

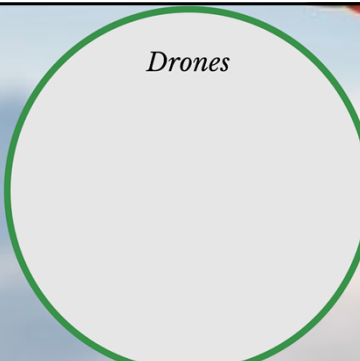
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Come Fly With Me, Let's Fly, Let's Fly Away



Drones at UNC Charlotte

Office of Legal Affairs Training Session
June 19, 2019
Brad Trahan, Asst. General Counsel
Joe Fiorelli, Interim Dir. Risk Mgmt & Insurance



Drones

Legal Framework

UNC Charlotte Policy

Examples



By JEFF PEGUES CBS NEWS January 26, 2015, 7:50 PM

Drone over White House highlights concerns

By Robert Pigott
BBC News

LOCAL

Drone buzzes Panthers-Chiefs game and police pounce

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Fox News Guest Crashes Drone While Talking About Drone Safety

FEBRUARY 7, 2015 BY ERIC REAGAN — 32 COMMENTS

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Drones

Legal Framework

UNC Charlotte Policy

Examples

All this legal stuff...

Federal Aviation Administration

- FAA Reauthorization Act of 2012, as amended in 2018
- 4 Main Categories of Users
 - Commercial, Government, Educational, Hobby

North Carolina Department of Transportation

- All operators must pass knowledge based test
- Commercial operators must obtain a permit

Privacy & Other Considerations

Commercial: Part 107

Step 1: Learn the Rules

- Under 55 pounds
- Visual line-of-sight only
- Not over people or under covered structures
- Daylight only
- Under 100 mph
- Under 400 feet from ground (or structure)
- Airspace restrictions
- Only fly in the United States

Step 2: Remote Pilot Certificate

- Eligibility
- Knowledge Test

Step 3: Register Drone with FAA



Commercial: Part 107 Waiver

You want to...	Part 107 regulation you need a waiver from...
Fly a UAS from a moving aircraft or a vehicle in populated areas	§ 107.25 – Operation from a Moving Vehicle or Aircraft
Fly a UAS at night	§ 107.29 – Daylight Operations
Fly a UAS beyond your ability to clearly determine its orientation with unaided vision	§ 107.31 – Visual Line-of-Sight Aircraft Operation
Use a visual observer without following all visual observer requirements	§ 107.33 – Visual Observer
Fly multiple UAS with only 1 remote pilot	§ 107.35 – Operation of Multiple Small UAS
Fly a UAS without having to give way to other aircraft	§ 107.37(a) – Yielding Right of Way
Fly a UAS over a person/people	§ 107.39 – Operation Over People
Fly a UAS: <ul style="list-style-type: none"> • Over 100 miles per hour groundspeed • Over 400 feet above ground level (AGL) • With less than 3 statute miles of visibility • Within 500 feet vertically or 2000 feet horizontally from clouds 	§ 107.51 – Operating Limitations for Small Unmanned Aircraft

How to get a waiver:

- (1) Call us
- (2) Determine needs
- (3) Complete application
- (4) Submit in FAA's Drone Zone
- (5) Wait... 90 days

Commercial: Part 107 (Non-Waiver)



Not all of the Part 107 Regulations can be waived...

- Operations from a moving aircraft, vehicle, or boat while carrying property of another on the drone.
- Beyond visual-line-of-sight while carrying property of another.
- 55 pounds of heavier.
- Carrying hazardous materials

But... for advanced operations, outside of the Part 107 Waiver, you can apply for **Special Authority or Blanket COA** or a **Public Certificate of Authorization (COA)**

Special Authority under § 44807

(formerly Section 333 Exemption)



- Initial skill test - must have airman's certificate (i.e. - a pilot's license).
- Medical Certificate - fitness test for drone pilots.
- 2:1 person to drone ratio to fly
- Daytime operations.
- Visual Line of Sight
- Processing Time - up to 6 months
- Drones weighing more than 55 pounds must receive Special Authority or COA.

Public Safety & Governmental Use (COA)



49 U.S.C. 41025(a)(2): "Governmental Function"

- non-commercial/no compensation
 - national defense
 - intelligence missions
 - firefighting, search and rescue
 - law enforcement
 - aeronautical research
 - biological or geological resource management
 - "closely related activities"
- note: the FAA has rejected educational and agricultural research and extension activities by public universities as not falling within the COA-eligible "governmental functions"

Educational Use



Informal Guidance from FAA Memo (2016)

- Limitation for faculty and research

The Reauthorization Act of 2018

- Expanded use for drones in the classroom or drone training programs

Current:

- (1) Fly under the Part 107 sUAS Rules (or with a waiver);
 - Learn Rules, Pass Drone Test, Register
- (2) Fly as a "recreation or hobby" user

Hobby or Recreational Use

Step 1: Register and Mark Drone

Step 2: Know the Rules

- Only for fun
- Follow safety guidelines
- Below 400 feet
- Visual Line of Sight
- Avoid: Aircrafts, people, public events, stadiums, emergency response efforts
- B4UFLY App



Step 3: (future) Safety Test

- Reauthorization Act of 2018 requires drone operators to pass an online knowledge and safety test and carry proof of test passage

Privacy & Other Considerations (North Carolina)

Knowledge Test (all) and **Permit** (commercial)

Surveillance -- Illegal to use UAS to take or distribute images of a person or their home without their consent (NCGS 15A-300.1; NCGS 14-401.25)


Weapons -- Attaching a weapon to a UAS is a Class E felony (NCGS 14-401.24)

Hunting and Fishing -- Operators may not use a UAS to disrupt wildlife resources or the lawful taking of wildlife. Illegal to use a UAS in the process of taking wildlife resources (N.C. G.S. 113.295)

Interference with Manned Flights -- Operators may not damage, disrupt the operation of or otherwise interfere with manned flights (N.C. G.S. 14-280.3).

Launch & Recovery Sites -- It is illegal to launch or recover a UAS from either private or state property without the consent of the property's owner (N.C. G.S. 15A-300.2). Local and federal property have their own laws and regulations governing the launch and recovery of UAS.

Prisons -- Illegal to fly over any prison - state or federal - in North Carolina (N.C. G.S. 15A-300.3).



University Policy 717: Unmanned Aircraft Systems (currently being updated)

UNIVERSITY POLICY: 717

EXECUTIVE SUMMARY:

UNC Charlotte recognizes the potential value of Unmanned Aircraft Systems (UAS) for educational, commercial and recreational purposes. In consideration of the personal safety and well-being of the UNC Charlotte campus community, and in accordance with applicable state and federal laws, this Policy establishes requirements for operation of UAS on (or above) the main campus of UNC Charlotte.

Four main categories:

- (1) University Activities
- (2) Non-University (Recreational)
- (3) Prohibited Uses
- (4) Standards

University Activities

- UAS Flight Notification
- Safety Risk Assessment
- Reporting Incidents & Accidents
- Non-University Property
- Insurance



HOBBY AND RECREATIONAL USE: UAV/DRONE FLIGHT INFORMATION FORM

All individuals who wish to operate a UAV/drone for hobby or recreational purposes on or above UNCC premises must complete this form at least three University business days prior to the proposed date of first use. See University Policy 71.7 for more details. Please contact Joe Florell (jflorell@unc.edu) with any questions.

Pilot's First Name *

Pilot's Last Name *

What is your relationship with the University?

University Affiliation *

- UNCC Student
- UNCC Faculty
- UNCC Staff
- Visitor to UNCC
- Other...

Email Address *

Type of UAV/Drone *

What is the make/model of your UAV/drone?

Date of First Flight *

On what date will you be flying?

Month: Day: Year:

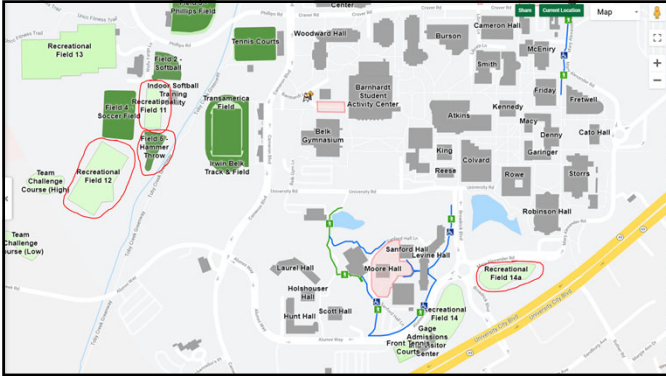
UAV/Drone Flight Information Form

<https://webforms.uncc.edu/risk-management-insurance/hobby-and-recreational-use-uavdrone-flight-information-form>

Non-University (Hobby/Recreational)

- **Three Days Notice**
 - Name of pilot
 - Type of UAS
 - Flight information
 - Participants involved
 - Other information as requested
- **Recommended Locations**
 - Rec Fields
 - Athletic Field 5
- **Pictures and Videos**
 - University Communications





Prohibited Uses & Exceptions



- Jerry Richardson Stadium during events
- In or near residence halls
- Sensitive or personal space
- Events with minors

Note: Policy currently does not contemplate third party commercial drone operations on campus. However, that is managed through OLA and University Communications upon consultation with RMI and the UAS Advisory Committee.

Standards (new Policy draft)

- No flying over people
- No flying above 400 feet
- No flying at night
- No flying in unsafe manner
- No flying outside visual line of sight
- No flying under the influence of alcohol or drugs
- No flying in a manner that interferes with air traffic
- No flying close to other aircraft
- No photography of spaces where an individual has an expectation of privacy

