

Small Unmanned Aircraft System (sUAS) Operation	Document No: SA-31 Revision 01 Date: 2017-01-04
	Approved By: EH&S Author: Mark S. Adams, PE

Table of Contents

1.0	Purpose.....	1
2.0	Scope.....	1
3.0	Responsibilities.....	1
4.0	Important Operational Notes.....	2
5.0	Rules of Operation by Category	2
6.0	Emergencies.....	4
7.0	Applicable Guidelines and Resources	5
8.0	Document Revision History.....	5

1.0 Purpose

The University at Buffalo (UB) will comply with current FAA regulations and best management practices to ensure the safety and privacy of UB students, faculty, staff, and visitors. In August 2016, FAA Rule 107 was published and this policy highlights the methods by which UB will achieve compliance. Any new governmental regulations will supersede UB policy statements when those regulations are more stringent.

2.0 Scope

This policy applies to all persons operating a Small Unmanned Aircraft System (sUAS) in airspace above UB property. This includes all three major campuses and off campus properties including Anderson Gallery, the President’s House, and others as listed at the FP&D Web site [[link](#)].

3.0 Responsibilities

3.1 Small UAS Operators

- Operators will be familiar with this policy.
- Operators shall review the attached flowcharts to ensure they are authorized to fly.
- Conduct preflight inspection that includes the aircraft and control system to ensure safe operation.

- Aircraft markings are required for all small UAS vehicles. These markings should allow determination of the operator's name and contact information.
- Operators engaged in commercial or public entity use must wear high visibility garments (vest, shirt, jacket). Law enforcement activities are exempt from this provision.

3.2 UB Police

- Order operators to suspend operation that is not consistent with this policy or FAA rules.

3.3 UB Environment, Health & Safety

- Maintain this policy and provide guidance to operators.
- Approve flight plans and experimental activities.

4.0 Important Operational Notes

1. Since all South Campus is within 5 miles of the Buffalo Niagara International Airport, all pilots must request clearance from the FAA prior to flying.
2. Flights outside of the Safe Fly Zones (SFZ) as designated on the attached maps may only be performed by pilots who are FAA Certified.
3. All flights outside of an SFZ must have a flight plan that is approved by either EH&S or University Police.
4. UB does not have a process to allow flights under the Public Entity category. Exceptions may be made for police response, firefighting and hazmat operations. Flights on campus will be Recreational Use, Business Use, or under the Education Use agreement.

5.0 Rules of Operation by Category

There are three categories of operation of small UAVs. They are Recreational use, Commercial/Business use, and Public Entity use. These are defined by FAA and full descriptions can be found at the [Know Before Your Fly](#) website.

5.1 Rules for all small UAVs:

- Visual Line-of-Sight (VLOS) must be maintained for all flights.
- Small UAVs may not operate over any persons not directly involved in the operation of the vehicle.
- Operators must obey any FAA Temporary Flight Restrictions (TFRs).
- Flights must be limited to 400 feet altitude and no faster than 100 mph.
- Daylight-only operations (civil twilight to dusk) are authorized. Official sunrise and sunset times for Buffalo, NY shall be used and may be found at this [Web site](#).
- Preflight inspections shall be performed.
- Operation under the influence of drugs or alcohol is not allowed.

- Use the attached flowcharts to ensure compliance.
- All crashes and injuries related to UAS operation shall be reported to either UB Police or EH&S.
- The South campus is within 5 miles of the Buffalo-Niagara Airport. All proposed flights shall have a flight plan that is approved by Buffalo Air Traffic Control.
- Downtown campus flights originating from UB owned property are likely to occur for a very limited set of criteria including aerial photo survey of a building. All flights shall be registered at ehs.buffalo.edu. Flying over property not owned by UB is not covered by this policy. Pilots need to follow protocols as set forth by the appropriate property owner of the City of Buffalo.

4.2. Recreational Use

At UB, operation of a small UAS that is under 5-lb and operated within a designate Safe Fly Zone (SFZ) as shown on the attached maps is allowed without further review. Use the Recreational Use Flight flowchart to ensure compliance.

4.3. Educational Use

Students may operate UASs in a manner consistent with the FAA legal interpretation dated May 5, 2016. The basic rules are as follows.

1. Protocols for recreational use must be followed.
2. Flights must be part of coursework and the majority of flying time must be related to some academic goal, the purpose of which is not simply learning to fly. Acceptable operation can include aviation-related coursework or other educational purposes such as television, film or photography courses.
3. Demonstrations at UB events is allowed.
4. Flights should not be related to a faculty members' professional duties or compensation or collection of data for their research projects.
5. A course instructor can only provide minimal assistance to a student flying a UAS.
6. A flight plan must be filed when flying outside of a Safe Fly Zone.

4.3. Commercial Use

The requirements for Commercial Use is expected to be the standard method of compliance for both commercial flight and flights by faculty and staff that might otherwise be accommodated under the Public Entity category. This is due to the difficulty in obtaining a blanket Certificate of Authorization that would cover all possible official University use cases. The Commercial Use rules are very straight forward.

Remote Pilot requirements:

1. The pilot must be at least 16 years of age.

2. Must hold a remote pilot airman certificate with a small UAS rating or be under the direct supervision of someone holding a remote pilot airman certificate.
3. Must pass the applicable Transportation Security Administration (TSA) vetting.
4. The pilot, or company, must have a valid Certificate of Authorization covering their planned flights.

5.4 Public Entity Use:

UB does not have a Certificate of Authorization (COA) in place to allow UAS flights by faculty or staff involved in research or other official duties. Any COA would require UB certification of pilots, descriptions of all planned activities and UAS types. The FAA does not have a process to manage multiple areas with multiple pilots. This policy will be updated as appropriate if progress is made towards obtaining a COA.

5.5 Indoor Flights

Requests for indoor flights should be directed to EH&S for planning and approval.

6.0 Emergencies

All emergencies at the University at Buffalo (North and South Campuses) shall be reported to UB Police. **(DO NOT CALL 911 FROM NORTH OR SOUTH CAMPUS.)**

Emergencies include the following:

1. Auto crashes
2. Personal injury accidents
3. Fires
4. Requests for emergency medical services
5. Police issues such as theft of property
6. UAS crashes

All persons operating UASs on North or South campus should program the University Police number into their phones to ensure prompt reporting of emergencies.

Emergency calls from off campus locations such as the Downtown Campus, Anderson Gallery, or the Darwin Martin House should go to 911.

Important UB Telephone Numbers:

All Emergencies (FIRE, EMS, POLICE)
716-645-2222

Blue Light Emergency Phones Pick up and speak
Environment, Health & Safety (EH&S) 716-829-3301

7.0 Applicable Guidelines and Resources

- 7.1 FAA Recommended guidelines for all UAS operators:
www.knowbeforeyoufly.org
- 7.2 University at Buffalo safety policies and guidance documents:
ehs.buffalo.edu
- 7.3 FAA B4UFLY app for iOS and Android
https://www.faa.gov/uas/where_to_fly/b4ufly/
- 7.4 FAA Rule 107
https://www.faa.gov/uas/media/Part_107_Summary.pdf
- 7.5 FAA Request for Waiver
https://www.faa.gov/uas/request_waiver/

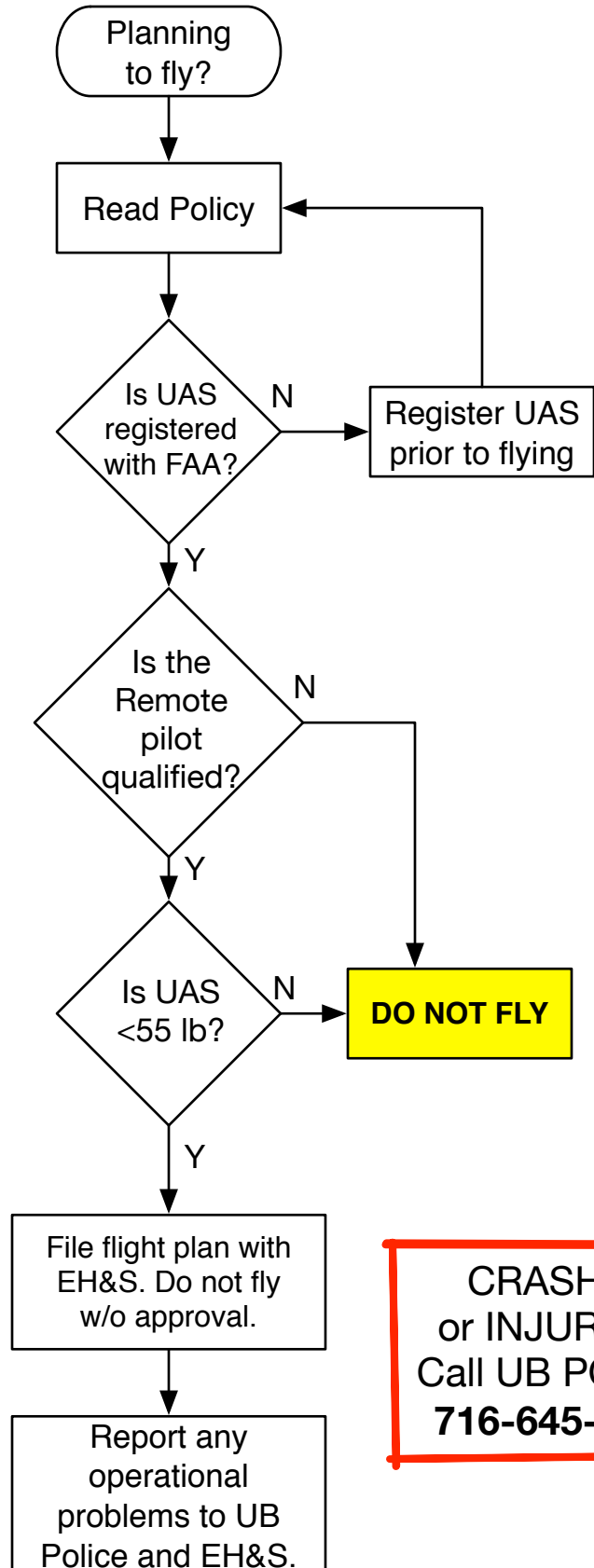
8.0 Document Revision History

Revision	Section(s) Changed	Change(s) Made:	Date
00		First Issue	2017-01-04

Business/Commercial Use Flight

All pilots shall adhere to these FAA and UB specific rules.

- Remote pilot >16 years old, FAA certificate in hand, TSA vetted.
- Fly no higher than 400 feet and remain below any surrounding obstacles when possible.
- Keep your sUAS within LOS at all times, and use an observer to assist if needed.
- Remain well clear of and do not interfere with manned aircraft operations, and you must see and avoid other aircraft and obstacles at all times.
- Do not intentionally fly over unprotected persons or moving vehicles, and remain at least 25 feet away from individuals and vulnerable property.
- Contact Buffalo ATC before flying on South Campus.
- Do not fly in adverse weather conditions such as in high winds or reduced visibility.
- Do not fly under the influence of alcohol or drugs.
- Ensure the operating environment is safe and that the operator is competent and proficient in the operation of the sUAS.
- Do not fly near or over sensitive infrastructure or property such as the electrical substation, Baker Chilled Water Plant or Capen Hall.
- Do not conduct surveillance or photograph persons outside of the Safe Fly Zones (SFZs).

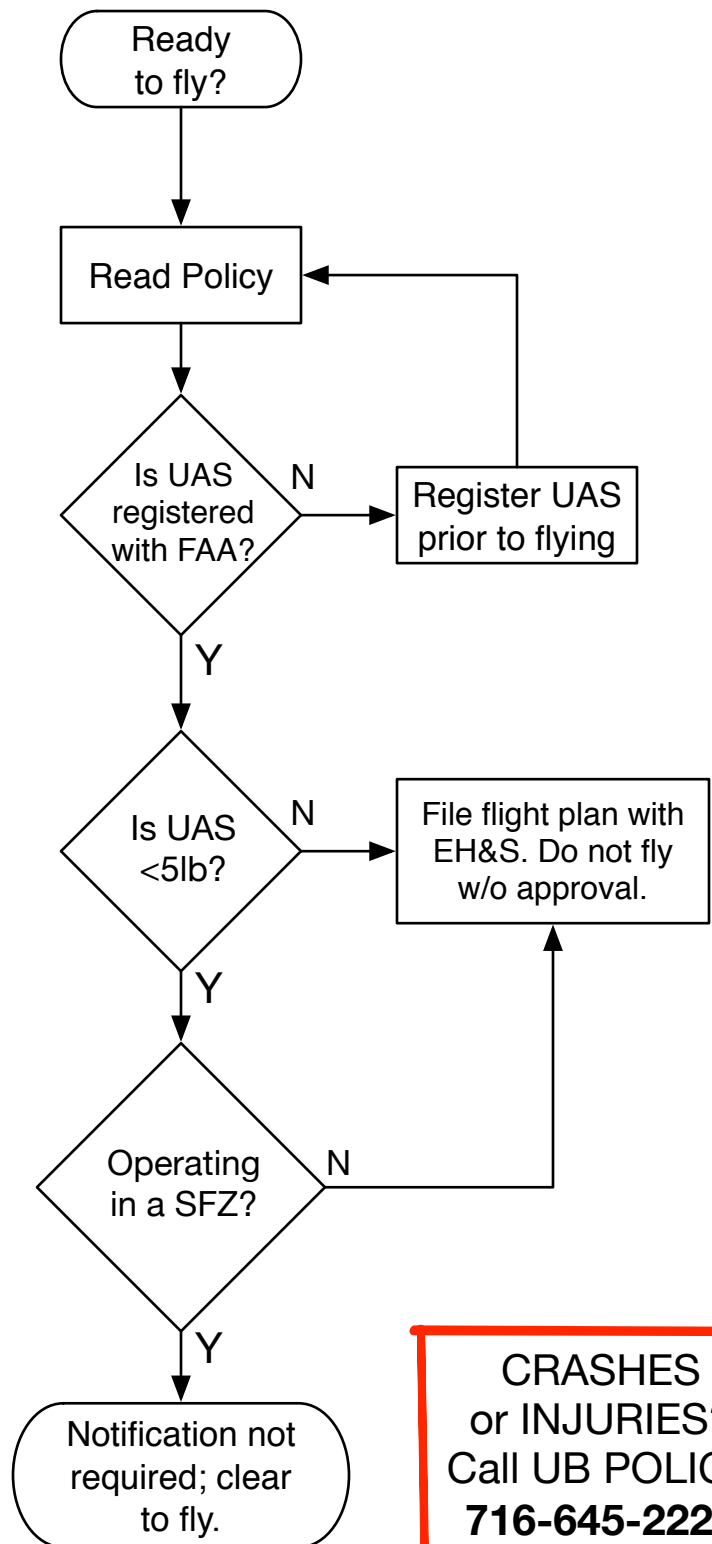


**CRASHES
or INJURIES?
Call UB POLICE
716-645-2222**

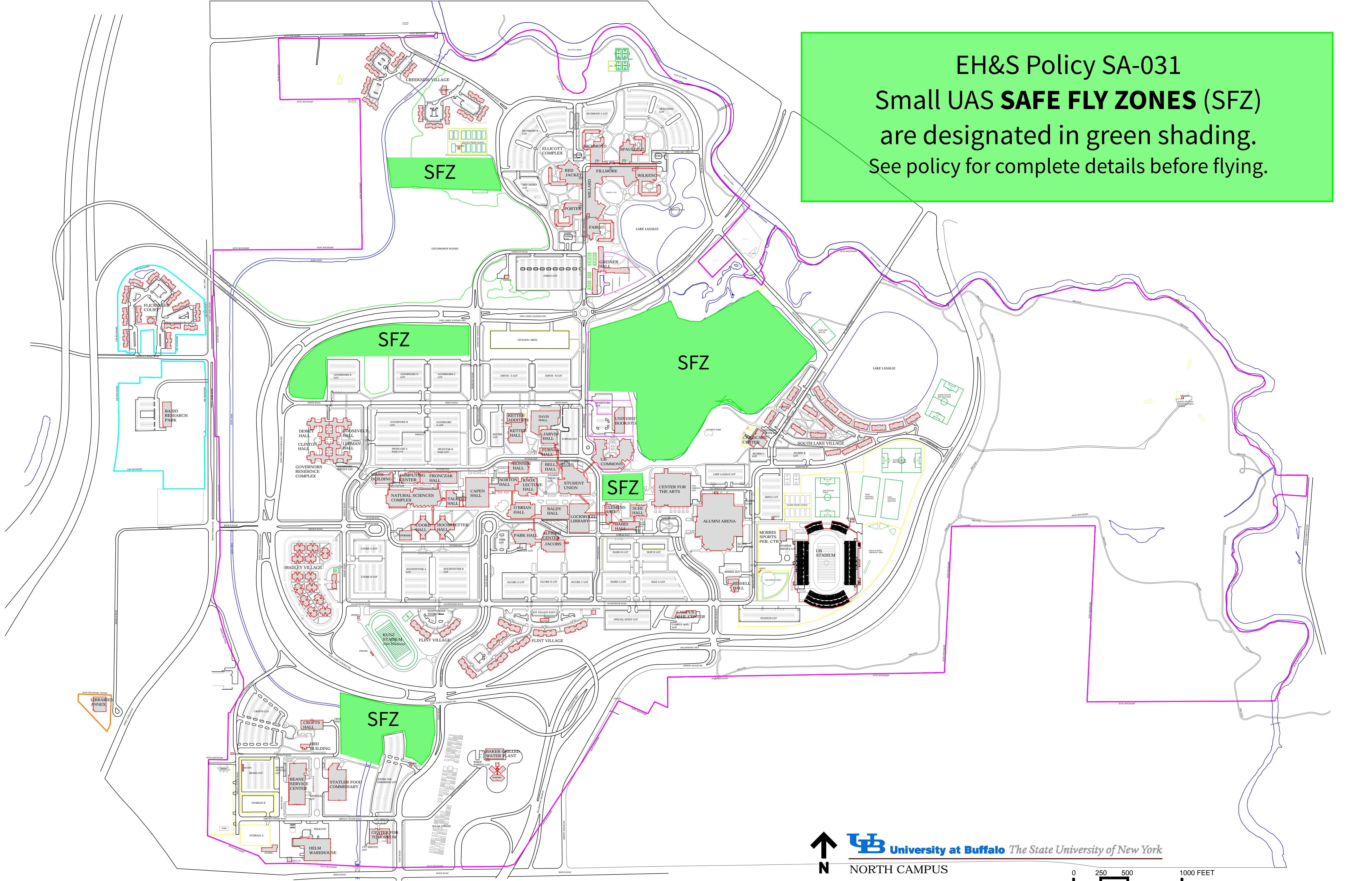
Recreational Use Flight

All pilots shall adhere to these FAA and UB specific rules.

- Fly no higher than 400 feet and remain below any surrounding obstacles when possible.
- Keep your sUAS in eyesight at all times, and use an observer to assist if needed.
- Remain well clear of and do not interfere with manned aircraft operations, and you must see and avoid other aircraft and obstacles at all times.
- Do not intentionally fly over unprotected persons or moving vehicles, and remain at least 25 feet away from individuals and vulnerable property.
- Contact Buffalo ATC before flying on South Campus.
- Do not fly in adverse weather conditions such as in high winds or reduced visibility.
- Do not fly under the influence of alcohol or drugs.
- Ensure the operating environment is safe and that the operator is competent and proficient in the operation of the sUAS.
- Do not fly near or over sensitive infrastructure or property such as the electrical substation, Baker Chilled Water Plant or Capen Hall.
- Do not conduct surveillance or photograph persons outside of the Safe Fly Zones (SFZs).



EH&S Policy SA-031
Small UAS **SAFE FLY ZONES** (SFZ)
are designated in green shading.
See policy for complete details before flying.



 **UB** University at Buffalo The State University of New York
NORTH CAMPUS

0 250 500 1000 FEET

Any University CAD drawing files of the University's buildings are to be used only as a general reference and should not be relied upon for building construction or any other work. All consultants are required to comply with the normal standards of site investigations, etc. as required by their profession and in accordance with their contracts with the University. The University at Buffalo's Facilities Planning and Design Department provides consultants with copies of the University CAD drawing files for general reference purposes only and disclaims any liability for the accuracy of the files for purposes of building construction or any other work.