UNIVERSITY OF NOTRE DAME
Policy on the Use of sUAS (Drones)

Background

The operation of Small Unmanned Aerial Systems (sUAS) is regulated by the Federal Aviation Administration (FAA) and relevant laws and is prohibited by the University of Notre Dame without formal authorization. The University's Department of Risk Management and Safety (RMS) serve as the University's clearing house for approval of all drone use on University property. All drone use must be in compliance with all applicable federal, state, local laws and University policy.

Definition

Small Unmanned Aircraft Systems (sUAS), otherwise known as drones, are defined as any aircraft weighing between .55 lbs. (250 grams) and less than 55 lbs. (25 kg) used to navigate airspace, operated without the possibility of direct human intervention from within or on the aircraft.

Scope

The scope of this policy applies to the operation of a drone on or over the lands of the University of Notre Dame and adjoining Congregation of the Holy Cross property. The scope of this policy encompasses video recording, still photography, research, and documentation of campus buildings.

Policy and Approved Plan

To ensure the safety and privacy rights of individuals and ensure the legal operation of drones on University property, the following policy and flight guidelines shall be followed:

1. All drone operators shall follow the operations pre-flight approval process. At the direction of any University Police Officer or Safety Compliance Officer, a flight can be terminated at any time.
2. Drones may not be operated in any way that would create a public safety hazard, an undue hazard to people or property, an invasion of privacy, or in such a way that unduly or negatively effects the environment of those working or living within a building, to those entering or exiting a building, or those moving about the campus.
3. Drones may not be operated directly above any public, open-air events (for example, over crowds or sporting events), inside public venues, above thoroughfares, or above any people or within 100 horizontal feet of any people.
4. Efforts should be made to limit the use of drones over public roadways at all times, and they should not be operated in a manner that would distract the attention of a vehicle's occupants.
5. For the purposes of protecting individual privacy rights, a drone shall not be used to monitor or record in an area where there is a reasonable expectation of privacy in accordance with accepted social norms. Drone operators shall not intentionally

photograph or otherwise video-record any individual or group inside a building or motor vehicle.

6. Operators must keep the aircraft under control at all times, remain within the line of sight of the aircraft, and fly only during daylight hours. Drone aircraft must be inspected for damage before each flight and ensure all safety sensors are appropriately calibrated.
7. As required by law, drone aircraft must be registered with the FAA to be in compliance with this policy. The registration process can be found at registermyuas.faa.gov. Operators must have proof of FAA registration in their possession during flight operations. Also, all drones must have their unique FAA registration number noted somewhere on the aircraft.
8. Per FAA regulations, drones may not exceed a flying height of 400 feet or be operated within a 5-mile radius of any airport without prior notice to the airport operator and air traffic controller.
9. Drones with metal blade propellers are prohibited.
10. Drones will not be operated while under the influence of any level of alcohol or drugs.
11. Drones will not be operated during inclement weather that would jeopardize operational control. Environmental conditions include sustained winds in excess of 20 mph, or gusts of 25 mph. Without prior approval, drones may be flown only when temperatures are above freezing, and not in rain, which can stress aircraft battery performance.
12. Drone operators must be trained in the use of the drone they will operate, and shall be mindful of the safety of people and risk of property damage, along with potential failure modes of their systems.
13. If the University arranges for a third-party to use a drone, all FAA requirements and campus policies shall be enforced. Proper proof of insurance (approved by RMS) which should include General Liability coverage with a $2,000,000 per occurrence limit and naming the University of Notre Dame as additionally insured will be required.

Operations Plan

The following operations plan and formal flight log must accompany all University of Notre Dame flight requests, and will require the following process:

a. Detailed Flight Plan information must be established prior to authorization request and include:
   - Purpose of the flight, including a description of intended photos/video to be captured.
   - Date and time of the flight, including start and end times and a backup plan if weather conditions prohibit flight.
   - Name of drone operator, and secondary visual observer, along with emergency contact information, including cell phone numbers.
   - Drone make, model, and weight, along with FAA registration identification.
   - Average and maximum flight altitude Above Ground Level (AGL).

b. For authorization, Contact Notre Dame Security Police (NDSP) dispatch at (574) 631-5555, and the Office of Risk Management and Safety at (574) 631-5037, providing specific flight plan details at least 24 hours in advance of the planned flight activity.

c. For authorization, contact the South Bend Airport Flight Tower at (547) 251-2600, the morning of a scheduled flight, providing specific flight plan information. A closing call at the completion of the flight is also required.

d. Unauthorized uses on University property are all uses not approved by the processes described above; NDSP will act on any reports of unauthorized drone flights and seek to

end them. Flights near heavily populated areas (i.e. occupied stadiums) are always unauthorized. Nonaffiliated violators will be dealt with in accordance with applicable policies and laws and may be subject to claims of trespassing.

e. All operators are personally responsible for compliance with FAA, federal, state, local and University policies. Failure to follow this policy may result in disciplinary action.In addition, the FAA may assess civil and criminal penalties to include fines of up to $250,000 and/or imprisonment for up to three years (14CFR Part 107)

Preflight Checklist

The Remote Pilot in Command (Remote PIC) is required to complete the preflight inspection procedure required by part 107 to determine if the drone is in a condition for safe operation:

- ❑ Visually inspect the condition of the unmanned aircraft system components
- ❑ Inspect the airframe structure, including undercarriage, all flight control surfaces and linkages
- ❑ Inspect registration markings for proper display and legibility
- ❑ Inspect moveable control surface(s), including airframe attachment point(s)
- ❑ Inspect servo motor(s) including attachment point(s)
- ❑ Inspect the propulsion system, including powerplant(s), propeller(s), rotor(s), ducted fan(s), etc.
- ❑ Verify all systems (e.g. aircraft, control unit) have an adequate energy supply for the intended operation and are functioning properly
- ❑ Inspect the avionics, including control link transceiver, communication/navigation equipment and antenna
- ❑ Calibrate UAS compass prior to any flight
- ❑ Inspect the control link transceiver, communication/navigation data link transceiver, and antenna(s)
- ❑ Check that the display panel, if used, is functioning properly
- ❑ Check ground support equipment, including takeoff and landing systems, for proper operation
- ❑ Check flight termination system components
- ❑ Check that mounted equipment, such as a camera, is securely attached
- ❑ Verify GPS communication with a minimum of four acquired satellite linkage signals
- ❑ Start the UAS propellers to inspect for any imbalance or irregular operation
- ❑ Verify all controller operation for heading and altitude
- ❑ Verify any noted obstructions that may interfere with the UAS
- ❑ At a controlled low altitude, fly within range of any interference and recheck all controls and stability

Drone Flight Plan/Information

Building/Location _____ Date _____

Reason for Flight

_____

_____

Flight Deliverables

_____

_____

Flight Start Time _____ Flight End Time _____ Flight Duration _____

Wind Speed _____ Gust Speed _____ Temperature _____

Weather Conditions _____

Max. Flight Height _____ Latitude _____ Longitude _____

Estimated Inspection Savings _____

Drone Information Make/Model _____ Serial No _____

Drone Pre-Inspection Checklist completed by Pilot _____

Flight Observer _____

Contacted Flight Tower: Pre-Flight _____ Post Flight _____

Contacted Security: Pre-Flight _____ Post Flight _____

Contacted Risk Management _____

Contacted Building Manager _____

Flight Map Notes (Attach Map) _____

Flight Authorization _____