

# Unmanned Aerial Systems Policy

## *Purpose*

The purpose of this policy is to establish guidelines and procedures in the operations of Unmanned Aerial Systems (**UAS**). It is written to protect all employees, contractors, visitors, vendors and the public from potential hazards of UAS.

This Program applies to all UAS owned, leased or operated under the direction of [MEMBER], for all employees, sub-contractors of [MEMBER], and/or external organizations who may operate a UAS being for the benefit or at the direction of [MEMBER].

Link to law: <https://www.congress.gov/112/plaws/publ95/PLAW-112publ95.pdf>

## *Remote Pilot in Command Certification and Responsibilities*

Establishes a remote pilot in a command position.

*See: Appendix B*

## *Aircraft Requirements*

- FAA airworthiness certification is not required. However, the remote pilot in command must conduct a preflight check of the small UAS to ensure that it is in a condition for safe operation.

## *Definitions*

**UAS-** Unmanned Aircraft Systems, **sUAS-** Small Unmanned Aircraft Systems, **UA-** Unmanned Aircraft, **sUA-** Small Unmanned Aircraft, Model Aircraft, **UAV-** Unmanned Aerial Vehicle.  
or **Drone(s)**

Will be defined for the purposes of this policy as: An aircraft operated without the possibility of direct human intervention from within or on the aircraft.

## ***Operational Limitations***

*See: Appendix A*

## ***Licensing and Regulations:***

On or after December 21, 2015 the drone must be registered with the FAA. Owners must register their UAS **online** if it meets the following guidelines:

UAS weighing more than 0.55 lbs. (250 g) and less than 55 lbs. (25 kg). Unmanned Aircraft weighing more than 55 lbs. **cannot** use this registration process and must register using the [Aircraft Registry process](#). Aircraft in excess of 55lbs are no longer considered only considered UAS but Small Aircraft and insured in like.

Operator must apply for a 333 exemption, or become a licensed pilot to fly UAS <http://www.faa.gov/uas/registration/>

## ***Unmanned Aerial Systems (UAS) Hazards***

The introduction of UASs into a system that has traditionally been dominated by manned flights creates a number of safety issues, including potential air collisions, ground collisions and system reliability. Privacy encroachments must not be overlooked and must be avoided without exception.

Potential impacts with the ground can be equally as dangerous as mid-air collisions. If a UAV system fails, impacts a populated area and the debris penetrates shelters, it is possible that the public on the ground could be fatally injured. All flights, manned or unmanned, are associated with some risk,

## ***Unmanned Aerial Systems (UAS) Uses***

**Member shall outline additional specific authorized uses**

## ***Unmanned Aerial Systems (UAS) Inventory***

[MEMBER] has conducted surveys and prepared a written inventory of the type and locations of all UAS's to the insurer.

## ***Repair and Maintenance of Unmanned Aerial Systems (UAS)***

Repair and Maintenance shall only be provided by certified repair facilities or specialist as outlined per the owner's manual. Any such maintenance or repair operations documentation must be maintained for review

A hard copy of the owner's manual must be maintained on-site for reference at all times.

## ***Minimum Operating Requirements***

All [MEMBER] employees who in the course of scope and duties operate the UAS must at a minimum comply with federal, state, and local regulations and statutes applicable to such systems.

See: *Appendix A*

## ***Training***

All [MEMBER] employees who in the course of scope and duties operate the UAS must at a minimum comply with federal, state, and local regulations and statutes applicable to such systems.

The UAS must not be utilized in a manner other than those specified within the policy.

- ***Minimum Training Requirements***

See: *Appendix C*

## ***Contracted Work***

Contractors shall provide a certificate of liability insurance for no less than \$1,000,000 prior to consideration or performance of any operations.

## ***Incident Documentation of Hazardous Incidents***

Any incident involving property damage, bodily injury, personal Injury, alleged privacy violations must be reported immediately to the [MEMBER APROPRIATE OFFICE].

## *Appendix A*

### *Operational Limitations*

- Unmanned aircraft must weigh less than 55 lbs. (25 kg).
  - Visual line-of-sight (VLOS) only; the unmanned aircraft must remain within VLOS of the remote pilot in command and the person manipulating the flight controls of the small UAS. Alternatively, the unmanned aircraft must remain within VLOS of the visual observer.
  - At all times the small unmanned aircraft must remain close enough to the remote pilot in command and the person manipulating the flight controls of the small UAS for those people to be capable of seeing the aircraft with vision unaided by any device other than corrective lenses.
  - Small unmanned aircraft may not operate over any persons not directly participating in the operation, not under a covered structure, and not inside a covered stationary vehicle.
  - Daylight-only operations, or civil twilight (30 minutes before official sunrise to 30 minutes after official sunset, local time) with appropriate anti-collision lighting.
  - Must yield right of way to other aircraft.
  - May use visual observer (VO) but not required.
  - First-person view camera cannot satisfy “see-and-avoid” requirement but can be used as long as requirement is satisfied in other ways.
  - Maximum groundspeed of 100 mph (87 knots).
  - Maximum altitude of 400 feet above ground level (AGL) or, if higher than 400 feet AGL, remain within 400 feet of a structure.
  - Minimum weather visibility of 3 miles from control station.
  - Operations in Class B, C, D and E airspace are allowed with the required ATC permission.
  - Operations in Class G airspace are allowed without ATC permission.
  - No person may act as a remote pilot in command or VO for more than one unmanned aircraft operation at one time.
  - No operations from a moving aircraft.
  - No operations from a moving vehicle unless the operation is over a sparsely populated area.
  - No careless or reckless operations.
  - No carriage of hazardous materials.
- Requires preflight inspection by the remote pilot in command.
- A person may not operate a small unmanned aircraft if he or she knows or has reason to know of any physical or mental condition that would interfere with the safe operation of a small UAS.

- Foreign-registered small unmanned aircraft are allowed to operate under part 107 if they satisfy the requirements of part 375.
- External load operations are allowed if the object being carried by the unmanned aircraft is securely attached and does not adversely affect the flight characteristics or controllability of the aircraft.
- Transportation of property for compensation or hire allowed provided that-
  - o The aircraft, including its attached systems, payload and cargo weigh less than 55 pounds total;
  - o The flight is conducted within visual line of sight and not from a moving vehicle or aircraft; and
  - o The flight occurs wholly within the bounds of a State and does not involve transport between (1) Hawaii and another place in Hawaii through airspace outside Hawaii; (2) the District of Columbia and another place in the District of Columbia; or (3) a territory or possession of the United States and another place in the same territory or possession.
- Most of the restrictions discussed above are waivable if the applicant demonstrates that his or her operation can safely be conducted under the terms of a certificate of waiver.

## *Considerations*

If you can, tell other people you'll be taking pictures or video of them before you do.

If you think someone has a reasonable expectation of privacy, don't violate that privacy by taking pictures, video, or otherwise gathering sensitive data, unless you've got a very good reason.

Don't fly over other people's private property without permission if you can easily avoid doing so.

Don't gather personal data for no reason, and don't keep it for longer than you think you have to.

If you keep sensitive data about other people, secure it against loss or theft.

If someone asks you to delete personal data about him or her that you've gathered, do so, unless you've got a good reason not to.

If anyone raises privacy, security, or safety concerns with you, try and listen to what they have to say, as long as they're polite and reasonable about it.

Don't harass people with your drone.

## *Appendix B*

### *Remote Pilot*

A person operating a small UAS must either hold a remote pilot airman certificate with a small UAS rating or be under the direct supervision of a person who does hold a remote pilot certificate (remote pilot in command).

To qualify for a remote pilot certificate, a person must:

- Demonstrate aeronautical knowledge by either:
- Passing an initial aeronautical knowledge test at an FAA-approved knowledge testing center; or
- Hold a part 61 pilot certificate other than student pilot, complete a flight review within the previous 24 months, and complete a small UAS online training course provided by the FAA.
- Be vetted by the Transportation Security Administration.
- Be at least 16 years old.

Part 61 pilot certificate holders may obtain a temporary remote pilot certificate immediately upon submission of their application for a permanent certificate. Other applicants will obtain a temporary remote pilot certificate upon successful completion of TSA security vetting. The FAA anticipates that it will be able to issue a temporary remote pilot certificate within 10 business days after receiving a completed remote pilot certificate application.

Until international standards are developed, foreign-certificated UAS pilots will be required to obtain an FAA-issued remote pilot certificate with a small UAS rating.

#### *A remote pilot in command must:*

- Make available to the FAA, upon request, the small UAS for inspection or testing, and any associated documents/records required to be kept under the rule.
- Report to the FAA within 10 days of any operation that results in at least serious injury, loss of consciousness, or property damage of at least \$500.
- Conduct a preflight inspection, to include specific aircraft and control station systems checks, to ensure the small UAS is in a condition for safe operation.
- Ensure that the small unmanned aircraft complies with the existing registration requirements specified in § 91.203(a)(2).

A remote pilot in command may deviate from the requirements of this rule in response to an in-flight emergency.

## *Appendix C*

### ***Training Requirements***

At a minimum to include:

#### **Advanced Safety**

1. Airspace Management-
2. Temporary Flight Restrictions- Minimum weather visibility of 3 miles from control station.
3. Area Awareness- FAA - B4UFLY mobile phone application should be used app for planning
4. Emergency Landing and Awareness
5. GPS Off awareness and situation review

#### **Training**

1. Takeoff, Landing and Shutdowns
2. Maneuvering and positioning
3. No GPS Flying and usage
4. Autopilot Mission Flying with interrupt and continue
5. Photo management with Autopilot and "Lawn Mowing" configuration
6. Custom Payload management
7. R/C Autopilot
8. Basic Helicopter maintenance, storage and setup
9. Battery maintenance
10. Camera usage

#### **Ground Station Mission Setup**

1. Full Mission planning

#### **Hands On**

1. All aspects of previous topics in real situations and practical usage