## **Checklist for Granting an Exception for Commercial**

### **Unmanned Aircraft System (UAS/Drone) Use**

Effective Date: August 29, 2016

**Revision Date: October 5, 2022** 

This checklist is designed to provide a tool to facilitate the required risk/benefit analysis pursuant to Campus policy before a commercial drone operation can take place over the Downtown Denver or Anschutz Medical Campus. Ultimate approval for any drone flight over CU Anschutz property lies with the Executive Vice Chancellor for Administration and Finance and Chief Financial Officer. Ultimate approval for any drone flight over the Downtown Denver Campus lies with the Executive Vice Chancellor of Administration and Strategy. Any flight that takes place without administrative approval will be deemed a violation of federal regulation and Campus policy, and those conducting the flight will be subject to sanctions at the discretion of Campus officials and will be promptly reported to Campus or local law enforcement, and the Federal Aviation Administration (FAA) Regional Operation Center.

### **Preliminary Inquiry:**

- (1) Is the use of the UAS necessary or crucial to further the mission of the Campus?
- (2) Are there no viable alternatives to using the UAS to achieve the stated goal or purpose?
- (3) Has the Campus, or in some cases, System Administration, requested an outside company or internal party to perform commercial flight services?
- (4) What Campus School/College/Department is involved and/or sponsoring the drone operation?
- (5) Who owns the drone and who will be operating and insuring the drone?
- (6) Will your proposed flight be taking place anywhere near, over, or around Children's Hospital Colorado or University of Colorado Hospital?
- (7) Will your proposed flight plan have the potential to interfere with Flight for Life traffic entering and leaving the airspace over the Anschutz Medical Campus?

If the answer to either question 1 or 2 is "no", an exception will not be granted. Pursuant to Campus policy, there must be a compelling circumstance to grant a waiver to the prohibition on drone flights over campus property.

Before the Executive Vice Chancellor for Administration and Finance and Chief Financial Officer for the Anschutz Medical Campus or the Senior Vice Chancellor for Administration and Finance for the Downtown Denver Campus can determine whether or not the flight warrants an

exemption, the following items <u>required pursuant to federal regulation (14 CFR Part 107)</u>, must be provided by the company before an official waiver can be granted:

- An FAA-Issued permanent Remote Pilot Certificate<sup>1</sup>
- Proof of Registration of the UAS with the FAA<sup>2</sup>
  - The aircraft must be more than 0.55 lbs. and weigh under 55 lbs.
- o A **Description of Proposed Flight Operations**, as contained in the questionnaire attached at **Exhibit A** to this UAS Commercial Use checklist.
- o A UAS Flight Plan, which meets all required FAA Criteria:
  - Flown in Class G<sup>3</sup> Airspace
  - Must be flown in visual line-of-sight
  - Must fly under 400 feet
  - Must fly during the day
  - Must fly at or below 100 mph
  - Must yield right of way to manned aircraft
  - Must NOT fly over people
  - Must NOT fly from a moving vehicle
- o **Proof of Liability Insurance** to cover UAS operations

If an <u>internal department</u> is requesting the use of a drone for commercial purposes, there are two routes for providing documentation for campus approval:

- (1) The option outlined above for small UAS operations under 14 CFR Part 107; OR
- (2) Obtain a blanket public **Certificate of Waiver or Authorization** (COA) from the FAA. A COA for public aircraft permits nationwide flights in Class G airspace at or below 400 feet, self-certification of the UAS pilot, and the option to obtain emergency COAs (e-COAs) under special circumstances. Special COAs must be approved by the FAA, and the requestor must contact 9-AJV-115-USACOA@faa.gov for more information. A COA application takes approximately 60 days to process.

Once the campus authorities have received all of the required documentation outlined in this document, the campus must be made aware of the proposed date, time, and exact flight plan of the UAS. If any documentation is incomplete, missing, or inadequate, or the proposed flight plan is deemed to be a risk to the campus community, the campus reserves the right to deny the UAS operation. All UAS operations must be approved by the following departments:

Office of Administration and Finance
University Police
Office of Regulatory Compliance

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https://www.faa.gov/air\_traffic/nas\_redesign/regional\_guidance/eastern\_reg/nynjphl\_redesign/documentation/feis/appendix/media/Appendix\_A-National\_Airspace\_System\_Overview.pdf

<sup>&</sup>lt;sup>1</sup> https://www.faa.gov/uas/commercial operators/become a drone pilot/

<sup>&</sup>lt;sup>2</sup> https://registermyuas.faa.gov/

University Risk Management
Facilities Management
University Counsel
Affiliate Hospital(s) Flights Deck (for Anschutz Medical Campus flights only)
Department/School/College using the footage

Once the company or internal department has received approval from all of the required Campus stakeholders, the company or internal department will be required to complete the Agreement for UAS flight.

The Campus will issue a physical permit for all approve flights, which the flight operator must carry with them at all times during flight operation.

## **Exhibit A: Description of Proposed Flight Operations**

# **Operational Details**

- 1. Where do you plan to operate?
- a. Consider providing latitude/longitude and a detailed map of your planned flight area.
- 2. How high will you fly your aircraft (maximum altitude above ground level)?
- 3. Do you want to fly in controlled airspace (Class B, C, D, surface E)?
- a. If yes, please see 14 CFR §107.41 and our Flying Drones Near Airports (Controlled Airspace) Part 107 page
- 4. Are there any other kinds of airspace within 5 miles of any planned flight area?
- 5. What kind of area(s) will you fly over?
- a. For example: rural, sparsely populated, congested, populated, a neighborhood, within city limits, large outdoor gathering of people, a restricted access site, etc.

#### **Small UAS Details**

- 1. What kind of UAS will you use to fly the operations requested in this application?
- a. For example: multi-rotor, fixed wing, hybrid (both multi-rotor and fixed wing), single rotor, lighter than air, etc.
- 2. What is your UAS's power or energy source in flight?
- 3. What is your UAS's maximum flight time (in minutes), range (in feet), and speed (in miles per hour)?
- 4. How big is the aircraft (length/width/height in inches)?
- 5. How do you ensure the aircraft only flies where it is directed (i.e. ensure containment)?
- a. For example: geo-fencing, tether, etc.
- 6. What kind of termination system, if any, does the UAS have?
- a. For example, immediate flight termination switch
- 7. How much will the aircraft and its payload weigh when flying?
- 8. If the aircraft carries any external or internal load (or object), how is the load secured?
- 9. What, if any, external or internal load (or object) could be dropped from the aircraft when flying, and how will you assure the safety of people, or other people's property, if it is dropped or detached when flying?

## **Pilot/Personnel Details**

- 1. What minimum level of experience will the Remote Pilot in Command (Remote PIC) have to fly under this waiver?
- 2. How many personnel (including the Remote PIC) will you use for operations under this waiver (minimum needed)?
- 3. What kind of training, if any, will personnel (e.g. visual observer(s)) have prior to flying under the waiver?
- a. How will the personnel be trained?
- b. How will the Responsible Person know the other personnel are competent and have operational knowledge to safely fly the UAS under the waiver conditions?
- c. If personnel will be tested, what kind of testing will be performed, and how will evaluations be conducted and documented?
- d. How will personnel maintain the knowledge/skill to fly under this waiver? Will recurrent training or testing be required?