

# Guidelines for Indoor Use of Unmanned Aircraft Systems

Prior to any use of an Unmanned Aircraft Systems (UAS), notification must be made to Risk Management and a Production Safety Representative. Notifications must be made as early as possible in the creative process, that production intends to fly a UAS indoors.

## **Guidelines for Operation:**

1. Operation of any UAS shall be performed only by operators with experience and appropriate training, who are fully qualified in the operation of UAS.
2. Prior to any operation of a UAS, the Pilot in Command (PIC) and the designated production representative will conduct safety briefings/safety meetings for the cast and crew, and persons necessary for filming. Briefings/Safety Meetings should include:
  - a) Possible risk to cast and crew in the vicinity
  - b) Safeguards to personnel, animals, equipment
  - c) Communications and emergency procedures, landing zones, and safe zones
  - d) Boundries and vetted flight paths
  - e) The use of SPFX, squibs, or stunt personnel
  - f) Radio frequencies and electronic devices that may interfere with the UAS
  - g) Obstacles, equipment or locations that may present a hazard
  - h) Abort signals, audible and/or visual used to halt filming
  - i) State and Local regulatory limitations or restrictions
3. The PIC is the final authority over the UAS and shall be in command over flight operations at all times. The PIC shall have final authority to abort any flight operation. Abort signals are to be designated ahead of time.
4. The PIC will establish the communication protocols with the designated production representative to establish a plan for communications. ***Once the UAS is airborne no changes will be made to any sequence without authorization from the PIC.***
5. An area must be established for the UAS operator to setup, rehearse and test the takeoff and landing, with a Production Safety Representative. This area needs to be clear of debris, and anything else that may hinder the operation of the UAS. All equipment shall be placed a safe distance away from this area.
6. UAS operators must provide additional spotters if necessary.
7. Unless authorized by the PIC, no personnel shall approach the UAS.
8. Equipment shall not be attached to, nor altered on, the UAS without approval of the PIC.
9. Radio frequencies shall be tested with RF conditions matching the live event as closely as possible. Testing must be done in advance at the site.

10. Live tests of the battery life must be performed prior to any flight operation. Flight times should last no longer than 30% of the UAS and the remote controller battery.
11. In the event of a power failure the UAS is designed to initiate a slow descent.
12. In the event of a loss of radio control, the UAS is designed to (a) hover and initiate a slow descent, or (b) return to the predetermined home.
13. The UAS must remain at least 15 feet away from non-consenting individuals, vehicles, equipment, or other vulnerable property. Proximity - The horizontal distance to the closest person should be greater than the flying height of the UAS. (If the closest person is 20 feet away then the UAS has a flight ceiling of 20 feet.) The UAS shall not be flown over the general audience or the public.
14. The UAS must not exceed 55 pounds in total.
15. Blade guards shall be used to protect the fingers from coming in contact with the blades.
16. Authorities Having Jurisdiction (AHJ) may have their own requirements regarding permits, or approvals regarding UAS operations. (PLAN EARLY).

## Notification

The Production Company must notify all production personnel of the planned use of UAS so that any objections can be communicated prior to the UAS operation. Notification can be accomplished by including a statement like the following on the call sheet:

**“An Unmanned Aircraft System (UAS) will be used in close proximity to production personnel and equipment. Any personnel who does not consent to working within the UAS area must notify \_\_\_\_\_ (please insert the assigned production designee(s) prior to the use of the UAS.”**

## Additional Briefing/ Safety Meeting

A secondary safety meeting shall be held with the people over whom the UAS will fly. The people shall be informed about the flight path and what to do in the event that the UAS lands in the crowd. Individuals should also be given the option to not participate in the UAS operations.

### **Absolutely no flying over the general audience or the public.**

Medic - Production shall have a medic on set any time a UAS is to be flown in proximity to talent, employees, or cast audience.