

BEFORE THE ADMINISTRATOR OF THE UNITED STATES

FEDERAL AVIATION ADMINISTRATION

PETITION FOR RULEMAKING

MODOVOLATE AVIATION, LLC

Petitioner

1131 Carol Lane

Glencoe, IL 20022

9 July 2014

1. The FAA has authority to promulgate aircraft certification requirements, flight rules, and airmen certification requirements for small unmanned aircraft systems ("sUAS" or "microdrones"), under 49 U.S.C. §§ 40109(b), 44701(a), 44701(f), and 44704.
2. In section 332 of the FAA Modernization and Reform Act of 2012, Pub. L. 112-95, 126 Stat. 11 (Feb. 14, 2012), the United States Congress mandated that the FAA issue a final rule for operation of such systems and a further notice of proposal making for regulation of unmanned aircraft systems by 31 August 2013, with integration to be complete by 30 September 2015.
3. No such final rule or NPRM has issued to date.

4. In the absence of any regulatory framework, microdrones are being sold on the open market through e-commerce and otherwise and are being bought in large numbers and operated by persons without airmen certificates.
5. These microdrones weigh from less than one pound to close to fifty pounds and have flight characteristics that make them a hazard to other aircraft in flight and to persons and property on the ground.
6. A regulatory framework for these flight vehicles is urgently needed to reduce the risks.
7. These vehicles, with their low prices and ready availability, have the obvious potential to extend the reach of air commerce, with many economic and social benefits, including those to domestic law enforcement and antiterrorism activities, journalism, agriculture, public utility infrastructure protection, real estate sales, and aerial surveying.
8. The FAA is mandated by 47 U.S.C. § 40104(a) to encourage the development of civil aeronautics as well as to promote the safety of air commerce.
9. The low cost of acquisition and operation of these flight vehicles make it certain that they will proliferate far beyond any conceivable level of FAA resources necessary to enforce traditional airmen certification and flight rule requirements against their operators.
10. The failure of the FAA to provide for the operation of microdrones is leading to an increasing threat to aviation safety, because non-airmen are buying them by the hundreds and flying them, ignorant or indifferent to the FAA prohibition.
11. Many of those buying these vehicles have no prior connection to the aviation community and therefore lack the cultural commitment of the traditional aviation community to follow safe practices and to be mindful of FAA rules.
12. The artificial distinction between model aircraft flown for hobbyist and recreational purposes and the same

aircraft flown for commercial purposes endangers aviation safety because many model aircraft operators fly their vehicles at high altitudes and outside the line of sight

13. The FAA's simple classification that distinguishes drones weighing more than 55 pounds and those weighing less is inadequate. A further distinction should be drawn between rotary-wing and fixed-wing aircraft and aircraft at the smaller end and those at the higher end of the "small Unmanned Aircraft Systems" category.
14. The FAA's apparent preoccupation with operations of larger fixed wing drones distracts its attention and diverts its energies from the activities posing the greatest threat to safety.
15. Accordingly, the FAA should regulate microdrones as consumer products, using models proven by other federal agencies such as the Federal Communications Commission, the Consumer Product Safety Commission, and the national Highway Traffic Safety Administration for other consumer products. These models impose requirements for autonomous vehicle behavior as a prerequisite for marketing them.
16. Such an approach greatly reduces the burden on the FAA that would otherwise result from detailed development, promulgation, and enforcement of specific flight rules and airmen certification requirements.
17. Promulgating the proposal quickly would have the effect of shifting the burden of detailed engineering design to manufacturers and vendors.

#### WHEREFORE

18. Petitioner asks that the FAA act immediately to release an NPRM proposing to regulate small unmanned aircraft systems as consumer products by requiring, as a precondition for sale, that they automatically limit height above ground, automatically limit range from the operator, and provide reliable capabilities automatically to land safely or to return to the launching point if the control link is interrupted, the flight vehicle approaches Class B, C, or D airspace, or the operator is incapacitated.

19. Petitioner requests that the text of the proposed rule be as follows:

**14 C.F.R. Aeronautics and Space**

**Subchapter C**

**Part 50**

**§ 50.101 Marketing of small Unmanned Aircraft Systems.**

(a) Except as provided elsewhere in this section, no person shall sell or lease, or offer for sale or lease (including advertising for sale or lease), or import, ship, or distribute for the purpose of selling or leasing or offering for sale or lease, any small Unmanned Aircraft System unless the System complies with the technical standards of subsection (b) and also complies with all applicable administrative (including verification of the equipment or authorization under a Declaration of Conformity, where required), technical, labelling and identification requirements specified in this chapter.

**(b) Performance requirements**

Each small Unmanned Aircraft System must have these limitations programmed into it, beyond the control of the operator to override the limitations:

- (1) Restricting flight to heights no greater than 400 feet above the surface;
- (2) Restricting flight to horizontal distances no greater than 1,500 feet from the ground control station;
- (3) Excluding flight in Class B, C, or D airspace; and
- (4) Ensuring that the flight vehicle autonomously returns to its launching point if the control link is lost

20. If the FAA issues an NPRM within 45 days of the submission of this petition, petitioner withdraws this petition and submits it and its supporting documentation as

a comment on the NPRM to be made part of its rulemaking docket.

Submitted 9 July 2014

MODOVOLATE AVIATION, LLC

BY

(s) Henry H. Perritt, Jr.  
Henry H. Perritt, Jr.  
its General Counsel