sUAS Indoor Safety Guidelines

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The operation of unmanned aircraft systems (sUAS/drones) at Southeast Missouri State University should be done in a safe manner. Flying a drone indoors has several risks such as flying into people, pets, furniture, ceilings and floors or other objects. Because every sUAS device functions differently, you should review the device manual to look for any specific requirements that the manufacturer has set forth for indoor flight. In addition, the following guidelines for indoor drone operation should be adhered to:

1. Fly drones specifically designed to indoor flight/operations.
2. The smaller the better: Gain prior experience by flying smaller (nano-drones or micro-drones) or toy models before moving on to mid-sized or larger drones.
3. For mid-sized and larger devices, it is recommended to have sUAS systems that have indoor positioning systems or obstacle avoiding drones. This is especially important in furnished rooms in a home or apartment.
4. Do not fly large drones such as FPV or Phantom Size drones indoors for competitions or demos unless you have considerable experience.
5. Avoid flying close to walls: The flow of air is impeded as one gets closer to a wall, which affects lift.
6. Avoid flying too close to ceilings or the floor.
7. It is recommended that indoor flight take place halfway between the ceiling and the floor to counter any changes in the altitude up or down during operation.
8. When possible, fly microdrones with optional propellers, which will allow them to bump into walls or ceilings without crashing.
9. Dial down controls. Make sure that you are flying at the absolute minimum speed for the drone and watch altitude climbing closely.
10. Use indoor hulls when flying indoors. Some drone systems have indoor hulls which are placed on spinning rotor blades to not only protect drones from impact but animals, furniture, people, and other objects.
11. Read any guidelines in the drone's manual about precautions to take during indoor flight/operations.
12. Secure any pets and animals within the area.
13. If you are flying within a public space post notices and markers indicating area of flight.
14. Move, rearrange or remove furniture from the room to ensure that drone's flight path is not impeded.

Resources & Additional Links:

- Tips for flying your drone indoors, Mark LaFay: http://www.dummies.com/consumer-electronics/drones/tips-for-flying-your-drone-indoors/
- Tips for Indoor Drone Flying: https://www.droneflyers.com/tips-for-indoor-drone-flying/
- Should you fly your drone inside?: http://500below.com/fly-drone-inside/
- Safety Tips: http://www.lemondrone.com/tips/6-safety-tips-flying-drone-indoors/ and http://www.droneguru.net/12-tips-for-safely-and-successfully-flying-drones-indoors/