

Policy Brief:

Final Regulations Facilitating Commercial Drone Use Announced



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Policy Brief: Commercial Drone Use

Introduction

Businesses, governments, first responders, and hobbyists have been quick to recognize the practical and recreational value of Unmanned Aerial Vehicles (UAV), more commonly referred to as drones. The applications for Drone's are endless – from stunning video footage to Amazon's aspirations for near instantaneous delivery.

But it's not all fun and games; the Federal Aviation Administration's (FAA) recently revamped its regulatory oversight directed at providing the first comprehensive set of rules to facilitate expanded commercial drone use without reducing aviation safety.

Background

In the FAA Modernization and Reform Act of 2012, Congress mandated the FAA promulgate regulations to safely integrate drones into the same airspace as commercial planes by September 2015. In February 2015, the FAA published a Notice of Proposed Rulemaking (NPRM) – the first step in the regulatory process – sketching out new regulations for commercial drone use and requesting public comment. Yet, the September deadline came and went, and the rules were nowhere to be found.

In February 2016, the FAA appointed a 27-member committee including drone producers, operators, and other interested parties, who were tasked with devising recommendations for

new regulations on commercial drone use. Signaling the end was near, and responding to the changing regulatory environment and increased number of exemption applications received, the FAA announced the pending regulations on commercial drone use would be complete within a couple of months in early April.

FAA publicly released the final rue today, which will have vast implications for the emerging technology.

The Rule

Similar to provisions in the NPRM, the rule will govern UAVs weighing less than 55lbs (excepting model airplanes satisfying the legal requirements already applicable to them), which are operated within the user's line of sight. UAV use will be limited to daylight hours and will be required to yield to other aircrafts, manned or unmanned, operating in the same airspace. UAV's will be limited to 100 mph and will be prohibited from flying at altitudes exceeding 400 feet from ground level (with limited exceptions) without explicit Air Traffic Controller permission.

While it is impossible to engage in wide scale commercial delivery without allowing the drone to leave the operator's line of sight, one provision of the rule seems to hint at the future. The rule allows drone's to carry external loads as long as the object being carried is securely attached to the drone and

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does not hinder proper functionality. Further, transportation for compensation or hire is allowed as long as the total weight of the package (including the drone) remains at or below 55lbs and the flight does not cross state lines.

Additionally, UAV operators will be required to:

Be at least 16 years of age
Pass an aeronautical exam at an FAA approved center (recurrent every 24 months)
Successfully clear vetting by the Transportation Security Administration
Obtain an unmanned aircraft certificate
Make the UAV available for FAA inspection upon request
Report any incidents resulting in injury or property damage to the FAA within 10 days

Endless Implications

With the announcement of the final rule, it is imperative to note the significant implications and benefits of expanded drone use in U.S. airspace, including medical supply transport, emergency response, and general safety and regulatory compliance.

For example, according to the Mayo Clinic, drones have already been field tested for medical uses, successfully delivering aid packages in Haiti after the 2012 earthquake. Similarly, Doctors Without Borders used drones to transport TB test samples from a remote village in Papua New Guinea. In fact, the Mayo Clinic website states when the FAA rules are complete, "the sky may be the limit for medical applications for drones – at least figuratively."

Furthermore, in a recently released report, Zurich North America identified numerous ways drones can be used to facilitate emergency response efforts and save lives by providing emergency responders a better understanding of the situation and replacing humans with drones to complete some of the deadliest tasks involved in disaster relief. For example, drones can be used to help locate survivors in the rubble, perform a structural analysis of damaged infrastructure, deliver needed supplies and equipment, evacuate casualties and help extinguish fires.

While it is likely true that the drones covered by this rule, i.e. those weighing less than 55lbs, aren't up to the task of evacuation or fire suppression, the opportunities are endless.

Drones could also assist companies and organizations with infrastructure maintenance and regulatory compliance. While not as flashy as medical delivery and emergency response, the ability to identify infrastructure deficiencies and solve problems before they occur can be equally important. In April, we wrote about S. 2684, UAV's for Energy Infrastructure Act.

This legislation requires the Department of Transportation to establish a legal process allowing owners or operators of "a pipeline or other critical infrastructure" to use drones to conduct "activities to ensure compliance with Federal or State regulatory, permit, or other requirements, including to conduct surveys associated with applications for permits" for pipeline construction, maintenance, or rehabilitation.

Whatever the task, the future of UAV's is bright. Some of the specific tasks articulated above may have to wait for future rulemakings, but newly released final rule is a large step in the right direction.

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