



10 Myths about Drones

1. A Model Aircraft is not a Drone or Unmanned Aircraft

Congress legally defined a model aircraft as a type of Unmanned Aircraft under [Section 336 of Public Law 112-95](#). Therefore, a Model Aircraft **is a drone**. In addition, there are many names for 'drones' such as quadcopter, quadrotor, hexirotor, model aircraft, and many more. Although there are different names, the FAA nomenclature for 'drone' is **UAS**. UAS stands for Unmanned Aircraft System. Although many believe that a 'drone' is fully autonomous while a model aircraft is pilot operated, a model aircraft can have autonomous and manual control modes. The legal difference between a model aircraft and a UAS is that a model aircraft is flown within visual line of sight of the person operating the aircraft and flown for hobby or recreational purposes. If a person is operating a 'model aircraft' for a business, then it is legally a UAS and the operator must have the proper FAA authorization.

2. I'm a hobbyist and registered my drone, I can go outside and fly everywhere now!

Wrong. Just because someone has registered their aircraft, there are still laws that need to be abided by. The FAA "**Know Before you Fly**" campaign covers the many safety guidelines you must follow. These include proper registration, flying at or below 400 ft, flying within your ability to see the aircraft, and never flying near other aircraft, over people, over stadiums or sporting events or under the influence. You should be aware of the airspace that you are flying in and whether you have permission to fly at a particular location. Some municipalities have adopted their own laws regarding land use or even the prohibition of flying model aircraft. Privacy and trespass laws extend out to the UC System and each UC has rules specific to their campus. Be sure to check with your campus and local community laws, such as the Academy of Model Aeronautics([AMA](#)) before you operate your UAS.

3. I'm a hobbyist taking videos for a friend's commercial event and not getting paid. Therefore, I do not need a private pilot's license to cover the event.

Although you are not being paid, you are still flying for a commercial purpose because your flight purpose (photography) benefits the commercial activity. Therefore, you will need to follow the commercial laws and have the appropriate certification. A recent lawsuit case regarding an unpaid hobbyist flying for a commercial event has cost him a \$55,000 fine from the FAA. Refer to the [FAA FAQ page](#) for more information about safe operations to avoid fines.

4. I can wear First Person View goggles and fly my drone unaided by a visual observer.

First Person View (FPV) goggles do not satisfy the Line of Sight requirement of Unmanned Aircraft System (UAS) operations. Therefore, if the pilot is wearing any goggles obstructing their Line of Sight View, the Visual Observer must also have ability of taking control in the event of the goggles losing ability to live stream. A solo person with FPV goggles must form a buddy system with a visual observer to legally operate if you are operating for fun under the [AMA Safety Rule 2b](#) and [Part 107 107.31 and 107.33](#).

5. The FAA doesn't control all the airspace all the way to the ground.

Wrong. The FAA controls all navigable airspace, which does extend all the way to the ground. This is codified in 14 C.F.R. 91.119 (a) and (c), in which the FAA declares that the FAA is responsible for the safety during the operation of an aircraft during takeoff or landing, or in an in-flight emergency situation requiring immediate action, both of which preclude that the FAA controls airspace all the way to the ground.



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6. The UAS Registration is meaningless.

Having a registered vehicle and displaying the proper license number allows the FAA to provide some oversight over UAS operations to better ensure the safety of all parties. By having a number visible, the FAA can hold people accountable for damages and reckless endangerment. To register your UAS with the FAA, please click [here](#). The Academy of Model Aeronautics similarly requires that all AMA members display their AMA number on the inside or affixed to the outside of the model aircraft. Unfortunately, at this time, neither the AMA or the FAA registration numbers may be used interchangeably.

7. Drones are easy to operate.

Many of the advanced drones may be easy to operate, but not all drones have intelligent or automated safety features. These drones may require extra practice to get used to finicky or non-intuitive control schemes.

8. Flying a drone is expensive and requires a Private Pilot's license

Currently, UAS operators under a Section 333 exemption do require a private pilot's license, however, the FAA just released a new law specifically for small Unmanned Aircraft Systems. Under the new law, 14 CFR 107, or Part 107, UAS operators can receive a Remote Pilot's Certificate with a UAS rating for commercial use of an UAS. This new certificate is expected to cost less than \$200 and require only an aviation knowledge test at an FAA-approved testing center. More information on the new certificate can be found on the FAA's website [here](#).

9. I can fly over people if I'm flying for fun or recreational purposes.

No. You cannot operate a UAS over any people, even if you are a hobbyist. While recreational flights are protected from further legislation from the FAA, they must be done in accordance with a community-based set of safety guidelines and within the programming of a nationwide community-based organization (). All of these organizations, including the Academy of Model Aeronautics specifically state that flying over people, cars and buildings is prohibited under their safety code ([AMA Safety Code B1](#)). Failure to operate under those guidelines categorically changes the nature of your model aircraft flight and you would then be subject to the FAA regulations, namely Part 107.

10. I can legally arm a drone, it's just a paintball gun.

No. As either a model aircraft, or as a unmanned aircraft this is specifically forbidden. The AMA safety code specifically prohibits arming a model aircraft. For commercial UAS flights, arming a UAS can be considered careless or reckless operation and endangering the life or property of another ([Part 107.23a and Part 107.23b](#)). In addition to these rules, under Part 107.36, the carrying of hazardous materials is also prohibited. Based on [49 CFR 171.8](#) that Part 107 enforces, items such as explosives, compressed gas, and flammable gas are prohibited. Therefore, guns, flamethrowers, and paintball or airsoft guns cannot be equipped to a UAS.



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SAFETY

References

- *Section 336 Public Law 112-95*
https://www.faa.gov/uas/programs_partnerships/uas_arctic/media/Sec_331_336_UAS.pdf
- *Academy of Model Aeronautics Safety Code* <https://www.modelaircraft.org/files/105.PDF>
- *Small Unmanned Aircraft Regulations Part 107* http://www.faa.gov/uas/media/RIN_2120-AJ60_Clean_Signed.pdf
- *49 CFR 171.8* <https://www.gpo.gov/fdsys/pkg/CFR-2011-title49-vol2/pdf/CFR-2011-title49-vol2-sec171-8.pdf>
- *FAA Drone Registration* <https://registermyuas.faa.gov/>
- *FAA UAS FAQs* <http://www.faa.gov/uas/faqs/>
- *Becoming a SUAS Pilot*
https://www.faa.gov/uas/getting_started/fly_for_work_business/becoming_a_pilot/