



Federal Aviation Administration

08/14/2015

Mr. Kevin Foley;

The purpose of this letter is to provide you with information about the laws and regulations regarding Unmanned Aircraft System (UAS) operations conducted within the National Airspace System (NAS). The NAS is "the common network of U.S. airspace; air navigation facilities, equipment and services, airports or landing areas . . . . Included are system components shared jointly with the military." The FAA's safety mandate under 49 U.S.C. § 40103 requires it to regulate aircraft operations conducted in the NAS, which include UAS operations, to protect persons and property on the ground and to prevent collisions between aircraft and other aircraft or objects.

## A UAS is an Aircraft

A UAS is an "aircraft" as defined in the FAA's authorizing statutes and is therefore subject to regulation by the FAA. 49 U.S.C. § 40102(a)(6) defines an "aircraft" as "any contrivance invented, used, or designed to navigate or fly in the air." The FAA's regulations (14 CFR part 1, § 1.1) similarly define an "aircraft" as "a device that is used or intended to be used for flight in the air." Because an unmanned aircraft is a contrivance/device that is invented, used, and designed to fly in the air, it meets the definition of "aircraft". The FAA has promulgated regulations that apply to the operation of all aircraft, whether manned or unmanned, and irrespective of the altitude at which the aircraft is operating. For example, 14 CFR part 91, § 91.13 prohibits any person from operating an aircraft in a careless or reckless manner so as to endanger the life or property of another.

An important distinction for UAS operators to be aware of is whether the UAS is being operated for hobby or recreational purposes or for some other purpose. This distinction is important because there are specific requirements in the FAA Modernization and Reform Act of 2012, Public Law 112-95 (the Act), that pertain to "Model Aircraft" operations, which are conducted solely for hobby or recreational purposes. While flying model aircraft for hobby or recreational purposes does not require FAA approval, all model aircraft operators must operate safely and in accordance with the law. The FAA provides guidance and information to individual UAS operators about how they can operate safely under current regulations and laws. Guidance may be found at <a href="http://www.faa.gov/uas/publications/model">http://www.faa.gov/uas/publications/model</a> aircraft operators/.

## **Model Aircraft Operations**

Section 336(c) of the law defines "Model Aircraft" as ". . . 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.

<sup>&</sup>lt;sup>1</sup> See FAA Pilot/Controller Glossary (Apr. 3, 2014), available at <a href="http://www.faa.gov/air\_traffic/publications/media/pcg\_4-03-14.pdf">http://www.faa.gov/air\_traffic/publications/media/pcg\_4-03-14.pdf</a>

- 1. Public Aircraft Operations + COA. In accordance with 49 U.S.C. §§ 40102 and 40125, a public entity performing a governmental function may operate UAS in the NAS. Further information about public aircraft operations is available in Advisory Circular (AC) 00-1.1A, Public Aircraft Operations (Feb. 12, 2014). Public aircraft operators must also obtain a COA prior to operations.
- 2. Airworthiness Certification + COA. For civil operators, you can apply for a special airworthiness certificate under 14 CFR part 21. Refer to the current edition of FAA Order 8130.34, Airworthiness Certification of Unmanned Aircraft Systems and Optionally Piloted Aircraft. The full civil type certification process allows for production and commercial operation of UAS and is a lengthy process typically undertaken by aircraft manufacturers. UAS operators who have obtained an airworthiness certificate for their UAS must also obtain a COA before conducting UAS operations.
- 3. Section 333 Exemptions + COA. In accordance with part 11, §§ 11.15 and 11.61-11.103 and the FAA's authority in 49 U.S.C. § 44701(f), the FAA may grant exemptions from regulatory requirements. The exemption process allows for the submission of a petition to the FAA outlining why the granting of an exemption would be in the public interest, the need for the exemption, and the reasons why granting the petition would not adversely affect safety or would provide a level of safety equal to the rules from which the exemption is sought. The FAA is currently reviewing petitions by, and granting exemptions to, civil UAS operators that want to operate for other than hobby or recreational purposes. Under section 333 of the Act, operators in appropriate circumstances can be exempted from airworthiness certification requirements. UAS operators who have obtained an exemption must also obtain a COA before conducting UAS operations.

Finally, UAS operators must understand that all UAS operations that are not operated as Model Aircraft under section 336 of the Act are subject to current and future FAA regulation. At a minimum, any such flights are currently required under the FAA's regulations to be operated with a certificated aircraft, with a certificated pilot, and with specific FAA authorization.

## For All UAS Operators

More information regarding UAS operations is available at the FAA Unmanned Aircraft Program Office's Web site: <a href="http://www.faa.gov/about/initiatives/uas/">http://www.faa.gov/about/initiatives/uas/</a>.

If you require additional information please contact me at 612-253-4502

In conclusion, we hope the information provided to you in this letter will assist you in conducting safe UAS operations in compliance with the FAA's regulations.

Sincerely,

David R. Nelson

Aviation Safety Inspector