

Sec. 22-1. Definitions.

The following words, terms and phrases, when used in this chapter, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

Emergency management means the preparation for the carrying out of all emergency functions, other than functions for which military forces are primarily responsible; to prevent, minimize and repair injury and damage resulting from emergencies, energy emergencies, disasters or their imminent threat, of manmade or natural origin caused by enemy attack, sabotage, civil disturbance, fire, flood, earthquake, wind, storm, wave action, oil spill or other water contamination requiring emergency action to avert danger or damage, epidemic, air contamination, blight, drought, infestation, explosion, riot or other hostile action, or other causes. These functions include, without limitation:

- (1) Firefighting services;
- (2) Police services;
- (3) Medical and health services;
- (4) Rescue;
- (5) Engineering;
- (6) Warning services;
- (7) Communications;
- (8) Defense from radiological, chemical and other special weapons;
- (9) Evacuation of persons from stricken areas;
- (10) Emergency welfare services;
- (11) Emergency transportation;
- (12) Plant protection;
- (13) Temporary restoration of public utility services; and
- (14) Other functions related to civilian protection;

together with all other activities necessary or incidental to the preparation for and carrying out of these functions.

Cross References: Definitions generally, § 1-2.

Secs. 22-2--22-35. Reserved.

ARTICLE II.

EMERGENCY MANAGEMENT*

* **Editors Note:** Ord. No. 2005-4, adopted March 1, 2005, amended art. II in its entirety to read as herein set out. Former art. II, §§ 22-36--22-42, pertained to emergency management agency.

Sec. 22-36. Emergency management policy.

Because of the existing and increasing possibility of the occurrence of emergencies or disasters resulting from man-made or natural causes; in order to ensure that preparations in Camden County (including the cities of Kingsland, Woodbine, and St. Marys, if adopted by the mayor and city councils of the cities of Kingsland, Woodbine, and St. Marys) will be adequate to deal with such emergencies or disasters; generally to protect the public peace, health and safety; and to preserve the lives and property of the people in Camden County, it is found and declared necessary:

- (1) To create an emergency management agency for emergency management in Camden County.
- (2) To confer upon the board of commissioners of Camden County and the chairman of the board of commissioners the emergency powers provided for in this article.
- (3) To authorize the establishment of an emergency management agency and the taking of such steps as are reasonable and necessary to implement the provisions of this article.

(Ord. of 3-1-2005(1))

Sec. 22-37. Definitions.

As used in this article, the terms:

Agency means the emergency management agency enacted by the board of commissioners of Camden County.

Emergency management means the preparation for the carrying out of all emergency functions to prevent, minimize and repair injury and damage resulting from emergencies, disasters or imminent threat thereof, of man-made or natural origin caused by civil disturbance, fire, flood, earthquake, wind, storm, wave action or similar physical conditions. These functions include without limitation, firefighting services, police services, medical and health services, rescue, engineering, warning services, communications, evacuation of persons from stricken areas, emergency welfare services, emergency transportation, plant protection, temporary restoration of public utility services and other functions related to civilian protection, together with all other activities necessary or incidental to the preparation for and carrying out of the foregoing functions.

State of emergency means the conditions declared by chairman of the commissioners when after conferring with the mayors of Kingsland, St. Marys and Woodbine, and in their judgment, the threat or actual occurrence of a disaster or emergency is sufficient severity and magnitude to warrant extra ordinary action to prevent or alleviate the loss of human life or damage to public or private property.

(Ord. of 3-1-2005(1))

Sec. 22-38. Enforcement.

The law enforcement authorities of the State of Georgia, the Camden County sheriff's department, and the Cities of Kingsland and St. Marys police department shall enforce the orders, rules and regulations issued pursuant to the terms and conditions of this article. During a declared state of emergency, the Camden County sheriff and the chiefs of police in Kingsland and St. Marys, Georgia shall have the authority and power to increase the number of and swear in additional police officers during the declared state of emergency. Such officers' tenure shall expire at the conclusion of the state of emergency.

(Ord. of 3-1-2005(1))

Sec. 22-39. Organization.

(a) There is hereby established pursuant to the provisions of this article an agency which shall be known as the Camden County Emergency Management Agency, hereinafter called the emergency management agency, with a director of emergency management who shall be the head thereof.

(b) The board of commissioners of Camden County shall nominate a director of emergency management who shall be appointed in accordance with the provisions of O.C.G.A. § 38-3-27. The director shall be subject to the direction and control of the board of commissioners, through the county manager and shall be responsible for the carrying out of the programs for emergency management in Camden County. The county manager shall act as the acting director of emergency management in the event of the absence or disability of the director for any reason. The compensation of the director shall be fixed by the board of commissioners and the director shall hold the office at the pleasure of the board of commissioners.

(c) The director may employ such technical, clerical, stenographic and other personnel, may fix their compensation and may make such expenditures with the appropriations therefor, or from other funds made available to him for the purpose of emergency management as may be necessary to carry out the purposes of this article.

(d) The director, subject to the direction and control of the board of commissioners, shall be responsible for carrying out the programs for emergency management in Camden County. He shall coordinate the activities of all organizations called upon to assist in a state of emergency in Camden County, shall maintain liaison with and cooperate with the emergency management agency of the State of Georgia and that of the federal government.

(e) The sheriff, the police chiefs and fire chiefs shall be the disaster coordinators and shall act for the chairman of the board of commissioners when requested to do so by the chairman of the board of commissioners or the vice chairman in the chairman's absence.

(Ord. of 3-1-2005(1))

Sec. 22-40. Emergency powers.

(a) Prior to declaring any state of emergency within the geographical boundaries of Camden County, the chairman of the board of commissioners after advice and council with the other members of the board, the mayor of Kingsland, the mayor of St. Marys and the mayor of Woodbine and with concurrence with the

Georgia Emergency Management Agency shall be vested the sole authority to declare a state of emergency.

(b) A declaration of a state of emergency or disaster shall activate the emergency and disaster response and recovery aspects of the local emergency operation plans applicable to Camden County and shall be the authority for the development and use of force to which the plans apply and for the use or distribution of any supplies, equipment and materials and facilities assembled, stockpiled or arranged to be made available pursuant to provisions of this article.

(c) The chairman of the board of commissioners shall have and may exercise for such periods as the state of emergency or disaster exists or continues the following emergency powers:

- (1) Command or utilize any private property if he finds this necessary to cope with the emergency or disaster;
- (2) Direct and compel the evacuation of all or a part of the population from any stricken or threatened area within Camden County if he deems this action necessary for the preservation of life or other disaster mitigation or response;
- (3) Prescribe routes, modes of transportation and destinations in connection with the evacuation;
- (4) Control ingress and egress to and from the disaster area and the occupancy of premises therein;
- (5) Suspend or limit the sale, dispensing or transportation of alcoholic beverages, firearms, explosives or combustibles;
- (6) Make provision for the availability and use of temporary emergency housing;
- (7) Suspend any regulatory ordinance prescribing the procedure for conduct of county business, or the orders, rules and regulations of any county agency, if strict compliance with any ordinance, order, rule, or regulation would in any way prevent, hinder or delay necessary action in coping with the emergency or disaster;
- (8) Utilize all available resources of Camden County as may be reasonably necessary to cope with the emergency or disaster;
- (9) To perform and exercise such other functions, powers and duties as may be necessary to promote and secure the safety and protection of the public;
- (10) To ensure all laws, rules and regulations relating to emergency management and to assume direct operational control of all civil forces and helpers in Camden County; and
- (11) To seize or take for temporary use, property for the protection of the public.

(d) Any power or authority granted to the chairman of the board of commissioners by this article may be exercised by the vice chairman of the board of commissioners so long as the chairman of the board of commissioners is absent from Camden County or otherwise unable to perform the duties of the office of the

chairman. If the chairman and vice chairman of the board of commissioners are both absent from Camden County or otherwise unable to perform the duties of the office of chairman, any power or authority granted to the chairman of the board of commissioners by this article may be exercised by the member of the board of commissioners designated by the chairman of the commission. The chairman, during the committee appointments, shall designate a line of authority setting forth the order of succession of the commissioners for exercising the powers and duties until either the chairman or vice chairman are able to exercise those powers and duties.

(Ord. of 3-1-2005(1))

Sec. 22-41. Regulations.

(a) The director of the agency is authorized and empowered to make orders, rules and regulations as may be necessary for emergency management purposes, provided such orders, rules and regulations are non-inconsistent with any orders, rules or regulations promulgated by the governor of the State of Georgia or by any state agency exercising power delegated to it by him.

(b) All such orders, rules and regulations shall be approved by the board of commissioners prior to their effective date and copy, as approved, shall be filed with the clerk of the board of commissioners.

(c) All such orders, rules and regulations promulgated by the board of commissioners shall have the full force and effect of law.

(Ord. of 3-1-2005(1))

Sec. 22-42. Penalty.

Any person who violates any provision of this article or any rule, order or regulation made pursuant to this article shall be guilty of a misdemeanor.

(Ord. of 3-1-2005(1))

Secs. 22-43--22-60. Reserved.

ARTICLE III.

STATE OF EMERGENCY

DIVISION 1.

GENERALLY

Sec. 22-61. Definitions.

The following words, terms and phrases, when used in this article, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

Building contractor means any person engaging in, undertaking or carrying on any business consisting of or relating to building construction, repair, renovation or making improvements to real property including

dwelling, homes, buildings, structures, or fixtures attached thereto.

Doing business means any building contractor shall be deemed to be doing business subject to the requirements of this article if:

- (1) He has or operates an office, agency, project site or place of business located in the unincorporated areas of the county, whether permanently, temporarily, periodically, or otherwise, that provides the following activities in the unincorporated areas of the county expressly including, but not limited to, the construction, renovation or repair, of dwellings or buildings or the making of improvements to real property or any fixtures attached thereto; or
- (2) He performs the following activities or services in the unincorporated areas of the county expressly including, but not limited to, the construction, renovation or repair of dwellings or buildings or the making of improvements to real property or any fixtures attached thereto regardless of the location of the principal office.

Overcharging means charging prices for goods, materials, services, or housing which are substantially in excess of the customary charges or in applicable cases substantially in excess of the supplier's or provider's costs for such goods, materials, services or housing. The existence of overcharging shall be presumed from a substantial increase in the price at which the goods, materials, services, or housing was offered in the usual course of business immediately prior to the onset of the emergency, but shall not include increases in costs to the supplier directly attributable to higher costs of materials, supplies, and labor costs resulting from the emergency.

State of emergency, as defined by O.C.G.A. § 38-3-3(5), means a condition declared by the governor when, in his judgment, the threat or actual occurrence of a disaster, emergency, or energy emergency is of sufficient severity and magnitude as to warrant extraordinary efforts in preventing or alleviating the damage, loss, hardship or suffering threatened or caused thereby.

Subsequent recovery period means the period of time that the disaster or emergency continues to cause disruptions in the area by the disaster or emergency. The "subsequent recovery period" shall not exceed six months after the state of emergency declaration by the governor is terminated unless extended by official action of the board of commissioners.

(Ord. of 7-20-1999(2), § 2; Ord. of 7-20-1999(3), § 2; Ord. of 7-20-1999(4), § 2; Ord. of 7-20-1999(5), § 2)

Cross References: Definitions generally, § 1-2.

Sec. 22-62. Overcharging prohibited.

In order to preserve, protect, or sustain the life, health, or safety of persons or their property, it shall be unlawful during the duration of a state of emergency, or subsequent recovery period in which the county has been designated as a disaster area, for any person located or doing business in the county to overcharge for any goods, materials, services or housing sold within the county.

(Ord. of 7-20-1999(3), § 1)

Sec. 22-63. Unlawful acts during emergencies.

It shall be unlawful for any person to commit any of the following acts during an emergency:

- (1) To wilfully obstruct, hinder or delay any member of the emergency management corps in the enforcement of any lawful rule or regulation issued pursuant to this article or in the performance of any duty imposed by virtue of this article.
- (2) To do any act forbidden by any lawful rules or regulations issued pursuant to this article if such act is of such a nature as to give assistance to the enemy, imperil the life or property of any inhabitant of this county, or prevent, hinder or delay the defense or protection of this county.
- (3) To wear or carry or display without authority any mark or identification specified by the emergency management agency.

Secs. 22-64--22-80. Reserved.

DIVISION 2.

SUSPENSION OF ORDINANCES, FORMALITIES

Sec. 22-81. Definitions.

The following words, terms and phrases, when used in this division, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

Fees means any fee or rate charged by the county for building permits, land disturbance permits, zoning applications, special land use permits, temporary land use permits, and other fees relating to the reconstruction, repair and clean up of areas impacted by the disaster or emergency. "Fees" shall not include those fees collected by the county on behalf of the federal or state government or those fees charged by the county pursuant to a federal or state statute or regulation.

Temporary dwelling means any mobile or easily movable home, trailer, recreational vehicle or structure not otherwise permitted by the zoning regulations in a particular zoning district.
(Ord. of 7-20-1999(5), § 2)

Cross References: Definitions generally, § 1-2.

Sec. 22-82. Meetings.

Upon proclamation by the appropriate state official of an emergency or disaster of manmade or natural causes or enemy attack impending on or affecting the state or the United States, the affairs and business of the county may be conducted at places other than the regular or usual place thereof, within or outside of the county, when it is not prudent, expedient or possible to conduct business at the regular location. When such meetings occur outside of the county, all actions taken by the board of commissioners shall be as valid and binding as if performed within the county. Such meetings may be called by the presiding officer or any two members of the board of commissioners without regard to or compliance with time-consuming procedures and formalities otherwise required by law.

(Ord. of 7-20-1999(5), § 1(1))

Sec. 22-83. Purchasing and public works contracts.

Upon the declaration of a state of emergency by the governor, or upon the determination by the board of commissioners, or its designee, of the existence of an emergency or disaster, the board of commissioners, its designee or the emergency interim successor may contract for public works without letting such contract out to the lowest, responsible bidder and without advertising and posting notification of such contract for four weeks; however, any public works contract entered into pursuant to this section shall be entered on the minutes of the county as soon as practical and the nature of the emergency described therein.
(Ord. of 7-20-1999(5), § 1(2))

Sec. 22-84. Code enforcement.

Upon the declaration of a state of emergency by the governor, or upon the determination by the board of commissioners, or its designee, of the existence of an emergency or disaster, the board of commissioners, its designee or the emergency interim successor may temporarily suspend the enforcement of the Camden County Code, or any portion thereof, where:

- (1) The emergency or disaster is of such nature that immediate action outside the Code is required;
- (2) Such suspension is consistent with the protection of the public health, safety and welfare; and
- (3) Such suspension is not inconsistent with any federal or state statutes or regulations.

(Ord. of 7-20-1999(5), § 1(3))

Sec. 22-85. Fees.

Upon the declaration of a state of emergency by the governor, or upon the determination by the board of commissioners, or its designee, of the existence of an emergency or disaster, the board of commissioners, its designee or the emergency interim successor may temporarily reduce or suspend any permit fees, application fees or other rate structures as necessary to encourage the rebuilding of the area impacted by the disaster or emergency.

(Ord. of 7-20-1999(5), § 1(4))

Sec. 22-86. Temporary dwellings.

Upon the declaration of a state of emergency by the governor, or upon the determination by the board of commissioners, or its designee, of the existence of an emergency or disaster, the board of commissioners, its designee or the emergency interim successor may issue temporary mobile home, trailer, recreational vehicle or other temporary dwelling structures or parks in any zoning district while the primary dwelling is being repaired provided that such temporary dwellings or parks are designed by an engineer and the plans are approved by the county health department and building and inspections department. The temporary permit shall not exceed six months in duration. In the case of continuing hardship and in the discretion of the board of commissioners or its designee, the permit may be extended for a period for an additional six months. Upon expiration of the temporary permit or an extension, the temporary dwelling shall be removed.

(Ord. of 7-20-1999(5), § 1(5))

Secs. 22-87--22-100. Reserved.

DIVISION 3.

REGISTRATION OF BUILDING CONTRACTORS

Sec. 22-101. Required.

No person shall engage in, undertake or carry on any business, in whole or in part, within the unincorporated areas of the county, consisting of or relating to building, constructing, repairing, renovating or making improvements to real property including dwellings, homes, buildings, structures, or fixtures attached thereto without having registered the name of the business with the board of commissioners and having paid fees as provided by the schedule of fees and charges on file in the office of the county clerk.
(Ord. of 7-20-1999(4), § 1)

Sec. 22-102. Penalties.

Any building contractor required by this division to pay a registration fee who engages in business without first registering and receiving a registration certification from the county as required shall be in violation of this division and punished as provided in section 1-19. Each day a building contractor does business in the unincorporated areas of the county without complying with this division shall constitute a separate offense.
(Ord. of 7-20-1999(4), § 5)

Sec. 22-103. Application.

All building contractors doing business or proposing to do business in the unincorporated areas of the county during a state of emergency or the subsequent recovery period shall register and file applications with the clerk of the board of commissioners or such other person designated by the board of commissioners at the county courthouse, or such other place designated by the county. The building contractor shall, under oath, provide the board of commissioners with a statement describing the general nature of the business to be conducted and give true and correct information as may be called for on the registration form, application or certificate provided by the county.
(Ord. of 7-20-1999(4), § 3)

Sec. 22-104. Fees.

Registration fees shall be as set forth in the schedule of fees and charges on file in the office of the county clerk and paid in full at the time of issuance of the registration certification.
(Ord. of 7-20-1999(4), § 4)

Sec. 22-105. Transferability.

Each certification issued under this division is granted to, and shall be accepted by, the building contractor under the condition that the same is not transferable and after issuance no such certification shall be transferred by the county or the building contractor to another individual or entity.
(Ord. of 7-20-1999(4), § 6)

Sec. 22-106. Display of registration certification.

Each certification issued under this division shall be posted conspicuously by the building contractor in the place of business of the building contractor or shall be carried on his person or vehicle used in such business. Such certification shall be exhibited to any authorized enforcement officer when so requested. (Ord. of 7-20-1999(4), § 7)

Sec. 22-107. Revocation, suspension.

Each certification granted under this division is a mere permit to engage in the business only so long as such business is conducted in a lawful manner. The board of commissioners reserves the right to revoke or suspend any certification granted hereunder, if the building contractor, or the building contractor's agent or employee acting within the scope of his employment, violates this division or any other county, state or federal law. If after issuance of a certification, the county desires to revoke such certification, written notice shall be given to the building contractor, which notice shall specify the violation with which the building contractor is charged and a date, time and place at which a hearing shall be held with regard to the violation. The building contractor shall have an opportunity to be heard at such hearing, shall have the right to be represented by counsel and shall have the right to introduce and submit evidence in opposition to such revocation. (Ord. of 7-20-1999(4), § 8)

Secs. 22-108--22-120. Reserved.

DIVISION 4.

CURFEW DURING EMERGENCY OR DISASTER

Sec. 22-121. Definitions.

The following words, terms and phrases, when used in this division, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

Curfew means a regulation requiring the withdrawal from any person not otherwise exempt from this division from appearing in certain public areas during specified hours.

Exempt individuals, unless otherwise specified in the resolution implementing the curfew, means those individuals engaged in the provision of designated, essential services, such as fire, law enforcement, emergency medical services and hospital services, military services, utility emergency repairs. The resolution may, in the discretion of the board of commissioners, also exempt regular employees of local industries traveling to and from their jobs with appropriate identification, news media employees, building and repair contractors, properly registered according to division 3 of this article, performing activities related to construction, repair, renovation or improvement of buildings and other structures damaged during the disaster or emergency. (Ord. of 7-20-1999(2), § 2)

Cross References: Definitions generally, § 1-2.

Sec. 22-122. Institution.

(a) Upon the declaration of a state of emergency by the governor, or upon the determination by the board of commissioners, or its designee, of the existence of an emergency or disaster, the board of commissioners, its designee or the emergency in-terim successor may adopt a resolution instituting a curfew when it is determined necessary to protect and safeguard the people and the property of the county.

(b) All of the territory of the unincorporated county shall be subject to the terms of the curfew, unless otherwise specified in the resolution.

(c) The resolution instituting the curfew shall include the dates and hours that the curfew shall be in effect.

(Ord. of 7-20-1999(2), § 1)

Sec. 22-123. Prohibition.

It shall be prohibited for any person, other than exempt individuals, to appear in public in the territory subject to the curfew including, not limited to, streets, highways, alleys, sidewalks, vacant lots, parks, public buildings or any other public places in all or a delineated part of the unincorporated county during the stated hours of the curfew.

(Ord. of 7-20-1999(2), § 3)



Attachment 9

Spaceport Camden Comprehensive Launch Plan (Example)



Example Comprehensive Launch Plan

As of 31 July 2017

GORA EXEMPT - SECURITY PLANNING DOCUMENT

FOIA EXEMPT - SECURITY PLANNING DOCUMENT

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COMPREHENSIVE LAUNCH PLAN (IAW ICS 201), Adapted CAMDEN EMA

1. Launch Customer / Launcher: VECTOR LAUNCH / B0.002	2. Launch Number (if applicable): SCC-2017-001	3. Estimated Date/Time: Date: 8/3/2017 Time: 0800 hrs local (TBD)
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4. Map/Sketch:

Figure 1 shows the whole of the two properties that make up the proposed Spaceport Camden, the current owners and the first check point on Union Carbide Road.

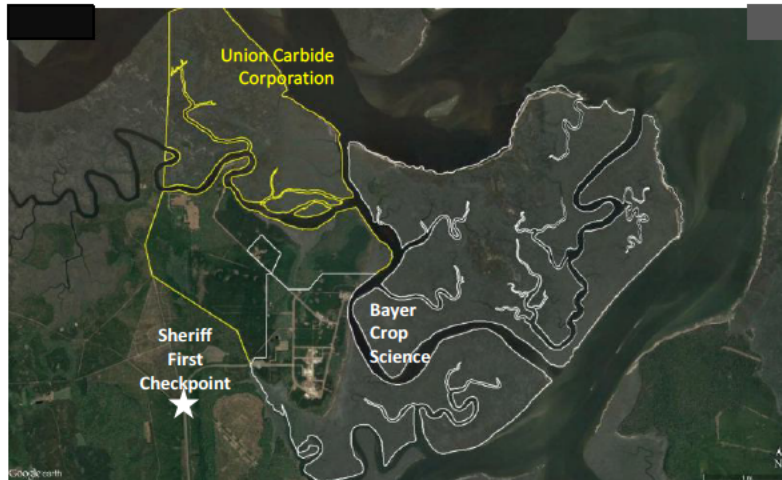


FIGURE 1. Proposed Spaceport Property, Current Owners & First Check Point (Union Carbide Road)

Figure 2 shows the locations where the three Camden Sheriff boats are proposed to be located.

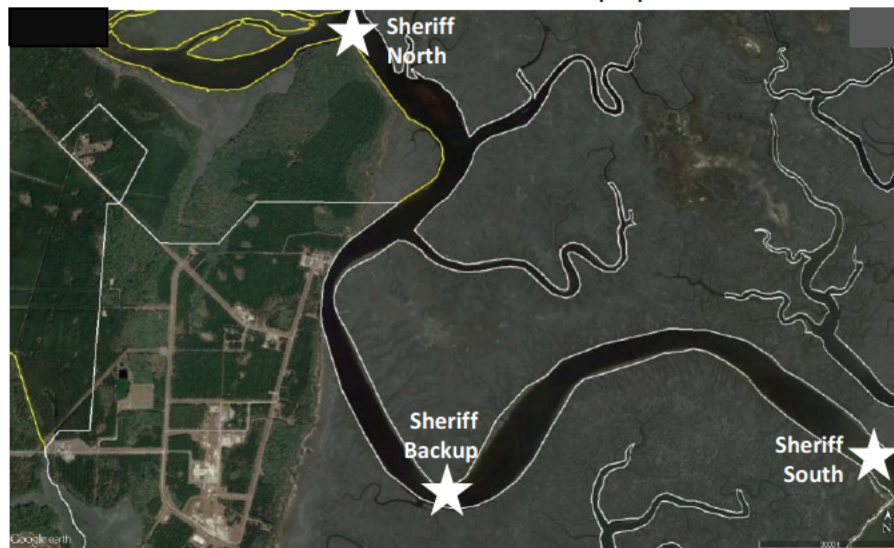


FIGURE 2. Proposed Placement of Camden Sheriff Boats

Figure 3 shows the proposed locations of various organizations assets and personnel, except the Sheriff's check point on Union Carbide Road (see Figure 1). Vector will perform operations from the Launch Control Center (LCC) shown on the map in Figure 3, outside the estimated ballistic trajectory arc in Figure 5. It is proposed to place the Camden Paramedics with the Observers as this is the location with the largest concentration of persons, also outside the estimated ballistic trajectory. The Camden Fire (and Forestry) assets will be placed near the main gate in the old motor pool corral and outside the predicted ballistic trajectory of the Vector test vehicle. The Sheriff's front gate unit and the Sheriff's rapid response team will also be placed at or near the main gate, respectively.

1. Launch Customer / Launcher:
VECTOR LAUNCH / B0.002

2. Launch Number (if applicable):
SCC-2017-001

3. Estimated Date/Time:
Date: 8/3/2017 Time: 0800 hrs local (TBD)

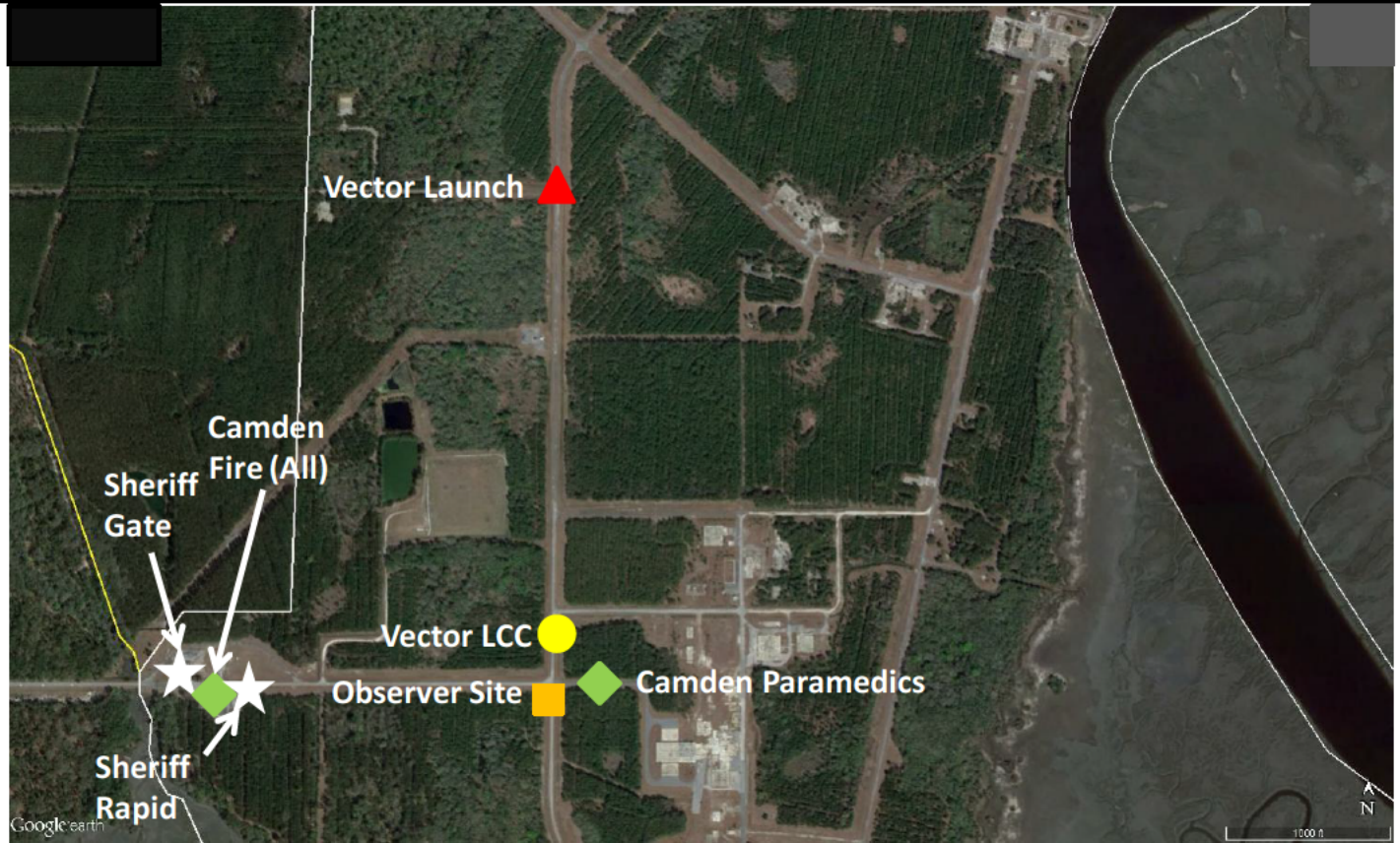


Figure 3. Locations of Participating Organization's Personnel and Assets

Figure 4 shows the anticipated flight trajectory, versus timing of the various staging, and the projected circle of landing given certain wind conditions and the assumption the parachute opens as planned.

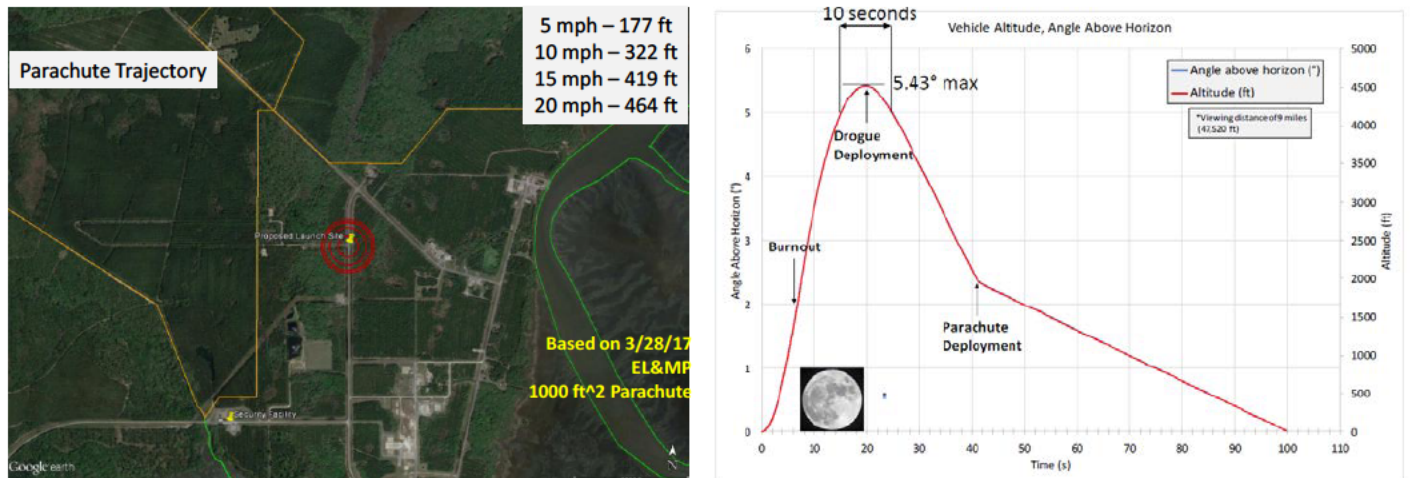


FIGURE 4. Estimated Trajectory With Parachute Deployment.

1. Launch Customer / Launcher:
VECTOR LAUNCH / B0.002

2. Launch Number (if applicable):
SCC-2017-001

3. Estimated Date/Time:
Date: 8/3/2017 Time: 0800 hrs local (TBD)

Figure 5 shows the estimated trajectory should the parachute not deploy. There is no planned personnel inside the ring of estimated ballistic trajectory.

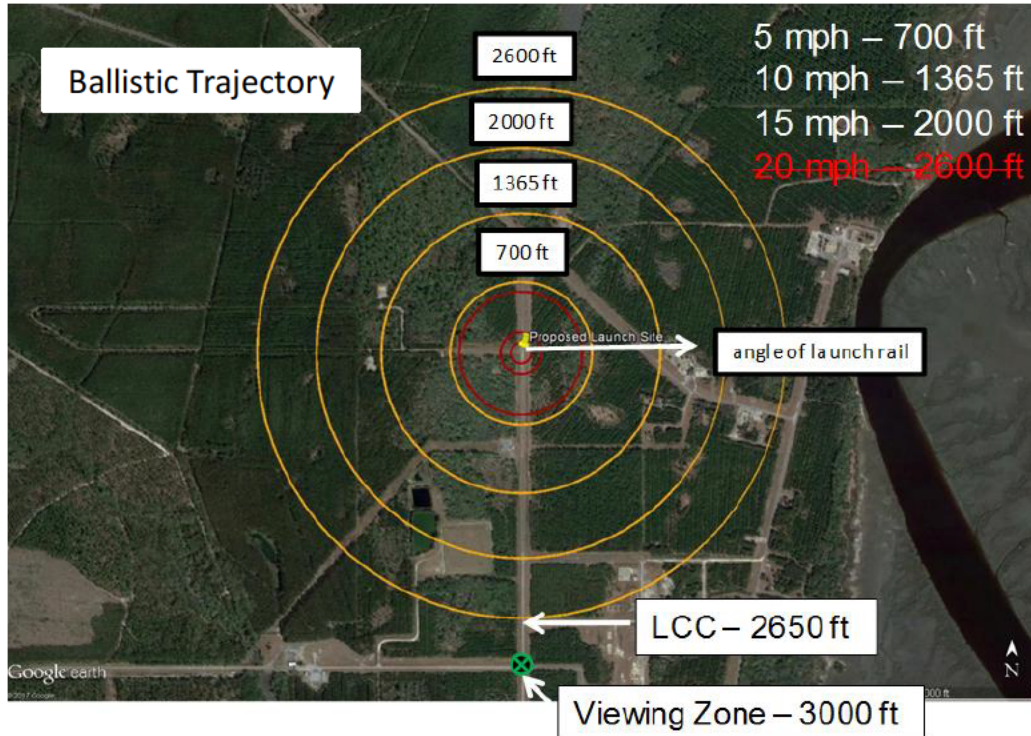


FIGURE 5. Estimated Ballistic Trajectory (no parachute deployment)

5. Situation Summary and Health and Safety Briefing:

REFER TO SAFETY MESSAGE ATTACHED AT END OF THIS CLP IN **NOTES** SECTION.

6. Prepared by: Name: _____ Position/Title: _____ Signature: _____

ICS 201, Page

Date/Time: _____

Updated by FDA 2/2011

1. Launch Customer / Launcher: VECTOR LAUNCH / B0.002	2. Launch Number (if applicable): SCC-2017-001	3. Estimated Date/Time: Date: 8/3/2017 Time: 0800 hrs local (TBD)
7. Current and Planned Objectives: The objectives of this launch activity are several, and include, but are not limited to, the following: <ol style="list-style-type: none">1. VECTOR – Development and technical shakedown test of rocket, operations, and crew training.2. CAMDEN – Initial development and exercise of processes and procedures for working with launch operators, local stakeholders, and other officials on a launch3. ALL - Protect the health and safety of the public and responders.4. CAMDEN - Ensure Site security is maintained from the air, land, and waterside to prevent unauthorized entry.5. ALL (AS APPROPRIATE) - Provide accurate information to news media and the public pre/post launch.6. ALL - Ensure fires or other hazards are eliminated.7. ALL - Ensure HAZMAT(s) are safely handled and removed prior to demobilization.		
8. Current and Planned Actions, Strategies, and Tactics:		
Time:	Actions:	
	SEE SECTION 9 FOR INDIVIDUAL ORGANIZATION'S PLANNED ACTIONS, ETC.	
6. Prepared by: Name: _____ Position/Title: _____ Signature: _____		
ICS 201, Page N/A		Date/Time: _____

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Last Updated – 31 July 2017

COMPREHENSIVE LAUNCH PLAN (IAW ICS 201), Adapted for CAMDEN EMA

1. Launch Customer / Launcher: VECTOR LAUNCH / B0.002	2. Launch Number (if applicable): SCC-2017-001	3. Estimated Date/Time: Date: 8/3/2017 Time: 0800 hrs local (TBD)
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9. Organizations

9.1 VECTOR LAUNCH SYSTEMS **(Radio ID: VECTOR)**

9.1.1 CONTACTS

9.1.1.1 Primary Point of Contact
 John Garvey, CTO, +1-562-234-1760, john.garvey@vector-launch.com
 (also, Mr. Garvey is the FAA Designated "Launch Control Officer" – LCO or his designee)

9.1.1.2 Other Contacts
 Alex Rodriguez, VP Gov / External Relations, +1-520-275-0519, alex.rodriguez@vector-launch.com
 George Regrutto, Onsite Logistics (starting Friday, 7/28), +1-520-444-0102

9.1.2 ROLE – Launch operator

9.1.3 RESPONSIBILITIES
 Vector Launch Systems (VLS) is the launch operator solely responsible for all aspects of safe handling (arrival, set up, clean up and removal), operating / launching (including fueling, defueling, launching, and any data collection, to name a few actions), and recovering the launch system under test, except as otherwise defined in this CLP that will be performed by other organizations. VLS is responsible for holding a Launch Readiness Review to include Camden County officials, between 48 and 24 hours prior to the proposed launch. VLS is fully responsible for their customers, other guests and personnel on the launch site and elsewhere. VLS is responsible for all interface with FAA and US Navy points of contact identified in the 27 June 2017 FAA Part 101 authorization, and its addendums, to launch the Vector-R experimental low altitude rocket in accordance with any and all requirements of the FAA or other government entities that regulate launch activities pursuant to the authorizations received. VLS is responsible for coordinating with Spaceport Camden POCs as defined in this CLP. VLS is responsible for executing an agreement with Camden County, and a site access agreement with the current owner of the property, Bayer Crop Science (BCS), with Camden County's facilitation. VLS is responsible for all media and media relations pertaining to this launch activity.

9.1.4 PRIMARY RESOURCES AND PLACEMENT
 Placement of the following VECTOR equipment will be as per the map in Section 4. The primary resources from VECTOR include:

- Launch Vehicle and Launch Support Equipment
- Communications Vehicle with Equipment
- Launch Control Center with Equipment
- Observers Station and Support Equipment

9.1.5 ACTIONS / CONTINGENCIES

(a) Arrival / Set up / Check Out

(b) Oversee Launch Readiness Review

(c) Perform site and flight familiarization discussions with observers and visitors, as appropriate and available.

(d) Launch and Recovery Operations, including all necessary VLS-specific communications IAW required FAA conditions of launch.

(e) Media relations and guest relations.

(f) Business operations, contracts, and related matters.

(g) Complete operations, clean up, & depart.

1. Launch Customer / Launcher: VECTOR LAUNCH / B0.002	2. Launch Number (if applicable): SCC-2017-001	3. Estimated Date/Time: Date: 8/3/2017 Time: 0800 hrs local (TBD)
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9.2 CAMDEN COUNTY – COUNTY ADMINISTRATOR / SPACEPORT CAMDEN **(Radio ID: SPACEPORT)**

9.2.1 CONTACTS

9.2.1.1 Primary Point of Contact

Steve Howard, County Administrator, +1-912-552-3788, showard@co.camden.ga.us
 Andrew Nelson, Spaceport Consultant, +1-617-899-8873, aanelson2@gmail.com

9.2.1.2 Other Contacts

Charles White, Emergency Response, +1-912-510-5993, cnwhite@co.camden.ga.us
 William Brunson, Parks Administration, +1-912-552-2904 (c), williambrunsonpsa@tds.net

9.2.2 ROLE – Launch site coordination

9.2.3 RESPONSIBILITIES

Camden County's Office of County Administrator is the primary focal point for the development and initial operation of Spaceport Camden County (SCC) on behalf of the Camden County Board of Commissioners. SCC is responsible for facilitating site access for all parties with the current owners of the properties that may be directly impacted by this activity (Bayer Crop Sciences (BCS) and Union Carbide Corporation (UCC)). SCC is responsible for facilitating the participation of other Camden County first responder units from the Camden County Sheriff's Department, and the Camden County Fire and Rescue Department. SCC will facilitate communications with the local US Navy presence in Camden County, as appropriate and necessary. SCC is responsible for providing other assets and support as agreed from time to time with VLS. SCC is responsible for any of their guests, employees, and/or contractors, who shall be on site and supporting or observing the launch operation.

9.2.4 PRIMARY RESOURCES AND PLACEMENT

Camden County / Spaceport team members will provide the following resources:

- Two (2) county owned ATVs, fuels / consumables, maintenance & support, initially at Main Gate.
- Informational graphics, support equipment and staff at the Main Gate and Observation Area.
- Observation Area equipment, forms of shelter, hygienic facilities, and staff.
- Basic essentials given the time of year (e.g., water, sunscreen, bug spray, etc.)
- Other consumables, hardware, support equipment, etc., as agreed to leading up to the operation.

9.2.5 ACTIONS / CONTINGENCIES

(a) Arrival / Set up / Check Out

(b) Coordination between other Camden personnel / resources, Vector, and any other necessary entities (e.g., Navy, land owners, abutters, invited guests, etc.)

(c) On site oversight of Camden and other visitors at Observation area.

(d) Participation in Launch Readiness Review.

(e) Ensure all equipment is in good working order, provide all consumables, fuel, and ensure personnel are equipped for principal safety measures while on duty.

(f) Clean up and removal of all items brought on to property.

1. Launch Customer / Launcher:
VECTOR LAUNCH / B0.002

2. Launch Number (if applicable):
SCC-2017-001

3. Estimated Date/Time:
Date: 8/3/2017 Time: 0800 hrs local (TBD)

9.3 CAMDEN COUNTY SHERIFF'S OFFICE (Radio ID: SHERIFF)

9.3.1 CONTACTS

9.3.1.1 Primary Point of Contact

Kevin Chaney, Captain, +1-912-552-4213, jkchaney@co.camden.ga.us

9.3.1.2 Other Contacts

Chris Sears, Lieutenant, +1-912-552-3714, acsears@co.camden.ga.us

Chuck Byerly, Chief Deputy, +1-202-590-6760, cdbyerly@co.camden.ga.us

9.3.2 ROLE – Site & Perimeter Monitoring and Security / Intervention

(b) (7)(F)



9.3.5 ACTIONS / CONTINGENCIES

- (a) Arrival / Set up / Check Out
- (b) Participate in Launch Readiness Review
- (c) Ensure all equipment is in good working order, provide all consumables, fuel, and ensure personnel are equipped for principal safety measures while on duty.
- (d) Perform monitoring / intervention duties on land and water as necessary, and report waterways “clear” or “not-clear” at time of launch.
- (e) Lead establishment of first responder communications network, coordinate with other necessary entities (fire, rescue, forestry, US Navy, Camden County / Spaceport).
- (f) Clean up and removal of all items brought on to property, and return watercraft to their original locations.

1. Launch Customer / Launcher: VECTOR LAUNCH / B0.002	2. Launch Number (if applicable): SCC-2017-001	3. Estimated Date/Time: Date: 8/3/2017 Time: 0800 hrs local (TBD)
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9.4 CAMDEN COUNTY FIRE & RESCUE w/ GEORGIA FORESTRY SUPPORT **(Radio ID: FIRE)**

9.4.1 CONTACTS

9.4.1.1 Primary Point of Contact

Mark Crews, Chief, +1-912-552-3810, mcrews@co.camden.ga.us
 Frank Allen, Chief Ranger, +1-912-390-1150, fmallen@gfc.state.ga.us

9.4.1.2 Other Contacts

Charles Lowther, Assistant Chief
 Mark Lain, Operations Captain
 Tina Ingles, Shift Supervisor / Battalion Captain

9.4.2 ROLE – Onsite Fire, Paramedic, and Forestry Support

9.4.3 RESPONSIBILITIES

The Camden County Fire & Rescue Department, with Georgia Forestry (CAMDEN FIRE) will provide support for safety and intervention, should an accident, fire, or other incident occur. With Georgia Forestry support, CAMDEN FIRE will assist VECTOR in retrieving the launch vehicle should it fall into a heavily forested area, using the Georgia Forestry tractor plow. CAMDEN FIRE will also participate in coordination, facilitation and review meetings prior to and after the launch operation. CAMDEN FIRE will work with CAMDEN SHERIFF to ensure the first responder communications system is operating correctly from and on the launch site property. (This does not include the VECTOR launch operations communication system. As part of the development of this CLP it will be investigated if these two systems should or could be connected so all first responders could monitor launch operations communications in real time).

9.4.4 PRIMARY RESOURCES AND PLACEMENT

The primary resources will be placed as defined on the map in Section 4. These primary resources to be utilized by CAMDEN FIRE include the following:

- 1- Fire Engine with 2 firefighters
- 1-Tanker-off Road capable, with 2 firefighters
- 1- Advance Life Support ambulance with 1 Paramedic and 1 EMT
- 1- Georgia Forestry tractor plow with operator
- 1-Fire Incident Commander
- 1-Military HUMVEE with a water tank, pump and hose line reel with 2 personnel assigned
- 1-Georgia Forestry Support Truck

Should the need arise to Air-Evac a person, the Harrietts Bluff First Baptist Church is a predetermined landing zone for Camden County air ambulances out of Jacksonville.

9.4.5 ACTIONS / CONTINGENCIES

- (a) Arrival / Set up / Check Out
- (b) Participate in Launch Readiness Review
- (c) Ensure all equipment is in good working order, provide all consumables, fuel, and ensure personnel are equipped for principal safety measures while on duty.
- (d) Perform fire, rescue, paramedic, and forestry related duties as necessary, and report “ready” or “not-ready” at time of launch. Also, assist Vector, using the Forestry plow, with retrieval of rocket if it lands in trees.
- (e) Coordinate with Sheriff’s office on first responder communications network establishment and operation.
- (f) Clean up and removal of all items brought on to property.

1. Launch Customer / Launcher: VECTOR LAUNCH / B0.002	2. Launch Number (if applicable): SCC-2017-001	3. Estimated Date/Time: Date: 8/3/2017 Time: 0800 hrs local (TBD)
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9.5 OTHER ORGANIZATIONS

9.5.1 OFFICIAL NOTIFICATIONS PER FAA PART 101 WAIVER BY VECTOR LAUNCH

9.5.1.1 ONE TO THREE DAYS PRIOR TO LAUNCH

LEIDOS Flight Service Station, +1-877-487-6867, to issue NOTAM (Notice to Airmen)

9.5.1.2 ONE HOUR, AND 15 MINUTES PRIOR TO, & UPON TERMINATION, OF LAUNCH

SUBASE KINGS BAY – ROBERT TIGHE, +1-912-573-9694 (o), +1-912-674-6822 (c) robert.j.tighe@navy.mil
 Alternate Contact: On Duty Watch Commander +1-912-674-6831 (c) (no email avail for ODWC)

SWFLANT – CDR GEORGE PORTER, +1-912-573-4174 (o), +1-912-409-5707 (c), george.porter@swflant.navy.mil

FACSFAC JAX – LCDR O.L. CHAMBERS, +1-904-542-2027, odarius.chambers@navy.mil
 (Fleet Area Control & Surveillance Facility Jacksonville)

FAA JACKSONVILLE ARTCC, +1-904-845-1537 (no name or email provided)

FAA JACKSONVILLE TERMINAL RADAR APPROACH CONTROL, +1-904-741-0767 (no name or email provided)

9.5.2 SITE OWNERS

9.5.2.1 BAYER CROP SCIENCES (BCS)

A representative(s) of BCS will be onsite to observe and ensure compliance with access agreements put in place for this activity. BCS currently has third party security on site 24/7 and will continue to provide this during this activity. The primary POC for BCS is: David Pitman, +1-912-222-7967, david.pittman.ext@bayer.com

9.5.2.2 UNION CARBIDE CORPORATION (UCC) / DOW CHEMICAL

A representative(s) of UCC may be onsite to observe and ensure compliance with access agreements put in place prior to, and potentially for, this activity. The primary POC for UCC is: Tim King, +1-304-389-2371, kingta@dow.com

9.5.3 OTHER INTERESTED PERSONS

9.5.3.1 US NAVY

Captain Dan Rochford, Commanding Officer, SWFLANT, +1-912-573-4173 (o), +1-912-674-9556 (c), francis.rochford@swflant.navy.mil
 Mr. Mark Rector, Public Affairs, SWFLANT, +1-912-573-2623 (o), +1-912-409-5834 (c), john.rector@swflant.navy.mil
 Mr. Russell Byrd, CPLO Kings Bay, +1-912-573-1675 (o), russell.i.byrd@navy.mil

IN NOTES: SEE ADDITIONAL USN/USMC CONTACTS FOR GENERAL INFORMATION

1. Launch Customer / Launcher:
VECTOR LAUNCH / B0.002**2. Launch Number (if applicable):**
SCC-2017-001**3. Estimated Date/Time:**
Date: 8/3/2017 Time: 0800 hrs local (TBD)**9.6 CROSS ORGANIZATION COMMUNICATIONS**

This section defines the real time data and voice communications capabilities that will be utilized during the activity. In addition, Vector may have a real time video link via the internet that persons can monitor online. This is being worked on, and if it is realized, will be included in this CLP. For general communications the US Navy will be connected to the site via cell phone between Vector Launch Control and SWFLANT (CDR George Porter or his designee), who will then communicate on to other Sub Base personnel.

9.6.1 ORGANIZATION'S RADIO IDENTIFICATIONS

Each Organization will have radio identifiers as described below.

Organization	Voice Comms Identifier	Example Functions
Vector Launch System	Vector <function>	Vector Launch Control
Camden Spaceport	Spaceport <function>	Spaceport Administrator
Camden Fire	Fire <function>	Fire Tanker
Camden Paramedics	Paramedic <function>	Paramedic Observer Site
Camden Sheriff	Sheriff <function>	Sheriff North Boat
Georgia Forestry	Forestry <function>	Forestry Plow

9.6.2 COUNTY RADIO FREQUENCY / RADIO COMMUNICATIONS PLAN – VOICE

System/Cache	Channel	Function	Frequency/Tone	Assignment	Remarks
(b) (7)(F)					

9.6.3 VECTOR RADIO FREQUENCY / RADIO COMMUNICATIONS PLAN – VOICE / DATA / VIDEO / OTHER

The Vector voice, data and video communications frequency usage is planned as follows:

(b) (7)(F)

6. Prepared by: Name: _____ Position/Title: _____ Signature: _____

ICS 201, Page N/A

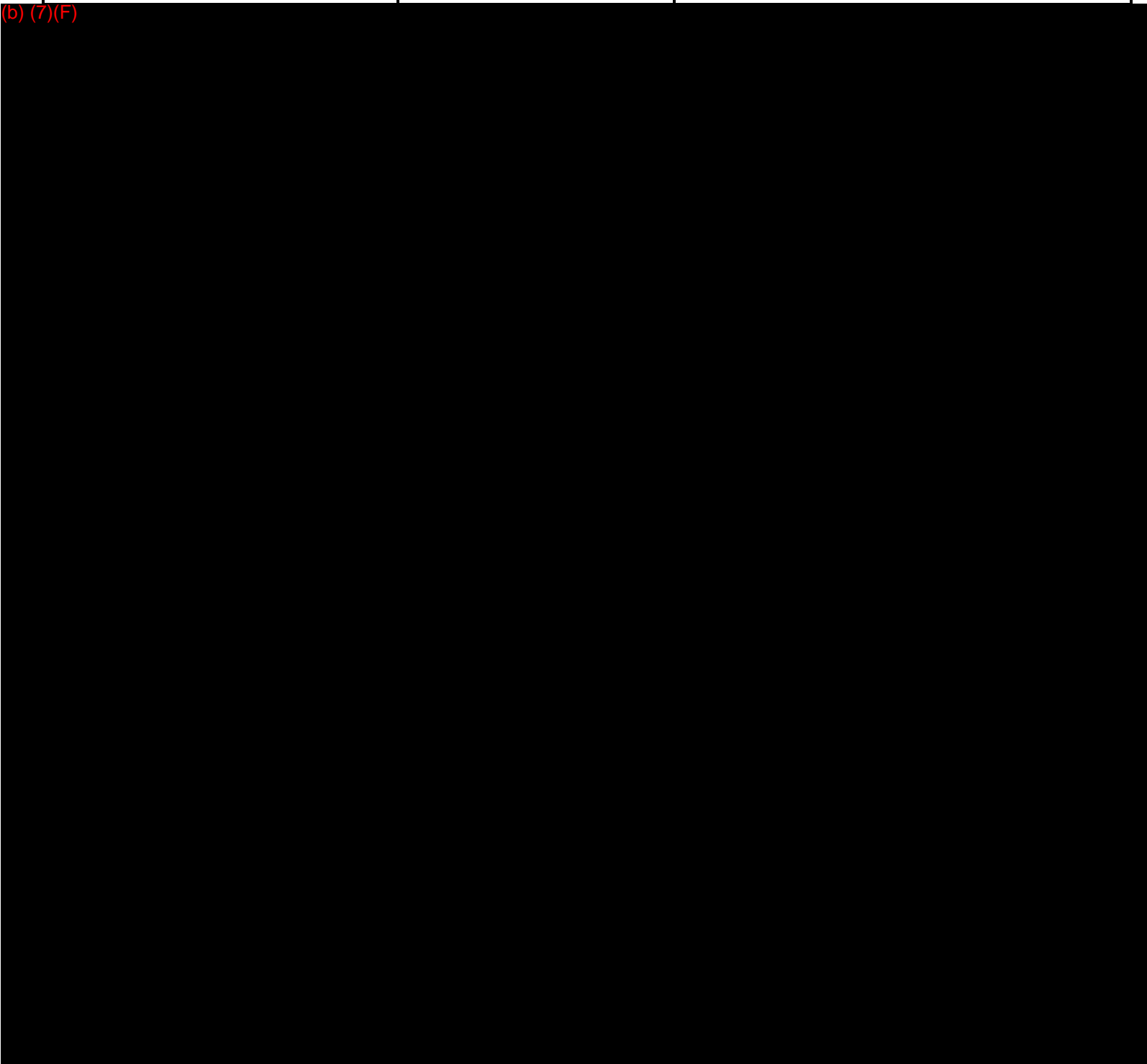
Date/Time: _____

Updated by FDA 2/2011

COMPREHENSIVE LAUNCH PLAN (IAW ICS 201), Adapted CAMDEN EMA

1. Launch Customer / Launcher: VECTOR LAUNCH / B0.002	2. Launch Number (if applicable): SCC-2017-001	3. Estimated Date/Time: Date: 8/3/2017 Time: 0800 hrs local (TBD)
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(b) (7)(F)



6. Prepared by: Name: _____ Position/Title: _____ Signature: _____	
ICS 201, Page N/A	Date/Time: _____

Updated by FDA 2/2011

NOTES:

FROM SECTION 5: Safety Message/Expanded Safety Message, Safety Plan, Site Safety Plan:

- All personnel must receive initial briefing morning of operations regarding overall operation and specific mission they are assigned.
- Upon assuming physical posting, test communications and assess surrounding areas for hazards. Identify /report hazards (likely to result in negative impacts)
- All personnel will remain aware of launch cycle, paying attention to equipment or debris falling via canopy, or other debris from overhead, taking any necessary protective actions. Radio communications will be conducted for Go / No-Go status as well alert to final countdown for launch.
- Remain aware and report location of any debris observed from assigned post, monitoring for fire or other hazard.
- HAZMAT will be handled by trained personnel, using proper PPE.
- Keep hydrated; ensure adequate supply of water is available (drink enough water). If drinking Gatorade or similar products use a 2:1 ratio (2 quarts water to 1 quart of Gatorade).
- Officers should bring a meal with them and or snacks that are small enough to fit into a cargo pocket
- Maintain communications with adjoining teams, and supervisors.
- Traffic vests should be used when operating on or near roadways for added visibility.
- Officers should bring tick and bug spray. A product containing DEET is recommended. Make a supervisor aware of tick bites.
- Snakes, poisonous and non-poisonous, are known to the area as well as alligators. Look before walking or placing your hand into an area.
- Consider all aspects of current and future situations

WEATHER TBD:

- Weather forecast will be provided prior to final IAP dissemination, and should be used as a guide for protective clothing or measures.

From 9.5.3.1 – Additional USN / USMC CONTACTS:

LtCol Martinez

David.Martinez@SWFLANT.navy.mil

[912-409-0906](tel:912-409-0906)

LCDR Foster

James.foster@swflant.navy.mil

[912-409-1455](tel:912-409-1455)

Maj Juarez

Eric.Juarez@SWFLANT.navy.mil

[912-674-5630](tel:912-674-5630)

Maj Fletcher

Austin.Fletcher@SWFLANT.navy.mil

[912-409-5000](tel:912-409-5000)

Capt Martin

Kevin.Martin@swflant.navy.mil

[912-409-9393](tel:912-409-9393)

LT Fogel

Paul.Fogel@SWFLANT.navy.mil

[912-409-9376](tel:912-409-9376)

Capt Angel

Matthew.Angel@SWFLANT.navy.mil

[912-409-1151](tel:912-409-1151)



Attachment 10

Population Monitoring and Management Plan



Population Monitoring and Management Plan

14 January 2020

GORA EXEMPT – SECURITY INFORMATION
FOIA EXEMPT – SECURITY INFORMATION

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Revision History:

1/14/20	Original issue of this document. Material previously contained within the LSOL application of 1/25/2019, submissions to FAA/AST and additional material developed in response to FAA/AST inquiries between January and December 2019.
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SECTION 1 – INTRODUCTION

Spaceport Camden has prepared this Population Monitoring and Management Plan (PMMP) for use in and around Spaceport Camden during hazardous operations. The resultant data generated by this plan on day-of-launch will inform the Launch Facility Operations Director (also known as the “launch director”) or a designee, if pre-determined population related thresholds are exceeded. These pre-determined population thresholds are identified to maintain safe cumulative risk limits (also known as “expected casualty” or “public risk limits”) during hazardous launch site operations in accordance with Title 14 of the Code of Federal Regulations (CFR) Part 420 for a Launch Site Operator License (LSOL) and Parts 415/417 for a Launch License.

The following paragraphs describe how Camden County will account for and manage the process to determine day-of-launch populations on Little Cumberland Island (LCI), Cumberland Island (CI), and the waters surrounding these islands, to ensure that cumulative risk limits are not exceeded.

1.1 FAA/AST Request for PMMP

This PMMP is required to address the concerns expressed by FAA/AST regarding the active monitoring and management of population that may be present on, and migrate to and from, Little Cumberland Island (LCI) and Cumberland Island (CI), during hazardous launch operations at Spaceport Camden. The original inquiry from FAA/AST stated:

“We need information on how the number of people on LCI and Cumberland Island would be accounted for and managed to ensure that the public risk limits are not exceeded.”

1.2 Regulatory Justification for Request (14 CFR § 413.13)

Although a PMMP is not a required submission under the LSOL regulations of 14 CFR Part 420 (or Parts 415/417), the FAA may request, pursuant to 14 CFR § 413.13 *“additional information necessary for a determination that public health and safety, safety of property, and national security and foreign policy interests of the United States are protected during the conduct of a licensed or permitted activity.”* This PMMP is one such request.

SECTION 2 – POPULATION MANAGEMENT AND MONITORING

2.1 Generation of Population Threshold Data by Launch

For every launch at Spaceport Camden there is an Incident Command System (ICS) Form 201 compliant document prepared by the launch stakeholders (led by Spaceport Camden) called the Comprehensive Launch Plan (CLP).¹ Within the CLP, one of the analysis products for an orbital launch will be a launch operator generated, and FAA/AST approved, determination of the maximum population that may be accommodated on LCI and CI, given appropriate characteristics for the launch vehicle, payload, trajectory, weather, and other factors included in an FAA/AST approved launch license. These maximum population determinations will serve as the basis for the maximum allowable populations on LCI, CI and the surrounding waters for day-of-launch. Should population estimates exceed these allowable limits, a launch hold would be implemented until populations have been reduced below the agreed upon limits.

2.2 Population Monitoring and Management (M/M)

The following is the description of the process to be used to monitor and manage populations that enter LCI, CI and the surrounding waters. For ease of understanding and considering various regulatory frameworks and necessary working arrangements, the M/M of population is broken down into four (4) zones: 1) Water, 2) Cumberland Island, 3) Little Cumberland Island, and the 4) Rest of the Area (ROA). These zones are shown in Exhibit 1 and are described in the following paragraphs based on their characteristics, lead-agency, supporting organizations, and the methods used to perform M/M operations.

¹ See Spaceport Camden's Launch Site Operator License (LSOL) application, Attachment 9, for an example of a CLP used in a suborbital launch performed at Spaceport Camden under Part 101.

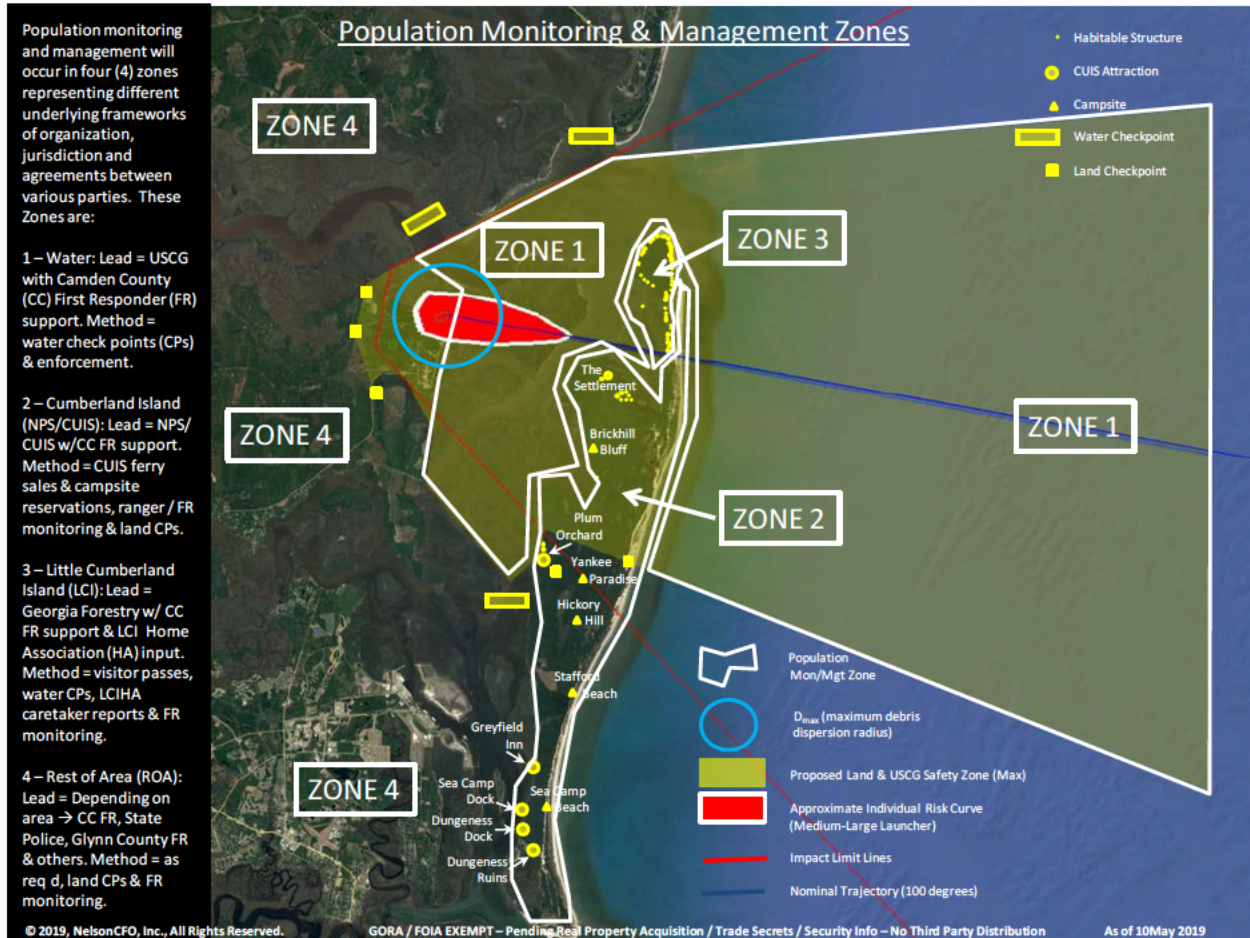


Exhibit 1. Spaceport Camden Population Monitoring and Management Approach

2.2.1. ZONE 1 – Water

On day-of-launch, the waters surrounding LCI and CI shall be subject to United States Coast Guard (USCG) safety zone rules promulgated by the Captain of the Port (COTP) Savannah in accordance with provisions of the Code of Federal Regulations (CFR), specifically, 33 CFR § 165.20, and in accordance with the USCG-Camden County Letter of Agreement (LOA) found as Attachment 3 to the Spaceport Camden LSOL application. Exhibit 1 uses the largest proposed USCG Safety Zone currently under evaluation that includes all of the envisioned trajectories from Spaceport Camden referenced in the Draft Environmental Impact Statement (DEIS)² (Attachment 1 to the Spaceport Camden LSOL application) and the largest launcher to be used from Spaceport Camden. Zone 1 is the water areas defined by the USCG Safety Zone.

Pursuant to the Spaceport Camden Access Control Plan (Attachment 5 to the Spaceport Camden LSOL application), these areas will be monitored by USCG authorized water craft at designated check points (CPs) that have enforcement authority granted to them under Coast

² March 2018.

Guard regulations (33 CFR § 165.20) and further addressed within the Spaceport Camden-USCG LOA (Attachment 3 to the Spaceport Camden LSOL application). All craft who wish to proceed through or within the Safety Zone must present appropriate credentials or otherwise be authorized by a launch official or the COTP's representative on the USCG-authorized water craft.

Craft and their population will be reported to a central launch population M/M desk that will be the point of contact for up-to-date population counts to the launch director. Assisting in the monitoring of the water areas will be other authorized first responder craft, video surveillance from Spaceport Camden property, and launch-day staff pre-positioned on CI, LCI, and Jekyll Island. If needed, fixed wing and/or drone aircraft (appropriately authorized under FAA rules) will also be utilized. These supporting elements will report observed (and if necessary, estimated) populations to the central launch population M/M desk so they are accounted for and managed, as appropriate.

2.2.2. ZONE 2 – Cumberland Island

Cumberland Island is managed and controlled by the National Park Service (NPS), Cumberland Island National Seashore (CUIS) staff. Currently, CUIS utilizes Camden County (CC) first responders (FRs) for enforcement purposes, including the pre-positioning of equipment, vehicles and material on CI. This existing mutual aid arrangement will be utilized for day-of-launch support where NPS/CUIS will be the lead agency supported by CC FRs. The primary method of population M/M will rely on CUIS's existing monitoring systems and the fact that there is a limit of 300 visitors allowed on Cumberland Island per day and an overwhelming majority uses the paid ferry system to the island. The number of overnight campers (who also use the ferry system) is known through the reservation and check-in system used by the CUIS staff. The number of ferry passengers is known by the ticket sales and boarding counts taken on the ferry. It is noted the 300 per day limit includes visitors who arrive by private boat and are not one of the limited number of residents or guests of the only inn on the island. Private arrivals on the island will be monitored by CC FRs and NPS/CUIS rangers. These observations will be augmented by CC FR and Ranger patrols prior to launch, launch-day staff pre-positioned at CPs between Plum Orchard, Yankee Paradise Campground and the beach in the central-north section of the island, and if necessary, fixed wing and drone aircraft operating under FAA regulations. From these various sources of data, population will be reported to a central launch population M/M desk that will be the point of contact for up to date population counts to the launch director.

2.2.3. ZONE 3 – Little Cumberland Island

The only access to LCI is by boat. For boats of a typical monohull draft design, access to LCI is achieved around high tide to the only boat dock³ on the island. For shallow hulled watercraft access may be achieved at any time to the LCI dock or the northern and eastern beaches of LCI across shallow flats.

The lead government agency for LCI is the Georgia Forestry Commission's (GFC's) southeast regional command. The GFC has entered into an agreement with LCI Home Association (LCIHA), for emergency services, safety, rescue, and monitoring of population that is documented in a Letter of Coordination (LOC). The LCIHA employed caretaker(s) will serve as the primary point of contact for regular and emergency contact procedures developed under the LOC. Through established mutual aid agreement(s), Camden County supports GFC in this activity and others.

Through the LOC the regular reports of current population (owners and visitors) on LCI will be made to GFC and the CC Emergency Management Agency. Augmenting this reporting will be data from the planned day-of-launch USCG Safety Zone and shore-based video surveillance (and if employed, drone and/or fixed wing aircraft) operations described above for Zone 1.

In order to travel to LCI through the Safety Zone, a watercraft and its occupants will need to show pre-authorization as a property owner or registered guests of an owner.

A tertiary M/M strategy may include CC FRs presence on LCI who will make additional independent population observations.

From these various sources of data, population will be reported to a central launch population M/M desk that will be the point of contact for up-to-date population counts to the launch director.

2.2.4. ZONE 4 – Rest of Areas (ROA)

There is little anticipated impact from the ROA on the public risk limits as these areas are well outside of the widest anticipated impact limit lines of a launch from Spaceport Camden. There is no anticipated plan to estimate or report Zone 4 populations on day-of-launch. However, M/M of spectator populations in non-hazardous operation areas is an important public service function included as part of a larger overall population M/M plan that helps to prevent inconvenient traffic patterns that may be created on the day of launch.

³ LCI boat dock access is via the Cumberland River (Intracoastal Waterway) from the western side of the island through a shallow channel that winds its way through the marsh.

The Director of the CC Emergency Management Agency (CEEMA) is responsible for developing and implementing CC local emergency operations plans. Through implementation of a unified command structure, the Director of CEEMA centrally coordinates all events and incidents that may impact public safety, including those where multiple jurisdictions are involved.

Zone 4 encompasses all land and water outside of the area directly affected by Zones 1 – 3. The CEEMA director delegates the M/M of road flow and potential congestion during launch operations in Zone 4 during day of launch operations to the county sheriff's office pursuant to National Incident Management System (NIMS) doctrine. NIMS provides a common, nationwide framework that enables the whole community to work together to manage all threats and hazards. NIMS applies to all incidents, regardless of cause, size, location, or complexity. The NIMS utilizes the Incident Command System (ICS) approach that defines all aspects of incident / event management through use of standardized ICS approved forms. The ICS is scalable and modular, allowing Camden County to collapse or expand, as necessary, to manage complex events.

Spaceport Camden launches are organized and planned utilizing the ICS-compliant CLP process. Methods of M/M are anticipated to include common tactics employed today for events and incidents including: road flow changes, CPs, and FR monitoring and interdiction, as necessary. The CLP process incorporates and utilizes common practices already in place across all local and regional first responders and government agencies to manage issues such as road flow and potential congestion. Anticipated participating agencies and their agreed upon roles and responsibilities for Zone 4 are provided in the following exhibit.

Agency	Roles and Responsibilities
Camden County Sheriff's Office	Road Closure on Union Carbide Road near Spaceport Camden's main gate and any identified flow control issues elsewhere in the county
Camden County Fire & Rescue	Staged for response
Georgia Forestry Commission	Staged for response
NPS/CUIS	Notification / Awareness
Naval Submarine Base Kings Base	Notification / Awareness
Strategic Weapons Facility Atlantic	Notification / Awareness
Georgia Department of Natural Resources (includes Crooked River State Park)	Notification / Awareness
Glynn County Emergency Management Agency	Notification / Awareness
Georgia Emergency Management Agency – State Operations Center Duty Officer	Notification / Awareness
Georgia State Patrol	Notification / Awareness
Georgia Department of Transportation	Notification / Awareness

Exhibit 2. Zone 4 Anticipated Participating Agencies & Agreed Upon Roles / Responsibilities

SECTION 3 – CONCLUSIONS

The processes described above for M/M of populations on day-of-launch will be pre-coordinated through the ICS-201 compliant CLP process employed by Spaceport Camden. The provisions of this population M/M plan will be integrated into the overall CLP and executed. Through the utilization of the USCG Safety Zone and the concomitant enforcement provisions there under, unauthorized vessels will be kept from LCI and CI and Zone 1 waterborne craft (and persons) will be accounted for on day-of-launch. For Zone 2, and augmenting the USCG CPs, on CI there will be NPS/CUIS's robust daily data on campers, ferry passengers, and private boats who visit the CUIS docks, which will be further augmented by ranger / FR patrols and land CPs. For Zone 3, on LCI, those vessels authorized to carry pre-registered visitors and property owners will go through the appropriate water CP and be counted. Augmenting this data will be information received under the GFC's LOC agreement with LCIHA. If needed, CC FRs on LCI may also monitor population, as needed. All of these data will be reported to launch control for use in determining if cumulative (public) risk limits have been exceeded.



Attachment 11

Little Cumberland Island Fire Mitigation Plan



Little Cumberland Island Fire Mitigation Plan

14 January 2020

GORA EXEMPT – SECURITY INFORMATION
FOIA EXEMPT – SECURITY INFORMATION

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Revision History:

1/14/20	Original issue of this document. Material previously contained within the LSOL application of 1/25/2019, submissions to FAA/AST and additional material developed in response to FAA/AST inquiries between January and December 2019.
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SECTION 1 – INTRODUCTION

Spaceport Camden has prepared this Little Cumberland Island (LCI) Fire Mitigation Plan (FMP) for use during Spaceport Camden launch operations.

1.1 FAA/AST Request for LCI FMP

This LCI FMP is required to address the concerns expressed by FAA/AST regarding risk from fire on Little Cumberland Island (LCI) during liquid rocket engine powered launch operations from Spaceport Camden. The original inquiry from FAA/AST stated:

“As a result of our application review, and a site visit conducted by AST personnel, it was determined the risk from fire should be included in the LSOL risk analysis. Little Cumberland Island (LCI) is heavily lined with saw palmetto underbrush, and firebreaks are difficult to maintain. If a fire were to start due to a mishap or incident, it could quickly spread and would be difficult to contain. LCI’s existing firefighting capability is limited. Also, island egress from LCI is a concern as the only access to the island is by boat and LCI’s dock is located in a tidal stream. The Dock cannot be accessed two-hours before or after low tide. This creates a situation in which evacuation and emergency services may not be feasible.”

1.2 Regulatory Justification for Request (14 CFR § 413.13)

Although a FMP is not a required submission under the LSOL regulations of 14 CFR Part 420 (or Parts 415/417), the FAA may request, pursuant to 14 CFR § 413.13 *“additional information necessary for a determination that public health and safety, safety of property, and national security and foreign policy interests of the United States are protected during the conduct of a licensed or permitted activity.”* This LCI FMP is one such request.

SECTION 2 – BACKGROUND REGARDING LCI AND FIRE

2.1 LCI and the National Park Service (NPS)

During the creation of Cumberland Island National Seashore (CUIS), Little Cumberland Island was incorporated into the lands of the new national park by the formation legislation. However, owners of cottages on Little Cumberland Island negotiated the continued occupation of the properties pursuant to an agreement entered into in 1975. The agreement between the Little Cumberland Island Homes Association (LCIHA) and the United States of America, acting by and through the Secretary of the Department of the Interior, requires LCIHA to perform mitigation activities for “Fire and Fire Control” and “Timber” by employing certain forest management practices, including prescribed burning

and removal of timber impacted by disease, insects or natural causes (e.g., severe weather).¹

LCI has been identified by NPS/CUIS as Fire Management Unit (FMU) #3 in their Fire Management Plan (see Exhibit 1).² As seen in Exhibit 1, LCI is located north of the larger Cumberland Island, with Christmas Creek and marsh separating the two. While LCI is within the Cumberland Island National Seashore boundaries, it is privately owned throughout and is managed by its own homeowners' association, the aforementioned LCIHA. In consideration of its ownership, management, and jurisdiction, LCI has been designated by the NPS as a distinct FMU, encompassing approximately 3,437 acres (see Exhibit 1). The boundaries of the LCI FMU are Christmas Creek and marsh to the south, Cumberland River to the west, St. Andrews Sound to the north, and the Atlantic Ocean to the east. The NPS is considered a cooperator with Camden County and the Georgia Forestry Commission (GFC) as lead agency, for fire management of this FMU.

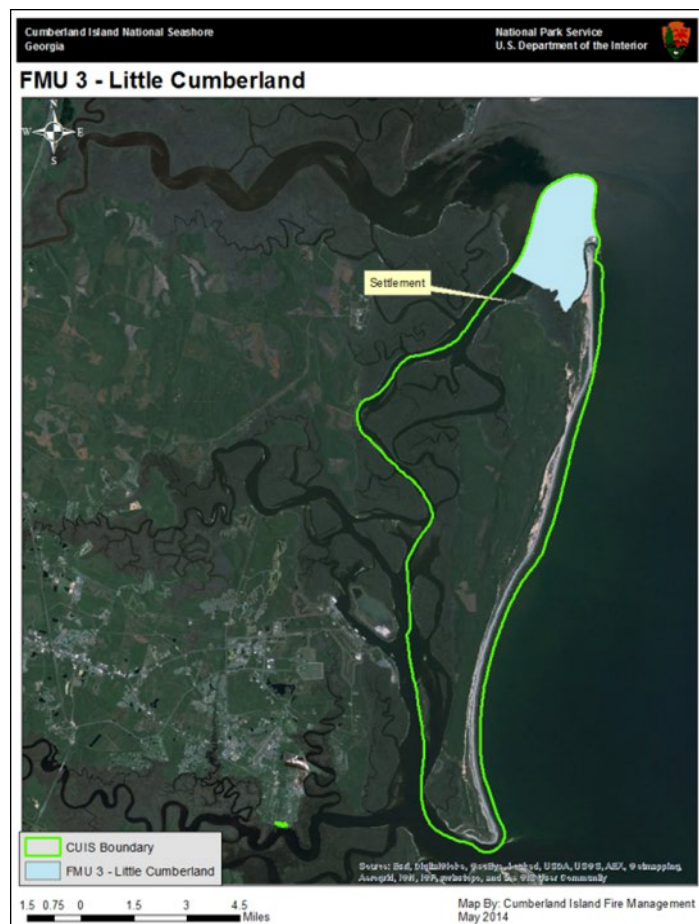


Exhibit 1. FMU #3, Little Cumberland Island (Source: NPS, CUIS FMP, 2015)

¹ Agreement between the LCIHA, Inc. and the USA (Department of Interior), in lieu of taking by imminent domain by the USA, 30 pages (1975).

² "Cumberland Island National Seashore Fire Management Plan," National Park Service, 88 pages (2015).

2.2 Existing Conditions, Fire Fighting Capability & GFC/CC Ability to Fight Fires on LCI

Camden County has assessed LCI's indigenous firefighting capability and Camden County generally concurs with the FAA assessment that existing capability to fight fire is limited, noting that the limitations have existed throughout the years, back to the original signing of the 1975 agreement.

Camden County recognizes fire on LCI from lightning strikes and or man-made causes has occurred in the past, as documented by NPS/CUIS in their analysis shown as Exhibit 2, and may occur in the future. The NPS exhibit indicates two fires occurred on LCI between 1977 and 2013 while over 60 fires occurred on Cumberland Island in the same period.

Camden County also recognizes that the risk of fire on LCI may be greater due to a lack of prescribed (controlled) burns since the 1975 agreement. Although the benefits achieved via controlled burns within the mostly Maritime Forest (oak tree canopy and various groundcover (vegetation) that includes saw palmettos) found on LCI may be less than for pine forests that are more common to South East Georgia, such burns are beneficial.³



Exhibit 2. Historic Fires on LCI and CI 1977-2013 (Source: NPS, CUIS FMP, 2015)

³ Fire conditions (fuel), may vary to some degree, depending on moisture content, height of vegetation, type of vegetation and trees, and other atmospheric conditions. Fire danger ratings are calculated on a day-to-day basis and are subject to change with weather conditions.

Camden County works in partnership with the GFC, who is recognized as the lead agency within Camden County for all woodland wildfire response, as well as public awareness, education and mitigation efforts. During the all-hazards assessment and response planning efforts carried out by Camden County Emergency Management, Camden County Fire Rescue, with GFC consultation, it was concluded that although fuel loading in some areas of LCI is considered high, fire incidents on LCI would in all likelihood be slow moving due to the nature of the Maritime Forest. Where ground firefighters are deployed on the Island in a timely manner with appropriate equipment (i.e., wheeled water ‘buffalo’ carriers [see Exhibit 3] with access to artesian wells), attack/ defense strategies would have a high probability of success. Relatively flat terrain, expansive beach access via landing craft, coupled with no natural gas pipelines and limited on-grid electric utilities, further decreases the fire hazard, while enhancing response effectiveness.



Exhibit 3. Current Type of Water Buffalo on LCI

LCI has a water buffalo permanently stationed on the island, but it has been inoperable (pump / motor). The LCI water buffalo is being repaired at County expense for re-deployment to LCI.

SECTION 3 – LCI / CI LAUNCH RELATED FIRE RISK ASSESSMENT

This section addresses risk factors on LCI and CI related to launch from Spaceport Camden.

3.1 Weather Related Risk Factors and Fire

Lightning and wind are the primary weather concerns contributing to naturally occurring fires on LCI and CI. Strong wind is also a principle concern to man-made fires.

These same weather factors are assessed for risk to the rocket and payload during launch operations. Inclement weather (rain, ice, snow, lightning or the presence of static electrical buildup prior to lightning) is the cause of rocket launch abort. So when there is a danger of lightning in the vicinity of a launch pad (and in the presence of sensitive electronics/fuel and an increased probability of strike during launch) rockets are not launched. Therefore, the risk of fire on LCI / CI from a rocket launch is reduced in the presence of inclement weather. The greater concern for LCI / CI is from lightning itself.

The presence of strong low and high altitude winds (that cause high aerodynamic loads), with or without other weather affects (rain, lightning, etc.) is also a danger to launch operations. Low level (altitude) winds are also a principle cause of concern for the spread of fire. Since launch operations cannot occur in strong winds, the risk of fire from a launch incident is also reduced due to the lack of strong winds.

Therefore, the probability of a launch failure in inclement weather or high winds is remote because the probability of a launch in such conditions is *de minimis*.

3.2 Launch Related Fire Risk in Good Weather on LCI / CI

The probability of a launch failure in good weather conditions causing a fire on LCI / CI is also considered remote, given the nature of liquid rocket engine powered vehicle failures (both probability and how rockets fail along the trajectory) and the trajectory these vehicles fly. The limitation of operations to small launch vehicles with relatively low fuel loads also causes the probability of fire due to an incident to fall dramatically versus larger rockets.

A typical trajectory starts with a nearly vertical climb for 45-75 seconds, and then slowly tips horizontally, continuing to gain altitude until it achieves orbit. At the proposed Spaceport Camden, when the rocket approaches Cumberland Island or LCI, it should be between 70,000 and 100,000 feet above the Island and take between 6-10 seconds to cross the island. The instantaneous impact point (IIP) also clears the island from west to east in about 5-7 seconds of dwell time. The IIP is the projected landing spot of the rocket should thrust be terminated at that instant.

Exhibit 4 below depicts a typical launch trajectory modeled by The Aerospace Corporation. Most of the initial vertical ascent (between 45-75 seconds depending on the rocket and trajectory) takes place almost directly over the launch pad and/or within the boundary of Spaceport Camden. For the specific trajectory modeled by Aerospace Corporation, around 60 seconds into flight the IIP starts to cross the western edge of Cumberland Island, taking about 5-7 seconds to reach the Atlantic Ocean (the “IIP dwell time”). The rocket then enters the airspace directly above Cumberland Island at an altitude of approximately 72,000 feet and departs 6-10 seconds later at about 97,000 feet. During this physical crossing, should an incident occur, the probability of the rocket or debris impacting the island is extremely remote.

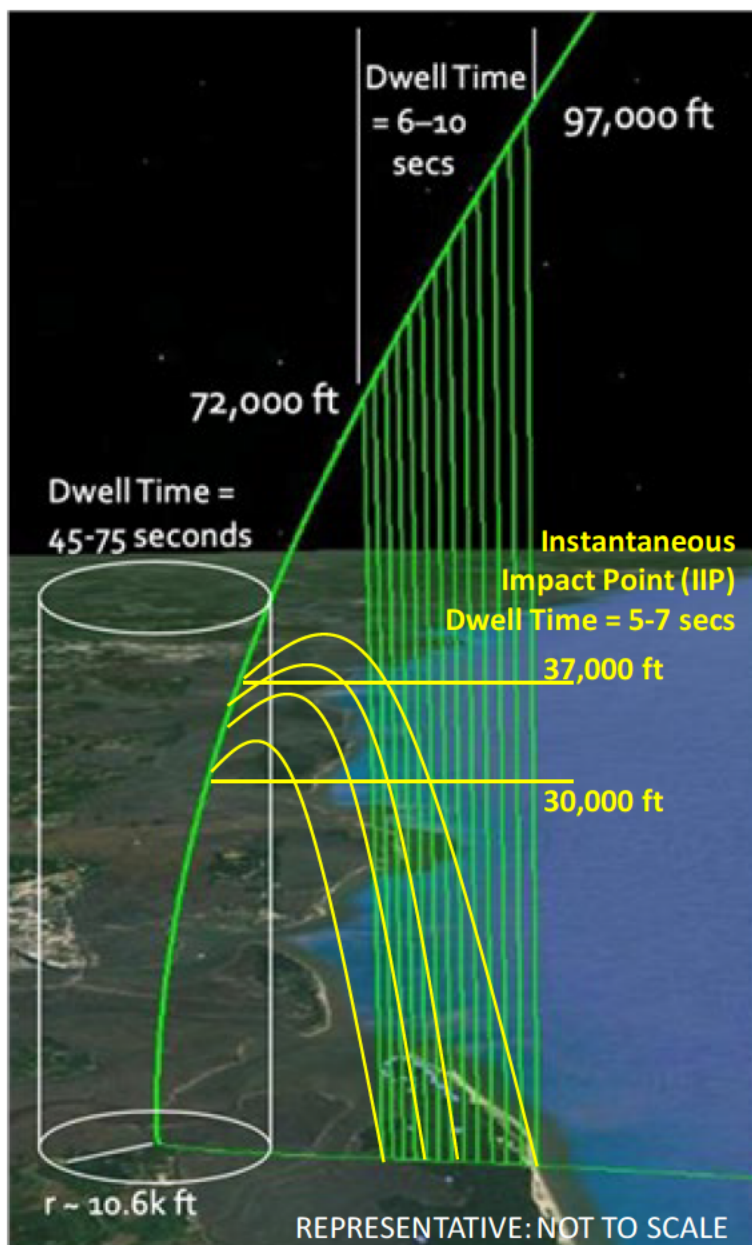


Exhibit 4. Representative Launch Trajectory with Cumberland Island and LCI Flyover

The nature of liquid-fueled rocket failures also limits the risk of fire caused by an accident. The most probable cause of a fire from a rocket failure is an intact impact – the entire rocket falls onto the land as one piece and the remaining fuel ignites. Given the distance from the launch pad (between 5-7 miles) and the height of the rocket along the trajectory in order to make the island in the case of a failure, it is highly unlikely the rocket will fall all the way to the Earth without breaking up due to atmospheric stresses or a triggered range destruct signal from the automatic flight termination system. Such intact impacts typically only occur very near the launch pad.

In the 300,000 Monte Carlo cases evaluated by The Aerospace Corporation, for each trajectory evaluated in the Spaceport Camden flight safety analysis, there was no intact impacts experienced on the islands. All failures resulted in mid-air breakup due to high loads exceeding the structural limits ($Q\alpha$ – “que-alpha”) of the automatic flight termination system destroying the rocket in flight. To be clear, in no case was there an intact impact on LCI or CI in the flight safety analysis. Therefore, this most likely failure scenario limits the probability of fire from launch accidents on the island(s) to near zero.

As communicated by the FAA at the December meeting in Washington D.C. to Spaceport Camden representatives, FAA/AST have further confirmed these results in their own flight safety analysis of launch failures, with no intact impacts from launch occurring on LCI or CI.

SECTION 4 – FIRE IMPACT MITIGATION STRATEGIES

The following addresses fire impact mitigation strategies to be followed by Spaceport Camden.

4.1 Fire Fighting Equipment

As noted earlier, Camden County’s initial assessment of LCI fire risk and response capability revealed that the current fire-fighting apparatus, i.e., water buffalo (Exhibit 3) stationed on LCI did not work due to an inoperable pump and motor. Camden County agreed to assist the GFC in bringing this apparatus back online to support potential firefighting response. As of this writing, Camden County has agreed in writing with the GFC to assume cost for all apparatus repairs, with GFC responsible for work completion and return to service on LCI. . Camden County is also assessing the need to procure and strategically deploy a second water buffalo on LCI, should the GFC make this recommendation.

Launch day planning would include pre-staging firefighters/EMTs with equipment, to include fire-fighting All-Terrain Vehicles (ATVs) on stand-by ready marine landing craft (see Exhibits 5, 6 and 7).



Exhibit 5. Fire Fighting ATV



Exhibit 6. Rescue ATV



Exhibit 7. Shallow Bottom Landing Craft Enables Beach Access

4.2 Fire Mitigation Mutual Aid & Support

Camden County is providing mutual aid to GFC for fire response support, with Camden County leading all evacuation, medical, and/or law enforcement response. Actions and resources supporting a fire incident are outlined in the Camden County Local Emergency Operations Plan, Camden Fire Standard Operating Guides, Memorandums of Understanding (MOUs) and the “Launch Day” Incident Action Plan (IAP) called the Comprehensive Launch Plan (CLP) in our LSOL application (example at Attachment 9 of the Spaceport Camden LSOL Application). The CLP outlines the following: command and control, communications, resources, and response to all hazards and cascading events, including safety zone security under a Unified Command structure.

Camden County recognizes that although considered unlikely, Spaceport Camden must plan for the possibility of a launch incident that could impact LCI. Planning efforts include draft development of Launch Day CLP that establishes USCG safety zone controls and supporting contingency plans for potential incidents that may occur.

Camden County, Camden County Emergency Management Agency, Camden Fire Rescue, Camden County Sheriff’s Office along with Naval Submarine Base Kings Bay, NPS/CUIS, and Glynn County Emergency Management maintain robust communications and mutual aid agreements that further mitigate fire danger on LCI. This enhanced coordination process amplifies mutual aid agreements and further strengthens the response capability, while outlining authorities, roles, and responsibility. This was highly evident during the Vector R Part 101 launch from Spaceport Camden in August 2017. Additional supporting agencies during this successful operation included the US Navy (Kings Bay), U.S. Coast Guard and Georgia Department of Natural Resources.

4.3 Fire Response

In the Cumberland Island National Seashore Fire Management Plan (FMP) Fire Management Unit (FMU) #3 operational guidance identifies the GFC and Camden County Fire and Rescue as the lead agencies for fire management on LCI. The NPS will assist Camden County and the GFC according to annual operating plans and requests from the lead agencies. A unified command structure is to be established for incidents within this FMU pursuant to the Spaceport Camden CLP process.

Camden County concurs with the FAA assessment regarding the limited access to LCI based on tidal restrictions. During low tide periods, access to the LCIHA’s Shell Creek dock (latitude N 30.95040, longitude W 81.42110) is not feasible for deeper drafted boats, and this limitation may delay emergency response efforts which include firefighting, search and rescue, and/or evacuation. Based on this limitation, Camden County would not rely solely on the existing tidal creek or traditional boats, opting instead to utilize alternative

ingress/egress points via water approach to the beach (land). This would be accomplished on launch days using shallow draft landing craft (Exhibit 7) with pre-positioned fire apparatus ATVs and firefighting personnel aboard marine landing craft, functioning as single resource or strike teams.



Exhibit 8. Beach Landing Area (yellow arch) for Low Draft Marine Landing Craft

If ingress onto LCIHA's tidal creek dock is impeded based on low tide conditions or is downwind of fire and considered unsafe, landing craft teams would access other points along LCI including the western beaches of the island (Cumberland River / Intracoastal Waterway), northern beach (St Andrews Sound Entrance), or the eastern beaches (Atlantic Ocean) as depicted in Exhibit 8.

Additional firefighting resources could be employed under the direction of the GFC, to include fixed wing aircraft tankers, and helicopter bucket deployment using freshwater sources. Camden County's draft launch day CLP will identify a strike team ready and pre-staged on marine landing craft for launch and or recovery phases.

It should be noted that marine landing craft with deployable ATVs rigged for firefighting, medical, and/or to support evacuation mission sets could reach any area of LCI on launch days within 15 to 30 minutes from pre-staged water access locations. Marine landing craft would be equipped with Forward Looking Infrared Radar (FLIR) capable of providing day/night ingress/egress if needed. The marine landing craft provides shallow draft beaching onto the shoreline, which ensures effective firefighting and response with upwind insertion. Should evacuation of personnel be required, they would be staged on the beach shoreline for landing craft embarkation.

4.4 Coordination and Dispatching

The NPS is dependent on other federal agencies and local cooperating agencies for fire management activities, due to the lack of staffing of qualified personnel at the Cumberland Island Seashore (CUIIS). The NPS has MOUs, Annual Operating Plans (AOPs), and/or other agreements with multiple agencies to enhance the capabilities of the park to manage fire.

The NPS has a central MOU with the GFC at the regional level and an AOP at the local level. These agreements provide for the sharing of resources and equipment during an emerging incident. The NPS also has a MOU with Camden County, which is updated annually. The NPS is a partner in the Tri-Agency Agreement with Okefenokee National Wildlife Refuge, Osceola National Forest, and Timucuan Ecological & Historic Preserve that streamlines the sharing of resources and equipment between local federal agencies. This agreement requires annual updates and signatures of agency administrators.

Dispatching and ordering of CUIIS resources is currently completed by the Georgia Interagency Coordination Center (GICC) in Gainesville, Georgia. Coordination with the Southern Area Coordination Center (SACC) is necessary for off-unit and NPS specific orders. In the event of an incident in the park, a dispatch center will be established either on the mainland or at the Captain's House on the Island and it will be staffed with an initial attack dispatcher. The initial attack dispatcher will coordinate the fire management officer (FMO)/incident commander's needs with local agencies and the GICC as well as keeping a communication log. If a wildfire is reported on LCI FMU #3, Camden County and GFC must be notified as they are the lead agency for response to this FMU. Mandatory notifications of a wildfire at CUIIS include:

Camden County 911
GFC Camden Unit (912) 576-5387
GICC (770) 297-3036
SACC (678) 320-3000

SECTION 5 - SUMMARY CONCLUSIONS AND INFORMATION

The low number and impact of historical wildfires on LCI provides a direct assessment dimension in assessing future occurrences from all-sources.

Georgia ranks in the top 20 states experiencing the highest number of thunderstorms per year and leads the nation in lightning strike related insurance claims. Lightning strikes are considered frequent occurrences in Camden County and can reach temperatures beyond 50,000 degrees Fahrenheit. Typically, humans are a key source of fires, but given the limited human activity on LCI, lightning is considered to be the highest threat vector for fuel ignition. This fact is considered in assessing both ignition and fire spread, indicating

that the LCI Maritime Forest has experienced lightning strikes, without significant rapid spread of fire occurring.

Ongoing efforts by the GFC to build stand-off areas, i.e., defensible spaces on LCI, and the low density of structures on LCI also reduces the risk of propagation via exposure, spread and intensity from fires.

For all launches, pursuant to the launch specific CLP, Camden County Fire/Rescue and Law Enforcement will utilize marine landing craft that will ensure uninterrupted ingress/egress to LCI, day and night in support of all First Responders. . Additional investments in restoring the existing water buffalo to an operational status and adding a new water buffalo, with ATV deployment capability for use by GFC, or Camden County Fire, EMS and or Law Enforcement will ensure a timely response onto LCI in support of all-hazards threats, e.g., fire, medical, evacuation, search and rescue.

Camden County was recently recognized in 2019 by the State of Georgia and Georgia Emergency Management Agency (GEMA), for achieving a high level of readiness and compliance in all-hazards planning and operational readiness. Camden County maintains highly effective and robust communications with our local, state and federal partners, to include multi-agency drills and exercises. Camden County operates in a well-established incident command system, in partnership with the GFC and the NPS/CUIS under established agreements that outline fire planning for LCI.

It should also be noted that Camden County retains emergency authority throughout Camden County, to include privately owned property on LCI as defined in the Local Emergency Operations Plan (LEOP) Sec. 22-40 (Attachment 8 to the Spaceport Camden LSOL Application). Emergency powers as defined in the Camden County LEOP states that the Camden County Chairman of the Board of Commissioners shall have and may exercise for such periods as the state of emergency or disaster exists or continues the following emergency powers: (1) Command or utilize any private property if he finds this necessary to cope with the emergency or disaster; (2) Direct and compel the evacuation of all or a part of the population from any stricken or threatened area within Camden County if he deems this action necessary for the preservation of life or other disaster mitigation or response; (3) Prescribe routes, modes of transportation and destinations in connection with the evacuation; (4) Control ingress and egress to and from the disaster area and the occupancy of premises therein. Additional authorities are contained in the Camden LEOP previously provided as attachment 8 to the Spaceport Camden LSOL application.

Camden County is acutely aware of the future responsibilities in carrying-out safe launch operations to include mitigation and response in an all-hazards environment should an incident occur on LCI. Safety of First Responders and the public will be the first priority during any incident.



Attachment 12
Scheduling and Notification Plan



Scheduling and Notification Plan

14 January 2020

GORA EXEMPT – SECURITY INFORMATION
FOIA EXEMPT – SECURITY INFORMATION

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Revision History:

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ACRONYMS & ABBREVIATIONS

ATC	Air Traffic Control
CFR	Code of Federal Regulations
CLP	Comprehensive Launch Plan
EIS	Environmental Impact Statement
FAA	Federal Aviation Administration
ICS	Incident Command System
LSOL	Launch Site Operator License
NOTAM	Notice to Airman
NOTMAR	Notice to Mariners
USCG	United States Coast Guard

SECTION 1 – INTRODUCTION

Spaceport Camden has prepared this plan to coordinate the scheduling and notification of hazardous launch site operations consistent with Title 14 of the Code of Federal Regulations (CFR) Part 420 for a Launch Site Operator License (LSOL). This plan requires that launch site operations between various site users be scheduled with Spaceport Camden and appropriate notifications issued to other launch site users, adjacent property owners, and key stakeholders.

1.1 Description of Scheduling Regulations (§ 420.55)

This Scheduling and Notification Plan is required to address the scheduling regulations provided in 14 CFR § 420.55 as quoted below:

§ 420.55 Scheduling and Notification Plan

(a) A licensee shall develop and implement procedures to schedule operations to ensure that each operation carried out by a customer at the launch site does not create the potential for a mishap that could result in harm to the public because of the proximity of the operations, in time or place, to operations of any other customer. A customer includes any launch operator, and any contractor, subcontractor or customer of the launch site operator's customer at the launch site.

(b) A licensee shall provide its launch site scheduling requirements to each customer before the customer begins operations at the launch site.

1.2 Description of Notifications Regulations (§ 420.57)

This Scheduling and Notification Plan is required to address the notification regulations provided in 14 CFR § 420.57 as quoted below:

§ 420.57 Notifications

(a) A licensee shall notify each launch operator and any other customer of any limitations on the use of the launch site. A licensee shall also communicate limitations on the use of facilities provided to customers by the launch site operator.

(b) A licensee shall maintain its agreement, made in accordance with § 420.31(a), with the local U.S. Coast Guard district.

(c) A licensee shall maintain its agreement, made in accordance with § 420.31(b), with the FAA ATC office having jurisdiction over the airspace through which launches will take place.

(d) At least two days prior to flight of a launch vehicle, the licensee shall notify local officials and all owners of land adjacent to the launch site of the flight schedule.

SECTION 2 – SCHEDULING OF LAUNCH SITE OPERATIONS

2.1 Scheduling Launch Site Operations

In general, potential hazardous operations should be scheduled as far in advance as possible. A monthly scheduling meeting with the Launch Facility Operations Director (or designee) and active spaceport customers will be used to identify potential upcoming hazardous operations and to ensure that the proposed operations are on the Spaceport's master schedule. The Launch Facility Operations Director (or designee) will maintain a master schedule that includes all requested, tentative, and firmly scheduled events. The master schedule will be used to prevent scheduling issues among customers and will be available to spaceport customers upon request.

A weekly scheduling meeting will be held with representatives of the spaceport and active spaceport customers at the direction of the Launch Facility Operations Director (or designee) to discuss the potential hazardous operations that are on the master schedule. The purpose of the meeting is to review the schedule for the week and to ensure coordination and de-confliction of potential hazardous operations. The weekly scheduling meeting will be the primary forum in which spaceport customers can raise concerns about potential hazardous operations to be conducted by other customers.

2.2 Comprehensive Launch Plan

When hazardous operations include launch activity, spaceport customers must submit a Comprehensive Launch Plan (CLP) in advance of their launch operations. For clarity, a spaceport customer includes any launch operator, and any contractor, subcontractor or customer of the launch site operator's customer at the launch site. The CLP development process is performed for each launch and ensures thorough coordination across the stakeholder community.

The CLP process is also ICS-201 compliant (Incident Command System Form 201) and further conforms to the overarching Camden County Emergency Operations Procedures (Attachment 8 of the LSOL Application). The CLP has been developed to ensure each operation carried out by a customer at Spaceport Camden does not create the potential for a mishap that could result in harm to the public because of the proximity of the operations, in time or place, or to operations of any other spaceport customer or local entity such as the US Navy at Submarine Base Kings Bay.

An example CLP was provided to the FAA as Attachment 9 of the LSOL Application and was from a FAA Part 101 launch at Spaceport Camden that did not require waterway closures or monitoring by the United States Coast Guard (USCG). Future CLPs for orbital launches will include the USCG implementation of an appropriate safety zone pursuant to 33 CFR § 165.20 and Attachment 3 of the LSOL Application.

SECTION 3 – NOTIFICATIONS

Compliance with § 420.57 Notifications is provided below.

3.1 Notifications to Launch Operators and Other Customers

Following the weekly scheduling meeting identified in Section 2.1, the Launch Facility Operations Director (or designee) will send out a schedule of the potential hazardous operations that are occurring within the week to all spaceport customers. If changes are made regarding the potentially hazardous operation after the weekly schedule is distributed, the Launch Facility Operations Director (or designee) will immediately contact all spaceport customers to notify them of the amended schedule. The notifications will identify unique launch requirements, schedule of operations, and any limitations on the use of launch site facilities

3.2 Notifications to United States Coast Guard

Camden County Board of County Commissioners maintains an agreement with the USCG, in accordance with § 420.31(a). Notifications to the USCG will be completed according to the agreement for the issuance of a Notice to Mariners (NOTMAR). The agreement was provided to the FAA as Attachment 3 of the LSOL Application.

3.3 Notifications to FAA Air Traffic Control

Camden County Board of County Commissioners maintains an agreement with the FAA Air Traffic Control (ATC) office having jurisdiction of the airspace through which launches would occur from Spaceport Camden. The agreement is in accordance with § 420.31(b) and notifications to the FAA will be completed according to the agreement for the issuance of a Notice to Airmen (NOTAM). The agreement was provided to the FAA as Attachment 4 of the LSOL Application.

3.4 Notifications to Adjacent Land Owners and Other Agencies

Spaceport Camden will maintain an email list of adjacent land owners, local officials, other agencies, appropriate media outlets, and the general public. At least two days prior to each launch, Spaceport Camden will notify adjacent land owners and other agencies in accordance with the launch specific CLP. The CLP process, identified in Section 2.2, includes notification contacts and procedures for each launch related operation. Such notifications will also be in accordance with any special notification requirements defined in the mitigation section of the Spaceport Camden Environmental Impact Statement (EIS).