ALASKA AEROSPACE CORPORATION

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Administration

Renewal Application for Interagency Land Management Agreement

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Pacific Spaceport Complex Alaska
Narrow Cape
Kodiak, Alaska

APPROVALS AND REVISION HISTORY

Approvals

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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

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

External Documents

	Document Number	Document Title
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.

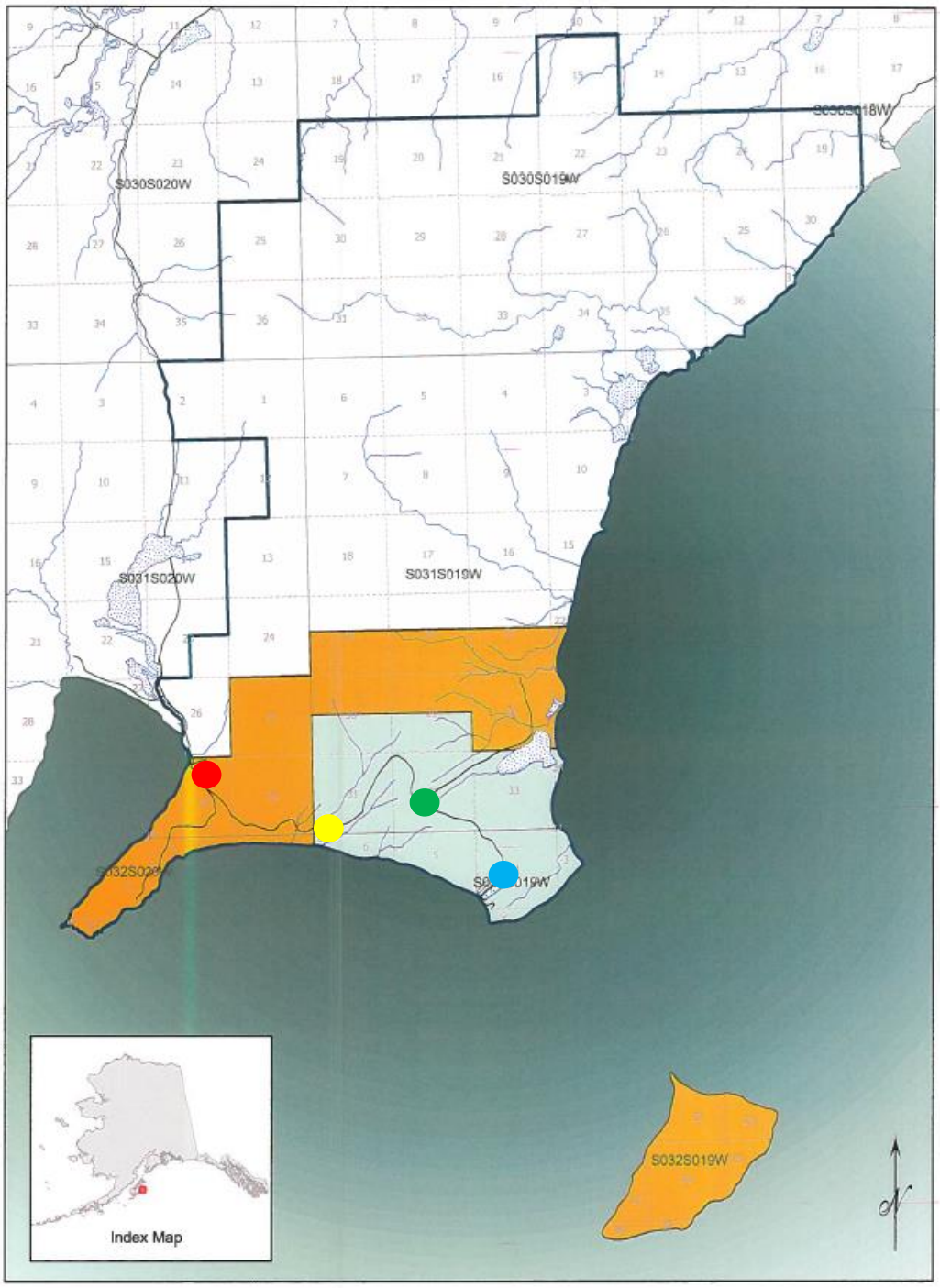

FIGURE 1: CORE LAUNCH FACILITY & SAFETY ZONE MAP

Core Launch Facility

Narrow Cape & Ugak Island Safety Zone - Public access will be blocked in these areas during hazardous operations.

Kodiak 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.

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

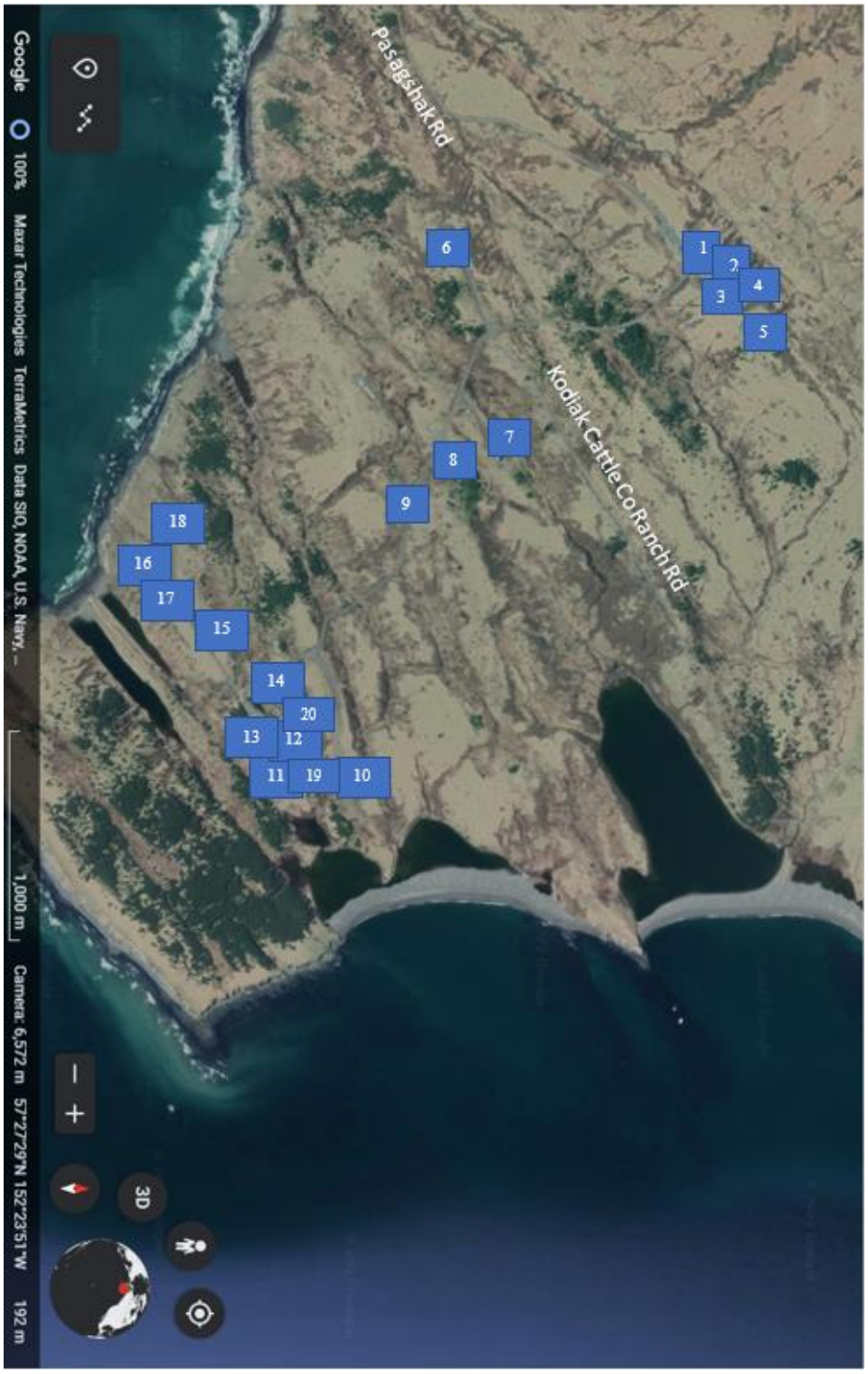

FIGURE 3. EXISTING FACILITIES MAP

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

- 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
    - Remediation
    - 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