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The Future of Part 107 sUAS Regulations and the 2017 Regulatory and Legislative Outlook for Commercial Drone Operations

Action Item: The FAA's new Part 107 regulations concerning small Unmanned Aircraft Systems ("sUAS") went into effect August 29, 2016, boosting investments in the expanding commercial UAS market. Additional FAA regulations, which would allow greater flexibility for commercial sUAS operations outside of the restrictions of Part 107, were anticipated for 2017. However, several Trump administration actions are causing regulatory uncertainty. This Alert highlights the key elements of Part 107, and the UAS regulatory and business outlook for UAS.

As another step towards integrating commercial Unmanned Aircraft Systems ("UAS") flight into our National Airspace System ("NAS"), the Federal Aviation Administration ("FAA") released its long-awaited Final Rule concerning commercial and business use of sUAS weighing less than 55 pounds, which went into effect August 29, 2016. In several respects, the new rules under Part 107 of the Final Rule were more lenient than anticipated, but additional flexibility— and further regulations—are needed to facilitate commercial sUAS operations in the United States.

The lack of support for these operations is forcing major companies, such as Amazon, to evaluate whether to refocus commercial efforts to more friendly countries. A newly published Trump Administration Executive Order (E.O. 13771), establishing a 2:1 ban on new regulations, is also hampering this development.

Highlights of the Part 107 Regulations

The FAA's Part 107 regulations apply to U.S.-registered sUAS engaged in non-recreational operations. Some of the key elements of the rule include:

Operational Requirements:

- The sUAS must weigh less than 55 pounds (including payload).
- Operations cannot exceed 400 feet above ground level ("AGL"), or 400 feet above a structure.
- Flight speed cannot exceed 100 mph.

- The sUAS must be registered with the FAA, and although no FAA airworthiness certification is required, the operator must maintain the sUAS in a safe condition.
- Flights are only permitted in daylight, or twilight (30 minutes before official sunrise and 30 minutes after official sunset) with appropriate anti-collision lighting.
- Flights must be conducted with a minimum weather visibility of 3 miles from the control station.
- The sUAS must remain in visual line-of-sight ("VLOS") of the operator, with unaided vision except for corrective lenses.
- No person can operate as Remote Pilot in Command ("RPIC") (see below) for more than one sUAS at one time.
- The operator must conduct a preflight inspection before the operation, including inspection of the operating environment, to ensure the sUAS is safe for operation and has enough power to operate for the intended operational time period. The sUAS would not have to meet the same airworthiness requirements as manned aircraft, nor be certified by the FAA. However, if FAA-certified components are used, the sUAS could be subject to FAA airworthiness directives addressing those component parts. Further, the operator must make the sUAS available to the FAA, upon request, for inspection or testing, and any associated documents and records required to be kept under Part 107.
- The sUAS cannot operate over persons not directly involved in the operation of the sUAA, or under a covered protective structure, and the operation must yield the right-of-way to other aircraft (manned and unmanned).
- The FAA did ***not*** impose an absolute restriction on sUAS operations near airports and similar restricted airspace. Rather, the rule allows such sUAS operations provided they do not interfere with "operations and traffic patterns at any airport, heliport, or seaplane base," and air traffic control ("ATC") permission is necessary. You can request airspace permission through an online portal on the FAA's UAS website. You cannot contact your local ATC tower or facility directly to request airspace permission—the requests must be made through the FAA's sUAS portal only.
- Careless and reckless operations are prohibited.
- No operations from a moving aircraft.
- No operations from a moving vehicle unless the operation is over a sparsely populated area.
- No carriage of hazardous materials.
- External load applications are allowed only if the object being carried by the sUAS is securely attached and does not adversely affect the flight characteristics or controllability of the sUAS.
- Transportation of property for hire or compensation is allowed, with certain restrictions.
- The operator must ensure that aircraft registration rules that apply to other aircraft are satisfied.
- Limitations in airspace classes: sUAS operations in Class G airspace are allowed without ATC permission; sUAS operations in Class B, C, D, and E airspace are only allowed with ATC permission; sUAS may not be operated in Class A (18,000 feet and above) airspace.

Pilot Requirements:

Part 107 implemented relaxed pilot certification requirements. Under the rule, there is now a new class of pilot certificate called a Remote Pilot in Command ("RPIC"). A person operating a sUAS must either hold a RPIC certificate or be under the direct supervision of a person who holds such a certificate. Individuals wishing to obtain a RPIC certificate must pass an initial test at an FAA-approved testing center and a recurrent test every 24 months. The RPIC must be at least 16 years old; be able to read, speak and understand the English language; not know or have reason to know that he/she has a physical or mental condition that would interfere with safe operation of the sUAS; certain types of incidents or accidents must be reported to the FAA within a set time period; and, the RPIC must pass a background check/vetting by the Transportation Security Administration ("TSA"). As with a traditional pilot certificate, unmanned aircraft certificate holders are subject to FAA drug and alcohol testing requirements.

Part 61 pilot certificate holders may obtain a temporary RPIC certificate immediately upon submission of their application for a permanent certificate. Others will obtain a temporary RPIC certificate upon successful TSA security vetting.

Certificates of Waiver ("COW")

If you cannot operate your sUAS within the Part 107 requirements, then you must apply for a waiver. The FAA has put in place an online portal for such waiver applications. Certain requirements will not be subject to waiver (such as the 55 pound weight restriction), although others will be. To obtain the COW, an applicant must demonstrate that the proposed operation can be conducted safely, and the request must contain a complete description of the proposed operations and a justification for the request (including supporting data and documentation).

Section 333 Exemptions versus Part 107 Waivers

If you already have a Section 333 exemption, then the FAA has stated that you can continue to operate under that exemption—until it expires. Or, you can chose to operate your sUAS under Part 107 instead. However, you cannot "pick and choose" (i.e.,you cannot use certain parts of your Section 333 exemption for some aspects of your sUAS operations and also use sections of Part 107 for other aspects of your operations).

The Regulatory Outlook

Already looking beyond Part 107, the FAA has signaled a willingness to increase operational flexibility for commercial sUAS through a number of efforts. First, to move forward with more flexible sUAS regulations, the Drone Advisory Committee ("DAC") was created by FAA Administrator Michael Huerta in May 2016[1] to develop and provide guidance to the FAA on UAS issues, including advice concerning UAS integration strategy, certification, preemption, privacy, how to secure funding necessary to integrate UAS into the National Airspace, and access to airspace (i.e., technology and regulatory mechanisms to allow drone operators to fly in the NAS beyond the restrictions in Part 107 without a case by case exemption review process). The DAC is comprised of representatives from UAS manufacturers, corporations utilizing UAS, academics, pilots, researchers, and representatives of manned aircraft interests.

At the Consumer Electronics Show in Las Vegas on January 6, 2016, Administrator Huerta delivered a speech suggesting that the FAA understands that regulatory oversight needs to keep up with the needs of the rapidly-expanding sUAS commercial market. In support, the FAA was expected in 2017 to engage in rulemaking to allow commercial drone operations over people not involved in the sUAS operation, beyond visual line of sight of the operator, night operations, and other operations outside the current restrictions of Part 107. NASA has been working with several technology companies, including Precision Hawk, Airware, Flirty, Verizon (parent company of TechCrunch), Gryphon Sensors, ne3rd, Sky Specs, Unmanned Experts, and Harris/Exelis to develop a drone traffic management system to prevent sUAS from colliding with infrastructure, each other, and other aircraft. Further, the Pathfinder Program (which conducts drone detection research to facilitate safe and autonomous UAS operations) has been moving forward. Technologies like geo-fencing and collision avoidance systems will make UAS flight safer and help public concern related to security risks sUAS may pose. More flexible FAA rules would facilitate greater sUAS usage for things like the energy industry and critical infrastructure inspections, construction site inspections, and home delivery services by Amazon, UPS, and FedEx.

However, regulatory efforts will be delayed for two main reasons: First, with respect to putting in place regulations that will allow operations outside of Part 107 restrictions, according to Administrator Huerta, discussions with industry leaders and the government regarding the pending rule raised many questions about the rule's content, and also highlighted safety and security concerns. Second, President Trump has issued an executive order requiring that two federal regulations be rescinded by an agency for each new one passed and that the cost of the new regulation be revenue neutral. This order has been viewed as putting a damper on the burgeoning sUAS in the United States market. Perhaps unlike many industries, the commercial drone market generally welcomes regulation so that sUAS can be used for additional purposes. After Part 107 went into effect in August 2016, the commercial sUAS industry skyrocketed. However, businesses that invested a lot of money in the sUAS market since Part 107 went into effect are now viewing the new regulatory freeze as an impediment to their investments and anticipated business opportunities. This delay could force companies that wish to expand drone usage to explore commercial options outside of the United States.

The FAA Reauthorization Bill

Congress spent a lot of time in 2016 considering the Aviation Innovation, Reform and Reauthorization Act ("AIRR"), which is a six-year reauthorization of the FAA. Part of the AIRR focused on drones. In July 2016, FAA extension legislation (which extended FAA funding through September 2017) was put in place. Under the Trump administration, Congress will be re-addressing several provisions relating to UAS that were in the original draft of the bill. One possible impediment to a long-term bill is the proposal by Congressman Bill Shuster, Chairman of the House Transportation and Infrastructure Committee, to privatize the FAA's air traffic control system. The Chairman may consider President Trump a positive ally for this effort and try again this Congress. His committee has already begun a series of hearings on FAA reauthorization. A highlight of UAS-related parts of the prior year's bill is as follows:

- Impose risk-based performance and safety standards for sUAS to set airworthiness standards related to the safe integration of sUAS into the National Airspace System. The standards would consider technologies or standards related to geographic and altitude restrictions, as well as sense-and-avoid capabilities, return-home capabilities if a communications problem arises, detectability and identifiability, and other mechanisms to promote aviation safety. Once those standards are in place, the FAA would establish a process for approval of sUAS makes and models without requiring type certification.

- Submission of operating instructions, manufacturer statement of compliance (certifying that the UAS conforms to the manufacturer's design data using the manufacturer's quality assurance system, and is manufactured to ensure consistency in the production process) and an FAA aircraft inspection would be prerequisites to FAA approval.

- Prohibit UAS from interfering with emergency response activities.

- Streamline the process for approval and cooperation among agencies to deploy UAS during emergencies, such as wildfires and disaster responses.

- Create new processes to detect, identify, and mitigate unauthorized operation of UAS around airports and critical infrastructure.

- Require sUAS manufacturers to include with the sUAS a safety and informational statement to provide sUAS owners with a background of the FAA regulations.

- Allow certain facilities to request a designation from the FAA to disallow UAS operations within a "close proximity" of their operations. This would include critical infrastructure, energy production, transmission and distribution, refineries, amusement parks, and others.

Conclusion

The commercial industry's desire for greater flexibility with respect to commercial sUAS operations is a trend likely to continue in 2017, but the effect of various Trump administration efforts remain to be seen. Because of the complex regulatory and legal environment in which sUAS operate, clients should consult with counsel as part of their sUAS business analysis to assist with evaluation of regulatory, technological, risk management, and legal and public policy issues. Blank Rome has a dedicated team of sUAS counselors and lobbyists experienced in both government and private sectors, with knowledge across a wide spectrum of industries who can assist interested clients in taking advantage of the developing sUAS markets and influencing the outcome of FAA reauthorization legislation.

1. Administrator Huerta was confirmed in January 2013 for a five-year term and hopes to serve out the remainder of this term under a Trump Administration. This remains to be seen.

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