## **Environmental Health and Safety**

### **MEMORANDUM**

DATE: 02/2/2022

FROM: Kortney Hughes, Assistant Director of Risk Management

TO: Chapman University Community

RE: Drones, also known as Unmanned Aerial Vehicle/System (UAV/UAS)

Effective August 29, 2016 the FAA Small Unmanned Aircraft Rule is in effect. https://www.faa.gov/uas/getting\_started/

The rules for operating an unmanned aircraft depend on why you want to fly. All flights for Chapman University are considered Fly for Work.

	Fly for Fun	Fly for Work	
Pilot Requirements	No pilot requirements	Must have Remote Pilot Airman Certificate Must be 16 years old Must pass TSA vetting *A person who already holds a pilot certificate issued under 14 CFR part 61 and has successfully completed a flight review within the previous 24 months can complete a part 107 online training course at www.faasafety.gov to satisfy this requirement.	
Aircraft Requirements	Must be registered if over 0.55 lbs.	Must be less than 55 lbs.  Must be registered if over 0.55 lbs.  (online) <a href="https://registermyuas.faa.gov/">https://registermyuas.faa.gov/</a> Must undergo pre-flight check to ensure UAS is in condition for safe operation	
Location Requirements	5 miles from airports without prior notification to airport and air traffic control	Class G airspace*	
Operating Rules	Must ALWAYS yield right of way to manned aircraft Must keep the aircraft in sight (visual line-of-sight) UAS must be under 55 lbs. Must follow community-based safety guidelines Must notify airport and air traffic control tower before flying within 5 miles of an airport	Must keep the aircraft in sight (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*	

	Fly for Fun	Fly for Work
Example Applications	Educational or recreational flying only	Flying for commercial use (e.g. providing aerial surveying or photography services) Flying incidental to a business (e.g. doing roof inspections or real estate photography)
Legal or Regulatory Basis	Public Law 112-95, Section 336  - Special Rule for Model Aircraft FAA Interpretation of the Special Rule for Model Aircraft	Title 14 of the Code of Federal Regulation (14 CFR) Part 107

<sup>\*</sup>These rules are subject to waiver.

#### **FAA Requirements:**

- Unmanned aircraft must weigh less than 55 lbs. (25 kg).
- Visual line-of-sight (VLOS) only. The unmanned aircraft must remain within VLOS of the remote pilot in command and the person manipulating the flight controls of the small UAS. Alternatively, the unmanned aircraft must remain within VLOS of the visual observer.
- At all times the small-unmanned aircraft must remain close enough to the remote pilot in command and the person manipulating the flight controls of the small UAS for those people to be capable of seeing the aircraft with vision unaided by any device other than corrective lenses.
- Small-unmanned aircraft may not operate over any persons not directly participating in the operation, not under a covered structure, and not inside a covered stationary vehicle.
- Daylight-only operations or civil twilight (30 minutes before official sunrise to 30 minutes after official sunset, local time) with appropriate anti-collision lighting.
- Must yield right of way to other aircraft.
- May use visual observer (VO) but not required. (However, I recommend a VO for Chapman University flights.)
- First-person view camera cannot satisfy "see-and-avoid" requirement but can be used as long as requirement is satisfied in other ways.
- Maximum groundspeed of 100 mph (87 knots).
- Maximum altitude of 400 feet above ground level (AGL) or, if higher than 400 feet AGL, remain within 400 feet of a structure.
- Minimum weather visibility of 3 miles from control station.
- Operations in Class B, C, D and E airspace are allowed with the required ATC permission.
- Operations in Class G airspace are allowed without ATC permission.
- No person may act as a remote pilot in command or VO for more than one unmanned aircraft operation at one time.
- No operations from a moving aircraft.
- No operations from a moving vehicle unless the operation is over a sparsely populated area.
- A person operating a small UAS must either hold a remote pilot airman certificate with a small UAS rating or be under the direct supervision of a person who does hold a remote pilot certificate (remote pilot in command).

#### To qualify for a remote pilot certificate, a person must:

• Demonstrate aeronautical knowledge by either:

- Passing an initial aeronautical knowledge test at an FAA-approved knowledge testing center; or
- Hold a part 61 pilot certificate other than student pilot, complete a flight review within the previous 24 months, and complete a small UAS online training course provided by the FAA.
- Be vetted by the Transportation Security Administration.
- Be at least 16 years old.



#### A remote pilot in command must:

- Make available to the FAA, upon request, the small UAS for inspection or testing, and any associated documents/records required to be kept under the rule.
- Report to the FAA within 10 days of any operation that results in at least serious injury, loss of consciousness, or property damage of at least \$500.
- Conduct a preflight inspection, to include specific aircraft and control station systems checks, to ensure the small UAS is in a condition for safe operation.
- Ensure that the small unmanned aircraft complies with the existing registration requirements specified in § 91.203(a)(2). (The FAA now requires every drone owner to register a UAS over .55 lbs.)

#### **Chapman Requirements:**

- Flight weight of 10 pounds or less, including aircraft, payload, and fuel/fluids, and camera.
- OFD and OCFA will only require the film permit, provided the applicant meets all of the provisions required by the FAA.
- Risk Management will require all of the proper insurance from the pilot/production company.
- Risk Management, Public Safety, and Fire & Life Safety will require the pilot/production company to provide the following:
  - O Details of the operating area, flight and safety plans with dates and times.
  - A copy of the remote pilot certificate.
  - Details of the specific objects, buildings, or persons to be filmed.
  - O A copy of the city or county film permit.
  - O Details of an emergency response plan with emergency landing procedures.
  - Will require a Visual Observer.

# Request for Drone (UAV/UAS) Approval

Name of Requestor							
Department Making Request							
Describe Purpose							
Describe the UAV/UAS, i.e. Drone:	Weight	Wingspan	Wing ID Number	FAA Registration Number			
Details of the operating area, flight and safety plans with dates and times.							
Camera – Describe any photography/filming that will be done including type, purpose, and precautions for privacy.							
Identify the pilot and attach copy of the remote pilot certificate.					Check if attached		
Details of the specific objects, buildings, or persons to be filmed.							
Attach copy of the city or county film permit.					Check if attached		
Details of an emergency response plan with emergency landing procedures.							
Identify one or more visual observers.							
Risk Management Approval	Public Safety A	pproval	Fire & Life Safe	Fire & Life Safety Approval			