



Questions and Answers about Recreational/Hobby Drone Operation

1. Is a drone considered an aircraft?

Yes. According to the FAA a drone is an unmanned aircraft. Of note anytime you fly your drone in the National Airspace (NAS) you are considered by the FAA to be a pilot. This means the operator must comply with any temporary flight restrictions (TFR) and Public Law 112-95 Section 336, which requires adhering to a set of community-based safety guidelines such as those of the Academy of Model Aeronautics (AMA).

2. Is a hospital helipad considered an airport?

Yes.

3. If a drone is being flown within 5 miles of a hospital helipad/airport, is the recreational drone operator required to notify the hospital/airport? And how high can they be flown within those 5 miles?

The hospital/airport must be notified if the drone is being operated within 5 miles of the hospital helipad/airport and it is required to be flown at or below 400' for Recreational operators. This is according to PL 112-95 (a)(5) Section 336. The higher someone flies, the more difficult it is to comply with AMA guideline A.2.

A. "Yield the right of way to all human-carrying aircraft" and the more likely to violate the regulations in Title 14 Code of Federal Regulations – Aeronautics and Space.

Commercial drone operators with a Part 107 Remote Pilot Airman Certificate with a small UAS rating or Section 333 Exemption must obtain permission from the airport/public heliport prior to operation of a drone within Class B, C, D and E airspace. No permission is required prior to flight in Class G airspace.

4. What is the average distance a drone can fly from the pilot/operator?

Public Law 112-95 requires hobbyists to maintain visual line of sight. That means being able to see which way your drone is headed, and the airspace around it. This will depend entirely on the size of the drone but a good rule of thumb is ¼ mile.

5. Do you have to have a pilot's license or special training to fly a drone for recreational use?

Not at this time. The operator must comply with Public Law 112-95 Section 336, which requires complying with a community-based safety guidelines (read AMA safety guidelines). Commercial drone operators who operate under a Part 107 must have a Remote Pilot in Command certificate. Those drone operators who have a Section 333 Exemption must have a sport/recreational pilot or airworthiness certificate.

6. Do you have to register your recreational drone?

All recreational drones must be registered with the FAA.* Registration must be displayed on the exterior of the drone as of 02/25/2019 <https://faadronezone.faa.gov> (*note new address in rev. 02-15-19)

7. Are drones allowed to fly at night? And are they lit?

Only recreational or hobby drones can be flown at night (unless done by a commercial drone pilot who is operating under Part 107 with a waiver) but they have to remain within visual line of site of the operator. This is hard to do in the dark depending upon where you are. They do have lighting but it is very small and hard to see depending upon the environment. Currently commercial drones are only allowed to be flown during daylight hours.

8. Can drones be picked up on radar?

Due to their size this is not likely. They are also not picked up by HTAWS or TIS.

9. Do drones emit any sort of squawk or discreet code?

Not at this time but will most likely in the future as that equipment becomes smaller.



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10. Why is the operation of a drone at a scene of an accident or close to a hospital helipad a potential danger to the air medical helicopter, its crew and patient?

There are many reasons: Potential mid-air collision, failure of the drone resulting in a crash, delay in landing/lift off and access to the patient due to interference by the drone, and distraction of the flight and ground crew from their duties due to the presence of the drone. Of note, drones have a much higher crash rate than do manned aircraft. At law enforcement scenes, drones can also put police personnel in unsafe situations by exposing their locations, tactical movements, and by disturbing evidence.

11. Can injury be caused to those on the ground by a failure of the drone during flight, lift off or landing?

Yes. People have been injured, sent to ER, and even killed.

12. What kind of liability does a drone operator incur when operating a drone?

The drone operator can be held liable for any damages to property, animals, and/or persons caused by their drone. The AMA does provide its members with liability coverage. Check with your homeowner's insurance agent for your specific coverage.

13. How long do the batteries last when flying a drone before it must return to the operator or land?

Battery technology is continually advancing, but at this time 20-30 minutes on average, maybe a little longer.

14. What is the field of view of the average drone camera?

About 150 degrees.

15. How fast does a recreational drone fly?

It depends upon the drone – 40 mph is the average top speed – but larger, more expensive drones can fly in excess of 100 mph. For a drone, it is not about speed, it is about capturing video footage.

16. Can a recreational drone be flown in a U.S. National Park?

Drones are prohibited in all national park service controlled land and water in the U.S for safety and noise reasons. They can disrupt, traumatize, and potentially injure wildlife and ruin the outdoor experience for other visitors. Should they fail in flight, they can also create a safety risk to anything and anyone in their path.

17. What advice do we have for those new to drone operation?

- A. Go to www.knowbeforeyoufly.org for the latest information on safe and responsible drone operation.
- B. Download the mobile app **B4UFLY** for drone operators and learn where you can and cannot fly your drone.
- C. Join a local drone club or an organization like the Academy of Model Aeronautics (AMA) to learn how to maintain and safely fly your drone from those who are experienced.
- D. Take the time to educate yourself on the rules and guidelines.
- E. When an aircraft is present, land your drone till the aircraft has departed the area.
- F. Keep your drone away from law enforcement, EMS and fire operations. It may be tempting to take photos and video footage, but by doing you so can endanger those on the ground and delay putting the fire out, getting the patient to the care they need or jeopardize a criminal investigation.
- G. Finally, remember to respect the privacy and safety of those around you.

Added the following to the 02/17/19 revision of this document:

- For updated information go to <https://www.modelaircraft.org/sites/default/files/105.pdf>
- Additional information can be found at <https://www.modelaircraft.org/>

For questions please contact [Jayce Commo](#) or [Tammy Chatman](#).



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Public Law 112-95

SEC. 336. SPECIAL RULE FOR MODEL AIRCRAFT.

- (a) IN GENERAL.—Notwithstanding any other provision of law relating to the incorporation of unmanned aircraft systems into Federal Aviation Administration plans and policies, including this subtitle, the Administrator of the Federal Aviation Administration may not promulgate any rule or regulation regarding a model aircraft, or an aircraft being developed as a model aircraft, if —
- (1) the aircraft is flown strictly for hobby or recreational use;
 - (2) the aircraft is operated in accordance with a community based set of safety guidelines (see the AMA safety guidelines below) and within the programming of a nationwide community-based organization;
 - (3) the aircraft is limited to not more than 55 pounds unless otherwise certified through a design, construction, inspection, flight test, and operational safety program administered by a community-based organization;
 - (4) the aircraft is operated in a manner that does not interfere with and gives way to any manned aircraft; and
 - (5) when flown within 5 miles of an airport, the operator of the aircraft provides the airport operator and the airport air traffic control tower (when an air traffic facility is located at the airport) with prior notice of the operation (model aircraft operators flying from a permanent location within 5 miles of an airport should establish a mutually-agreed upon operating procedure with the airport operator and the airport air traffic control tower (when an air traffic facility is located at the airport)).
- (b) STATUTORY CONSTRUCTION.— Nothing in this section shall be construed to limit the authority of the Administrator to pursue enforcement action against persons operating model aircraft who endanger the safety of the national airspace system.
- (c) MODEL AIRCRAFT DEFINED.— In this section, the term “model aircraft” means an unmanned aircraft that is—
- (1) capable of sustained flight in the atmosphere;
 - (2) flown within visual line of sight of the person operating the aircraft; and
 - (3) flown for hobby or recreational purposes.

Academy of Model Aeronautics National Model Aircraft Safety Code Effective January 1, 2018

A model aircraft is a non-human-carrying device capable of sustained flight within visual line of sight of the pilot or spotter(s). It may not exceed limitations of this code and is intended exclusively for sport, recreation, education and/or competition. All model flights must be conducted in accordance with this safety code and related AMA guidelines, any additional rules specific to the flying site, as well as all applicable laws and regulations.

As an AMA member I agree:

- I will not fly a model aircraft in a careless or reckless manner.
- I will not interfere with and will yield the right of way to all human-carrying aircraft using AMA's *See and Avoid Guidance* and a spotter when appropriate.
- I will not operate any model aircraft while I am under the influence of alcohol or any drug that could adversely affect my ability to safely control the model.
- I will avoid flying directly over unprotected people, moving vehicles, and occupied structures.
- I will fly Free Flight (FF) and Control Line (CL) models in compliance with AMA's safety programming.
- I will maintain visual contact of an RC model aircraft without enhancement other than corrective lenses prescribed to me. When using an advanced flight system, such as an autopilot, or flying First-Person View (FPV), I will comply with AMA's Advanced Flight System programming.
- I will only fly models weighing more than 55 pounds, including fuel, if certified through AMA's Large Model Airplane Program.
- I will only fly a turbine-powered model aircraft in compliance with AMA's Gas Turbine Program.
- I will not fly a powered model outdoors closer than 25 feet to any individual, except for myself or my helper(s) located at the flightline, unless I am taking off and landing, or as otherwise provided in AMA's *Competition Regulation*.
- I will use an established safety line to separate all model aircraft operations from spectators and bystanders.

For a complete copy of AMA's Safety Handbook please visit: www.modelaircraft.org/files/100.pdf