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UNMANNED AIRCRAFT SYSTEMS

The New FAA Part 107 For Unmanned Aircraft... Less Protection For Airports Than Before

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n June 21, 2016, the FAA published its Final Rule for the new Part 107 of the Federal Aviation Regulations (FARs) entitled "Operation and Certification of Small Unmanned Aircraft Systems." Part 107 will govern all commercial and some governmental UAS operations in the United States. It will not govern model/



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hobby UAS operations. Part 107 does not provide for any restrictions on UAS operations near non-towered airports.

The FAA chose not to restrict UAS operations near airports despite recommendations from AOPA, NBAA, ALPA, and GAMA that UAS operations be restricted and/or prohibited near airports. The FAA rejected these recommendations on the grounds that, "Part 107 has specific risk mitigation and hazard reduction provisions" that facilitate the integration of UAS operations into existing manned aircraft operations in uncontrolled airspace. (Final Rule, p. 351).

The FAA explained the lack of restrictions for UAS operations near non-towered airports as follows: "First, small UAS pilots will be require to pass initial aeronautical knowledge testing before receiving a Part 107 airman certificate." The FAA further explained that, "the remote pilot in command will be required to ensure that the [UAV] will pose no undue hazard to other aircraft, people, or property in the event of a loss of control of the aircraft for any reason." (Final Rule, pp. 351-52).

The FAA acknowledges that there are risks associated with close operations between manned and unmanned aircraft. The FAA does not believe, however, that these risks are a serious problem because Part 107 "will prohibit remote pilots from operating their small unmanned aircraft in a manner that interferes with operations and traffic patterns at airports, heliports, and seaplane bases." (Final Rule, p.352).

The FAA states that, in order to avoid interfering with operations in a traffic pattern, UAS pilots should, "avoid operating in the traffic pattern or published approach corridors used by manned aircraft." (Final Rule, p. 353). The FAA hopes that most UAS pilots will always yield the rightof-way to manned aircraft, and otherwise avoid operating in the vicinity of airports. *Is this hope far-fetched?*

Several comments to the proposed rules — including EAA and the National Association of State Aviation Officials suggested that the FAA require UAS pilots intending to fly within 5 miles of all non-towered airports to notify airport authorities in advance of their operations. The FAA rejected 16 AUGUST/SEPTEMBER 2016 MIDWEST FLYER MAGAZINE this suggestion because — while airport operators have the ability to manage operations on the surface of the airport — "airport operators may not regulate the use of airspace above and near the airport." (Final Rule, p. 354).

The FAA concluded: "The FAA does not consider the notification of airport operators to significantly enhance the safety of integration with existing operations." (Final Rule, p. 354). The FAA further explained: "The requirement for notification creates a burden on the airport operator with little benefit to users of the airport, because the airport operator would have no requirement to disseminate knowledge of small UAS operations to other airport users." (Final Rule, pp. 354-55). These statements by the FAA about notice-of-operations are remarkable given that such notices are the rule applicable to all model/hobby flying near airports.

It should be recognized that Part 107, with regard to operations near airports, is significantly different than the rules used as part of the 333 Exemption process. In a typical 333 Exemption situation, the blanket Certificate of Authorization (COA) used by the FAA prohibits UAS operations near airports as follows: five nautical miles from an airport having an operational control tower; three nautical miles from an airport having a published instrument flight procedure, but not having an operational control tower; and two nautical miles from a heliport or an airport not having a published instrument flight procedure or an operational control tower. These rules will soon become obsolete.

While dropping any specific prohibitions on UAS operations near non-towered airports in Part 107, the FAA is putting 100% of its faith in safe integration of UAS operations into the National Airspace System — including airspace at or near airports — in the new UAS-specific airman certificate. The FAA's name for the new certificate is: "A Remote Pilot Certificate with a Small UAS Rating."

To obtain a Remote Pilot Certificate with a Small UAS Rating, the applicant must take and pass an initial aeronautical knowledge test. After passing the test, the applicant will apply for a Remote Pilot Certificate using either a paper application or the FAA's electronic application process. The FAA will then forward the application to the Transportation Security Administration (TSA) for a background check to determine whether the application poses a security risk. If the applicant passes the TSA review, a Remote Pilot Certificate will be issued.

Notably, Part 107 does not require any specific training or flight instruction requirements for UAS Remote Pilot Certificate applicants. In addition, Part 107 does not require applicants for a Remote Pilot Certificate to demonstrate any flight proficiency or aeronautical experience.

So, how will a UAS pilot applicant learn enough about

the National Airspace System and manned aircraft operations near airports, to be safe? Here is the FAA's answer to this question: "Knowledge testing is the most flexible and efficient means for insuring that a remote pilot possesses the requisite knowledge to operate in the NAS because it allows the applicant to acquire the pertinent knowledge in *whatever manner works best for him or her.* The applicant can then take and pass the aeronautical knowledge test to verify that he or she has indeed acquired the pertinent areas of knowledge." (Final Rule, p.408).

The UAS pilot test will cover the following areas of knowledge: (1) regulations applicable to small UAS operations; (2) airspace classification and operating requirements, and flight restrictions affecting small unmanned aircraft operations; (3) effects of weather on small unmanned aircraft performance; (4) small UAS loading and performance; (5) emergency procedures; (6) crew resource management; (7) radio communication procedures; (8) determining the performance of small unmanned aircraft; (9) maintenance and inspection procedures; (10) physiological effects of drugs and alcohol; (11) aeronautical decision making and judgment; and (12) *airport operations.*

This last item, *"airport operations,"* may be the most important part of the knowledge/testing aspects of Part 107. The FAA, however, does not appear very concerned about UAS operations near airports. It may surprise you to learn the FAA expects only a small number of UAS operations to occur near airports. (Final Rule, p. 432). *Does this seem accurate? Does it appear to downplay the risks of UAS operations near airports?*

The FAA merely acknowledges that there may be instances where, "a small unmanned aircraft unexpectedly ends up flying near an airport due to adverse conditions." (Final Rule, p. 432). To avoid any mishaps, the FAA states: "In those instances, the remote pilot in command will need to have an understanding of airport operations so that he or she knows what actions to take to ensure that the small unmanned aircraft does not interfere with airport operations or traffic patterns."

Let's all hope that the Part 107 knowledge testing procedure is sufficient to prevent unmanned aircraft from crashing into manned aircraft near airports.

EDITOR'S NOTE: Russ Klingaman is a partner with the law firm of Hinshaw & Culbertson LLP in Milwaukee, Wis. As an instrument-rated private pilot and aircraft owner, he has a special interest in aviation law. Klingaman teaches aviation law at Marquette Law School and UW-Oshkosh, and is the immediate past-president of the Lawyer Pilots Bar Association. Klingaman handles a broad range of business disputes involving contracts and intellectual property. He also handles FAA enforcement cases and lawsuits involving serious personal injuries and/or property loss. Questions and comments about the foregoing topic may be directed to Russ Klingaman at rklingaman@hinshawlaw.com.







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