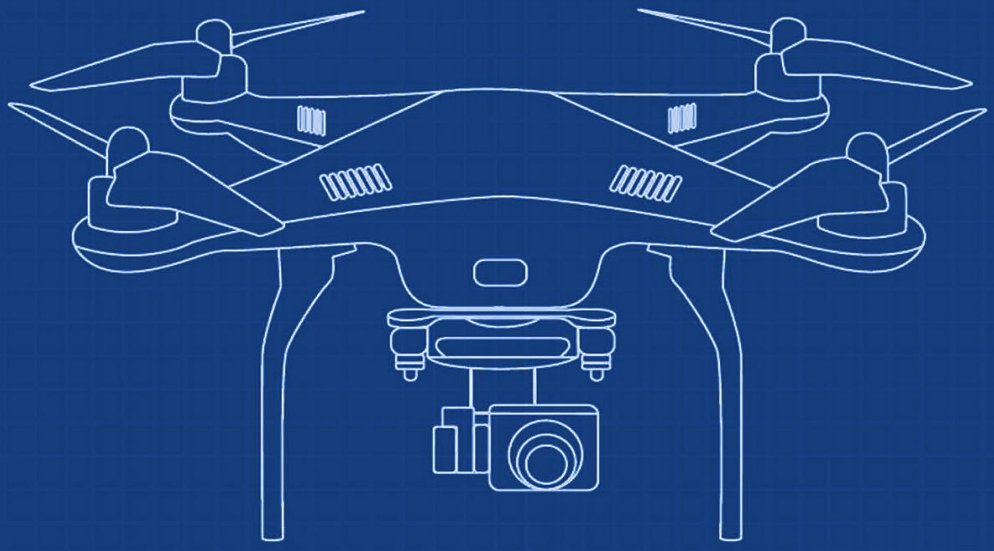

UAS
Unmanned Aircraft System
POLICY

[Infrastructure Name]

May 2018

[Infrastructure Name] UAS Policy

Table of Contents

Policy 3
- Purpose 3
- Authority 3
- Scope 3

Definitions 4

Operating Procedures 4
- Procedure for Flight approval 4
- UAS Registration Requirement 5
- Classification of Use 5
- Employee UAS Operation 6
- Contractor UAS Operation 6
- Payload Authorization 7
- Prohibited UAS Use 7

Part 107 7
- Standard Operating Rules 7
- Operating Limitations - Waivers 8

Pre-Flight/Post-Flight 8

Data Collection 11

Accident Reporting 11

Sanctions 11

Resources 11

Frequently Asked Questions 12

I. Policy

A. Purpose

The purpose of this Unmanned Aircraft System (UAS) Policy is to establish scope and governance of Unmanned Aircraft Systems (UAS) activities for [Company/Organization Name] and the use of UAS on or over business property. It also serves to establish the Designated UAS Authority responsible for overseeing UAS activities at [Company Name].

This policy requires that all [Company Name] sponsored UAS operations taking place on-site or off-site, will be conducted in a manner ensuring individual privacy and safety, in accordance with all applicable Federal, State, and Local laws.

B. Authority

[Designated UAS Authority] is responsible for approving any UAS on [Company Name] property or at any Company sponsored activity or event.

Contacts:
Department (or committee)_____
UAS Coordinator_____
Phone number_____
Email_____

C. Scope

This policy is applicable to:

1. Company employees, staff, and third-party operators operating UAS in any location for business activities.
2. All platforms of UAS which include, but are not limited to: sUAS, UAV, Drone, Model Aircraft, regardless of size or weight.
3. Any individuals who operate UAS on [Company Name] property, including persons not affiliated with the company.
4. Any individuals operating UAS purchased with funding through the company.

II. Definitions

Federal Aviation Administration (FAA) – A division of the Department of Transportation that inspects and rates civilian aircraft and pilots, enforces the rules of air safety, and installs and maintains air-navigation and traffic-control facilities.

Unmanned Aircraft System (UAS) – An unmanned aircraft system, sometimes called a drone, is an aircraft without a human pilot onboard – instead, the drone is controlled from an operator on the ground. Sometimes prefaced as a Small Unmanned Aircraft System (sUAS).

Unmanned Aerial Vehicle (UAV) - An unmanned aerial vehicle is a powered, aerial vehicle that does not carry a human operator, uses aerodynamic forces to provide vehicle lift, can fly autonomously or be piloted remotely.

Drone - The common term for UAV, UAS, and sUAS.

Remote Pilot-in-Command (RPIC) - The official term given by the FAA for the individual who either directly operates the UAS or directly supervises another individual operating the UAS. The Remote Pilot in Command must have the proper FAA UAS pilot certifications and abide by the necessary FAA regulations and this policy.

Designated UAS Authority – The individual, department, or committee designated by the [Company Name] as authorized to provide oversight for UAS activities.

III. Operating Procedures

A. Procedure for Flight approval

Regardless of flight purpose, anyone intending to fly a UAS at [Company Name] or sponsored activity/event must submit an application to [the Company's] [UAS Authority] department.

Application must include:

- Photo ID
- Proof of FAA registration
- Picture of UAV with owner information included
- Screenshot from FAA website that shows flight path is not in the “no-fly zone”
- If this is a no-fly zone, FAA permit is required
- Copy of Part 107 licenses (Commercial use only)
- Copy of vendor insurance (Commercial use only)
- Safety plan (Commercial use only)

Application review: [Designated UAS Authority] will review the application, request additional information to either approve or deny. [Designated UAS Authority] reserves the right to cancel or reschedule any approved UAS usage.

Approval: Upon approval, the applicant will be issued a UAS use permit, authorizing the use of UAS as outlined in the permit. The pilot must keep a physical copy of the UAS permit on him/her while operating the UAS. The [UAS Authority] will approve only the necessary duration for the proposed activity. Recurring flight approvals may be requested.

B. UAS Registration Requirement

- UAS that weigh more than 0.55 Lbs. must be registered with the FAA before an application if submitted. Proof of registration must be submitted with the application.
- UAS registration number and owner contact information must be listed on the UAV
- Non-US Citizens who are not eligible to register a UAS in the united states must follow the FAA guidelines.

C. Classification of Use

- Employee Operation: In-house business operations of a UAS is permitted on company property. It will require approval from the [Company Name] UAS department.
- Contractor Operation: Commercial UAS operations and 3rd party vendors are permitted after application approval from [UAS Committee] department. [Company Name] employees can request approval for contractor UAS operations.

D. Employee UAS Operation

Employees operating UAS on behalf of [Company Name] must adhere to the following:

1. Obtain approval from [Company] UAS department
2. Hold a valid FAA remote pilot certification or be under the direct supervision of a person who does hold a remote pilot certificate
3. Ensure that their UAS is registered and insured
4. Complete any required [Company] UAS training

E. Contractor UAS Operation

Third-party contractors operating UAS on behalf of [Company Name] must adhere to the following:

1. The [Company Name] UAS coordinator is responsible for coordinating the work of contractors who will be utilizing UASs on [Company's] behalf is responsible for providing that contractor with a copy of this policy.
2. All Commercial UAS operations must be conducted by a certified remote Pilot with a Part 107.
3. The contractor must agree to abide by the FAA Part 107 regulations – or the contractor's Section 333 Exemption – and related policy points within this document.
4. The company must also check the FAA guidelines and zones before flying and obtain a proper exemption if the flight-area is located in a no-fly zone.
5. Contractors/third-party operators must provide a copy of their insurance coverage when submitting the application.
6. The contractor must agree, as a part of its contract, to indemnify and hold [Company Name] harmless from any liability stemming from personal injury or property damage arising from the contractor's UAS operations.
7. The contractor must further agree to procure adequate insurance of $____ million to protect against such liability, and provide [Company] with a certificate of insurance showing [Company's] additional insured status.

F. Payload Authorization

The person requesting authorization to operate a UAS must identify the payload function, size, and weight. Access points or any devices that might interfere with company networks are prohibited.

G. Prohibited UAS Use

UAS operation is prohibited if any person(s) acting as a UAS pilot:

- Consumed alcohol in the past 12 hours
- Have used any drugs that affect the person's faculties in any way
- Operated without a permit
- For recreational use

IV. Part 107

A. Standard Operating Rules

1. The remote pilot in command must conduct a pre-flight inspection. The remote pilot should record the pre-flight inspection via hard copy document or appropriate web-based application. (See a sample of a preflight inspection checklist at Appendix 2)
2. The remote pilot may not go forward with the operation if he or she believes that there are any physical or mental conditions, drug- or alcohol-induced or otherwise, that would interfere with the safe operation of the UAS.
3. The remote pilot must maintain visual line-of-sight at all times.
4. Where possible, a visual observer should assist in operations.
5. No operations over people unless those people are directly participating in the operation.
6. Operations within daylight hours only. [Company] UASs may operate during twilight hours (30 minutes before official sunrise to 30 minutes after official sunset) if the UAS has anti-collision lighting.
7. UASs must always yield the right-of-way to other aircraft.
8. Maximum ground speed of 100 mph (87 knots).
9. Maximum altitude of 400 feet above ground level. i. A UAS may go above 400 feet if it remains within 400 feet of a structure.
10. Operations must stay within Class G airspace – well away from airports. However, should the pilot in command determine that to perform [Company] duties operations may move into Class B, C, D or within the lateral boundaries of the surface area of Class E airspace, the remote pilot must request and receive permission from the appropriate Air Traffic

Controller. Operations should also, where practicable, stay at least one mile away from heliports, including hospitals with heliports.

11. UASs may only fly when visibility is at least at 3 miles.
12. No operations from a moving aircraft.
13. No operations from a moving vehicle unless the operation is over a sparsely populated area.
14. No careless or reckless operations (e.g., no stunt flying).
15. No carriage of hazardous materials.
16. In the event of operations that lead to serious injury, loss of consciousness, or property damage of at least $500, it is the remote pilot's responsibility to make an official report to the FAA. This can be done in coordination with designated [Company] supervisors or personnel.

B. Operating Limitations - Waivers

1. All remote pilots must make sure UAV operation falls within the standard FAA Part 107 operating rules.
2. If it becomes clear that compliance with a certain or multiple of Part 107's limitations is not practical to get the full benefit of [Company Name's] UAS usage, the remote pilot or responsible individual should bring such to the attention of the UAS coordinator or other assigned supervisor.
3. [Company Name] will then make an application to the FAA for a waiver for the specific Part 107 limitation.
4. Waivers are available for:
    - Operation from a moving vehicle or aircraft (§ 107.25)*
    - Daylight operation (§ 107.29)
    - Visual line of sight aircraft operation (§ 107.31)*
    - Visual observer (§ 107.33)
    - Operation of multiple small unmanned aircraft systems (§ 107.35)
    - Yielding the right of way (§ 107.37(a))
    - Operation over people (§ 107.39)
    - Operation in certain airspace (§ 107.41)
    - Operating limitations for small unmanned aircraft (§ 107.51)

V. Pre-Flight/Post-Flight

Pre-Flight Checklists and Mission Logs must be conducted for each UAS mission by the [Company Name] or by a third-party for the [Company Name]. If more than one drone is flown during the same mission, each drone and its flight details

must recorded on the Mission Log report. Below are examples of a Pre-Flight Checklist and a UAS Flight Mission Log.

UAS Mission Checklists						Mission #:	
Mission Checklist							
☐	Airport(s) Notified:	☐	UAV Batteries Charged		☐	Gimbal Protector Installed	
☐	Location is OK to fly		Battery 1 volts:		☐	Propellers Packed	
☐	Weather Forecast OK		Battery 2 volts:		☐	Cables Packed	
	Temperature:		Battery 3 volts:		☐	Camera Filters Packed	
	Wind:		Battery 4 volts:		☐	Sun Shade Packed	
	Precipitation:	☐	Controller Charged		☐	Tools Packed	
☐	Firmware up-to-date	☐	Tablet Charged		☐	Flight Plan designed/entered in software	
☐	MicroSD Card Formatted	☐	Mobile Phone Charged		☐	Log Book Packed	
Launch Site Checklist							
☐	Verify Weather is OK to Fly		☐	Check for obstacles, interference			
	Temperature:		☐	Check for nearby human activity/dangerous situations			
	Wind:		☐	Verify Launch Pad is down-wind from observers			
	Precipitation:		☐	Launch Pad/Barriers Placed			
☐	**Safety Briefing**						
Equipment Checklist							
☐	Airframe/Landing gear inspected	☐	SD Card Installed		☐	Gimbal/Lens Protector Removed	
☐	Propellers Inspected/Attached	☐	Battery Installed		☐	Camera Filters Installed	
☐	Controller/Tablet Assembled						
Pre-Flight Checklist							
☐	Aircraft Placed on Launch Pad		☐	Check RC battery level			
☐	Turn on Remote Controller/Tablet/DJI Pilot App		☐	Check Aircraft Battery Level			
☐	Antennas Properly Positioned		☐	Check flight mode switch (P-Mode)			
☐	Turn on Aircraft		☐	Check Satellite and Compass status			
☐	Check the aircraft status LEDs		☐	Set RTH Location and height			
☐	Verify the gimbal is level, can move unobstructed		☐	Check camera settings			
Take-Off Checklist							
☐	Check launch site is clear for take off		☐	Make sure the aircraft is stable while hovering			
☐	Start the motors		☐	Check flight controls, make sure they respond as expected			
☐	Take off and hover		☐	Start recording video			
Post Flight Checklist							
☐	Remove Battery from Aircraft	☐	Install Gimbal Guard		☐	Repack all equipment	
☐	**Complete the Flight Log**						

UAS Flight Log

Mission #

Mission/Flight Plan			
Pilot Name:		RP Cert. #:	
Address:		Phone:	
Visual Observer(s):			
Location:			
Date:		Aircraft Type/Name:	
Planned Time:		Aircraft Certificate #:	
Estimated Mission Duration:		Mission Type (VFR, IFR):	
Airports within 5 miles:			
Waivers Applied for:			
Mission Description/Route:			

Mission/Flight Record			
Flight 1	Takeoff Loc:	Launch Time:	Flight Notes:
	Landing Loc:	Landing Time:	
	Battery Voltage:	Elapsed Time:	
Flight 2	Takeoff Loc:	Launch Time:	Flight Notes:
	Landing Loc:	Landing Time:	
	Battery Voltage:	Elapsed Time:	
Flight 3	Takeoff Loc:	Launch Time:	Flight Notes:
	Landing Loc:	Landing Time:	
	Battery Voltage:	Elapsed Time:	
Flight 4	Takeoff Loc:	Launch Time:	Flight Notes:
	Landing Loc:	Landing Time:	
	Battery Voltage:	Elapsed Time:	
Mission Notes:			

VI. Data Collection

All data collection (e.g., images, video) should be protected and maintained in strict compliance with organizational security policies and procedures. Whenever possible, the UAS should divert sensors away from occupied structures and uninvolved persons to minimize inadvertent, unapproved data collection.

VII. Accident Reporting

In case of a UAS mishap, the RPIC is responsible for safe custody of the UAS until the aircraft has been taken into custody by proper authority. Per Part 107, any operation that results in serious injury, loss of consciousness, or property damage of at least $500 should be reported to FAA within 10 days. The report may be submitted to the appropriate FAA Regional Operations Center (ROC) electronically or by telephone.

VIII. Sanctions

Any violations of company policies by an individual will be dealt with in accordance with applicable company policies and procedures, which may include disciplinary actions up to and including termination of employment.

Fines or damages incurred by individuals or units that do not comply with this policy will not be paid by [Company Name] and will be the responsibility of those persons involved.

IX. Resources

FAA's general page for Unmanned Aircraft Systems information:
https://www.faa.gov/uas/
FAA Drone Zone
https://faadronezone.faa.gov/#/
FAA B4UFly Mobile App
https://www.faa.gov/uas/where_to_fly/b4ufly/
FAA Summary of Small Unmanned Aircraft Rule (Part 107):
https://www.faa.gov/uas/media/Part_107_Summary.pdf
FAA's Becoming a Pilot:
https://www.faa.gov/uas/getting_started/part_107/remote_pilot_cert/

FAA's Sample Preflight Inspection Checklist: https://www.faasafety.gov/files/gslac/courses/content/451/1458/Preflight%20Inspection%20 Checklist.pdf
An Early Survey of Best Practices for the Use of Small Unmanned Aerial Systems by the Electric Utility Industry: https://info.ornl.gov/sites/publications/files/Pub73072.pdf
U.S. DHS Best Practices for Protecting Privacy, Civil Rights & Civil Liberties In UAS Programs: https://www.dhs.gov/sites/default/files/publications/UAS%20Best%20Practices.pdf

X. Frequently Asked Questions

You may want to consider answering some Frequently Asked Questions, to help inform and educate your employees and any third-party operators on the use of drones on or near your business.

FAA Frequently Asked Questions: https://www.faa.gov/uas/faqs/

Sample questions:

- Are employees allowed to fly drones on [Company Name] property?
- Do I need permission to fly drones on [Company Name] property?
- How do I get permission to fly drones on [Company Name] property?
- Who do [Company Name]'s drone policy and flight operations manual apply to?
- Do I need to register my UAS?
- Do I need to notify [Company Name] each time I fly my drone?
- What do I need to do if I crash my drone?
- What do I do if I think someone is violating the company drone policy?
- What restrictions on filming video with drones on business property are there?
- Can news media fly a UAS over [Company Name] to photograph/video stories or cover breaking news?

Created by:

Solutions to Secure Your Airspace

www.911security.com