Drone Law: Look Up in the Sky...It's a Bird, It's a Plane, It's a DRONE!

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Who is WBK?

- WBK provides advice and representation over a range of industries including uncrewed aircraft systems ("UAS"), Advanced Air Mobility ("AAM"), emerging technologies, energy, media, and telecommunications. With over 70 lawyers and professionals in its offices in Washington, DC, Austin, TX, and Denver, CO, we combine the services, capabilities, standards, and expertise of a large-firm practice with the value, flexibility, and client-oriented personal style that only a smaller firm can deliver.
- Representative UAS work includes:
 - Obtained first commercial UAS authorizations for operators and manufacturers from the FAA.
 - Succeeded in advocating for a new form of DOT economic authorization for interstate UAS package delivery.
 - Wrote dozens of pleadings and letters shaping FAA rules and state UAS laws, including briefing work in the seminal *Singer* and *NPPA* cases.
 - Participated in industry-FAA meetings to share knowledge.
 - Helped clients develop UAS policies and compliance manuals.
 - Worked with clients to obtain FAA approvals necessary for UAS business plans.
 - Engaged in advocacy opposing anti-drone efforts within ALI, the ULC, and the Mercatus Center.
 - Prepares monthly Drone Update that provides information on UAS legislation, regulation, law enforcement activities, and news.

Who am I?



Bob Kirk is a partner at WBK who provides regulatory advice for businesses employing emerging technologies. He has assisted clients in obtaining authority from the FAA to utilize UAS in ways not contemplated by the rules; advocating for businessand consumer-friendly UAS regulations at the federal, state, and local levels; opposing state and local proposals to criminalize certain UAS activities; evaluating potential UAS business cases; and formulating compliance plans for UAS operations.

WBK Drone Team

- **Kara Graves** is a partner who provides policy and strategic counsel on myriad communications issues, focusing largely on spectrum, infrastructure siting, and other areas of interest to the wireless industry. Her practice focuses primarily on representing clients before the Federal Communications Commission, NTIA, and other federal agencies, as well as before the Executive and Legislative branches of federal government.
- **John Scott** is a partner who uses his long experience as an in-house attorney to help clients find solutions to legal and regulatory through efficient, practical advice and representation. He has counseled clients on how to grow their business consistent with the legal frameworks governing the communications industry. He also has represented communications providers, trade associations, and companies in the drone industry before the Federal Communications Commission in rulemakings, enforcement matters, and other proceedings, and has also represented clients in proceedings before other federal agencies, and in federal court litigation.
- **Tyler Dillon** is an associate who helps clients navigate complex regulatory issues concerning emerging technologies, public safety communications, wireless communications, and cybersecurity. He has helped clients obtain FAA approval for large UAS and agricultural operations and advised on the impact of state and local laws on UAS operations.

Common Terminology

Uncrewed Aircraft ("UA" or "Drones"): Aircraft operated without the possibility of direct human intervention from within or on the aircraft. (See 49 U.S.C. § 44801(11))

Uncrewed Aircraft System ("UAS"): A UA and associated elements (including communication links and the components that control the unmanned aircraft) that are required for the operator to operate safely and efficiently in the national airspace system. (See 49 U.S.C. § 44801(12))

National Airspace System ("NAS"): The common network of U.S. airspace; air navigation facilities, equipment and services, airports or landing areas; aeronautical charts, information and services; rules, regulations and procedures, technical information, and manpower and materials. (FAA National Airspace System Overview)

Uses for Drones



Drones have as many uses as business can dream of and U.S. laws and regulations allow. Drones can be used for:

- **Collect Data**. Drones can collect high-resolution images and videos, topographical maps, and georeferencing data (longitude, latitude, altitude). This information can be used to assess the value of property or assets, inform risk assessments, or assess damage after a national disaster or other event.
- **Monitor.** Drones can surveil property or assets and transmit images, video, and audio in real time. By doing so, drones can monitor properties and assets for security and fraud prevention purposes or provide live feeds of the condition of property and assets.
- **Information Verification.** Drones could be used to verify information, such as the identity and location of loan applicants in remote areas or the location, condition, or characteristics of property or assets.
- Customer Service. Drones may be used to provide customer service, such as by delivering documents or facilitating remote meetings.
- **Inventory.** Drones may be used to scan items for counting inventory in warehouses.



Drone Legal Landscape

Overview of Federal Laws & Regulations

The Federal Aviation Administration ("FAA") largely is responsible for regulating and approving drone operations in the NAS.

• The FAA's authority comes from Congress authorizing the Department of Transportation ("DOT") to regulate the safety of "air commerce." (49 U.S.C. §§ 40101, 40104(a))) "Air commerce" covers the operation of "aircraft," which is "any contrivance invented, used, or designed to navigate, or fly, in the air." (49 U.S.C. § 40102(3), (6))

Today, with exceptions authorized by specific FAA rules (such as **Part 107**), UAS operations are permitted pursuant to a **waiver/exemption system**.

Airspace Explained



- The FAA defines classes of airspace as A, B, C, D, E, and G.
- Different types of airspace have different regulations. Class G is uncontrolled airspace.
 - "Uncontrolled airspace" does not mean drone operators can fly in that airspace without complying with FAA regulations and U.S. law.

Remote Identification

Remote ID is the ability of a drone in flight to provide identification and location information that can be received by other parties through a broadcast signal. Remote ID helps FAA, law enforcement, and other federal agencies locate the control station when a drone is flown in an unsafe manner or where it is not allowed to fly.

Drone pilots required to register their drones must comply with Part 89 Remote ID requirements. Drones comply with Remote ID requirements if they have built-in FAA Remote ID requirements or are retrofitted with modules that have Remote ID broadcast capabilities. (14 C.F.R. § 89.105-.115)

Drones may not have to comply with Remote ID requirements if the UA is flown within "FAA-recognized identification area[s]." (14 C.F.R. § 89.115(b)) Education institutions, trade schools, and community-based organizations only are eligible to apply to establish FAA-recognized identification areas. (14 C.F.R. § 89.205)

Part 107 - Overview

14 C.F.R. Part 107 authorizes certain operations of small UAS ("sUAS"). A sUAS is "an unmanned aircraft weighing less than 55 pounds on takeoff, including everything that is on board or otherwise attached to the aircraft." (14 C.F.R. § 107.3)

UAS operations that comply with Part 107 do not need prior FAA approval. Such UAS operations may include:

- Photography/filming
- Surveying/inspecting property
- Creating 3D maps
- Monitoring crops



Part 107 - Requirements

Operational Requirements

The sUAS must:

- Remain within visual line of sight. (14 C.F.R. § 107.31)
- Not exceed 100 miles per hour. (14 C.F.R. § 107.51(a))
- Not fly higher than 400 feet above ground level. (14 C.F.R. § 107.31(b))
- Fly only when the minimum visibility is 3 miles or greater. (14 C.F.R. § 107.51(c))
- Fly 500 feet below or 2,000 feet horizontally from clouds. (14 C.F.R. § 107.51(d))

Initially, nighttime operations and flights over people and from moving vehicles were prohibited under Part 107. Such operations are now permitted under certain conditions.

Pilot and Aircraft Requirements

Remote Pilot Certification Requirements. Only persons with remote pilot certificates or those supervised by a person with that certificate may operate the sUAS. (14 C.F.R. § 107.12) To receive a certificate, persons must be at least 16 years old and pass a knowledge test or hold a pilot certificate. (14 C.F.R. § 107.63(a))

Aircraft Requirements. The sUAS must be registered and in a condition for safe operation. (14 C.F.R. § § 107.13, 15)



Part 107 – Waivers

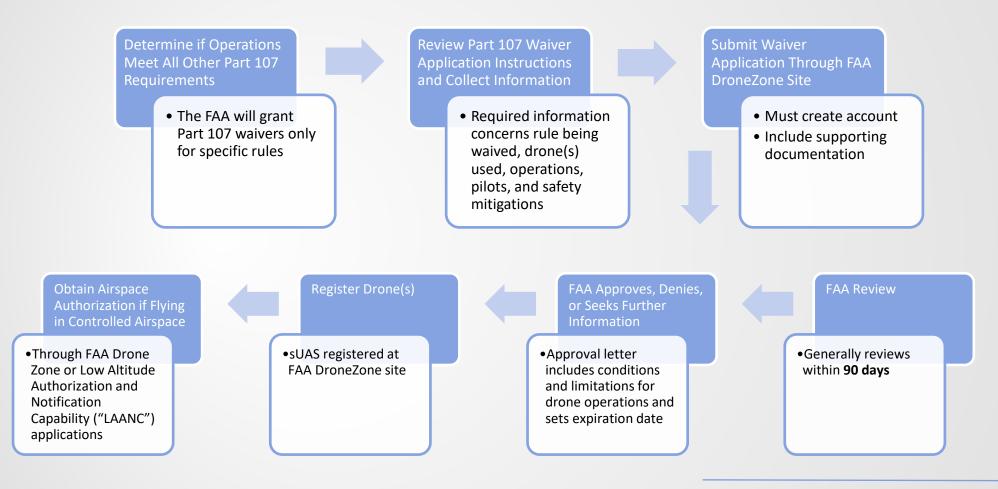
The FAA may grant waivers for specific Part 107 regulations if the operation would not fully comply with FAA Part 107 regulations. (14 C.F.R. § 107.205) These regulations concern:

- Operations from a moving vehicle or aircraft. (14 C.F.R. § 107.25)
- Requirement of anti-collision light for night and twilight operations. (14 C.F.R. § 107.29(a)(2), (b))
- Visual line of sight requirements. (14 C.F.R. § 107.31)
- Visual observers. (14 C.F.R. § 107.33)
- Operations of multiple sUAS. (14 C.F.R. § 107.35)
- Yielding the right of way. (14 C.F.R. § 107.37(a))
- Operations over people. (14 C.F.R. § 107.39)*
- Operations in Class B, Class C, or Class D airspace or within certain Class E airspace. (14 C.F.R. § 107.41)
- Operating limitations for sUAS (14 C.F.R. § 107.51)
- Operations over moving vehicles. (14 C.F.R. § 107.145)

Operators must submit a waiver application to the FAA. The key factor of whether a waiver application would be granted is safety. (14 C.F.R. § 107.200(a)) It is easier to obtain waivers for operations similar to those for which the FAA already has granted waivers.

*Drone operators do not have to submit waiver applications to the FAA if they comply with Part 107 and additional rules for operations over people and moving vehicles.

Part 107 Waiver: Video Above 400 Feet



Section 44807 Exemptions - Overview

The main differences between Section 44807 and Part 107 FAA regulations for flying unmanned aircraft are:

- *Eligibility*: Section 44807 is available for a wider range of operations, while Part 107 is more restrictive.
- Weight Limit: Part 107 has a weight limit, while Section 44807 does not.
- Waiver: Part 107 requires a waiver, while Section 44807 does not.
- Qualified Public Operators: Qualified public aircraft operators can fly under Part 107.

Examples of operations approved pursuant to Section 44807 include:

- Agricultural spraying and surveying these operations often involve drones that weigh 55 lbs. or more
- Aerial photography drones that weigh 55 lbs. or more may be necessary to carry larger cameras or lenses
- Package Delivery package delivery drone operations that operate beyond the visual line of sight would need approval under Section 44807

Operators must submit a petition for exemption from the FAA. Like Part 107 waivers, the key factor is whether the UAS could operate safely. Operators also must apply for a certificate of waiver or authorization ("COA") for approval for the specific airspace where UAS flights would occur, though the FAA will issue a "blanket" COA for flights at or below 400 ft. in "Class G" airspace.

Exemption approvals usually contain conditions and limitations the operator must follow when operating the UAS, including those relating to visual observers, pilot qualifications, VOs, documentation, and operational restrictions such as elevation, visibility, and weather requirements



Seeking Approval for Spraying Crops

Draft & Submit Petition and Supporting Documents

 Focus on safety – why is your drone operation safer than manned operations?

Register Drone

 Registration done through mail. Drone seller may handle this process for purchasers. FAA Review

- Generally reviews within
 30 days for agricultural operations
- •W/in **120 days** for non-agricultural operations

Apply for Agricultural Certificate

Only applies for agricultural operations

FAA Approves, Denies, or Seeks Further Information

- Approval letter includes conditions and limitations for drone operations and sets expiration date
- If denied, can petition for reconsideration w/in 60 days

Apply for Certificate of Waiver or Authorization for Applicable Airspace

- Doesn't apply if flying in Class G airspace – FAA will issue blanket waiver
- FAA tries to respond within 60 days

State/Local Laws & Regulations – Preemption

Federal law and regulations preempt some, but not all, state and local laws and regulations concerning UAS operations.

Generally, the FAA advises that:

- States and local governments may not regulate in the fields of aviation safety or airspace efficiency but generally may regulate outside those fields.
- A state or local law will be preempted if it conflicts with FAA regulations.
- State or local laws affecting commercial UAS operators are more likely to be preempted. In particular, state and local laws may be preempted if they directly reference, or have a significant impact on, prices, routes, or services of a UAS operator.

State/Local Laws & Regulations – In Practice

State and Locality UAS Regulations

Laws that are not preempted may include:

- Privacy;
- Trespassing;
- Wildfire suppression;
- Photography or videos of sensitive facilities (e.g., utilities; prisons; railroads, etc.); and
- UAS takeoff and landing areas.

Numerous states have enacted laws prohibiting localities from regulating UAS operations.

State and Municipal Enforcement Actions

States and localities have arrested people for, among other actions:

- Interfering with wildfire suppression efforts in LA;
- Flying too close to Logan Airport;
- Smuggling contraband into prisons and correctional facilities;
- Taking photos of Vandenberg Space Force Base; and
- Shooting down drones.



Relevant Upcoming Policy Issues

Beyond Visual Line of Sight ("BVLOS")

The FAA Reauthorization Act of 2024 ("Act") requires the FAA to issue a rule establishing a "performance-based" pathway for UAS BVLOS operations. (49 U.S.C. § 44811) The Act requires the FAA to issue a notice of proposed rulemaking ("NPRM") by September 2024 and a final rule by September 2025. However, the FAA has yet to issue an NPRM, and it is unclear where that rulemaking stands with the new administration.

The FAA has authorized certain BVLOS operations, including for (among others)

- Package delivery operations;
- Monitoring of mining operations;
- Security; and
- Patrols.

Import Controls

Legislators and executive officials have expressed security concerns about drones from China. However, drones developed by China-based companies dominate the U.S. market, making up at least 75% of the U.S. UAS consumer market.

The Department of Commerce is soliciting <u>comment</u> as it considers proposing rules restricting the importation of information and communications technology and services integral to UAS from foreign adversaries, including China.

Congressmembers have proposed legislation to restrict the import of drones from specific China-based companies.

Counter-UAS ("C-UAS") Authorities

A "C-UAS system" is a system or device capable of disabling, disrupting, or seizing control of a UA or UAS. (See 49 U.S.C. § 44801(5)) These technologies include:

- Jamming. Blocking or interfering with radio communications.
- Spoofing. Replicating and replacing or modifying radio signals.
- *Hacking*. Techniques focusing on the UAS's communications link and/or the onboard computer processors.
- Kinetic Actions. Physically disrupting or disabling a UAS, including through the use of nets, projecticles, and lasers.

Use of these C-UAS technologies generally are prohibited by various federal laws, including the Computer Fraud and Abuse Act and the Communications Act. Congress has authorized the Departments of Homeland Security, Defense, and Energy as well as the FAA to conduct limited C-UAS operations and/or research.

Policymakers have shown interest in expanding authorization for C-UAS capabilities. Instances such as the NJ-NY "drone" sightings and concern about drone attacks have helped drive such interest. No legislation has been passed yet.

Spectrum

UAS operations rely on the use of radio spectrum. Spectrum is a scarce resource, i.e., there is a finite amount of spectrum to be used. The FCC regulates spectrum for non-Federal operations, and the National Telecommunications and Information Administration is responsible for spectrum use by Federal agencies.

The FCC has taken action to expand access to spectrum for UAS operations. In 2024, the FCC adopted an Order setting aside portions of the 5 GHz band for UAS operations, and in early 2025, the FCC adopted an NPRM to facilitate the deployment of UAS and Advanced Air Mobility.

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