



DEPARTMENT OF THE NAVY

U.S. NAVAL STATION  
PSC 1005, BOX 25  
FPO AE 09593-1000

NSGBINST 3710.5  
N32  
19 Oct 17

**U.S. NAVAL STATION, GUANTANAMO BAY, CUBA INSTRUCTION 3710.5**

From: Commanding Officer, U.S. Naval Station, Guantanamo Bay, Cuba

Subj: RECREATIONAL UNMANNED AIRCRAFT SYSTEMS USE

Ref: (a) Public Law 112-95 sections 331, 336  
(b) Federal Aviation Administration Advisory Circular 107-2  
(c) Academy of Model Aeronautics Safety Code  
(d) National Association of Rocketry Safety Code  
(e) NAVSTAGTMOINST 5530.2

Encl: (1) NSGB UAS Registration Form  
(2) FM Frequency De-confliction Chart  
(3) Authorized Flying Locations  
(4) Phoenix Flying Site Map  
(5) Self Help Flying Site Map  
(6) NSGB Security UAS Citation

1. **Purpose.** To promulgate rules governing the use of Unmanned Aircraft Systems (UAS) to include radio controlled aircraft, model rockets, control line aircraft, free flight aircraft and drones on U.S. Naval Station Guantanamo Bay (NSGB), Cuba for recreational use.
2. **Applicability.** This instruction applies to all residents and visitors on board NSGB. Sponsors shall ensure their guests become familiar with the provisions of this instruction. Non-compliance may result in administrative action including suspension of privileges and/or debarment, as well as, criminal prosecution for those subject to the Uniform Code of Military Justice (UCMJ).
3. **Background.** Prior to the Federal Aviation Administration (FAA) involvement, Public Law 112-95 section 336 allowed radio controlled model aircraft operators to fly with little FAA oversight. Section 336 of Public Law also mandates that a community based organization set forth best practices for radio controlled model aircraft. The Community Based Organization that is recognized by the FAA is known as the AMA (Academy of Model Aeronautics). Because of the AMA, the FAA has in large part, allowed radio controlled model aircraft to operate without the burden of regulations until June 2016. With the rapid advancement of radio controlled aircraft and aerial photography capability, Congress has now mandated that the FAA promulgate regulations governing the use of certain UAS, for certain uses in the National Airspace System. As of June 2016, radio controlled model aircraft now known as UAS (Unmanned Aircraft Systems) can still be flown for recreational purposes as they always have been, with the exception of now having to register the UAS with the FAA (NSGB residents and guests do not have to register UAS with the FAA). Federal Aviation Regulation (FAR) part 107 applies more stringent requirements for those seeking to use their same UAS for commercial applications. Because NSGB is outside the scope of FAA regulations, this instruction will tailor best practices set forth by the AMA and FAR part 107 to meet the specific needs of NSGB.

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4. Discussion. In an interest to allow for personal hobbies and recreational activities, Phoenix and Self Help Flying Sites, along with residential locations have been established for use of certain UAS flight activities. This instruction seeks to balance the safety and security of base personnel and sensitive assets with personal hobbies and recreational activities. Failure to comply with the instruction may result in administrative or disciplinary actions to include but not limited to termination of flying privileges and or confiscation of UAS.

#### 5. Definitions

a. Unmanned Aircraft (UA). Per reference (b), an aircraft operated without the possibility of direct human intervention from within or on the aircraft.

b. Model Aircraft. Per reference (b), a UA that is capable of sustained flight in the atmosphere, flown within visual line of sight of the person operating the aircraft; and flown for hobby or recreational purposes.

c. Unmanned Aircraft System. Per reference (b), a UA and its associated elements (including communication links and the components that control the UA) that are required for the safe and efficient operation of the UA in the National Airspace System.

d. Drones. Are a type of UA. They will be categorized by lack of a fixed wing. Drones will be identified by three or more rotors designed for vertical lift. A quad copter is an example.

e. Pilot in Command. The Pilot in Command is the sole manipulator of the UAS.

f. Reckless Flying. The willful act of endangering personnel, property or wildlife as documented by NSGB Security with enclosure (6).

#### 6. Responsibilities

a. UAS owners shall:

(1) Register all UAS with the NSGB UAS Officer with enclosure (1), prior to the first flight of each individual UAS, via email at [usn.gtmo.navstagtmobaycu.list.n32-uas@mail.mil](mailto:usn.gtmo.navstagtmobaycu.list.n32-uas@mail.mil) or in person with the NSGB UAS Officer located in Bulkeley Hall, ext 4888.

(2) Be familiar and comply with this instruction in its entirety, with special attention to paragraph 11, photography.

(3) Identify each UAS with first, last name and contact phone number of owner.

(4) Notify the NSGB UAS Officer upon Permanent Change of Station.

(5) Turn over UAS to NSGB Security if suspected or determined to be in violation of this instruction, as determined by NSGB Security personnel until a disposition can be made by the UAS Officer or NSGB Commanding Officer.

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## b. NSGB UAS Officer shall:

- (1) Serve as custodian for all UAS registrations.
- (2) Retain all registration forms until member transfers. Provide copy of registration to UAS owner.
- (3) Review this instruction annually to determine applicable changes and relevancy.
- (4) Provide communications and coordination to MUGM ATC with regards to all UAS activities.
- (5) Ensure MUGM NOTAMS reflect current location (radial/distance), altitude restrictions and operating hours of permanent flying sites (Phoenix and Self Help).
- (6) Coordinate and communicate changes to instruction with NSGB Security, Naval Criminal Investigative Service, NSGB Air Traffic Control, Public Affairs Officer, Command Duty Officer - Senior Watch Officer and the Staff Judge Advocate.
- (7) Retain all documented UAS citations from NSGB Security related to UAS owners.
- (8) Upon receipt of a UAS citation from NSGB Security related to a (serious violation) per enclosure (7), notify UAS owner of suspended flying privileges in writing with copies forwarded to the owner's chain of command and NSGB Security.
- (9) Upon receiving the third citation (for minor related offenses) from NSGB Security per enclosure (6), notify UAS owner of suspended flying privileges in writing with copies forwarded to the owner's chain of command and NSGB Security.

## c. NSGB Security shall:

- (1) Enforce rules and regulations set forth in this instruction.
- (2) For UAS suspected or determined to have originated from NSGB, the following guidance is provided.
  - (a) NSGB Security shall use enclosure (6) to determine and document any violations of this instruction. NSGB Security shall make available a copy of citation within one day for UAS owner to pick up at Security Headquarters, building 1655.
  - (b) Forward all citations to the NSGB UAS Officer for retention.

7. General Rules. All UAS may not exceed the limitations of this instruction and is intended exclusively for sport, recreation, education and/or competition. All model flights must be conducted in accordance with this instruction and the following regulations.

- a. Model aircraft will not be flown in a careless or reckless manner.
- b. All pilots shall avoid flying directly over unprotected people, vessels, vehicles, or structures and shall avoid endangerment of life and property of others.
- c. No flight higher than approximately 400 feet above ground level for fixed wing and rotary aircraft.
- d. No flight higher than approximately 500 feet above ground level for model rockets.
- e. Not to exceed a takeoff weight, including fuel, of 10 pounds for all UAS.
- f. Prior to first flight of each UAS, owner shall label their model with first name, last name, phone number and register with the NSGB UAS Officer.
- g. Not operate UAS while under the influence of alcohol or while using any drug that could adversely affect the pilot's ability to safely control the aircraft.
- h. Not operate fixed wing or rotary model aircraft carrying pyrotechnic devices that explode or burn, or any device which propels a projectile or drops any object that creates a hazard to persons or property.
- i. Night flying is prohibited. No model UAS may be flown between the hours of sunset and sunrise.
- j. A successful radio equipment ground-range check in accordance with manufacturer's recommendations will be completed before the first flight of a new or repaired model aircraft.
- k. RC model aircraft shall use the radio-control frequencies currently allowed by the Federal Communications Commission (FCC). Only individuals properly licensed by the FCC are authorized to operate equipment on Amateur Band frequencies 50 and 53 mhz. FM, 2.4GHZ and WIFI frequencies do not require a license. See enclosure (2) for FM channel designations.
- l. Prior to turning on transmitters, UAS pilots must de-conflict with other UAS pilots when using AM and FM transmitter/receiver frequencies. See enclosure (2).
- m. Due to high performance speed capabilities with respect to the lateral confines of the Phoenix Flying Site and the Self Help Flying Site, fixed wing aircraft with gas turbine engines (both jet and fan) are prohibited. Rotary aircraft with gas turbine engines are permitted. Member shall conform to AMA turbine safety procedures, document number 513 when using turbine engines.
- n. Avoid electrical power lines by a minimum of 50 feet.
- o. Harassment of wildlife is prohibited.

- p. All UAS must be flown within visual line of sight of Pilot in Command.
- q. No person may fly any UAS outside the designated areas located in enclosure (3) without expressed written permission from NSGB Commanding Officer.
- r. Flying UAS for commercial (for hire) applications is prohibited.
- s. Avoid photo or video capture of classified or sensitive assets per reference (e) and paragraph 11 of this instruction.
- t. Migrants are prohibited from operating any UAS with cameras, and may only operate UAS in the two designated flying sites (Phoenix or Self-Help) when escorted by IOM.

8. Phoenix Flying Site. It is the Pilot in Command's responsibility to ensure the UAS flown is compatible to meet the lateral and vertical restrictions of the Phoenix Flying Site. Considerations such as performance characteristics to include turn radius and speed should be evaluated prior to flying. Member must also ensure his/her experience is compatible not only for the model being flown but also the current weather conditions with special considerations made to winds. While located a safe distance of five miles away from Leeward Airfield, infrequent approach and departure routes for both manned fixed wing and rotary aircraft may pass closer than five miles. It is imperative that all UAS pilots see and avoid all manned aircraft. A near miss is unacceptable and safety of flight, as perceived by the manned aircraft must not be in question. Phoenix Flying Site Rules:

- a. Per enclosure (4), no aircraft shall intentionally be flown behind the established safety line.
- b. Pilots shall ensure spectators remain behind safety line at all times.
- c. Maintain aircraft within the lateral and vertical boundaries of flying site.
- d. Maximum of three aircraft may be flown simultaneously.
- e. Members should limit their flight time to 20 minutes, allowing for shared use of flying site.
- f. Refer to enclosure (3) for determination of authorized UAS.
- g. All other general rules in paragraph 7 of this instruction apply.

9. Self Help Flying Site. It is the Pilot in Command's responsibility to ensure the UAS flown is compatible to meet the lateral and vertical restrictions of the Self Help Flying Site. Considerations such as performance characteristics to include turn radius and speed should be evaluated prior to flying. Member must also ensure his/her experience is compatible not only for the model being flown but also the current weather conditions with special considerations made to winds. While located a safe distance of five miles away from Leeward Airfield, infrequent approach and departure routes for both manned fixed wing and rotary aircraft may pass closer than five miles.

It is imperative that all UAS pilots see and avoid all manned aircraft. A near miss is unacceptable and safety of flight as perceived by the manned aircraft must not be in question. Self Help Flying Site Rules:

- a. Per enclosure (5), no aircraft shall intentionally be flown behind an established safety line.
- b. Pilots shall ensure spectators remain behind the safety line at all times.
- c. Maintain aircraft within the lateral and vertical boundaries of flying site.
- d. Maximum of five aircraft may be flown simultaneously.
- e. The use of Sherman Road is prohibited for takeoffs and landings.
- f. Refer to enclosure (3) for determination of authorized UAS.
- g. All other general rules in paragraph 7 of this instruction apply.

10. Residential Areas. Per enclosure (3), authorized residential areas and authorized UAS residential areas are defined as the adjacent property of UAS owner's residence. Included in residential flying areas are the associated playgrounds. Residential Rules:

- a. No UAS may be flown to a height above the highest man made structure within 200 feet of Pilot in Command or UAS.
- b. Because of obstacles and confined spaces in residential areas, operators should consider use of UAS weighing less than 3.0 pounds. Beginner pilots should fly at the designated Phoenix or Self Help Flying sites per enclosures (4) and (5) until proficient and confident with UAS.
- c. All other general rules in paragraph 7 of this instruction apply.

11. Aerial Photography. Aerial photography and video are permitted per enclosure (3) and reference (e). It is the Pilot in Command's responsibility to avoid capturing sensitive property asset areas. Per reference (e), the following locations/assets shall not be captured via photograph or video.

- a. Classified facilities, equipment or material.
- b. John Paul Jones Hill (JPJ Hill). Photography will not be taken at any point beyond Magazine Gate Five at the base of JPJ Hill or as marked by "No Photography" signs.
- c. Any installation security assets that divulge Tactics, Techniques or Procedures (TTP). This prohibition does not include static displays /assets. Photography showing the identity of NSF members requires written release by the member.

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d. NSF Detention Center

e. Entry Control Point (ECP) and procedures associated with processing personnel, baggage, cargo, etc., on NSGB. Restriction includes photography of force protection, anti-terrorism, physical security screening, vetting and associated TTP designed to protect the installation and its residents.

f. Ships docked at piers or industrial facilities in and around the piers, unless specifically authorized by ship's CO or ship's master.

g. The Naval Computer and Telecommunications Area Master Station Atlantic satellite dishes located at building 2145.

h. Perimeter security surveillance cameras, radars, and other facilities equipment which support installation security.

i. Within the security perimeter of the power generation, desalination facilities, compounds including power substations, water storage and water distribution.

j. Interior spaces containing command, control communication computers, or intelligence equipment or operations directly or indirectly supporting the installation safety and security. The following areas are included but not limited to: NSF Headquarters (HQ), Marine Corps Security Force Company HQ, Naval Ordnance and Weapons Storage Magazines and Bulkeley Hall.

k. Within the security perimeter of bulk fuel storage areas and supporting distributing points, to include refueling piers, valve alignment, and fuel line junction points.

l. Migrants (protected, undetermined or other status). Authorization to photograph can only be granted by Department of State and/or Department of Homeland Security, unless written authorization is provided by the U.S. State Department, photos of protected migrants, refugees, or Cuban commuters will not be allowed.

For all other categories of migrants and refugees, photographs will not be permitted unless written permission is granted by Homeland Security.

12. First Person View. The following rules apply to all aircraft being flown in First Person View (FPV) mode.

a. Pilot in command shall utilize the assistance of a spotter who can observe the aircraft by line of sight.

b. Pilot in command must be able to fly the aircraft without utilizing FPV mode.

c. FPV pilot shall brief the spotter of his/her duties to include, maintaining line of sight and be able to direct the FPV pilot when approaching lateral boundaries of flying site. During flight, the spotter must be able to take the controls and fly the aircraft line of sight if safety of flight is in question.

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13. Model Rockets. While not under positive radio control, model rockets are permitted to be used at the Self Help Flying Site. It is the member's responsibility to ensure the rocket mass, body tube type, and motor combination remain under the 500 feet altitude limitation. Variables such as wind and launch angle shall be considered prior to launching. It is recommended that member uses pre-constructed commercially produced rocket body tubes and motor combinations to help determine rocket peak altitudes.

a. Rocket motors (using solid propellant) up to a "D" -series size may be used provided they remain attached to the model during flight. Model rockets may be flown in accordance with the National Model Rocketry Safety Code but may not be launched from model aircraft or any other UA.

b. Expended or faulty model rocket motors shall be soaked in water prior to being discarded.

c. Guantanamo Fire Department shall be notified (Phone #4222) prior to launching and upon securing.

d. Rocket materials shall be light weight with no metal components for the nose, body and fins.

e. Motors shall only be certified, commercially produced model rocket motors.

f. Model rockets shall not weigh more than 53 ounces (1,500 grams). Propellant shall not exceed 4.4 ounces (125 grams). Maximum total impulse is limited to 20.00 N-sec. The absolute limiting factor shall be such that the rocket does not exceed a peak altitude 500 feet above ground level.

g. Misfires procedures shall be handled with the utmost level of precaution. After a rocket misfire, remove the safety interlock or disconnect the battery source. Allow a minimum time of one minute to elapse from the time of last launch attempt prior to allowing anyone to approach the model.

h. Ignition systems shall be of electrical design using an electrical launch system and electrical motor igniters. The launch system shall have a safety interlock wired in series with the launch switch and use a launch switch that returns to the "off" position when released.

i. Launching systems shall be constructed of a tower and rod assembly pointed within 30° of vertical. Blast deflectors shall be used to prevent motor exhaust from hitting the ground.

j. Recovery systems such as a streamer or parachute shall be used to facilitate a safe recovery. Only flame resistant or fire proof wadding shall be used in the rocket recovery system.

14. Damage or Injury From UAS. Any property damage or injury resulting in medical care shall be reported to NSGB Security (4345) and the NSGB UAS Officer (4888) within 24 hours. For holidays, contact shall be made the next business day.



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15. Operations Outside of Authorized Flying Areas. Any flight conducted outside of designated areas per enclosure (3) within this instruction requires expressed written consent from NSGB Commanding Officer.

16. Review Responsibility. The Air Operations Officer is overall responsible for the annual review of this instruction.

17. Records Management. Records created as a result of this instruction, regardless of media and format, shall be managed per SECNAVINST 5210.8.



D. C. CULPEPPER

**Distribution:**

Electronic only, via NSGB NIPR Network

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**NSGB UAS REGISTRATION FORM**

NSGB UAS Officer

Bulkeley Hall

#4888/4388

Date:

Name (last, first):

Unit (ie, NAVSTA, JTF, MWR):

Home address:

Home Phone:

Work Phone:

Email :

Projected date of departure from NSGB:

UAS#1

Type (Drone, helicopter, fixed wing, free flight, rocket):

Manufacturer:

Power (electric, gas, nitro)

Photo, video capable (yes, no):

Color(s):

UAS#2

Type (Drone, helicopter, fixed wing, free flight, rocket):

Manufacturer:

Power (electric, gas, nitro)

Photo, video capable (yes, no):

Color(s):

UAS#3

Type (Drone, helicopter, fixed wing, free flight, rocket):

Manufacturer:

Power (electric, gas, nitro)

Photo, video capable (yes, no):

Color(s):

UAS#4

Type (Drone, helicopter, fixed wing, free flight, rocket):

Manufacturer:

Power (electric, gas, nitro)

Photo, video capable (yes, no):

Color(s):

UAS Officer signature:

Date:

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**FM FREQUENCY DE-CONFLICTION CHART**

<b>Channel No.</b>	<b>Frequency</b>	<b>CHANNEL</b>	<b>FREQUENCY</b>
11	72.01	41	72.61
12	72.03	42	72.63
13	72.05	43	72.65
14	72.07	44	72.67
15	72.09	45	72.69
16	72.11	46	72.71
17	72.13	47	72.73
18	72.15	48	72.75
19	72.17	49	72.77
20	72.19	50	72.79
21	72.21	51	72.81
22	72.23	52	72.83
23	72.25	53	72.85
24	72.27	54	72.87
25	72.29	55	72.89
26	72.31	56	72.91
27	72.33	57	72.93
28	72.35	58	72.95
29	72.37	59	72.97
30	72.39	60	72.99
31	72.41		
32	72.43		
33	72.45		
34	72.47		
35	72.49		
36	72.51		
37	72.53		
38	72.55		
39	72.57		
40	72.59		



Category C (Ducted Fan) Electric, Gas, Nitro



Category C (Prop) Electric, Gas, Nitro



Category D (Helicopters) Electric, Gas, Nitro, Turbine



**AUTHORIZED FLYING LOCATIONS**

LOCATION	PHOTOGRAPHY/ VIDEO	PERMITTED UAS	MAX SPEED
PAOLA POINT	YES	A	10
RADIO POINT	YES	A	10
WEST IGUANA	YES	A	10
IGUANA TERRACE	YES	A	10
TK	YES	A	10
EVANS POINT	YES	A	10
DEER POINT	YES	A	10
MOBILE POINT	YES	A	10
MARINA POINT	YES	A	10
EAST CARAVELLA	YES	A	10
CARAVELLA POINT PROHIBITED DUE TO PROXIMITY OF HOSPITAL HELO PAD	NO	NO FLY	NA
WINDWARD LOOP	YES	A	10
BARGO	YES	A	10
VILLAMAR	YES	A	10
GRANADILLO CIRCLE	YES	A	10
GRANADILLO POINT	YES	A	10
KNOB HILL	YES	A	10
PHEONIX PERMANENT FLYING SITE	YES	A,B,C,D,F	50
SELF HELP PERMANENT FLYING SITE	YES	A,B,C,D,E,F,G	100

Category A (with shrouded rotors) Electric only

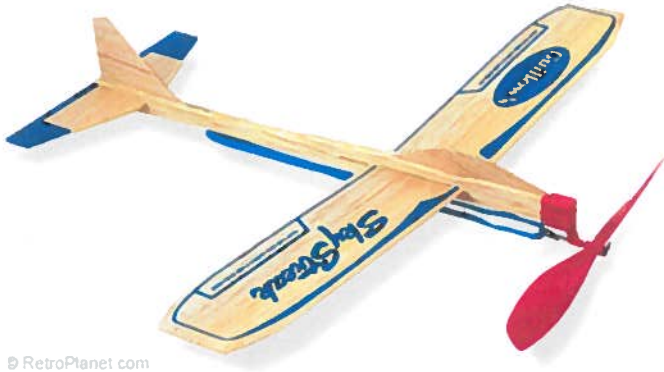


Category A (with rotor safety guards) Electric



Category B (No rotor protection) Electric

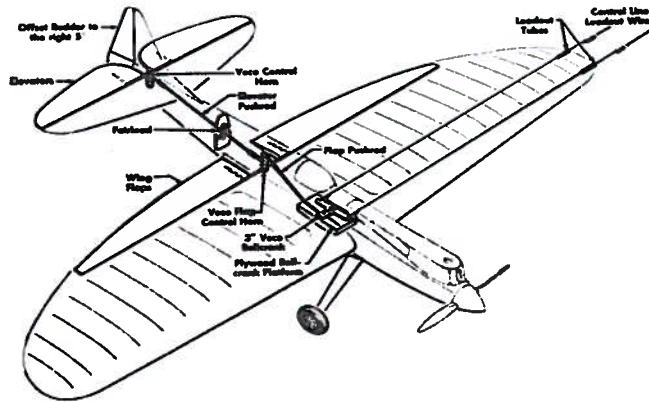
Category E (Free Flight), Rubber band



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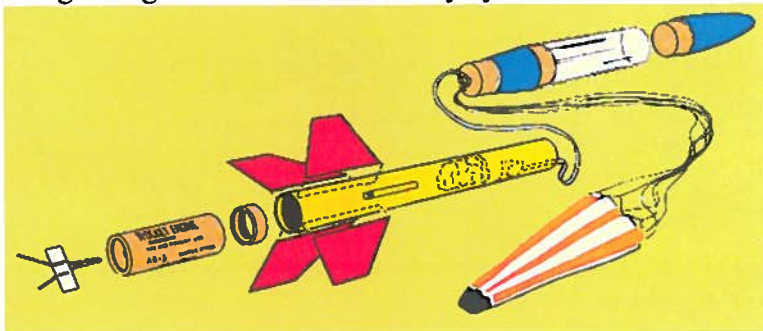
Category F (Control Line) Electric, Gas, Nitro

- control line aircraft are controlled on a circular pattern without the use of radio frequencies\*

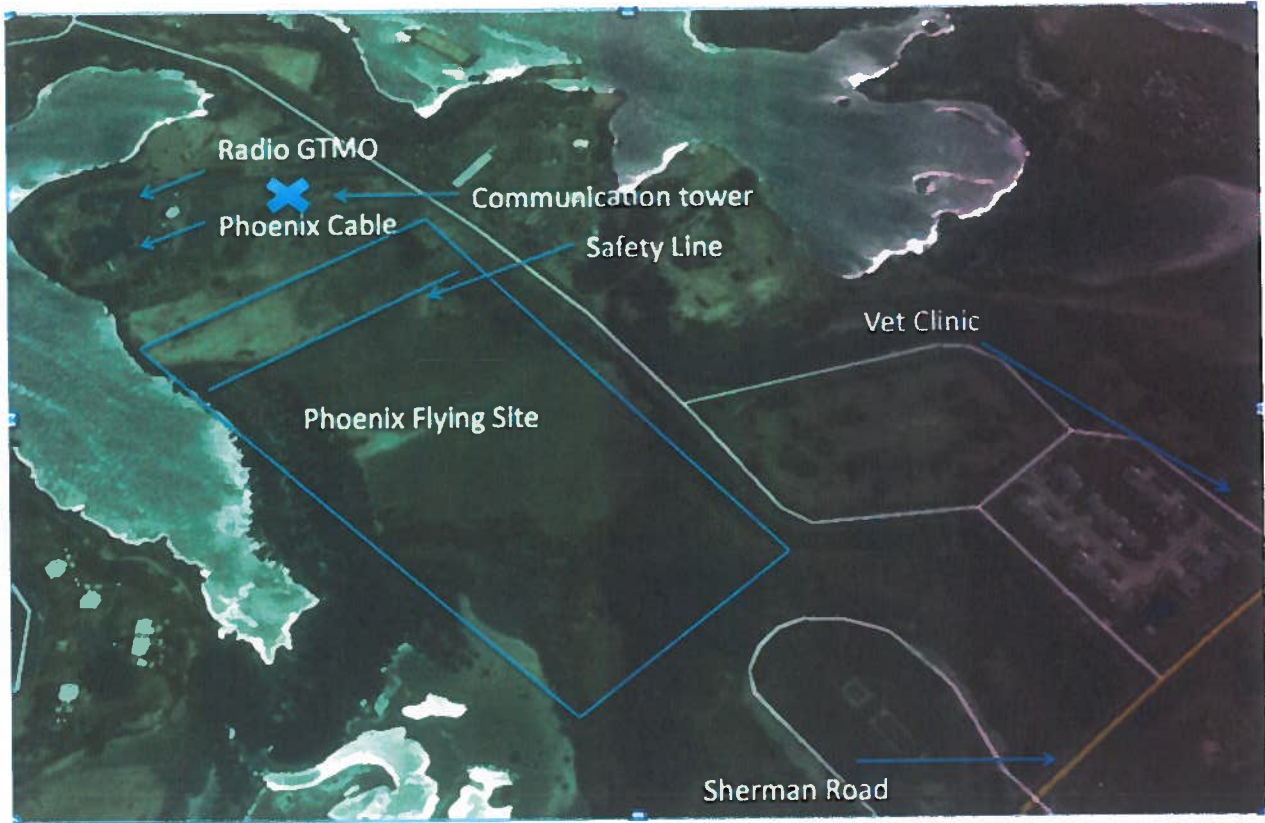


Category G (Rockets) Size D motor maximum.

\*Single stage booster with recovery system\*



**PHOENIX FLYING SITE MAP**





**SELF HELP FLYING SITE MAP**





**NSGB SECURITY UAS CITATION**

Date: \_\_\_\_\_ UAS Owner Name \_\_\_\_\_  
Time: \_\_\_\_\_ Address \_\_\_\_\_  
Location: \_\_\_\_\_ Phone \_\_\_\_\_  
Patrolman: \_\_\_\_\_ Email \_\_\_\_\_

**Serious Violations**

(Circle violation, provide amplifying information in remarks section)

A. NSGB Security: circle violation and forward to NSGB UAS Officer, Bulkeley Hall.

1. UAS willfully flown in a careless or reckless manner
2. Flying UAS without approved registration
3. Violation of reference (e), NSGB Photography Instruction
4. UAS exceeding 10 lbs.
5. Operating UAS with metal propellers or rotors
6. Operating UAS while under the influence of drugs or alcohol
7. Intentional flight outside of authorized locations IAW Enc (3)
8. Intentional harassment of wildlife
9. Operating UAS with pyrotechnics that burn or explode.
10. Flying between the hours of sunset and sunrise
11. Exceeding model rocket motor size D
12. Exceeding model rocket weight of 53oz

**Minor Violations**

(Circle violation, provide amplifying information in remarks section)

A. NSGB Security: circle violation and forward to NSGB UAS Officer, Bulkeley Hall.

1. Exceeding the lateral or vertical boundaries of authorized location in accordance with enclosure (3)
2. Flying for compensation of hire
3. UAS exceeding .55 lbs (applicable to residential areas only)
4. UAS not complying with safety guards or rotor shrouds (applicable to residential areas only)
5. Property damage resulting from UAS
6. Flying over unprotected people and or property
7. Exceeding 400' altitude for all UAS (at designated flying fields).
8. Exceeding 500' altitude for all model rockets (at designated flying field)
9. UAS or rockets not properly labeled with name and phone number of owner
10. Not maintaining UAS within line of sight

Patrolman remarks

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Patrolman Signature \_\_\_\_\_

NSGB UAS Officer remarks and disposition

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NSGB UAS Signature \_\_\_\_\_

Received by NBSG UAS Officer

Date: \_\_\_\_\_

Signature: \_\_\_\_\_