

- The S1/2 of Section 19, S1/2 of Section 20, S1/2 of Section 21, S1/2 of Section 22, Sections 27-28, S1/2 of Section 29, S1/2 of Section 30, Sections 31-34, Township 31 South, Range 19 West, Seward Meridian, Alaska per Patent #50-85-0443 dated June 18, 1985. The associated DNR land acquisition casefile is GS 1560.
- Sections 25, 34, 35 and 36 of Township 31 South, Range 20 West, Seward Meridian, Alaska per Patent #50-85-0372 dated June 4, 1985. The associated DNR land acquisition casefile is GS 1551.
- Sections 3-6 and 9; and Sections 23 - 27, 34 and 35 of Township 32 South, Range 19 West, Seward Meridian, Alaska per Patent #50-85-0434 dated June 14, 1985. The associated DNR land acquisition casefile is GS 1532.
- Sections 1, 2, 3, 4, 9 and 10 of Township 32 South, Range 20 West, Seward Meridian, Alaska per Patent #50-85-0435 dated June 14, 1985. The associated DNR land acquisition casefile is GS 1559.

The title list above, and this authorization, are intended to be inclusive within the identified area and technical omissions are not intended to constrain the scope of the approved use. Any state-owned, DMLW-managed lands, or state-selected lands that may be managed by DMLW in the future that are crossed by the authorization considered herein at the time of this decision, which are omitted from this list, and are subsequently identified, are included in this decision. Navigable and public water determinations are subject to change pursuant to future findings.

Third Party Interests

The applicant has requested an ILMA reissuance that may intersect with existing third-party interests. Not all of the third-party interests outlined below overlap the Core Launch Facility where development by ACC is allowable and may be located within the Ugak Island or Narrow Cape Safety Zones.

- ADL 67915, Public & Charitable Lease, U.S. Coast Guard
- ADL 221571, Public Utility Easement, Kodiak Electric Association, Inc.
- ADL 221677, Grazing Lease, Kodiak Game Ranch
- ADL 222341, Grazing Lease, Coplee International, Inc.
- ADL 228146, Public Utility Easement, GCI Communication Corp.
- ADL 229275, Public Utility Easement, GCI Communication Corp.
- ADL 231629, Designated Material Site, DMLW
- LAS 32481/ADL 234429, Misc. Land Use Permit/Public and Charitable Lease, New Cingular Wireless PCS, LLC.

Planning & Classification

The proposed ILMA reissuance is located within the boundaries of DNR's 2004 Kodiak Area Plan (the Plan), Kodiak Region, Map 3-6 within the following planning units:

Uplands:

Unit K-44A (Slope Peak)² is located to the north of the footprint of AAC's Core Launch Facility and is designated as Grazing (Gr) and Public Recreation and Tourism-Dispersed (Rd) which convert to classifications of Grazing Land and Public Recreation Land, respectively. The Plan's management intent for this unit notes that *"development authorizations other than those associated with grazing operations are not considered appropriate because of the unit's large areas that are devoted to grazing operations, limited road access, and mountainous terrain."* AAC has proposed no development of this Unit, and the proposed management would be restricted to infrequent closures related to public safety. The Plan notes a grazing lease (ADL 221677) located in this unit and states that grazing operations have occurred for many years in the southeast portion of this unit in the vicinity of the Burton Ranch.

Unit K-45 (Kodiak Launch Complex)³ is defined by the Plan as the boundaries of ACC's Core Launch Facility and is designated as General Use (Gu) and Public Recreation and Tourism-Dispersed (Rd) which convert to classifications of Resource Management Land and Public Recreation Land, respectively. The Plan notes that management of this unit must be consistent with the management agreement between DNR and AAC (ADL 226285), though grazing leases are appropriate if they remain compatible with the operations of the Pacific Spaceport Complex (then known as the Kodiak Launch Complex). The Plan notes certain types of uses which are generally inconsistent with ADL 226285, which include *"the development of occupied structures in or near danger areas, and the development of radio frequency (RF) generating structures that could compromise the RF environment during a missile launch."*

Unit K-46 (Ugak Island)⁴ comprises the entirety of Ugak Island which is designated as General Use (Gu) which converts to a classification of Resource Management Land. The Plan notes that the unit is immediately downrange of the Pacific Spaceport Complex and notes that the *"unit is to be managed for multiple uses, primarily habitat and dispersed recreation. Consult with the Alaska Aerospace Development Corporation prior to issuing authorizations"*.

Unit K-47 (Pasagshak Bay, Eastern)⁵ consists of rugged terrain save for an area immediately adjacent to Pasagshak Road. Unit K-47 is designated as Grazing (Gr) and Public Recreation and Tourism-Dispersed (Rd) which convert to classifications of Grazing Land and Public Recreation Land, respectively. The Unit is to be managed for the long-term use of grazing operations and public recreation, and the Plan notes that there is a grazing lease (ADL 221677) in this unit. The Plan further notes that *"development authorizations other than those that are related to these uses are inappropriate."* AAC has proposed no development of this Unit, and the proposed management would be restricted to infrequent closures related to public safety.

² Kodiak Area Plan Page 3-68

³ Kodiak Area Plan Page 3-69

⁴ Kodiak Area Plan Page 3-69

⁵ Kodiak Area Plan Page 3-69

Unit K-76 (Pasagshak Point)⁶ comprises the area west of the Pacific Spaceport Complex along Ugak Bay and is designated as Grazing (Gr) and Public Recreation and Tourism-Dispersed (Rd) which convert to classifications of Grazing Land and Public Recreation Land. The Plan notes that the management intent for the unit is “*to be managed for dispersed recreation purposes and to accommodate grazing operations. Authorizations other than those related to public recreation or grazing are considered inappropriate.*” The plan identifies a grazing lease (ADL 222341) in this unit, though a decision to reissue the lease was appealed on July 16, 2018, and has not yet been resolved. AAC has proposed no development of this Unit, and the only proposed authorization in this unit would involve management related to infrequent closures related to public safety.

Management guidelines applicable to the designations for the uplands noted above include grazing and public access. Chapter 2: Grazing – Management Guideline B⁷ notes that “*lands used for grazing will be managed as multiple use lands to support a variety of public benefits.*” With the exception of the infrequent closures necessary to protect public safety during launch operations, there are no foreseeable impacts to grazing activity in the area during normal day-to-day operations associated with the Pacific Spaceport Complex. Chapter 2: Public Access – Management Guideline E⁸ notes that “access to state lands may be curtailed at certain times to protect public safety, provide for the remediation of public use areas, allow special uses, and prevent harm to the environment, fish and wildlife

Tidelands:

KT-24 (Narrow Cape)⁹ comprises the tidelands surrounding Narrow Cape and is designated as Habitat (Ha) and Harvest (Hv) which both convert to a classification of Wildlife Habitat Land. This unit is also designated as Public Recreation and Tourism-Dispersed (Rd) which converts to a classification of Public Recreation Land. Per the Plan, management intent for this unit is to “*protect marine mammals and their haulout areas, kelp beds, and waterfowl wintering areas*”. The Plan further notes the intent to “*maintain sport fishing and commercial harvest opportunities*” and states that “*marine structures and uses associated with operations on the uplands are considered appropriate*”. Finally, the Plan notes that the uplands immediately adjacent to this unit are utilized by ACC for an orbital launch facility.

Unit KT-25 (Ugak Island)¹⁰ comprises the tidelands surrounding Ugak Island and is designated as Habitat (Ha) which converts to a classification of Wildlife Habitat Land. Per the Plan, management intent for this unit is to “*protect heritage sites, near shore kelp beds and marine mammals and their rookeries and haulout areas,*” and notes that the appropriate federal entities responsible for management of marine mammals should be consulted prior to granting authorizations.

KT-26 (Pasagshak Pt./Narrow Cape)¹¹ comprises the sandy shore situated between Pasagshak Point and Narrow Cape and is designated as Habitat (Ha) and Harvest (Hv) which both convert to a classification of Wildlife Habitat Land. The Plan notes that the management intent for this unit is to “*maintain harvest opportunities. Protect near shore kelp beds, anadromous streams, marine*

⁶ Kodiak Area Plan Page 3-96

⁷ Kodiak Area Plan Page 2-30

⁸ Kodiak Area Plan Page 2-61

⁹ Kodiak Area Plan Page 3-105

¹⁰ Kodiak Area Plan Page 3-105

¹¹ Kodiak Area Plan Page 3-106

mammals, and winter waterfowl concentrations,” and notes that the appropriate federal entities responsible for management of marine mammals should be consulted prior to granting authorizations.

KT-27 (Pasagshak Point)¹² comprises the tidelands surrounding Pasagshak Point and is designated as Habitat (Ha) and Harvest (Hv) which both convert to a classification of Wildlife Habitat Land. The Plan notes that the management intent for this unit is to “*protect near shore kelp beds, herring rearing and feeding areas, waterfowl wintering areas, and marine mammals and their haulout areas.*” The Plan further notes that the management intent for this unit is to maintain sportfishing and harvest opportunities, which would be unimpeded by the reissuance of ADL 226285 save for infrequent closures related to public safety. The Plan also notes that the appropriate federal entities responsible for management of marine mammals should be consulted prior to granting authorizations.

KT-28 (Pasagshak Bay)¹³ comprises the sandy shore at the head of Pasagshak Bay and is designated as Habitat (Ha) and Harvest (Hv) which both convert to a classification of Wildlife Habitat Land. The Plan notes that the management intent for this unit is to “*protect heritage sites, near shore kelp beds, anadromous streams, herring spawning areas, waterfowl wintering areas, and marine mammals.*” The Plan further notes that the management intent for this unit is to maintain sportfishing and harvest opportunities, which would be unimpeded by the reissuance of ADL 226285 save for infrequent closures related to public safety. Per the Plan, a Salmon Sanctuary Area exists within this unit, and is to be managed in concordance with Guideline F of the Fish and Wildlife Habitat and Harvest Areas section of Chapter 2¹⁴, which states that, “*to preserve the quality of an existing hatchery's water supply, uses should not be located on state land where they would risk reducing water quality or quantity below that needed by the hatchery or aquatic farm.*” Infrequent closures for public safety will not negatively impact the quality or quantity of water needed for hatchery or aquatic farm use. As with other tidelands units, the Plan also notes that the appropriate federal entities responsible for management of marine mammals should be consulted prior to granting authorizations.

Of note, the only uplands proposed for continued operation and development are within Unit K-45 (Kodiak Launch Complex) which specifically notes that management of the unit must be consistent with the management agreement (ADL 226285) regarding the Pacific Spaceport Complex. All other units listed above are impacted only by the proposed reissuance of the Ugak Island and Narrow Cape Safety Zones. As the Plan clearly considers operation of the Pacific Spaceport Complex to be in the best interest of the State, and as infrequent closures of state lands are necessary to protect health and safety of the public during launch authorizations, SCRO finds that the request to reissue the ILMA held by AAC with the same existing footprint is consistent with the management intent and goals of the Plan.

¹² Kodiak Area Plan Page 3-106

¹³ Kodiak Area Plan Page 3-106

¹⁴ Kodiak Area Plan Page 2-15

Access

Functional legal access to the Core Launch Facility and Narrow Cape Safety Zone uplands exists via Pasagshak Road. Access to the Ugak Island Safety Zone uplands exists only via boat or aircraft.

Agency Review & Public Notice

Agency Review Summary

Agency review of the application was conducted from July 14, 2023, to August 14, 2023. On August 10, 2023, the review period was extended through October 12, 2023. The notice was also sent to the following recipients:

Federal Agencies

- Federal Aviation Administration
- National Oceanic and Atmospheric Administration
- U.S. Army Corps of Engineers (USACE)
- U.S. Coast Guard

State Agencies

- Alaska Department of Fish & Game (ADF&G); Division of Habitat; Access Defense
- ADF&G; Division of Sportfish
- ADF&G; Division of Wildlife Conservation
- Department of Environmental Conservation (DEC); Division of Environmental Health; Drinking Water Program, Solid Waste Program
- DEC; Division of Spill Prevention and Response; Contaminated Sites Program
- DEC; Division of Water; Alaska Pollution Discharge Elimination System Program
- Department of Commerce, Community and Economic Development; Division of Community and Regional Affairs
- Department of Transportation & Public Facilities; Statewide Right-of-Way
- Kodiak Soil and Water Conservation District

Local Agencies

- City of Kodiak
- Kodiak Chamber of Commerce
- Kodiak Island Borough

Agency Review Comment & Response

A total of two (2) comments were received during the agency review and are summarized below:

Comment: On July 28, 2023, USACE commented to note that if developments related to the ILMA impact waters of the U.S., then a permit would be required. USACE did not make the determination as to whether or not a permit was needed and passed along contact information and a link to their permit application.

Response: SCRO appreciates the response and passed the information to AAC for review.

Comment: On August 8, 2023, DOT&PF Statewide Right-of-Way commented to note that future driveways or utilities which may be needed by ACC to manage or maintain the ILMA would be permitted through DOT&PF.

Response: SCRO appreciates the response.

No other comments were received.

Public Notice Summary

Public Notice of the application was conducted from July 14, 2023, to August 14, 2023. On August 10, 2023, the notice period was extended through October 12, 2023. The notice was posted to the State of Alaska Online Public Notice System and sent to the Kodiak and Chiniak Post Offices for display on their notice boards. The notice was also sent to the following recipients:

- Afognak Native Corp.
- Bells Flats Natives, Inc.
- Coplee International, Inc.
- Kodiak Audubon Society
- Kodiak Electric Association, Inc.
- Kodiak Game Ranch
- Koniag, Inc.
- Leisnoi, Inc.
- Native Village of Afognak
- Natives of Kodiak, Inc.
- Sun’aq Tribe of Kodiak
- Tangirnaq Native Village – Woody Island Tribal Council
- 28 adjacent landowners and interested parties who requested a copy of the public notice during the extension period

Public Notice Comment & Response

Due to the significant number of public comments – 251 – received during the notice period a summary of the comments and the Division’s responses are addressed in Attachment A of this decision.

Environmental Considerations

This decision considers the environmental factors directly related to the authorization for use of state lands, specifically whether the approval of the authorization is in the State’s interest. The purpose of this consideration is to identify any associated mitigation measures or other requirements necessary to protect the public interest, while informing the overall decision of whether or not to approve the authorization.

Fuel, lubricants, and other hazardous materials will be restricted to those necessary for maintenance and operation of an orbital launch facility. A list of hazardous materials stored onsite at the PSCA can be found in Appendix A of AAC’s attached reissuance application. Per AAC’s development plan, *“no fuels, hazardous materials, or hydrocarbons are disposed of at PSCA. All materials are either consumed during operations or transported off the spaceport when operations are concluded.”*

There are prior spills associated with operation of the PSCA, including a potential hazardous site serialized by DMLW as ADL 234616. Spills are monitored by the Department of Environmental Conservation, Spill Prevention and Response, Prevention Preparedness and Response Program (PPRP). Following a spill, PPRP may issue corrective action work plans to guide remediation of the site when necessary. Per AAC's application, *"In the event of a spill or release to the environment, Alaska Aerospace staff and security personnel shall follow the Alaska Department of Environmental Conservation (DEC) and the spaceport's Emergency Response Plan procedures. Alaska Aerospace will dispose of facility-related hazardous waste and the collection of and disposal of any by-products will comply with applicable environmental regulations under DEC and the Environmental Protection Agency."* Information regarding dates of prior spills and field inspections, the type and quantity of substance released, the method of disposal, and the date the case was closed can be found on PPRP's webpage¹⁵ by searching AAC's facility ID number 76041. Oversight of any potential spills which may occur in the future will be under the purview of the Department of Environmental Conservation and the Environmental Protection Agency, as appropriate.

A secondary potential hazardous site (ADL 233981) associated with the U.S. Coast Guard LORAN site (ADL 67915) is located within the footprint of the ILMA. This 88-acre site may be incorporated into AAC's ILMA at a later date should the U.S. Coast Guard choose to remediate the site.

Discussion

Authorization Footprint:

During the public comment period, numerous comments were received which objected to an expansion of the authorized facility. However, SCRO notes that ACC's application to reissue the ILMA does not request additional acreage. The Narrow Cape and Ugak Island Safety Zones were originally authorized on October 21, 2008. The only addition proposed by AAC would be the inclusion of the U.S. Coast Guard LORAN site (ADL 67915), which currently lies within the boundaries of the Core Launch Facility. In the event that the U.S. Coast Guard remediates the site and relinquishes their authorization to utilize the underlying state lands, the 88 acres site would be absorbed into AAC's surrounding ILMA without the need for any additional administrative decision by DMLW.

Authorization Term:

The reissuance of the ILMA issued to AAC will be limited to a 30-year term. A term of this length provides AAC and its customers with long-term certainty, while also allowing the State, at the conclusion of the term, to evaluate whether higher and better uses of the property may have emerged that are incompatible with the continued presence of this infrastructure. Issuance of the 30-year term of the reissuance will become effective on May 17, 2029, as this is the final day of the extension granted to ACC on May 18, 2024.

¹⁵ <https://dec.alaska.gov/Applications/SPAR/PublicMVC/PERP/SpillDetails?SpillID=75454>

Launch Frequency and Closure Procedure:

Launches are authorized by the FAA pursuant to AAC's Spaceport Operator License LSO 03-008A. Currently, AAC is authorized to conduct 9 launches per year, though AAC is seeking to increase that number up to an annual maximum of 36 based on launch demand projections forecast through 2030.¹⁶ The schedule of launches, as allowed by the FAA license, will be determined by AAC based on the technical needs and timelines of their customers. During active launch operations AAC will initiate road closures at Milepost 10 of Pasagshak Road, as depicted by the red dot depicted in Figure 1. Per their application, AAC will occasionally host customers who will need to conduct rocket testing. During testing operations AAC may close the road within the Core Launch Facility at the spaceport entrance, Burton Boulevard, or Fossil Beach, as noted on Figure 1. In the event of any closure, AAC will coordinate with DOT&PF, DNR, FAA, and the U.S. Coast Guard. Per AAC's application¹⁷, closure duration will be based upon the type of launch or testing activity and may range from four to nine hours per day.

Unless in cases of emergency and imminent threat to life and safety, prior to closing access, AAC must first obtain written approval from SCRO. Such requests must be made a minimum of five business days prior to launch activities, include the dates of the closure, the start and end time of the closure, the road and milepost where the access is to be restricted, and a description of the area to be closed. SCRO will then provide written authorization to AAC, and AAC will in turn provide SCRO with a post-closure report detailing a summary of the access restrictions and the date and timeframe the state lands were closed and opened. SCRO recommends that AAC take great care to avoid closures during periods of time which may see a high degree of public use in the area, such as weekends and major holidays, but recognizes that customer scheduling needs will not always allow for total elimination of access conflicts during active launches.

In instances where AAC is conducting government related launch operations where national security concerns preclude sharing specific closures times, AAC must provide SCRO with a window of time no greater than 30 days in length, in which a more specific closure may occur. Closures by AAC must be advertised to the maximum extent possible to inform the public and must include electronic road signage near the City of Kodiak noting the closure, radio announcements, notices to airmen and mariners, and updates to AAC's website. Currently, AAC maintains a launch update hotline¹⁸ and a link via their website¹⁹ to sign up for closure text alerts. Such measures must continue and should be updated over the term of the 30-year ILMA to reflect the most up to date technological advances and social expectations.

¹⁶ Pacific Spaceport Complex – Alaska Spaceport Master Plan 2020-2030: Page 4-2

¹⁷ AAC Supplemental Information, Page 11

¹⁸ Available by phone at 1-833-PSCA-3-2-1

¹⁹ Available online at: <https://akaerospace.com/>

Figure 1: A map supplied by ACC depicting the Core Launch Facility, the Ugak Island and Narrow Cape Safety Zones, and road closure locations

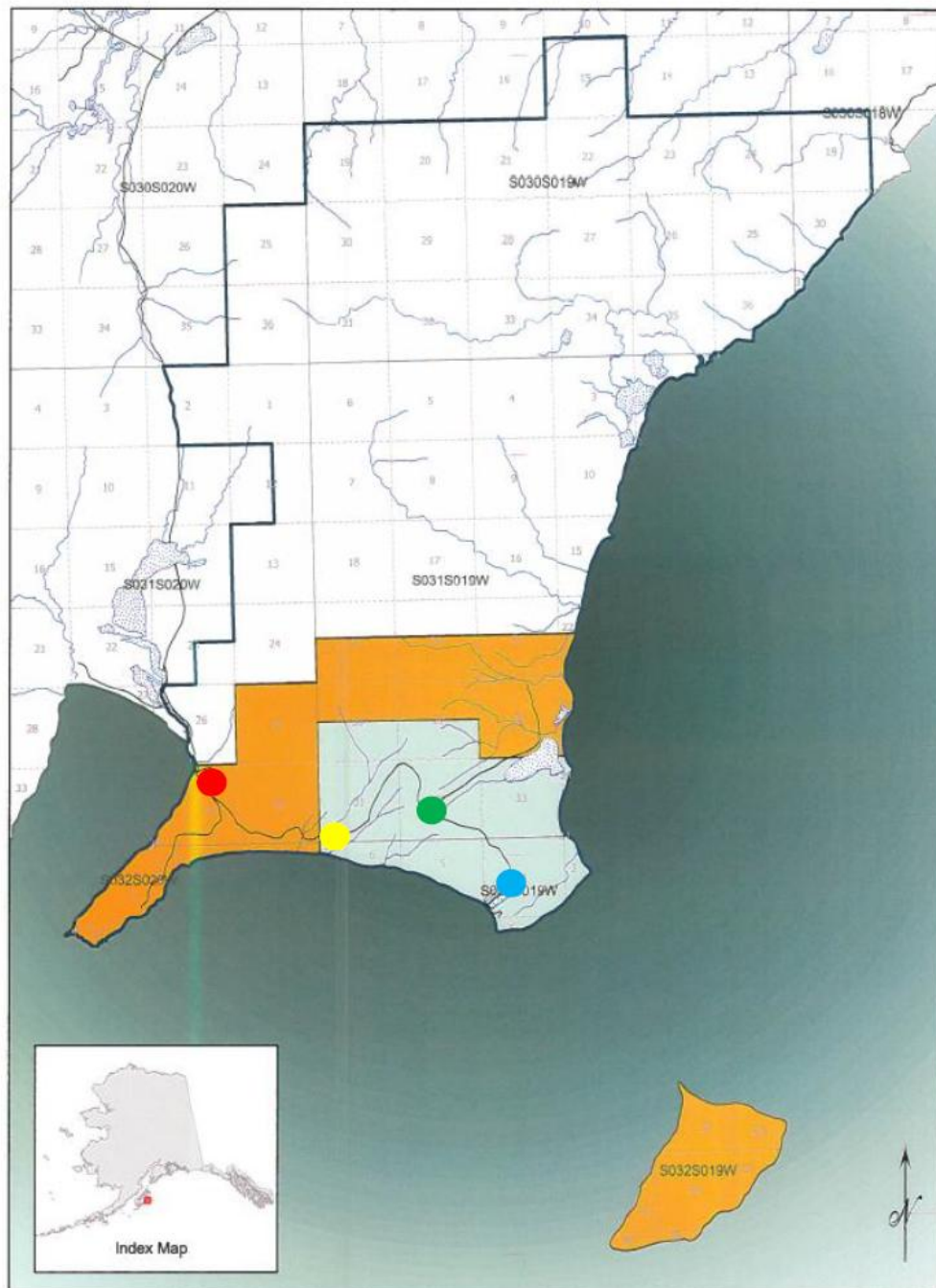


FIGURE 1: CORE LAUNCH FACILITY & SAFETY ZONE MAP

- Core Launch Facility
- Narrow Cape & Ugak Island Safety Zone - Public access will be blocked in these areas during hazardous operations.
- Kodiak Narrow Cape Public Use Area
- Road access will not be permitted past the red point during launches, and the yellow, green, and blue points during testing. This is further discussed in Section 2.
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Figure 2: A map supplied by ACC depicting the non-development zones within the Core Launch Facility



FIGURE 2: NON-DEVELOPMENTAL AREAS

 Areas outlined in Purple will be designated as Non-Development Areas

Non-Development Areas:

Within the Core Launch Facility, ACC has identified two zones which are recognized as areas of high importance to maintain in a natural state, undeveloped, and available for public use, as depicted on Figure 2. Pursuant to AAC's application, development is precluded within these zones and is not authorized by way of this decision to re-issue the ILMA. Development of these areas would require a future application to amend this decision, which would be subject to a public process.

Relationship with the Kodiak Narrow Cape Public Use Area:

The Core Launch Facility and portions of the Narrow Cape and Ugak Island Safety Zones fall within the bounds of the Kodiak Narrow Cape Public Use Area, a legislatively designated area (LDA) established pursuant to AS 41.23.240. AS 41.23.250(b) states that, "*subject to valid existing rights, including existing rights for grazing leases and operations and the interagency land management agreement between the department and the Alaska Aerospace Corporation for the Kodiak Launch Complex, the commissioner may not dispose of the surface estate in state land within the Kodiak Narrow Cape Public Use Area.*" Furthermore AS 41.23.250(c) notes that, "*grazing and missile launch activity are allowable uses within the Kodiak Narrow Cape Public*

Use Area.” As AAC’s operation of the PSCA is clearly outlined as a valid existing right at the time the LDA was established, reissuance of the ILMA is consistent with the management of the Kodiak Narrow Cape Public Use Area.

Third Party Contracting for Use of State Land:

SCRO recognizes that AAC’s management of the Pacific Spaceport Complex – Alaska will necessitate issuance of contracts to third parties, to include federal and private partners, for use of land and infrastructure within the Core Launch Facility. While issuance of subleases is not appropriate due to AS 41.23.250(b), which prohibits disposal of the surface estate within the Kodiak Narrow Cape Public Use Area, this decision explicitly provides for the ability for AAC to issue contracts for the use of state land within the Core Launch Facility for orbital launch activities consistent with the scope of the ILMA. Such contracts will provide operational assurance for AAC’s clients but will be tied to the term of the ILMA authorization and may not encumber title to the underlying property or not outlive AAC’s authorized use of the state land described herein.

U.S. Coast Guard LORAN Site:

Located within the footprint of the Core Launch Facility is an 88-acre site occupied by a U.S. Coast Guard LORAN site, serialized as ADL 67915. The site is no longer used for long-range navigation as the LORAN-C system was terminated nationwide on February 8, 2010. Since that time there has been interest by AAC in acquiring or subleasing the site from the U.S. Coast Guard for inclusion into the Core Launch Facility for use as an instrumentation/telemetry antenna expansion area and/or potential launch pad. Presently, there is environmental contamination associated with the site due to a prior leak of an underground storage tank, which must be remediated by the U.S. Coast Guard prior to relinquishing the site back to DMLW. Negotiations between AAC and the U.S. Coast Guard for future use or transfer of the site is outside the scope of SCRO’s decision to reissue AAC’s ILMA. However, inclusion of the 88-acre site into AAC’s ILMA is authorized by virtue of this decision without any later amendment required by SCRO should the U.S. Coast Guard remediate and relinquish the site.

Survey

A survey is not required prior to the issuance of the ILMA on state-owned, DMLW-managed lands; however, AS 38.95.160 requires that certain publicly financed improvements be documented by recorded plat. AAC is responsible for ensuring compliance with AS 38.95.160, if applicable. DMLW reserves the right to require a survey in the future.

Fees

On April 20, 2021, AAC paid \$2,400.00 pursuant to 11 AAC 05.160(d)(1)(D)(ii), as modified by Director’s Fee Order #3. There are no additional fees associated with issuance of an ILMA.

Term

The 30-year term of the reissuance will become effective on May 17, 2029, which will then expire on May 17, 2059. Following termination, whether by abandonment, revocation, or any other means, the applicant shall rehabilitate the site to a condition that is acceptable to DMLW.

Recommendation

Based upon the information provided by the applicant, as well as review of relevant planning documents, statutes, and regulations related to this application, it is the recommendation of staff to issue an ILMA as described above, on the condition that all stipulations are followed as described in the attached authorization.

Evan Dodd

11/14/2025

Evan Dodd, Natural Resource Manager 1
DMLW, Southcentral Regional Land Office

Date

Manager's Decision

Based on information provided by the applicant, agency and public review, and review of relevant planning documents, statutes, and regulations related to this application, it is the decision of the DMLW to issue an ILMA to AAC as recommended above. During the term of the ILMA, periodic inspections may be conducted, at the discretion of DMLW, to ensure compliance. DMLW reserves the right to issue other compatible uses within this same area.

This decision takes effect immediately. If no appeal is filed by the appeal deadline, this decision becomes a final administrative order and decision of the department on the 21st calendar day after issuance.

Joni Sweetman

11/14/2025

Joni Sweetman, Natural Resource Manager 3
DMLW, Southcentral Regional Land Office

Date

Attachments

Attachment A: Public Comments & Responses
Attachment B: Unsigned ILMA
Attachment C: AAC Construction Development Plan
Attachment D: AAC Supplemental Information

Appeal

An eligible person affected by this decision may appeal to the DNR Commissioner per AS 44.37.011 and 11 AAC 02. Any appeal must be received within twenty (20) calendar days after issuance of this decision under 11 AAC 02.040. An eligible person must first appeal a decision to the Commissioner before seeking relief in superior court. The Alaska Court System establishes its own rules for timely appealing final administrative orders and decisions of the department.

Appeals may be mailed or hand-delivered to the DNR Commissioner's Office, 550 W. 7th Avenue, Suite 1400, Anchorage, Alaska, 99501; or faxed to (907)-269-8918; or sent by electronic mail to dnr.appeals@alaska.gov. Appeals must be accompanied by the fee established in 11 AAC 05.160(d)(1)(F), which has been set at \$200.00 under the provisions of 11 AAC 05.160 (a)-(b). A copy of 11 AAC 02 is available on the department's website at: <https://dnr.alaska.gov/mlw/pdf/DNR-11-AAC-02.pdf>.

Attachment A

Public Comments and Responses Sorted by Topic

Public notice of the application was originally conducted from July 14, 2023, to August 14, 2023. On August 10, 2023, the notice period was extended through October 12, 2023. A total of 251 public comments were received during the public notice period. Many of the individual comments received contained overlapping topics of interest, and a significant number of the comments were sent as form letters with duplicative information. For those reasons, concerns noted by commenters have been sorted by topic and are summarized and addressed below. Individual comments are housed within the casefile for ADL 226285.

Requests for Information:

Issue: Many commenters reached out to SCRO requesting additional information regarding the ILMA reissuance request, such as copies of AAC's revised application, more information regarding the locations of road closures, and detailed maps of the ILMA footprint. These comments contained requests for information rather than specific comments pertaining to ACC's

Response: SCRO provided the requested information to commenters as per their request.

Deadline for public comments and request for a public meeting:

Issue: Many commenters noted that 30 days was not enough time to gather public input and requested an extension, with some noting that the public notice was distributed during fishing season when many residents were busy and may not have seen it. Additionally, many commenters requested that a public meeting be held to discuss the project.

Response: SCRO extended the comment period to 90 days to accommodate this request. While public meetings are not a standard part of SCRO's process when adjudicating ILMA applications, two informational listening sessions were hosted by SCRO on September 29, 2023, and October 2, 2023. Each session had representation from AAC present and opportunities for public attendees to ask questions.

General community opposition:

Issue: Many commenters stated that the Kodiak community has never supported the presence of the launch facility.

Response: SCRO acknowledges the comment.

Support for the project:

Issue: Some commenters voiced their support for AAC's ILMA reissuance.

Response: SCRO acknowledges the comment.

Term of authorization:

Issue: Commenters suggested that any authorization issued to AAC should be probationary in nature and issued for a shorter term with renewals to ensure ongoing stewardship of state land.

Response: AAC is requesting a 30-year term consistent with their original ILMA issued on May 18, 1994. To attract customers to use its facility, AAC needs to demonstrate that it has a long-term authorization to utilize state land, as contracts may span multiple years and necessitate tailoring existing launch pads to fit the individual customer needs. A term of 30 years will offer operational assurance necessary to AAC and its existing and future customers which will, in turn, provide

economic growth for the State.

AAC's expansion of facilities is unnecessary:

Issue: Commenters opposed AAC's intent to construct additional fencing, antennas, and a larger fuel storage area on the basis that AAC has not had enough launch customers to warrant expansion.

Response: SCRO's review is limited to whether the requested use of State land is in the best interest of the State and aligns with DNR's mission statement to "develop, conserve, and maximize the use of Alaska's natural resources consistent with the public interest". The uses identified in the ILMA application are beneficial to the State while maintaining significant multiple-use opportunities, consistent with the Department's decision to reissue the ILMA. Business decisions related to AAC's existing and future customer base are outside the scope of SCRO's review.

Scope creep of facilities:

Issue: Commenters note public distrust that AAC's facilities will stay contained to the Core Launch Facility and may sprawl into the Ugak Island and Narrow Cape Safety Zones. One commenter alleges that AAC previously constructed a tracking station on Pasagshak Point outside of the Core Launch Facility Footprint.

Response: Regarding the Ugak Island and Narrow Cape Safety Zones, AAC's current authorization, amended on October 21, 2008, states that "*this authorization does not grant AADC [AAC] authority to construct or develop any improvements or roads on the subject lands, or to restrict access or public activities at any time other than the situations discussed above. The only authority granted to AADC will be to restrict access several hours per launch campaign during hazardous operations and immediately before and during launches.*" Per AAC's development plan, no construction has been proposed within the Ugak Island and Narrow Cape Safety Zones, and permission to do so is not authorized by way of this ILMA reissuance.

Unused portions of the ILMA should be remediated:

Issue: Commenters note that there are fenced gravel areas along the roadway which have not been used in many years and asserts that AAC should remediate these sites by removing the fencing and covering the gravel areas with topsoil.

Response: SCRO's scope of review is to determine whether it is in the State's interest to reissue the ILMA to AAC, not to make specific operational decisions on behalf of AAC. SCRO understands that over the life of the 30-year term, AAC will have customers with various needs which may require modification of existing launchpads, or otherwise reconfiguring infrastructure within the Core Launch Facility. Questions regarding restoration of previously used gravel pads, while relevant in the context of remediation at the end of life of the facility, are premature at this time as AAC may have future uses for currently unused portions of land within the Core Launch Facility.

Total acreage of AAC's request:

Issue: Many commenters expressed opposition to a perceived expansion of the existing ILMA footprint related to the Ugak Island and Narrow Cape Safety Zones, with some commenters describing the request as a land grab.

Response: AAC's application proposes a reissuance of the existing ILMA footprint for a term of 30 years and does not request additional acreage. SCRO has previously authorized two amendments to the ILMA. AAC was approved to add an additional 640 acres for a storage and

maintenance facility on February 6, 2003. A second amendment on October 21, 2008, authorized the expansion of the Ugak Island and Narrow Cape Safety Zones, totaling a combined acreage increase of 7,048 acres. The footprint of land AAC is authorized to manage and close for public safety has remained unchanged since 2008 and the only additional acreage proposed by AAC would be the 88-acre LORAN site operated by the U.S. Coast Guard contingent on the U.S. Coast Guard relinquishing the site, which is already within the boundaries of the ILMA.

Frequency of closures and communication with the public:

Issue: Commenters noted a lack of communication from AAC regarding road closures, which resulted in a restriction of public access at unexpected times. Other commenters noted that closure appeared to be of excessive length or frequency.

Response: SCRO appreciates the comment. As noted in AAC's application²⁰, AAC closures may range from four to nine hours per day depending on the type of activity being conducted and the associated risk to public safety or national security. Closures by AAC must be advertised to the maximum extent possible to inform the public and should include electronic road signage near the City of Kodiak noting the closure, radio announcements, notices to airmen and mariners, and updates to AAC's website. Additionally, AAC operates a launch phone hotline to provide concerned citizens with the most up to date information, as well as a text alert which will keep the community up to date regarding closures.

Impacts to Burton Ranch:

Issue: Commenters note that the Burton Ranch is unfairly impacted by the closures and suggests that AAC buy out the private property.

Response: Potential future property acquisitions between AAC and private landowners is not within the scope of SCRO's review of the ILMA reissuance request.

Impacts to natural beauty and public recreation:

Issue: Commenters note that the area surrounding the launch facility contains high quality natural habitat and rare species, including the Lady Slipper Orchid, and that limiting access does a disservice to the public. Additionally, commenters note the importance of the area for viewing gray whale migrations. Commenters also noted that Narrow Cape is an important area to public recreationists, as there is a high degree of public use at Pasagshak Point, Surfer's Beach, and Fossil Beach. Various examples of uses were stated including public camping, hiking, surfing, etc.

Response: SCRO appreciates the comment and understands the high value the community of Kodiak places on the surrounding area and its recreational potential. However, AAC's closures of the Ugak Island Safety Zone, Narrow Cape Safety Zone and the Core Launch Facility areas are intended to protect public safety during launch operations. For this reason, restriction of public access to these scenic and recreational resources in order to mitigate any risks to the public is appropriate, as long as such closures by AAC are specifically limited to launch-related needs. Outside of active launch activities, there should not be any negative impacts to public recreation and access to scenic and natural resources.

²⁰ AAC Supplemental Information, Page 11

Trails used by birders:

Issue: One commenter notes that the Kodiak Audubon Society notes that their “Hiking and Birding Guide” was published over 20 years ago, and depicts trails in the Narrow Cape area, some of which have been overlain by AAC infrastructure.

Response: The trails referenced in the Kodiak Audubon Society’s “Hiking and Birding Guide” appear to be informal and do not have legal protection through a recorded easement or authorization. Because no valid right existed for these trails at the time AAC’s original ILMA was issued, the ILMA does not recognize them. Accordingly, AAC may manage the land consistent with the terms and conditions of their authorization.

Relocation of nesting birds:

Issue: One commenter asserts that Rhinoceros Auklets and Puffins no longer nest on the nearby cliff’s due to AAC’s operation of the orbital launch facility.

Response: SCRO appreciates the comment but has not been provided with any evidence to support this claim. The Alaska Department of Fish & Game was provided with copies of the reissuance application during the agency review and did not submit comments in objection to the ILMA reissuance.

Seasonality and frequency of closures:

Issue: Commenters suggest that launches be restricted to the period of time from October to April to avoid impacts to public recreation and hunting. Other commenters note that any ILMA to AAC should contain a provision prohibiting area closure for more than 25% of the days in any given month.

Response: SCRO appreciates the comment and recognizes that closures during certain times of year may represent more of a hardship for the community than others. While AAC is required to notify SCRO ahead of any planned closures associated with launch activities, the launches themselves are permitted by the FAA, and scheduling is driven by the needs of AAC’s various customers. Launch permitting and customer timeframes are outside the scope of SCRO’s review and imposing seasonal or monthly restrictions would limit AAC’s ability to provide operational assurance to its customers and could deter future use of the facility. However, SCRO recommends that AAC take into account times of the year in which a large degree of public use of the area is to be expected, and limit launch activities to dates and times which reduce public conflict to an extent which is reasonable.

Impacts to public transportation:

Issue: One commenter asserts that heavy vehicles and increased usage of roadways related to AAC’s operations are negatively impacting the roads and suggests that the State should increase maintenance and repair operations, including at the Kodiak Airport. The commenter also states their opposition to installation of an airstrip in the vicinity of the PSCA.

Response: Maintenance and repair of public highways and airport facilities are under the jurisdiction of DOT&PF and are outside the scope of SCRO’s review of the ILMA reissuance request. AAC’s application does not propose creation of an airstrip.

Increased annual launches will result in more closures:

Issue: Commenters note that an increase in annual launches will necessitate an increase in the number of closures, thus restricting access to state lands.

Response: SCRO acknowledges the comment. The Division has reviewed the scope of use described in the application, and the potential for additional activity within the ILMA consistent with the approved purpose of use to facilitate the launch of satellites and rockets. On balance, the benefits of these uses are appropriate, the closures, even associated with increased activity, and necessary to protect public safety while facilitating the beneficial use for launches. The specific number of launches allowable per year is under the jurisdiction of the FAA and is outside the scope of SCRO's decision to reissue the ILMA. SCRO understands that increased launches will inherently require additional closures necessary to protect public safety. SCRO recommends that AAC, when reasonable, select launch dates and times which do not unduly impact the public.

Impacts to marine vessels:

Issue: Commenters note that closures within the safety zones will negatively impact commercial fishing fleets and may disrupt U.S. Coast Guard emergency operations during launches.

Response: AAC's closures of the Ugak Island Safety zone are intended to protect public safety during launch operations, including those operating marine vessels within the Ugak Island and Narrow Cape Safety Zones. AAC coordinates directly with the U.S. Coast Guard for launch related closures.

Public Safety:

Issue: Commenters noted that operation of an orbital launch facility may be hazardous to those in the vicinity and poses a risk to public safety.

Response: AAC's infrequent closures of the Ugak Island, Narrow Cape Safety Zone and the Core Launch Facility are intended to protect public safety during launch operations.

Number of successful launches:

Issue: Some commenters opposed the launch facility based upon the number of failed launches relative to successful launches. Other commenters asserted a varied number of past successful launches, with one commenter suggesting that there had never been one.

Response: The Division has reviewed the scope of activities described in the application, and determined that the ILMA is appropriate to reissue. The ratio of successful launches by AAC's customers is outside the scope of this authorization. Failed launches may still yield data which may support future launches and innovation for AAC's customers. Review of publicly available information demonstrates that AAC has had many successful launch operations, most recently on August 21, 2025, which involved a successful hypersonic missile test.²¹

Military Use:

Issue: Some commenters note that launches from the PSCA were meant to be private in nature and not related to military activity:

Response: The original ILMA granted to AAC on May 18, 1994, did not contain a provision prohibiting military activity. SCRO understands that many of AAC's customers over the years have been related to military activities, including the first launch ever conducted on November 6, 1998, on behalf of the U.S. Air Force. Additionally, Department of Defense use of the PSCA was noted on page 6 of the Pacific Spaceport Complex – Alaska Spaceport Master Plan 2020-2030.

²¹ <https://alaskapublic.org/news/public-safety/2025-08-25/government-rocket-makes-unscheduled-launch-from-kodiak-spaceport>

Expansion of the Pasagshak Recreation Area:

Issue: One commenter suggested expansion of the current Pasagshak Recreation Area to create a conservation zone over the lands as an alternative to reissuance of the ILMA. The commenter suggests that the new area could be called “The Pasagshak State Conservation Area” and could be passively managed by the Division of Parks and Outdoor Recreation (DPOR).

Response: SCRO understands “Pasagshak Recreation Area” to mean the nearby Pasagshak State Recreation Site. Establishment of a conservation zone managed by DPOR is outside the scope of SCRO’s decision regarding reissuance of an ILMA for an orbital launch facility.

Conflicts with the Pacific Spaceport Complex – Alaska Spaceport Master Plan 2020-2030:

Issue: One commenter noted that AAC’s ten-year master plan proposed a decrease in the amount of land required for the facility under the leadership of a former AAC CEO, and questions why AAC is not adhering to their own management plan.

Response: SCRO adjudicates request for state lands as they are applied for. While AAC’s planning document for facility operations from 2020 to 2030 does propose to reduce the footprint of the ILMA, the ILMA application received three years later on May 15, 2023, does not. Past changes in AAC’s leadership are outside the scope of SCRO’s adjudication of the current ILMA request.

Makeup of AAC’s board of directors:

Issue: Commenters assert that it is a requirement that two members of AAC’s board of directors be filled by a resident of Kodiak and that there is currently only one Kodiak resident on the board. Some commenters suggest that the seat be filled by a Kodiak resident associated with specific hobbies such as surfing, hiking, whale watching, etc. or by a member of the Audubon Society or the Island Trails Network.

Response: Pursuant to AS 26.27.020(a)(1), *“the powers and responsibilities of the corporation are vested in the board of directors. The board of directors of the corporation consists of nine members appointed by the governor as follows: three state residents who have a significant high level of experience in the private business sector, specializing in financing or economic development or marketing; two of the state residents appointed under this paragraph shall be residents of the borough where the launch activities of the corporation occur if qualified candidates residing in the borough are available.”* The process for appointing the AAC’s board of directors or asserted determinations of whether members are qualified candidates with significant high-level experience in financing, economic development, or marketing, is outside the scope of SCRO’s review for reissuance of the ILMA reissuance. SCRO recognizes that board seats have changed over the years during the existing ILMA and will continue to change over the term of reissuance of the ILMA. There is no statutory basis to require that a member of the board partake in any particular activity or be a member of the Audubon Society or Island Trails Network.

Mitigation of contamination from the anomalous launch in 2023:

Issue: Commenters question whether there has been a thorough clean-up and mitigation of the spilled fuel from a Long Wall (formerly ABL Space Systems) rocket which crash landed on the launch pad shortly after ignition on January 10, 2023. Commenters also express concern regarding the contaminated soil that was removed from State lands following the crash. Additionally, one commenter asserts that the Alaska Department of Environmental Coordination (DEC) is not monitoring the mitigation of the crashed rocket on January 10, 2023.

Response: Spills are monitored by the Department of Environmental Conservation, Spill

Prevention and Response, Prevention Preparedness and Response Program (PPRP). Per PPRP's website²², the anomalous launch on January 10, 2023, resulted in a release of approximately 5,200 gallons of aviation fuel. Per guidance from PPRP, AAC facilitated the removal of soils impacted by the spill which were contained on-site and later hauled out of state for disposal. Per PPRP, the case associated with the spill was closed on April 24, 2024, with no further action needed.

Environmental impacts:

Issue: Commenters noted concern regarding environmental degradation of the area due to operation of the PSCA and any proposed expansion. Specific concerns were related to contamination of soil, surface water, and groundwater. Additionally, one commenter alleged that they have heard that water used for firefighting and clean-up associated with the failed launch on January 10, 2023, was treated and discharged into a nearby lake.

Response: SCRO appreciates the comment. Per AAC's application, *"no fuels, hazardous materials, or hydrocarbons are disposed of at PSCA. All materials are either consumed during operations or transported off the spaceport when operations are concluded."* SCRO acknowledges that potential spills or the otherwise inadvertent release of hazardous materials associated with the PSCA may have environmental impacts if not correctly reported and mediated.

Alaska state law requires all oil and hazardous substance releases to be reported to the Department of Environmental Conservation (DEC). Spills are monitored by the DEC, Spill Prevention and Response, Prevention Preparedness and Response Program (PPRP). Following a spill, PPRP may issue corrective action work plans to guide remediation of the site when necessary. Such remediation actions may involve removal of contaminated soil to an offsite location to mitigate/minimize environmental impacts, such as was done following the anomalous launch on January 10, 2023. Review of publicly available information from DEC's "spill search" webpage indicates that, at the time of this decision, all spills associated with AAC's operation of the PSCA have been marked as "Case Closed, No Further Action", which indicates that any remediation, if required by DEC, has been completed to the satisfaction of the DEC.

Review of publicly available DEC mapping resources, including Alaska DEC Groundwater Plumes - Public²³ and Alaska DEC Drinking Water Protection Areas²⁴ does not indicate the presence of existing known groundwater contamination plumes, public water system sources, or drinking water protection areas within the footprint of the Core Launch Facility or Ugak and Narrow Cape Safety Zones. Additionally, DEC was included in the agency review for the reissuance of the ILMA to AAC and did not provide comments in objection to the proposal.

Finally, SCRO has not been provided with any evidence to support the claim that water used for cleanup of the January 10, 2023, launch was discharged improperly into local waterbodies. DEC's PPRP webpage²⁵ clearly indicates that the case associated with the spill in question has been closed without further action following an approved cleanup plan and site visit.

²² <https://dec.alaska.gov/Applications/SPAR/PublicMVC/PERP/SpillDetails?SpillID=70837>

²³ <https://gis.data.alaska.gov/datasets/ADEC::alaska-dec-groundwater-plumes-public/explore?location=57.445957%2C-152.346806%2C12.82>

²⁴ <https://adec.maps.arcgis.com/apps/mapviewer/index.html?webmap=13ed2116e4094f9994775af9a62a1e85>

²⁵ <https://dec.alaska.gov/Applications/SPAR/PublicMVC/PERP/SpillDetails?SpillID=70837>

Potential for Superfund site:

Issue: One commenter suggested that operation of an orbital launch facility will result in the area being designated as a Superfund site and provided a list of various Superfund sites across the United States.

Response: SCRO acknowledges the comment. Superfund sites refer to the federal environmental remediation program established by the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980, which is administered by the Environmental Protection Agency. Designation of superfund sites is not within DMLW's jurisdiction, and speculation regarding the potential for future federal environmental hazard designations is outside the scope of SCRO's decision to reissue the existing ILMA held by AAC. AAC is required to comply with all local, state, and federal environmental regulations.

Landlord and tenant relationship regarding environmental contamination:

Issue: One commenter provided input which included verbatim text from an article titled "Ignorance is Not Bliss: What You Don't Know About Your Tenants May Hurt You", which outlines suggestions for clauses landlords may wish to include in their leases to limit environmental liability. The commenter annotated the text to suggest similarities with the ILMA proposed for reissuance to AAC and cautioned that the authorization should not be approved as-is.

Response: SCRO acknowledges the comment. Standard stipulations included in authorization issued by SCRO are reviewed as needed by the Department of Law to ensure that risk to the state is minimized. The article submitted by the commenter is not within the scope of SCRO's decision to reissue the ILMA to AAC.

Alternative sites:

Issue: One commenter suggested that Kiska Island in the Aleutians would be a better choice than Kodiak to place national security infrastructure.

Response: Suggestions to relocate an existing orbital launch facility to the Aleutian Islands are outside the scope of SCRO's review of AAC's ILMA reissuance request.

Economic benefits:

Issue: Some commenters questioned whether the PSCA contributes to the local tax base, while others question whether the community of Kodiak subsidizes AAC and if operation of the PSCA would increase taxes.

Response: Local tax ordinances are within the jurisdiction of the Kodiak Island Borough (KIB) and are outside the scope of SCRO's decision to reissue an ILMA to AAC. SCRO is not aware of any administrative mechanism by which operation of the PSCA on general state land could directly increase taxes for KIB residents. Operation of the PSCA may contribute to the local and state economy through increased spending by AAC staff at local businesses, expenditures by out-of-town staff associated with air travel and car rental, and expenditures related to construction of infrastructure and transportation of materials and equipment to the PSCA.

Potential for human remains:

Issue: One commenter asserts that human remains were known to be on site when the PSCA was originally constructed and references ancient native burial sites emerging out of the cliffs in the area.

Response: SCRO has not identified any evidence to support a claim of burial sites emerging out of nearby cliffs. An archeological survey was conducted in the Narrow Cape area by the Division of Parks and Outdoor Recreation, Office of History and Archeology, for the then proposed orbital launch complex.²⁶ Archeological work at the time consisted of a pedestrian survey and excavation of subsurface shovels tests, all of which were negative for archeological materials. Per the Alaska Heritage Resources Survey, there are seven recorded sites on Narrow Cape, four of which are associated with the U.S. Coast Guard LORAN site²⁷, one associated with a World War II era bunker complex²⁸, one associated with the discovery of a ground slate point or knife²⁹, and a Koniag traditional village site³⁰. In addition to past archeologic work conducted in the area, ACC will be working with the Alutiiq Museum to conduct archeological work in the vicinity of Launch Pad 3D for an upcoming construction project. Should any archeological material be identified, ACC will comply with the provisions of their Inadvertent Discovery of Unanticipated Resources Plan.

No other topics within the scope of SCRO's review were raised by commenters during the public notice period.

²⁶ DePew, Alan, Rachel Joan Dale, and Charles E. Holmes (1994). Cultural Resource Survey of the Proposed Alaska Orbital Launch Complex, Kodiak Island, Alaska.

²⁷ KOD-00750, KOD-01122, KOD-01123, & KOD-01124

²⁸ KOD-00456

²⁹ KOD-00081

³⁰ KOD-00441

STATE OF ALASKA
DEPARTMENT OF NATURAL RESOURCES

and the

Alaska Aerospace Corporation

Interagency Land Management Assignment
Pacific Spaceport Complex - Alaska
ADL 226285

The Department of Natural Resources, Division of Mining, Land and Water, Southcentral Regional Land Office, whose address is 550 W. 7th Avenue, Suite 900C, Anchorage, AK 99501, hereafter referred to as the Grantor, assigns to the Alaska Aerospace Corporation, whose address is 4300 B Street, Suite 101, Anchorage, AK 99503, hereafter referred to as Grantee, management of state land described herein for the Pacific Spaceport Complex – Alaska, Ugak Island Safety Zone, and Narrow Cape Safety Zone within the jurisdiction of the Grantee;

Core Launch Facility:

Seward Meridian, Township 31 South, Range 19 West: S1/2 of Section 29, S1/2 of Section 30, Sections 31-34

Seward Meridian, Township 32 South, Range 19 West: Sections 3-6, 9

Containing approximately 3,717 acres

Narrow Cape Safety Zone:

Seward Meridian, Township 31 South, Range 19 West: S1/2 of Section 19, S1/2 of Section 20, S1/2 of Section 21, S1/2 of Section 22, Sections 27-28, N1/2 of Section 29, N1/2 of Section 30

Seward Meridian, Township 31 South, Range 20 West; Sections 25, 34-36

Seward Meridian, Township 32 South, Range 20 West: Sections 1-4, 9-10

Containing approximately 5,581 acres

Ugak Island Safety Zone:

Seward Meridian, Township 32 South, Range 19 West: Sections 23-27, 34-35

Containing approximately 1,467 acres

The Grantee may manage the surface estate within the Core Launch Facility area for the construction, operation, and maintenance of the Pacific Spaceport Complex – Alaska and associated orbital launch and aerospace related activities subject to the terms, conditions, and stipulations made part of this document. The Grantee may further manage the surface estate within

the Narrow Cape Safety Zone and Ugak Island Safety Zone to close and restrict public access to ensure public safety during orbital launch and aerospace related activities subject to the terms, conditions, and stipulations made part of this document.

This Interagency Land Management Assignment (ILMA) is made effective on the signature date of the Grantor. This ILMA will remain in effect until 11:59 p.m. on May 17, 2059.

Signature of Grantee or Authorized Representative	Title	Date
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Signature of Grantor or Authorized Representative	Title	Date
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Stipulations

1. **Authorized Officer:** The Authorized Officer (AO) for the State of Alaska (State), Department of Natural Resources (DNR), Division of Mining, Land and Water (DMLW), is the Regional Manager or designee.
2. **Change of Contact Information:** The Grantee shall maintain current contact information with the AO. Any change of contact information must be submitted in writing to the AO.
3. **Proper Location:** This authorization is for activities on state lands or interests managed by DMLW. It does not authorize any activities on private, federal, native, and municipal lands, or lands which are owned or solely managed by other offices and agencies of the State. The Grantee is responsible for proper location within the authorized area.
4. **Development Plan:** Development shall be limited to the authorized area and improvements specified in the approved development plan or subsequent modifications approved by the AO. The Grantee is responsible for accurately siting development and operations within the authorized area. Any proposed revisions to the development plan must be approved in writing by the AO before the change in use or development occurs.
5. **Relinquishment:** The Grantee will provide written notification to the Assignor of their intent to cease use of lands described herein. Notification shall be given a minimum of 90 days prior to expected return of lands. This notification will identify all improvements on site and will include a plan for the disposition of these improvements. Land returned by the Grantee to DMLW for any reason shall be in an environmental and physical condition acceptable to the AO. Site rehabilitation may require the removal of improvements, equipment, and material. Relinquishment requests must be approved by the AO before management transfers back to the Assignor.
6. **Excess Lands:** Lands that are in excess of the Grantee's needs shall be returned to the Grantor upon determination by the Grantor that the land is in a condition acceptable to the AO.
7. **Review of Assignment:** This assignment is subject to review by the Grantor. If a review shows the site is abandoned; has significant nonuse relative to an approved development plan or has a violation of the terms, conditions and stipulations of this assignment, such as a new use not authorized in an approved development plan; the AO may revoke the ILMA in whole or part and require rehabilitation of the site to a condition satisfactory to the AO. The Grantee shall, upon request, provide written verification that the lands are still required for the purpose(s) described herein.
8. **Survey:** Pursuant to AS 38.95.160, a professional architect, engineer, or surveyor shall supervise the location and design of any improvements on the parcel(s) and shall be responsible for preparing a survey plat for recording in the appropriate recording district if the costs are more than \$100,000. In addition, the Grantee is responsible for compliance with the survey requirements of the platting authority as it relates to this project.
9. **Public Trust Doctrine:** The Public Trust Doctrine guarantees public access to, and the public right to use, navigable and public waters and the land beneath them for navigation, commerce, fishing, and other purposes. This authorization is subject to the principles of the Public Trust

Doctrine regarding navigable or public waters. The AO reserves the right to grant other interests consistent with the Public Trust Doctrine.

- 10. Valid Existing Rights:** This authorization is subject to all valid existing rights and reservations in and to the authorized area. The State makes no representations or warranties, whatsoever, either expressed or implied, as to the existence, number, or nature of such valid existing rights.
- 11. Maintenance of Improvements:** The Grantor is not responsible for maintenance of authorized improvements or liable for injuries or damages related to those improvements. No action or inaction of the Grantor is to be construed as assumption of responsibility.
- 12. Amendment or Modification:** The Grantee may request an amendment or modification of this authorization; the Grantee's request must be in writing. Any amendment or modification must be approved by the AO in advance and may require additional fees, changes to the terms of this authorization, or a written decision.
- 13. Concurrent Use:** The DMLW reserves the right to grant additional authorizations to third parties for compatible uses on or adjacent to the land under this authorization. Authorized concurrent users of state land, their agents, employees, contractors, subcontractors, and licensees shall not interfere with the operation or maintenance activities of each user.

The DMLW may require authorized concurrent users of state land to enter into an equitable agreement regarding concurrent use.
- 14. Assignment:** This authorization may not be transferred or assigned without the prior written approval of the AO. The grantor reserves the right to modify and/or add stipulations for the authorization prior to approving the assignment. Notwithstanding other requirements described in this authorization, assignments shall be restricted to agencies of the State of Alaska.
- 15. Request for Information:** The AO, at any time, may require the Grantee to provide any information directly or indirectly related to this authorization, in a manner prescribed by the AO.
- 16. Inspections:** The AO shall have reasonable access to the authorized area for inspection, which may be conducted without prior notice.
- 17. Destruction of Markers:** The Grantee shall protect all survey monuments, witness corners, reference monuments, mining claim posts, bearing trees, and unsurveyed corner posts against damage, destruction, or obliteration. The Grantee shall notify the AO of any damaged, destroyed, or obliterated markers and shall reestablish the markers at the Grantee's expense in accordance with accepted survey practices of the DMLW.
- 18. Incurred Expenses:** The Grantor shall in no way be held liable for expenses incurred by the Grantee connected with the activities directly or indirectly related to this authorization.
- 19. In Lieu of Indemnification:** In connection with the entry on or use of assigned lands, subject to the limitations and provisions of AS 09.50.250-.270 and AS 37.05.170, the Grantee shall ensure that its contractors and subcontractors shall indemnify, save harmless, and defend the State, its agents and its employees from any and all claims or actions for injuries or damages sustained by any person or property arising directly or indirectly from the construction or the

contractor's performance of the contract, except when the proximate cause of the injury or damage is the State's sole negligence.

- 20. Preference Right:** No preference right for subsequent authorizations is granted or implied by this authorization.
- 21. Alaska Historic Preservation Act:** The Alaska Historic Preservation Act, AS 41.35.200, prohibits the appropriation, excavation, removal, injury, or destruction of any state owned historic, prehistoric, archaeological or paleontological site without written approval from the DNR Commissioner. Should any sites be discovered, the Grantee shall cease any activities that may cause damage and immediately contact the AO and the Office of History and Archaeology in the Division of Parks and Recreation.
- 22. Compliance with Government Requirements:** The Grantee shall, at its expense, comply with all federal, state, and local laws, regulations, and ordinances directly or indirectly related to this authorization. The Grantee shall ensure compliance by its employees, agents, contractors, subcontractors, licensees, or invitees.
- 23. Waiver of Forbearance:** Any failure on the part of the AO to enforce the terms of this authorization, or the waiver of any right under this authorization by the Grantee, unless in writing, shall not discharge or invalidate the authorization of such terms. No forbearance or written waiver affects the right of the AO to enforce any terms in the event of any subsequent violations of terms of this authorization.
- 24. Severability Clause:** If any clause or provision of this authorization is, in a final judicial proceeding, determined illegal, invalid, or unenforceable under present or future laws, then the Grantor and the Grantee agree that the remainder of this authorization will not be affected, and in lieu of each clause or provision of this authorization that is illegal, invalid, or unenforceable, there will be added as a part of this authorization a clause or provision as similar in terms to the illegal, invalid, or unenforceable clause or provision as may be possible, legal, valid, and enforceable.
- 25. Fire Prevention, Protection and Liability:** The Grantee shall take all reasonable precautions to prevent and suppress forest, structure, brush and grass fires, and shall assume full liability for any damage to state land and structures resulting from the negligent use of fire. The State is not liable for damage to the Grantee's personal property and is not responsible for forest fire protection of the Grantee's activity. To report a wildfire, call 911 or 1-800-237-3633.
- 26. Notification of Discharge:** **Notification of Discharge:** The Grantee shall immediately notify the Department of Environmental Conservation (DEC) and AO of any unauthorized discharge of any amount of oil to water, a discharge of any amount of a hazardous substance (other than oil), and any discharge of oil greater than 55 gallons on land. All fires and explosions must also be reported immediately.

If a discharge, including a cumulative discharge, of oil is greater than 10 gallons but less than 55 gallons, or a discharge of oil greater than 55 gallons is made to an impermeable secondary containment area, the Grantee shall report the discharge within 48 hours. Any discharge of oil greater than one gallon up to 10 gallons, including a cumulative discharge, solely to land, must be reported in writing on a monthly basis.

Notification of discharge must be made to DEC online at ReportSpills.alaska.gov or by phone at 1-800-478-9300.

Notification of discharge must be made to the appropriate DNR Office, preferably by e-mail: Anchorage email dnr.scro.spill@alaska.gov, (907) 269-8528; Fairbanks email dnr.nro.spill@alaska.gov, (907) 451-2739; Juneau email dnr.sero.spill@alaska.gov, (907) 465-3513. The Grantee shall supply the AO with all incident reports submitted to DEC.

- 27. Waste Disposal:** On-site refuse disposal is prohibited, unless specifically authorized by the AO. All waste generated during operation, maintenance, and termination activities under this authorization shall be removed and disposed of at an off-site Alaska Department of Environmental Conservation (DEC) approved disposal facility. Waste, in this paragraph, means all discarded matter, including but not limited to human waste, trash, garbage, refuse, oil drums, petroleum products, ashes and discarded equipment.
- 28. Institutional Controls:** No Institutional Controls (IC)s without Grantor approval.
- 29. Materials:** The Grantee shall not sell, transfer, donate or otherwise remove material including gravel, sand, rock, or peat from the parcel(s) except as explicitly authorized by the Grantor. The right of the Grantee or Grantee's contractor(s) and subcontractor(s) to construct, maintain, or improve and remove buildings, roads, and works of other description, and to use or remove sand, gravel, timber or other materials on or near the surface for purposes directly related to the project is limited to those expressly stated in the approved development plan.
- 30. Timber Resources:** The Grantee shall not sell, transfer, donate or otherwise remove timber from the parcel(s) except as explicitly authorized by the DNR Division of Forestry.
- 31. Minerals:** Jurisdiction and management of all minerals including oil and gas in the above-described land is reserved to DMLW.
- 32. Third Party Interests:** The right to grant third party interests, encumber, or otherwise alter the title of the property is expressly reserved to the Grantor.

Special Stipulations

1. **Closure Requests:** Prior to closing public access within the authorized area, the Grantee must first obtain written approval from the Grantor. Closure requests must be provided to the Grantor a minimum of 5 business days prior to the proposed closure.
2. **Confidential Closures:** In the event that national security concerns preclude sharing specific closure times, the Grantee must provide the Grantor with no less than a 30-day window in which the launch activity will occur.
3. **Closure Notifications:** Closure of public access must be advertised to the greatest extent possible to inform the public and must include, at a minimum, electronic road signage near the City of Kodiak, radio announcements, notices to airmen and mariners, and online updates. Additional types of closure notifications should be updated to best reflect modern norms during the term of the authorization.
4. **Post Closure Reporting:** Following an authorized closure the Grantee must provide the Grantor with a written report detailing a summary of the access restrictions, to include dates and times in which public access was restricted.
5. **Non-Development Areas:** Per the approved development plan the Grantee shall not construct within, improve, or otherwise alter the lands within the two non-development areas without a written request to amend this authorization, subject to the Grantor's approval.
6. **Radio Interference:** The Grantee must cooperate and work with the U.S. Coast Guard to ensure that all communication and electronic equipment are compatible.
7. **Third Party Contracts:** The Grantee shall have the ability to issue contracts to third parties for the use of state land for orbital launch activities consistent with the scope of the ILMA. Any contracts issued by the Grantee will terminate upon expiration or revocation of the ILMA.



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Administration

Construction Development Plan

Document Number: PLN-1007

Revision: 2

Date: 5/16/2023



Pacific Spaceport Complex Alaska
Narrow Cape
Kodiak, Alaska

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APPROVALS AND REVISION HISTORY

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Revisions

Rev	Date	Revision Description
	7/12/2022	Initial release
1	8/1/2022	Edits to maps for legibility and minor edits for clarity
2	4/25/2023	Minor updates

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SUPPORTING DOCUMENTS

The current revision of all documents, are applicable only as specifically referenced herein.

Internal Documents

	<u>Document Number</u>	<u>Document Title</u>
1	PLN-1006	AAC ILMA Supplemental Information
2	PLN-1011	AAC ILMA Application
3	PLN-1012	AAC ILMA Environmental Risk Questionnaire

External Documents

	<u>Document Number</u>	<u>Document Title</u>

ACRONYMS

The following definitions and acronyms apply when referred to in this document:

Acronyms

<u>Acronym</u>	<u>Definition</u>
AAC	Alaska Aerospace Corporation
ILMA	Interagency Land Management Agreement
LP-3A	Launch Pad 3A
LP-3B	Launch Pad 3B
LP-3C	Launch Pad 3C
LP-3D	Launch Pad 3D
LCC	Launch Control Center
LEO	Low Earth Orbit
LOC	Launch Operations Control
LOX	Liquid Oxygen
MSF	Maintenance Storage Building
PSCA	Pacific Spaceport Complex – Alaska
RCC	Range Control Center
RMSF	Rocket Motor Storage Facility
VIBII	Vehicle Integration Building Two

1 INTRODUCTION

1.1 OVERVIEW

Alaska Aerospace is a state-owned corporation established to develop an aerospace industry in the state. Alaska Aerospace operates the Pacific Spaceport Complex – Alaska (PSCA), the nation’s first commercial spaceport not collocated on a federal range, that provides responsive and efficient launch capability for Low Earth Orbit (LEO) polar, sun synchronous, and high inclination orbits. PSCA is located at Narrow Cape on Kodiak Island, Alaska. Alaska Aerospace headquarters is in Anchorage.

1.2 PURPOSE

This document will serve as the development plan as part of the supplemental information packet for Alaska Aerospace’s Interagency Land Management Assignment application. The purpose of this document is to address the requirement to “Include a map or sketch plat, showing location of proposed activities in relation to survey monumentation or fixed geographical features, that fully illustrates the intended use, including the location of buildings and improvements and access points, labeled with all dimensions, and a development plan providing a complete list of proposed activities.” Further supplemental information can be found in document PLN-1006 AAC ILMA Supplemental Information.

2 POTENTIAL CONSTRUCTION PROJECTS

This section will address construction that is planned on previously utilized land. These are projects such as upgrades to existing facilities or tearing down and rebuilding new infrastructure. This map includes locations of planned upgrades.



FIGURE 1: MAP OF EXTENDED CONSTRUCTION

2.1 AREA 3

This section will address the area 3 planned projects to support current and future customers. Area 3 is shown on the map with the numbers of 1,2,3, and 4.

2.1.1 Launch Pad 3A (LP-3A)

LP-3A is being kept as a tactical and suborbital pad but may also be used for staging and commodity storage of launch support equipment for Area 3 customers. It is partially developed but would require expanding the gravel pad and extending power from the main power line along the area access road. There are two locations in consideration, next to the existing gravel pad or on the other side of the road.

The unutilized land is a lightly wooded area that is slightly graded, and the area would be cleared and flattened. The pad area would be expanded to approximately fifty thousand (50,000) square feet with gravel. Potentially separate bermed pads, 8 in thick with concrete and 20 ft high x 60 ft long high berms would be built for LOX and rocket propellant. A small building 200 ft x 200 ft for payload integration may be constructed on the old pad location if the expansion location is chosen on the opposite side of the road. This is represented by 1 on Figure 1 above.

2.1.2 Launch Pad 3B (LP-3B)

To allow for the launch of larger vehicles from LP-3B, modifications will need to be made to the existing infrastructure and pad. The concrete launch pad at LP-3B will be replaced with an overall thicker lift of concrete, with a surface area of 1000 sqft and approximately 20 inches thick. Additionally, it may be required to construct two separate safety berms with a concrete slab base. General construction to include 8 in thick concrete slabs and berm dimensions of approximately 20 ft high x 60 ft long. LP-3B modification will also include the overbuild of approximately 20,000 sqft utility slabs and extension of the perimeter security fencing and vehicle gates. Site utility upgrades may be required as load requirements and service needs change as part of these infrastructure accommodations to the larger vehicle. To allow for the larger equipment to turn around, the gravel road in front of the pad may be extended approximately 14,250 sqft or 50'x 285' to make space for a truck turn around. Site modification will require the use of developed and undeveloped land. It is anticipated that pad modification could extend up to 50,000 sqft into the surrounding undeveloped property. The land is flat but would be graded and is almost completely treeless. Few, if any trees would be removed. Other development would include a water deluge system with a water catchment system; enhanced communications and data systems; lighting; cameras; lightning rods and arrestors; and fencing. The lightening arrestor would potentially have a few anchor points, 1 ft x 1 ft outside of the fence line. This is represented by 2 on Figure 1 above.

2.1.3 Launch Pad 3C (LP-3C)

To provide uninterrupted equipment travel from the production facility to the vehicle launch pad a raceway would be constructed in Area 3, VIBII Tent Structure to LP-3C. Construction of the raceway will include a 12 ft – 14 ft, 140 ft long 3500 sqft. Raceway will be constructed of either asphalt or concrete with a thickness of 6-12 inches respectively. Raceway will be constructed on the previously developed land at LP-3C in Area 3. LP-3C may increase the size of concrete for the LOX and Fuel areas and add an additional concrete pad for additional rocket stage testing. This is represented by 3 on Figure 1 above.

2.1.4 Launch Pad 3D (LP-3D)

LP-3D is a gravel pad, but the plan is to upgrade it to a multi-use government/commercial launch pad that can be used for liquid, solid, and hybrid propellant boosters. The area is already partially utilized but will be expanded into unused land. Approximate acreage is 5 acres. The slightly slanted land would be flattened, and the few trees would be removed. The pad would be developed with a layer of 3 ft of concrete 10,000 sqft and potentially 2 separate bermed pads, 8 in thick with concrete and 20 ft high x 60 ft long high berms. The bermed pad's purpose is for the placement of LOX and rocket propellant. Other development would include a water deluge system with an environmentally approved water catchment

system; enhanced communications and data systems; lighting; cameras; lightning rods; fencing; and an area for installation of a temporary tent and small vehicle integration facility. This is represented by 4 on Figure 1 above.

2.2 OPERATIONS CENTER

2.2.1 Launch/Range Control Center (LCC/RCC)

The LCC would be expanded 75 x 100 ft to accommodate additional offices and personnel. The building would be expanded into a parking lot, not impacting any new land. The parking lot would be expanded slightly, approximately 75 ft x 100 ft into where the balloon launch building is located currently. This would require the building to be pulled down, but no new areas would be developed. This is represented by 6 on Figure 1 above.

2.2.2 Maintenance Support Facility

The area directly adjacent to and west of the existing soft-sided storage facilities located behind the Maintenance Support Facility is being used for a third soft-sided storage or metal facility. The land is partly paved, and the paved area would be extended a short distance of 60 ft x 80 ft of asphalt, 3 in thick. Little to no land changes would be required. This is represented by 7 on Figure 1 above.

2.2.3 Fire Response Facility

To better provide for fire response, a separate Fire Response Facility (FRF) should be constructed outside of the launch pad clear zone safety areas and near the existing infrastructure and road system. The plan is a new FRF be built between the current RCC and the EMCC. The new building would be where there is currently a paved lot. The building would be 60 ft x 100 ft with power, water, communications and data systems, and cameras being extended to it. This is represented by 8 on Figure 1 above.

2.2.4 Optics Cables

To support better internet connectivity onsite, more internet cables will be installed to the Operations Center buildings including the EMCC, LCC, MSF, and other building. These cables will be buried 1-3 ft deep. The cables could span the entire approximately 1,200 ft length. This is all previously disturbed areas and no major changes to the land would be made. This is represented by 8 on Figure 1 above.

2.3 LAUNCH VEHICLE AND PAYLOAD STORAGE FACILITIES

The launch vehicle and payload storage areas are being assessed to understand the requirements of current and future customers. AAC is currently reviewing 2 options that may be executed. This is represented by 9 on Figure 1 above.

2.3.1 Option 1

Two additional storage facilities are planned next to the existing two Rocket Motor Storage Facilities. The land was already flattened and cleared. The structures would be two more 92.5 ft x 28.17 ft earthen

covered facilities. Additional construction for supporting utilities such as power, communications, fencing extensions, and lightning protection would be installed.

2.3.2 Option 2

Storage is also planned for the area, adjacent to and east of the existing RMSF. The land was already flattened and cleared. This would include little grading and paving concrete 300 x 600 ft, 8 in thick. Fences would be installed, and power and lighting would be extended.

3 NEW CONSTRUCTION

The new construction section will address construction projects that are planned on new land. This includes things like new buildings and new launch pads. New construction location options are shown on the following map.



FIGURE 2: MAP OF NEW CONSTRUCTION

3.1 LAUNCH PAD 1A AREA

3.1.1 Launch Pad 1B

An area approximately 6 acres, will be constructed near Launch Pad 1 to accommodate both rocket propellant (fuel and oxidizer) tanks, along with piping that connects the tanks to the launch pad and an access road that allows the transport of the tanks from existing paved roadway to the fueling pads. The concrete rocket propellant pads 60 ft x 40 ft, 8 inches thick will have berms 20 ft high x 60 ft long to protect the launch structure from any unintended damage. The land is already flat and mostly clear of trees. Little grading would be necessary, and few trees (approximately <20) would be removed. This is represented by 10 on Figure 2 above.

3.2 ROCKET MOTOR STORAGE EXPANSION

For the planned expansion of the rocket motor storage facility, AAC is assessing the following options. This is represented by 11 on Figure 2 above.

3.2.1 Option 1 Liquid Oxygen Plant

To reduce the amount of chemicals being trucked into the site, and to keep up with customer needs, liquid oxygen (LOX) will be produced in a medium sized building. The building size is still being determined but the total facility footprint will have an area less than 100 ft x 200 ft. Utilities, power, communications, cameras, and fencing would be installed. The land is mostly flat, and few trees would need to be removed. Little grading would be required.

3.2.2 Option 2 Launch Vehicle Propellant Storage Area

Having launch vehicle propellant storage at PSCA provides an increase in safety by minimizing the number of tanker truck trips required to transport propellants from Kodiak to PSCA. Tanks would be installed in a new propellant storage area located adjacent to the Rocket Motor Storage Facility area, on the west side of the existing facilities. The plan includes 60,000 square feet of land directly west of the RMSF for storage of liquid oxygen, helium, nitrogen, and other oxidizers. The land is fairly flat, and treeless. The area would be flattened and paved with concrete 8 inches thick, with the proper catchment systems installed.

3.3 AREA 3

3.3.1 LP-3A Launch Pad

AAC is evaluating the addition of an additional 100 ft x 100 ft flat concrete and gravel pad to support potential suborbital launch and recover pad for future customers. The location is across the road from the existing LP-3A pad and will be given new number as we move forward. This is represented by 12 on Figure 2 above.

3.3.2 LP-3B Water Tank

AAC is evaluating the addition of a water tank in Area 3 with the following options. This is represented by 12 on Figure 2 above.

3.3.2.1 Option 1

Area 3 waterline installation will be a project to provide fire protection and a future potable resource for operations in this area. The waterline will be extended from the mainline and a small pump and hydrant will be built. 2500 ft of pipe will run 5-7 ft below the surface.

3.3.2.2 Option 2

A water tank and a well of approximately 80 ft in depth will be built to help with fire suppression. A 30 x 30 ft water tank pad will be built of concrete 6-8 inches thick and the total area with the well will be 100 ft x 100 ft. The land is flat and treeless but would be graded.

3.3.3 LP-3B and LP-3C Access Roads

Small roads would be constructed along the outside edge of the fences at Pad 3B and 3C for the purpose of fire suppression clearing to the south. The road would be 25 ft wide approximately 800 ft long and 3 ft deep of gravel. The land is flat with little elevation change and clear of any trees but would be leveled for the road. This is represented by 13 on Figure 2 above.

3.3.4 LP-3C

To create more room for customer parking and equipment storage, the areas on either side of the VIBII tent Structure will be turned into 100 ft x 300 ft gravel storage and parking areas, with 3 ft deep of gravel. The area is flat and mostly treeless but would be graded and potentially a few trees would be removed, between 5-20. Fencing would extend around the area for safety as well as power for lighting. This is represented by 14 on Figure 2 above.

3.3.5 LP-3D Storage

The plan is to make an area adject to Pad D in Area 3 for laydown and logistics yard. This area buildout will include fencing around a new gravel pad, 3 ft deep of gravel, 300 x 600 ft, a drainage culvert, and power. This area is currently undeveloped and lightly wooded. The land would be flattened and cleared if necessary. This is represented by 15 on Figure 2 above.

3.3.6 Future Launch Pad 3E (LP-3E)

A new launch pad would be constructed past the existing Pad 3D. The pad would be 100 ft x 100 ft of compacted gravel, enclosing 100 ft diameter concrete pads for a launch stool, liquid oxygen fuel berm, rocket propellant berm, and a 50 ft x 80 ft fabric Vehicle Integration Building (VIB-1) for launch vehicle processing and storage. Berms would be 20 ft high x 60 ft long and the pads would be 8in thick with concrete. The gravel road would be extended approximately 700 ft, 25 ft wide, and 3 ft deep. The land is flat and there are few (> 10 trees). Grading and tree removal would be completed as necessary. Other structures would be a 3ft fence, cameras, utilities, and lightening protection. This is represented by 16 on Figure 2 above.

3.4 OPERATIONS CENTER

3.4.1 Light Manufacturing, Fabrication Facilities, and Warehousing

Development of these land uses must be located outside of the widest launch pad clear zone, resulting in the only location capable of supporting this type of development is north of the Pasagshak Road in the upper area of the spaceport west of the LOC. The land is mostly flat and clear of trees. The land would be flattened prior to use. The area is 1000 x 400 ft, and all new buildings would be in this area. Power, water,

communications and data systems, cameras, lightning rods, and fencing would be installed around the buildings. This is represented by 17 on Figure 2 above.

3.4.2 Antenna Field Expansion

The expansion of the antenna field includes multiple options that may be considered based on customer and facility needs. The following describes the options.

3.4.2.1 Option 1

Due to increased customer rate the ability to have multiple telemetry systems set up and in an operational condition is critical to supporting customer cadence. For this effort expanding the existing leveled graveled area inside of the antenna field fencing is planned. The estimate would be for the addition of a 150 ft x 250 ft area of additional gravel 24 in in depth added to the inside of the antenna field perimeter security fence with an extension to the existing power and comms utilities present at the site. This is represented by 18 on the map above.

3.4.2.2 Option 2

There are increasing negative effects to system performance in adding more antenna systems to support customer requirements. To reduce interference between antenna systems expansion beyond the existing Antenna Field footprint would be required. An immediate expansion of 300 ft by 300 ft area due east of the antenna field would be planned with a clearance of approximately 14 - 20 trees and addition of gravel, electrical power, communication vaults, and lightning rod protection would be added in the proposed area. The perimeter security fence would be expanded from the existing fence to cover the additional area to comply with DoD security requirements. This is represented by 19 on Figure 2 above.

3.4.2.3 Option 3

To support addition of customer antenna installations, a 1250 ft long 12 ft wide single lane gravel 3 ft deep access road would be added along the top ridge line due east from the existing access road exit of the antenna field. Three 150 ft by 200 ft gravel 8 in deep pad areas would be added and individually fenced, with power and comms feeds added along the access road. One additional tree would be required to be removed in addition to the 14-20 proposed in Option 2. This is represented by 20 on Figure 2 above.

3.4.2.4 Option 4

A proposal for a large passive High Frequency receiving array to support atmospheric ionosphere research has been received. If other antenna field expansion Options have been enacted, a 200 ft access road would be required. If no other expansion plans have been enacted an 800 ft long access road would be required. The expanded site itself would require a 1500 ft x 5 ft wide gravel access path running approximately parallel to the existing ridgeline in an east to west orientation. Small 20 ft by 20 ft gravel pads 8 in deep for each antenna element would be required along access path. Electrical and Comms feeds would be required for each antenna element/pad area along the access path. A 5ft wildlife/livestock fence would

be added approximately 1500 ft by 40 ft in size around antenna array. This is represented by 21 on Figure 2 above.

3.4.3 Antenna Diagnostics Tower

To facilitate diagnostics and maintenance of safety critical antennas an installation of a far-field boresight/diagnostics tower will be built. The installation of a 150 ft tall Rohn antenna tower will be between MSF and the Antenna field. Clearance of a 2-acre area of overgrowth in a previously cleared area will be required. An addition of a 10 ft by 10 ft by 2 ft thick concrete pad for the antenna base, and an addition of 6 6ftx4ftx4ft concrete anchor points for antenna guy wire mounting within the cleared area will be required. This is represented by 22 on Figure 2 above.

3.4.4 Rocket Park Upgrade

To create a more welcoming entrance to the spaceport the entryway will be redone. 5-10 concrete pads will be put down, 10 ft x 10 ft approximately 12 inches thick, to provide bases to erect more rocket shells and other aerospace-related statutes. The land is already flattened and cleared. Fencing, power, communications, and utilities will be extended. A small building 40 ft x 40 ft may be built to support increased numbers of visitors related to aerospace operations at the site. This is represented by 23 on Figure 2 above.



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Administration

Renewal Application for Interagency Land Management Agreement

Document Number: PLN-1006

Revision: 3

Date: 5/15/2023



Pacific Spaceport Complex Alaska
Narrow Cape
Kodiak, Alaska

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APPROVALS AND REVISION HISTORY

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Revisions

Rev	Date	Revision Description
	7/12/2022	Initial release
1	8/1/2022	Addition of section Public Use and Public Road Closures and minor edits
2	9/20/2022	Edits to address Public Comments, non-development areas, closures
3	4/25/2023	Minor formatting and updating

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SUPPORTING DOCUMENTS

The current revision of all documents is applicable only as specifically referenced herein.

Internal Documents

	<u>Document Number</u>	<u>Document Title</u>
1	PLN-1007	AAC ILMA Construction Development Plan
2	PLN-1011	AAC ILMA Application
3	PLN-1012	AAC ILMA Environmental Risk Questionnaire

External Documents

	<u>Document Number</u>	<u>Document Title</u>
1		
2		

ACRONYMS

Acronym	Definition
AAC	Alaska Aerospace Corporation
AADC	Alaska Aerospace Development Corporation
AFUB	Antenna Field Utility Building
CSLA	Commercial Space Launch Act
DEC	Alaska Department of Environmental Conservation
EMC ²	Expanded Mission Control Center
EPA	Environmental Protection Agency
FAA/AST	Federal Aviation Administration Commercial Space Transportation
GSE	Ground Support Equipment
HVDS	Hazardous Vapor Detection System
ILMA	Interagency Land Management Assignment
IPF	Integration and Processing Facility
LEB	Launch Equipment Building
LEV	Launch Equipment Vault
LOCC	Launch Operations Control Center
LOX	Liquid Oxygen
LP-1	Launch Pad-1
LP-2	Launch Pad-2
LSS	Launch Service Structure
MSF	Maintenance and Support Facility
PPF	Payload Processing Facility
PSCA	Pacific Spaceport Complex Alaska
RCC	Range Control Center
RMSF	Rocket Motor Storage Facility
RREB	Range Radio Equipment Building
RSTS	Range Safety and Telemetry System
SCAT	Spacecraft Assemblies & Transfer Building
USCG	US Coast Guard

1 INTRODUCTION

Alaska Aerospace (AAC), a public corporation of the State of Alaska, was established by Alaska statute as the Alaska Aerospace Development Corporation (AADC) in 1991.

The Pacific Spaceport Complex – Alaska (PSCA), formerly known as the Kodiak Launch Complex, located at Narrow Cape, and operated by Alaska Aerospace, was the nation's first commercial spaceport not collocated on a federal range.

PSCA is a spaceport licensed by the Federal Aviation Administration Commercial Space Transportation (FAA/AST) under provisions of the Commercial Space Launch Act (CSLA) Title 51 U.S. Code Chapter 509) to provide orbital and suborbital launch capability.

PSCA is situated on 3,717 acres of state-owned land under an Interagency Land Management Assignment (ILMA) with the Department of Natural Resources. Under this agreement, AAC can also restrict access to another 7,048 acres surrounding the launch complex to protect the general public from potential operational hazards associated with launch operations at PSCA (see attached map and ADL 226285). PSCA is proposing to renew this lease for another 30 year term.

1.1 INTERAGENCY LAND MANAGEMENT ASSIGNMENT ADL 226285 DESCRIPTION

This ILMA includes the approximately 3,717 acres of land as approved on May 18, 1994, and amended on February 3, 2003. This revised ILMA request includes the 88 acres of US Coast Guard (USCG) lands already located within the PSCA ILMA area which would increase the total acreage to 3805. These areas are described as:

1.1.1 Core Launch Facility

- Township 31 South, Range 19 West, Seward Meridian
All state lands within Sections 31, 32, 33, and 34; and
All state lands within the South ½ of Section 29 and South ½ of Section 30
- Township 32 South, Range 19 West, Seward Meridian
All state lands within Sections 3, 4, 5, 6 and 9

This ILMA also includes the approximately 7,048 acres of Ugak Island, Pasagshak Point, and highlands to the north and west of PSCA as safety areas during periods of hazardous and launch operations and does not include the Core Permit Area, as described in the amended ILMA dated October 20, 2008. These lands, along with the original ILMA approved lands, are depicted on the Figure 1 map, and are further described as:

1.1.2 Narrow Cape Safety Zone

State lands to the north and west of the Core Permit Area as defined by the April 19, 2005, ILMA. Containing approximately 5,581 acres.

- Township 32 South, Range 20 West, Seward Meridian
All state lands within Sections 1, 2, 3, 4, plus 9 and 10.
- Township 31 South, Range 20 West, Seward Meridian
All state lands within Sections 25 and 34, 35, 36
- Township 31 South, Range 19 West, Seward Meridian
All state lands within the South ½ of Sections 19, 20, 21, 22, plus 27 and 28, and the North ½ of Sections 29 and 30.

1.1.3 Ugak Island Safety Area

All state lands comprise Ugak Island to the south of the Core Permit Area. Containing approximately 1,467 acres.

- Township 32 South, Range 19 West, Seward Meridian
All state lands within Sections 23, 24, 25, 26, 27, plus 34 and 35.

1.1.4 Non-Development Areas

These areas marked by the purple borders will be designated as non-development areas. The Narrow Cape area south of Twin Lakes and the established launch areas at PSCA has been recognized as an area of high importance to maintain a natural state, undeveloped, and available for public use. The area will be retained to preclude potential development and/or conflicting uses being created by other agencies or entities.

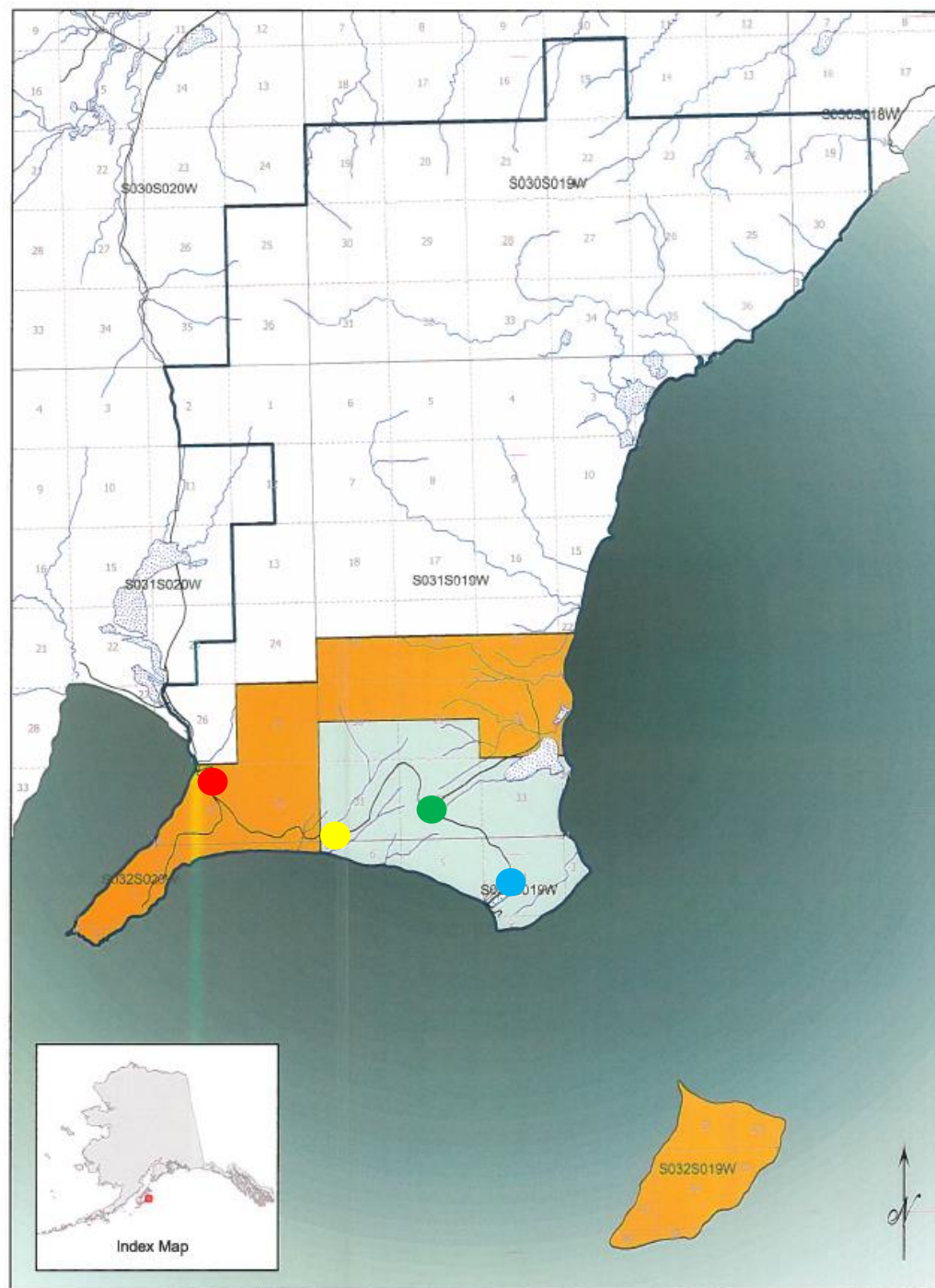


FIGURE 1: CORE LAUNCH FACILITY & SAFETY ZONE MAP

- Core Launch Facility
- Narrow Cape & Ugak Island Safety Zone - Public access will be blocked in these areas during hazardous operations.
- Kodiak Narrows Public Use Area
- Road access will not be permitted past the red point during launches, and the yellow, green, and blue points during testing. This is further discussed in Section 2.



FIGURE 2: NON-DEVELOPMENTAL AREAS

 Areas outlined in Purple will be designated as Non-Development Areas

2 PUBLIC USE AND PUBLIC ROAD CLOSURES

Current public use of the core launch facility and the safety zone land includes the following activities:

- Hiking
- Use of the beaches
- Berry picking/foraging
- Fishing
- Animal watching

Land closures are needed to protect the public from hazardous operations from launching, testing, and chemicals. PSCA's legally required closure distance is determined by calculating explosive quantity distances established by the Federal Aviation Administration (FAA) by evaluating the amount of the chemicals used on an asset and the type of activity. Closure durations are also based on the type of activity and may range from four to nine hours a day. AAC coordinates closures with the Department of Natural Resources, the Department of Transportation, the Federal Aviation Administration, and the US Coast Guard to ensure all national, regional, and local laws, ordinances, regulations, and other applicable requirements are met. Closures are then communicated to the public by radio, road signs, notices to airmen and mariners, and website updates.

Launches:

Currently, AAC is authorized to have 9 launches per year, although AAC is seeking to increase this number in the near future. During launches, the road will be closed in coordination with the Department of Transportation and Department of Natural Resources at Pasagshak Road, Mile Post (MP) 10, as demonstrated by the red dot in Figure 1. Both the core launch facility and the safety zone would be closed and patrolled to prevent unauthorized entry. The nearby airspace and waterways are closed in coordination with the Federal Aviation Administration and the US Coast Guard.

Testing:

Occasionally AAC will need to host customers that need to conduct rocket testing. In this case, the road will be closed at Spaceport Entrance, Burton Blvd., and/or fossil beach, represented by the yellow, green and blue dot, in coordination with the Department of Natural Resources and the Department of Transportation if necessary. The exact location of the closure is dependent on PSCA legal closure requirements, the launch vehicle type and degree of hazard for the test being conducted. Only core launch facility lands will be closed for these operations.

3 EXISTING FACILITIES DISCUSSION

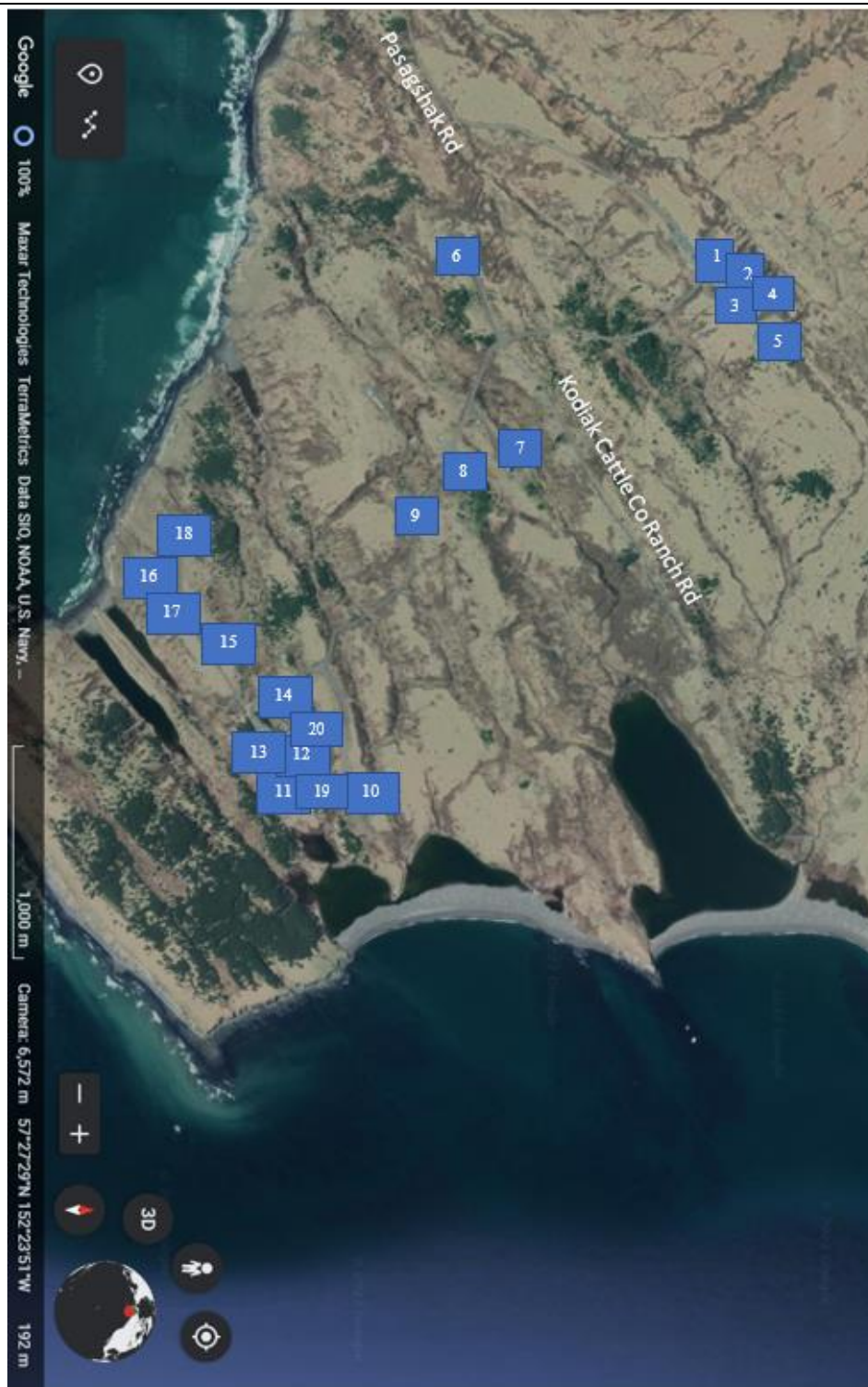


FIGURE 3. EXISTING FACILITIES MAP

3.1 EXISTING FACILITIES DISCUSSION

3.1.1 Site 1 - Range Control Center (RCC)

The RCC is the administrative, engineering, and operations support facility for PSCA. The RCC is a 14,000-square-foot building that houses the Launch Operations Control Center (LOCC) and customer offices, Tech Control/Communications Room for inter and intra communications, weather office, security, emergency medical services, conference rooms for unclassified and classified support, administrative and engineering support personnel offices, restrooms, and break room. The RCC provides both private office and open space areas primarily for Launch Site Users.

3.1.1.1 Launch Operations Control Center (LOCC)

The LOCC is approximately 1,610 square feet and seats up to forty-nine (49) people with operations consoles for Alaska Aerospace and Launch Site User personnel. Workstations consist of computer monitors, keyboards, and CPUs. The facility is designed to meet government requirements.

3.1.2 Site 2 - Alpha Site

Used as a secondary launch operations center, allowing more than a single customer to conduct launch operations at PSCA. Located east of the RCC, the Alpha consists of eight buildings that provide a secondary LOCC, offices, security, communications, a conference room, restrooms and break areas. Five trailers are 650 sq ft (56' x 11.67'), the Large Command and Control is 2,600 sq ft, and the conference room is 1,300 sq ft.

3.1.3 Site 3 - Maintenance and Support Facility (MSF)

The MSF is a 19,000-square-foot building housing three large maintenance and support bays that provide all-weather in-door equipment maintenance and support areas for PSCA: as well as storage bays for Range Safety and Telemetry System (RSTS) and customer equipment. The MSF also has a small kitchen, as well as washroom facilities. On the second floor of the MSF, above the first bay area, are offices for use by PSCA staff.

3.1.3.1 Range Safety and Telemetry System (RSTS)

The RSTS command computer is located inside the MSF and consists of two, GPS-based, S-band telemetry receiving and UHF command destruct systems, each with two 5.4-meter auto-tracking antennas, and two omnidirectional command destruct antennas, which are in the antenna field. One RSTS system is located at PSCA in the MSF with the mobile units at varying mission-specific off-axis locations depending on the mission geometry and requirements.

3.1.4 Site 4 - Soft-Side Storage Units

Located directly behind the MSF are two soft-sided unheated storage units. Each unit measures 80 ft by 60 feet. These units are used by PSCA for the long-term storage of a variety of equipment.

3.1.5 Site 5 - Instrumentation Field

A 260' x 390' gravel area east of the MSF accommodates a wide array of Launch Site User instrumentation equipment and antennas as well as the RSTS Mobile Operations Centers and the Mobile Telemetry System. This area also houses a communications, power, and fiber optics hub (AFUB) for interfacing with User equipment or instrumentation. This site has antennas installed by commercial companies and their current use is covered by multiple Non-Disclosure Agreements. The antennas are permanently mounted inside radome covers. In 2019, Alaska Aerospace installed a new weather radar within the instrumentation field. It is covered by a radome.

The instrumentation field also includes the **Antenna Field Utility Building (AFUB)** (16' x 10.5') and the **Range Radio Equipment Building (RREB)** (10.5' x 10'). The AFUB supplies power and communication, via copper, fiber, and coax, to meet customer requirements. A single, 500 KVA transformer supplies 480V power to provide lugged 1-phase or 3-phase 120/208 VAC volts. The RREB facilitates radio communication throughout the entire complex and communications with equipment staged on Pasagshak Point during launch operations.

3.1.6 Site 6 - Long Range Radar Area (Area 1)

Area 1 was developed as a long-range radar site for government launch campaigns. The compacted gravel pad within the secured fence line is 50,000 square feet and 3 feet thick (200'x 250'). To the north and west of the Area 1 Pad, there is an additional 90,000 square feet of compacted gravel for parking and storage.

3.1.7 Site 7 - Payload Processing Facility (PPF)

Space vehicles and payloads are processed in the PPF, which includes a 40' x 60' x 58' receiving bay and a 40' x 60' x 58' processing bay. Each bay has 2,400 square feet of floor space for a total of 4,800 square feet. It has a ceiling-mounted 15 Ton crane with a 50 ft hook height. The facility can support fueling up to 10,000 lbs. of hydrazine/hypergolic fuel to space vehicles and payloads and includes a hazardous vapor detection system (HVDS) and appropriate engineering controls to provide a safe fueling environment. Each bay has hazardous fuel containment trenches installed.

3.1.8 Site 8 - Area 4

Area 4 is constructed as a 50,000 square foot (200'x 250') compacted gravel pad allowing for temporary soft wall accommodations that can house 100 government personnel.

3.1.9 Site 9 - Radar Gravel Pad (Area 2)

Area 2 was developed as a radar tracking site for government launch campaigns. The compacted gravel pad within the secure fence line is 112,450 square feet and 3 feet thick (325'x 346').

3.1.10 Site 10 - Rocket Motor Storage Facility (RMSF)

The Rocket Motor Storage Facility (RMSF) is comprised of two Earth Covered Magazines (ECMs) (92.5' x 28.17') for short- or long-term storage of rocket motors.

3.1.11 Site 11 - Launch Service Structure (LSS)/Launch Pad-1 (LP-1)

LP-1 consists of a 40' x 60', 174' tall LSS that is an environmentally controlled, all-weather facility, with adjustable height and adjustable diameter work platforms, transporter erector accommodation, and side entry with booster break-over accommodations. The LSS is constructed with a 20' diameter throat by 40' deep flame trench rated for up to 1.3 million pounds of thrust. It has a ceiling-mounted 75 Ton crane with a 50 ft hook height.

3.1.12 Site 12 - Spacecraft Assemblies & Transfer (SCAT) Building/Launch Pad-2 (LP-2)

The SCAT building is a self-contained, environmentally controlled rail-mounted mobile structure that is capable of enclosing LP-2 and used for vehicle transfers at the IPF and LSS to maintain all inside operations during loading and unloading. The SCAT is 45' wide and 70' long, with a 60' high ceiling, with four roll-up doors. Three doors are 40' high by 18' wide, and one door is 43' high to allow SCAT removal from the stool-mounted launch vehicles while on the LP-2 launcher. This structure is roller mounted on tracks between the IPF and the LSS. The SCAT is also available as a launch vehicle processing building when positioned over LP-2. The SCAT is equipped with a 25-ton bridge crane with a 43 ft hook.

3.1.13 Site 13 - Integration and Processing Facility (IPF)

The IPF supports indoor horizontal processing of launch vehicles. The IPF is a 50' x 100' with a 60 ft high ceiling, an environmentally controlled structure capable of maintaining vehicle-specific temperature and humidity with four 40' high by 18' wide roll-up doors. It has a 25 Ton bridge crane with a 40 ft hook height.

3.1.14 Site 14 - Vacant Gravel Pad (Area 5)

Area 5 is a 50,000 square foot (200'x 250') compacted gravel launch pad intended for use during government launch campaigns. When not in use as a launch pad, Area 5 is commonly used by government programs as secured storage.

3.1.15 Site 15 - Launch Pad 3A

Launch Pad 3A is a 10,000 square foot (100'x 100') compacted gravel launch pad intended for use during government launch campaigns. Pad A currently has no electrical or communication infrastructure installed. Also included on Pad A is a 75'x 25' fenced area used as secured storage.

3.1.16 Site 16 - Launch Pad 3B

Launch Pad 3B is constructed to support both commercial and government launches. It includes 50,000 square feet of compacted gravel, concrete pads for a launch stool, and a 50' x 80' fabric Vehicle Integration Building (VIB-1) for launch vehicle processing and storage.

3.1.17 Site 17 - Launch Pad 3C

Launch Pad 3C was originally developed as a 10,000 square foot (100'x100') compacted gravel pad for government launch campaigns. Pad C has been modified to provide capabilities for commercial liquid propellant vehicle launches. Modifications included concrete pads for a launch stool, vehicle transport erector, liquid oxygen (LOX) pad, and propylene pad. Protective berms at the fuel and LOX pads were

also constructed. To the west of the LOX pad, there is an additional 5,525 square feet of compacted gravel for rocket propellant tank access and storage. To the east of the propylene pad, there is also an additional 3,750 of compacted gravel for mobile propellant tank access and storage. The pad area consists of 26,000 square feet inside a fenced area with an additional 2,500 square foot parking area outside the fence. The site is supported by a 50' by 120' fabric Vehicle Integration Building (VIB-2) for launch vehicle processing and storage. A 20,000 square foot compacted gravel pad for parking and storage has been constructed adjacent to VIB-2.

3.1.18 Site 18 - Launch Pad 3D

Pad 3D is a 10,000 square foot (100'x 100') compacted gravel launch pad intended for use during government launch campaigns. An ECP shipping container hosts the power and low voltage distribution equipment.

3.1.19 Site 19 - Launch Equipment Vault (LEV)

Outside of the LSS is the LEV, a reinforced concrete structure with conduit pass-throughs to the pad and umbilical tower for communications, power, and conditioned air between the LEV and LP-1. The LEV is environmentally controlled and offers 331 square feet of floor space to house launch vehicle electrical ground support equipment (GSE).

3.1.20 Site 20 - Launch Equipment Building (LEB)

LP-2 is supported by the LEB. Conduit pass-throughs are available between the LEB and the LP-2 to accommodate User umbilical connectivity. The reinforced concrete LEB, located adjacent to the LP-2, is environmentally controlled and offers 108 square feet of floor space to house User electrical ground support equipment (GSE).

3.1.20.1 Launch Pad 2 Earthen Berms

Two fueling earthen barriers adjacent to LP-2, one for Liquid Oxygen containers (52.6' x 24', 15.5' tall), the other for rocket propellant containers (12' x 24', 14' tall). Commercial supplied piping systems were connected from each of the two barriers to LP-2 for customer's use during rocket fueling operations. There are no permanent fuel storage tanks in this location.

4 SPACEPORT ACTIVITIES GENERATING THIRD PARTY INTERESTS

PCSA activities may generate interest from outside third parties. Past activities that may have generated interest include the following:

- Rocket testing
 - o Integration and testing
 - o Hazardous operations
 - o Wet dress rehearsals
 - o Static fires
- Launch operations
 - o Rocket launches
 - o Range and telemetry operations
 - o Remote operations
 - o Rocket termination
- Mission planning
 - o Logistics
 - o Scheduling
 - o Coordination
 - o Execution
- Transmissions
 - o Data uplink/downlink
 - o Data processing
- Training related to launches and aerospace
- Minimal manufacturing of aerospace parts
- Fabrications related to launches and aerospace
- Storage of aerospace materials
 - o Warehousing materials
 - o Temporary propellant (Fuel, LOX) storage
 - o Rocket storage
 - o Equipment storage
- Innovation and technology development related to aerospace
- Satellite operations

5 HAZARDOUS MATERIALS AND HYDROCARBONS STORED, USED, TRANSPORTED, GENERATED, IN CONTACT WITH, OR DISPOSED AT PSCA

PSCA handles a variety of hazardous and/or hydrocarbons while conducting launch operations. The following information is provided to describe existing storage tank capability at the spaceport which are all above ground.

TABLE 1: SITE 1 - RANGE CONTROL CENTER (RCC)

Number of tanks	Capacity (in gallons)	Type of Chemical Stored
1	2500	Diesel
1	150	Diesel

TABLE 2: SITE 3 - MAINTENANCE AND SUPPORT FACILITY (MSF)

Number of tanks	Capacity (in gallons)	Type of Chemical Stored
2	2000	Diesel
1	150	Diesel
1	1000	Gasoline
1	200	Diesel
1 (portable)	300	Diesel
1 (portable truck)	1400	Diesel

The tanks are located approximately 100 feet north of the MSF adjacent to a paved motor vehicle parking area.

TABLE 3: SITE 7 - PAYLOAD PROCESSING FACILITY (PPF)

Number of tanks	Capacity (in gallons)	Type of Chemical Stored
1	150	Diesel
1	550	Hydrazine
1 (portable)	500	Diesel

One 550-gallon tank is capable of holding hydrazine but is not currently in use. It is expected to be used in the coming years as operations increase.

TABLE 4: SITE 10 - ROCKET MOTOR STORAGE FACILITY (RMSF)

Number of tanks	Capacity (in gallons)	Type of Chemical Stored
1	3000	Diesel
1	50	Diesel

TABLE 5: SITE 13 - INTEGRATION AND PROCESSING FACILITY (IPF)

Number of tanks	Capacity (in gallons)	Type of Chemical Stored
1	2500	Diesel

TABLE 6: SITE 16 - LAUNCH PAD B

Number of Tanks	Capacity (in gallons)	Type of Chemical Stored
1	5000	Kerosine
4	5000	Liquid Oxygen (LOX)

Four LOX tanks - 2 are owned by the spaceport and are stationary, and 2 are periodically transported in by various customers.

TABLE 7: SITE 17 - LAUNCH PAD C

Number of Tanks	Capacity (in gallons)	Type of Chemical Stored
5	5000	Liquid Oxygen (LOX)
1 (portable truck)	5000	LOX

One Portable truck is periodically brought in by customers.

TABLE 8: SITE 18 - LAUNCH PAD D

Number of Tanks	Capacity (in gallons)	Type of Chemical Stored
1	2500	Diesel

5.1 FURTHER DISCUSSION OF TOXIC AND/OR HAZARDOUS MATERIALS AND HYDROCARBONS TRANSPORTED AT PCSA

During regular operations, fuels are brought in by Pasagshak Road to the MSF. They are then transported throughout the facility to the smaller tanks.

TABLE 9: REGULAR OPERATIONS

Delivery Frequency	Amount (in gallons)	Type of Chemical
1 per month	2500	#2 Diesel Highway fuel
1 per month	750	Unleaded gas
1 per month	1400	#1 Diesel Heating fuel

During mission operations, propellants, fuels, and/or commodities are brought in more frequently because of increased demand from backup generators. Mission operations and periodical tank use occur in the weeks leading up to a launch. Future operations are expected to increase the frequency that these deliveries occur.

TABLE 10: MISSION OPERATIONS

Delivery Frequency	Amount (in gallons)	Type of Chemical
1 per 4 days	2500	#2 Diesel highway fuel
4 per launch	18500	Liquid oxygen (LOX)
3 per launch	8500	Kerosine
1 per launch	30	Triethylaluminium (TEA-TEB)

6 HAZARDOUS MATERIALS RESPONSIBILITIES

In the event of a spill or release to the environment, Alaska Aerospace staff and security personnel shall follow the Alaska Department of Environmental Conservation (DEC) and the spaceport's Emergency Response Plan procedures. Alaska Aerospace will dispose of facility-related hazardous waste and the collection of and disposal of any by-products will comply with applicable environmental regulations under DEC and the Environmental Protection Agency (EPA). For the full list of Hazardous Materials stored at PSCA please see Appendix A.

TABLE 11: SPILL HISTORY

All past accidents and spills have been cleaned and closed per the Alaska Department of Environmental Conservation, with the exception of the most recent spill that occurred on 1/10/2023, which is in progress.

Spill Number	Date	Chemical Amounts
06249901901	01/19/06	25-gal Hydraulic Oil
14249923702	8/25/2014	100 lbs Other
17249927501	10/2/2017	35-gal glycol
18249920101	7/20/2018	292-gal Naphtha
18249933301	11/29/2018	292-gal Naphtha
20249905901	2/28/2020	3-gal Other
20249908302	3/23/2020	412-gal Solvent
20249925501	9/11/2020	50-gal Naphtha
22249912601	5/6/2022	8-gal Aviation Fuel
22249912901	5/9/2022	2-gal Aviation Fuel
22249915901	6/9/2022	200-gal Aviation Fuel
22249924202	8/30/2022	1-gal Aviation Fuel
22249925201	9/9/2022	1 Quart Hydraulic Fuel
23249901002	1/10/2023	5200-gal Aviation Fuel

No fuels, hazardous materials, or hydrocarbons are disposed of at PSCA. All materials are either consumed during operations or transported off the spaceport when operations are concluded.

7 POTENTIAL FUTURE THIRD PARTY INTERESTS

PCSA activities may generate interest from outside third parties. Updated activities that may generate third-party interest include the following:

- Rocket testing
 - o Rocket/Payload integration
 - o Hazardous operations
 - o Launch rehearsals
 - o Static fires
- Launch operations
 - o Rocket launches
 - o Mobile launch system launches
 - o Range and telemetry operations
 - o Remote operations
 - o Rocket termination
- Mission planning
 - o Logistics support
 - o Scheduling
 - o Coordination
 - o Execution
 - o Public notifications
- Transmissions
 - o Data uplink/downlink
 - o Data processing
- Training related to launches and aerospace
- Minimal manufacturing of aerospace parts
- Fabrications related to launches and aerospace
- Temporary storage of aerospace materials
 - o Warehousing materials
 - o Temporary propellant (Fuel, LOX) storage
 - o Rocket storage
 - o Equipment storage
 - o Water storage
- Innovation and technology development related to aerospace
- Liquified atmospheric gas production for aerospace operations
 - o Production
 - o Storage
 - o Distribution onsite for aerospace operations
- Satellite operations

PLN-1006 - Renewal Application for Interagency Land Management Agreement

- Tourism and site visits related to aerospace operations at the site
- Weather forecasting and monitoring for aerospace operations
- Hazardous waste management related to aerospace operations
 - o Remediation
 - o Temporary storage
- Maintenance and upkeep of facilities, equipment, and land relating to aerospace operations

8 APPENDIX A CHEMICAL LIST

This list includes yearly estimates of potential chemicals used sitewide.

Chemical Name	Type	Quantity
DIESEL NO.1	Bulk Fuels and Coolants	10,000 gal
DIESEL NO.2	Bulk Fuels and Coolants	40,000 gal
UNLEADED GASOLINE	Bulk Fuels and Coolants	15,000 gal
KEROSENE	Bulk Fuels and Coolants	20,000 gal
Acetylene Carbon Dioxide	Compressed Gases	600 cf.
Argon	Compressed Gases	600 cf.
Carbon Monoxide	Compressed Gases	1 cf
Nitrogen	Compressed Gases	3,000 kg
FORANE 22 CHLORODIFLUOROMETHANE	Compressed Gases	.5 lb
HELIUM, GAS	Compressed Gases	90 kg
NITROUS OXIDE, GAS	Compressed Gases	600 cf.
OXYGEN, GAS	Compressed Gases	600 cf.
PROPANE	Compressed Gases	100 gal.
CARBON DIOXIDE ACETYLENE TEST GAS	Compressed Gases	.5 lb
Hydrazine anhydrous	Explosives	0 Gallon
Dry Chemical (Fire Extinguishing Agent)	Janitorial	.5 Gallons
Chevron Automatic Transmission Fluid DEXRON® VI	Lubricants	20 gallons
CHEVRON DELO 400 15W40 ENGINE OIL	Lubricants	110 gallons
CHEVRON RANCHO ISO 32 HYDRAULIC OIL	Lubricants	1/55 gallon drum
CHEVRON RPM GEAR OIL SAE 90	Lubricants	2 gallons
Chevron Supreme Motor Oil SAE 5W-30	Lubricants	25 gallons
NAPA BALKAMP JACK OIL	Lubricants	3 gallons
NAPA DOT 3 Brake Fluid	Lubricants	4 gallons
NAPA DOT 5 Brake Fluid	Lubricants	2 gallons
NAPA GEAR OIL 80W90	Lubricants	5 gallons
NAPA Power Steering Fluid, 9800, 9832, 9801	Lubricants	2 gallons
NAPA QUALITY TRACTOR HYDRAULIC FLUID.doc	Lubricants	25 gallons
NAPA® Mac's White Lithium Grease	Lubricants	15/10 oz
Liquid Oxygen LOX	Propellants and Explosives	10000 gallons
DEXRON®-VI Automatic Transmission Fluid	Vehicle Maintenance	5 gallons
STP® Oil Treatment	Vehicle Maintenance	2 gallons