



Howard Shelanski Office of Information and Regulatory Affairs (OIRA) Office of Management and Budget 725 17th Street, NW. Washington, DC 20503

Re: Small UAS Rule (14 CFR 107)

Dear Mr. Shelanski,

On behalf of Measure UAS, Inc., I would like to offer our comments regarding the small unmanned aircraft systems (UAS) rule currently under OIRA review. Measure is one of the nation's leading Drone as a Service[®] companies, providing turnkey flight operations to a wide variety of enterprise customers. We served on the UAS Registration Task Force in November of 2015¹ and have received a number of groundbreaking approvals from the Federal Aviation Administration (FAA) for commercial UAS operations.

While we fundamentally agree with the need to eliminate and streamline regulations around small UAS operations, it must be done with input from parties that have been conducting commercial operations safely.

Specifically, we urge OIRA to require small UAS operators to demonstrate flight proficiency and aeronautical experience before obtaining an unmanned aircraft operator certificate. The current notice of proposed rulemaking would allow small UAS operations to commence without pilots possessing any flight experience:

"...the FAA proposes not to require that applicants for an unmanned aircraft operator certificate with a small UAS rating demonstrate flight proficiency and aeronautical experience...because the considerations underlying the current [manned] flight proficiency demonstration and aeronautical experience requirements have, at best, a limited applicability to small UAS operations that would be subject to this proposed rule..." (III. E. 2. a. pg 102).

Measure disagrees with the FAA's proposal to abolish all flight proficiency and aeronautical experience requirements for the small UAS operator certificate. We believe that operators should demonstrate operational proficiency when flying aircraft in the national airspace (NAS), regardless of whether or not they are physically inside the aircraft. We feel that the reasoning for removing the experience requirements does not accurately reflect the realities of commercial drone operations. In our experience, the ability to purchase an aircraft has no bearing whatsoever on pilot ability. Nor should we presume that commercial operations over critical infrastructure are intuitive or without risk. Quite the contrary, we have found that inexperienced

¹ Federal Aviation Administration. "Unmanned Aircraft Systems Registration Task Force Recommendations Final Report." November 21, 2015



pilots that are not proficient often will panic when they find themselves in a situation where the aircraft performs in unexpected ways. With some flight training and experience at the aircraft controls, these situations can be eliminated or at least controlled and not lead to damage to persons or property.

"The second consideration for these [manned] requirements (to prevent harm to people on the ground) is addressed by the [unmanned] operating requirements of this rule, which limit the operation of the small unmanned aircraft to a confined area and require the operator to ensure that the aircraft will pose no hazard to people on the ground if there is a loss of positive control." (III. E. 2. a. pg 100).

Operation of small UAS are not and should not be limited to "confined areas." With the exception of indoor flights or flights inside large structures (e.g., stadiums), the vast majority of commercial operations take place in open areas and eventually beyond line of sight.

The FAA's advice to inform people about ongoing operations in an area does nothing to protect those people. Instead, the FAA should make certain that the operator is capable of operating the aircraft in a manner that reduces the risk to people and property as much as possible, and that the operator will be able to adeptly respond to dangerous or unexpected situations.

"There are additional considerations for not requiring a flight proficiency demonstration or aeronautical experience for small UAS operators. First, unlike the pilot of a manned aircraft, the small UAS operator has the option to sacrifice the small unmanned aircraft in response to an emergency." (III. E. 2. a. pg 102).

Sacrificing a small UAS is the act of an inexperienced pilot and should not be taken lightly as an aircraft that is 55 pounds can cause significant damage. who has given up on preserving the safety of the people and property around them. Most, if not all collisions with buildings and monuments occurred when inexperienced operators lost control of their small UAS and abdicated themselves of public responsibility.^{2,3} While reckless or irresponsible behavior cannot be eliminated, commercial operators should be held to higher standards—and it is the responsibility of the FAA to ensure that they are.

Measure fully supports the FAA's decision to lower UAS operator certification standards so they do not unnecessarily restrict the burgeoning commercial drone industry. We believe that there is a middle ground to be found between the restrictive pilot certificate requirements and the proposal outlined in the NPRM. The following is a list of alternatives that Measure believes will satisfy both the FAA's desire for safety and the desire to catalyze growth in the commercial drone industry:

² New York Times. "New Jersey Man is Arrested After Drone Hits Empire State Building." February 5, 2016.

³ New York Times. "A Drone, Too Small for Radar to Detect, Rattles the White House." January 27, 2015.



- To be certified to fly UAS for commercial operations, a pilot should have logged flight experience. A sport pilot certificate (the entry-level pilot certificate) requires a minimum of 15 hours of flight training from an authorized instructor, and 5 hours of solo flight. That amount of time should be reduced for UAS operators: we recommend a new operator log 5 hours of flights under the supervision of a trained instructor.
- 2) A practical test need only include maneuvers that demonstrate basic spatial awareness. These maneuvers would include the ability to take off and land, to fly to designated points, and to reorient a small UAS that has been knocked off course.
- 3) It may become necessary to implement different licensing grades depending on the applications an operator wishes to perform. For example, a Class A license would permit operators to fly under the current conditions for commercial operations (as outlined in §333 of the 2012 FAA Modernization & Reform Act). A Class B license would permit more complex operations, including night-flights, flights over non-participants, and so forth. Analogously, manned pilot's licenses are tiered (sport, pilot, and private), each with different privileges.
- 4) It may be practical to assess new operators on a flight simulator.

Measure would like to thank you for your consideration of our perspective. We have worked hard since our inception to ensure that all commercial UAS operations are done in a manner that is safe, legal, and insured. We are confident that the new small UAS rules will be the next step to safe and responsible UAS integration in the United States, and we look forward to working with you to help build that reality.

Sincerely,

Brandon Torres Declet.

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