

## FAA Issues Proposed Rules for Small Drones (Feb. 2015)

On February 15, 2015, the Federal Aviation Administration (“FAA”) released a long-anticipated set of proposed regulations to safely integrate small unmanned aircraft systems (UAS)—statutorily defined as unmanned aircraft weighing less than 55 pounds—into the national airspace system, when such aircraft are used for non-recreational or non-hobby purpose. The initiative is further to a congressional mandate under the FAA Modernization and Reform Act of 2012.<sup>1</sup> Once the proposal is published in the Federal Register (expected on February 23, 2015), interested parties will be afforded 60 days to comment on the draft regulations. Currently, the FAA prohibits such small UAS operations in the absence of a specific exemption, certificate of waiver or authorization (COA) and/or special airworthiness certificate, which entails a lengthy, case-by-case adjudicatory process.

The proposed regulations, to be codified at new 14 C.F.R. part 107, would facilitate additional small UAS operations for commercial purposes without first obtaining an exemption, COA or airworthiness certificate, subject to certain requirements to minimize risks to other aircraft and people and property on the ground. More specifically, the regulations would, among other things: (1) require any person at the controls of a small UAS, i.e., a UAS “operator,” to be at least 17 years old, pass an initial aeronautical knowledge test (and every two years thereafter), obtain an FAA unmanned aircraft operator certificate with a small UAS rating and undergo vetting with the Transportation Security Administration; (2) generally require UAS operators to maintain visual line-of-sight with the small UAS, un-augmented by visual aids other than corrective lenses, and adhere to see-and-avoid requirements with respect to other aircraft and obstacles (3) require UAS operators, prior to flight, to assess airspace restrictions, weather conditions, potential ground hazards and the location of other persons; (4) require UAS operators, after the pre-flight assessment, to ensure the aircraft will not pose an undue hazard to other aircraft, persons or property in the event of a loss of positive control, by taking mitigation steps appropriate to the environment (such as, for example, advising local ATC if the operation takes place where other air traffic could pose a hazard);



The firm’s practice encompasses virtually every aspect of aviation law, including advising small UAS and other aircraft operators on FAA certification and operating requirements and related exemptions. For further information regarding the matters identified in this article, please contact:

Jonathon H. Foglia  
[jhfoglia@zsrlaw.com](mailto:jhfoglia@zsrlaw.com)  
Telephone: (202) 973-7932

Malcolm L. Bengé  
[mlbenge@zsrlaw.com](mailto:mlbenge@zsrlaw.com)  
Telephone: (202) 973-7904

Zuckert, Scoutt & Rasenberger, L.L.P.  
888 17th Street, N.W.,  
Washington, D.C. 20006  
Telephone: (202) 298-8660  
Fax: (202) 342-0683  
[www.zsrlaw.com](http://www.zsrlaw.com)

This document has been prepared by Zuckert, Scoutt & Rasenberger, L.L.P. to inform its clients and other parties of legal developments of interest. The views expressed herein do not constitute legal opinion or advice and should not be used as such. © 2015 Zuckert, Scoutt & Rasenberger, L.L.P.

# FAA Issues Proposed Rules for Small Drones (Feb. 2015)

Page 2 of 4

(5) restrict small UAS operations to daylight hours, impose a minimum weather visibility threshold of three miles from the control station and require the operation to be immediately discontinued if the flight would pose a hazard to other aircraft, persons or property; (6) limit flight operations to an altitude of no more than 500 feet above ground level and a speed of no more than 100 mph (primarily to mitigate risks in the event of a loss of positive control); (7) require operations to be conducted at least 500 feet below clouds and 2,000 feet horizontal from clouds; (8) prohibit small UAS from flying over other persons who are not involved in the operation of the flight (other than persons inside or underneath a covered structure); (9) ban operations within airport flight paths, prohibited or restricted airspace areas (except where otherwise authorized by the controlling agency) or areas subject to FAA-issued Notice to Airmen (unless approved by ATC or permitted under an FAA-issued COA); and (10) require operators to yield right-of-way to other aircraft at all times and obey all applicable FAA-issued temporary flight restrictions. The operation of small UAS from other aircraft would be prohibited, however, operations from waterborne vehicles would be allowed, and no operator would be allowed to operate multiple small UAS simultaneously.

The proposal would permit, but not require, a visual observer to assist the operator with the proposed visual-line-of-sight and see-and-avoid requirements by maintaining constant visual contact with the small UAS in place of the operator. In this regard, the operator and any visual observer(s) would be required to be situated such that both the operator and visual observer(s) are capable of observing the small UAS at any given time, and they would be permitted to communicate by radio or other communication-assisting device. Although first-person view devices and other vision-enhancing devices would be permitted (such as, for example, a camera in connection with a bridge inspection), such devices could not be relied upon by either the operator or any visual observer(s) to meet the line-of-sight and see-and-avoid requirements. Both operators and visual observers would be required to comply with current FAA alcohol and drug use prohibitions under 14 C.F.R. part 91.

Importantly, the proposed regulations would require small UAS to comply with the FAA's aircraft registration (including U.S. citizen ownership) and aircraft marking requirements. If the small UAS is not large enough to display aircraft markings in standard size, aircraft markings would need to be displayed in the largest practicable manner. Small UAS operations generally would be permitted in Class G airspace, however, prior ATC approval would be required for operations in Class B, C, and D airspace, or within the lateral boundaries of the surface area of airport designated Class E airspace. No small UAS operations would be permitted in Class A airspace.

Additionally, operators would have ultimate responsibility for ensuring a small UAS is in a safe condition prior to initiating a flight and, not surprisingly, the proposed regulations would prohibit any person from operating a small UAS unless the aircraft is in a condition for safe operation; operators would be required to complete a preflight inspection that includes, among other tasks, confirmation that the communications link between the control station and the small UAS is functioning properly. Furthermore, the FAA's prohibition against operating aircraft in a careless or reckless manner would continue to apply to small UAS operations. The proposed regulations also would explicitly prohibit operators from dropping any objects from a small UAS, and operators would be required to report any accident with a small UAS involving an injury or property damage to the FAA within 10 days of the operation. Moreover, operators would be required to make available to the FAA, upon request, the small UAS for testing or inspection, along with associated documents and records.

The FAA, in its proposal, has invited a number of specific comments, including, but not limited to, comments on whether small UAS operations should be allowed beyond the operator's line-of-sight and, if so, what would constitute appropriate operational limits, whether visual observers should be subject to

## FAA Issues Proposed Rules for Small Drones (Feb. 2015)

Page 3 of 4

certificate requirements, whether a numeric limit (e.g., a defined distance from the operator) should be utilized to establish a horizontal boundary on the area of small UAS operations, and comments regarding the proposed areas to be tested during the operator's initial and recurring knowledge tests and if such individuals also should be required to demonstrate flight proficiency or aeronautical experience.

Significantly, the FAA in its proposal indicates that it is considering a more flexible approach with respect to so-called very light "micro UAS category" aircraft, i.e., small UAS weighing less than 4.4 pounds, informed, in part, by Canadian regulations governing such aircraft operations. Under this approach, and in contrast to the requirements outlined above, micro UAS operations would only be permitted in Class G airspace at a maximum altitude of 400 feet above ground level and a maximum airspeed of approximately 35 mph; operations would not be allowed within five (5) miles of an airport and must be located within 1,500 feet of the operator. Additionally, micro UAS operators would not be allowed to rely on first person view devices and the aircraft itself would need to be made out of frangible materials that break, distort or yield on impact (e.g., breakable plastic, paper, wood or foam). The aircraft would be permitted to operate over persons who are not involved in its operation. As with other small UAS operations, micro UAS operations would be limited to daylight hours and subject to a required pre-flight safety assessment, and the operator would have to hold an FAA-issued operator certificate – although no aeronautical knowledge test would be required, with the operator instead self-certifying that he or she is familiar with the aeronautical testing areas.

In issuing the draft rules, the FAA emphasized that privacy concerns implicated by expanded UAS operations are beyond the scope of the rulemaking project. Concurrent with the FAA's release of its proposal, however, the White House issued a Presidential Memorandum on policies and procedures governing information the federal government obtains by UAS.<sup>ii</sup> More specifically, the Memorandum addresses federal agencies' (i) collection, usage, retention and dissemination of such information, (ii) adherence to civil rights and civil liberty protections under applicable laws, (iii) internal efforts to strengthen accountability, and (iv) promotion of transparency regarding UAS operations, including notice to the public regarding where an agency's UAS are authorized to operate in the national airspace system, the agency's overall UAS program and a general annual summary of the agency's UAS operations during the previous fiscal year. The Memorandum further establishes a "multi-stakeholder engagement process" for the development of commercial and private UAS usage best practices, to include privacy, accountability, and transparency issues. The FAA, along with other federal agencies, will participate in this process, which will be led by the National Telecommunications and Information Administration.

The FAA's proposed small UAS regulations seek to balance the needs of a rapidly evolving UAS market, the directives established by Congress under the FAA Modernization and Reform Act of 2012 and the FAA's statutory responsibility to issue rules to ensure the safety of aircraft and the efficient use of the national airspace system as well as to protect individuals and property on the ground. Indeed, as the FAA explained when issuing the proposed regulations, UAS operations present two unique challenges: (1) applying anti-collision see-and-avoid principles to operators who are not present on the aircraft; and (2) the potential for loss of positive control over UAS and resulting hazards. Importantly, the proposed regulations signify an incremental approach, with the FAA focusing first on small UAS that, due to their size, weight and speed, pose the least amount of risk to the national airspace system, with larger UAS to be regulated differently in future FAA rulemaking initiatives.

The draft rules would not apply to the operation of certain model aircraft for hobby or recreational purposes, given that federal law prohibits the FAA from issuing any new regulations governing such operations, although operations with such aircraft will continue to be subject to FAA enforcement action

# FAA Issues Proposed Rules for Small Drones (Feb. 2015)

Page 4 of 4

where the operation endangers the safety of the national airspace system.<sup>iii</sup> Nor do the proposed regulations apply to: (a) air carrier operations; (b) external load and towing operations; (c) international operations; (d) foreign-owned aircraft ineligible for U.S. registry under 14 C.F.R. part 47; (e) public aircraft; and (f) moored balloons, kites, amateur rockets, and unmanned balloons. Finally, the FAA anticipates that, in most cases, government agencies will continue to conduct their UAS operations under special FAA-issued COAs, rather than the proposed small UAS regulations.

The current FAA requirements for small UAS operations will remain in place unless and until the FAA adopts final rules. Businesses and individuals intending to operate small UAS for non-recreational purposes (including, but not limited to, agricultural crop surveys, bridge, power-line, pipeline and antenna inspections, research and development purposes, educational/academic uses, film production and other aerial photography uses, and wildlife nesting area evaluations), are well-advised to review the FAA's current requirements as well as the agency's proposed regulations and consult with aviation counsel for a better understanding of how the underlying rules may impact their planned drone activities.

Zuckert, Scoutt & Rasenberger, L.L.P.  
888 17th Street, N.W.  
Washington, D.C. 20006  
Telephone: (202) 298-8660  
Fax: (202) 342-0683  
[www.zsrlaw.com](http://www.zsrlaw.com)

---

<sup>i</sup> Public Law 112-95. Section 332(a)(3) requires the Secretary of Transportation to adopt a plan providing for the safe integration of small UAS into the national airspace system no later than September 30, 2015.

<sup>ii</sup> Presidential Memorandum, Promoting Economic Competitiveness While Safeguarding Privacy, Civil Rights, and Civil Liberties in Domestic Use of Unmanned Aircraft Systems (Feb. 15, 2015).

<sup>iii</sup> Section 336 of Public Law 112-95 bars the FAA from issuing rules regarding model aircraft where all the following criteria are satisfied: (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 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 five 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. The FAA has published an interpretive rule explaining these criteria. 79 Fed. Reg. 36172, 36175 (Jun. 25, 2014). Earlier FAA policy with respect to the operation of model aircraft is contained in Advisory Circular (AC) 91-57.