

FAA & PUBLIC ACTIVELY TETHERED UAS

1. Actively Tethered Unmanned Aircraft System (UAS) Definition:

The Securing Growth and Robust Leadership in American Aviation Act (H.R.3935), which went into law on May 16th, 2024, expanded upon the definition of **Actively Tethered Unmanned Aircraft Systems**, originally introduced in the FAA Reauthorization Act of 2018. An actively tethered unmanned aircraft system" means an unmanned aircraft system in which the unmanned aircraft component:

- A) weighs 55 pounds or less, including payload but not including the tether;
- **B)** is physically attached to a ground station with a taut, appropriately load-rated tether that provides continuous power to the unmanned aircraft and is unlikely to be separated from the unmanned aircraft:
- C) is controlled and retrieved by such ground station through physical manipulation of the tether;
- **D)** is able to maintain safe flight control in the event of a power or flight control failure during flight; and
- **E)** is programmed to initiate a controlled landing in the event of a tether separation.

2. Regulatory Advantages Compared to Piloted UAS

Section 926 of H.R.3935 amends Section 44806 of Title 49, United States Code, to say that Actively Tethered Unmanned Aircraft Systems may be operated --

- **A)** without any requirement to obtain a Certificate of Authorization, Certificate of Waiver, or other approval by the Federal Aviation Administration;
- **B)** without requiring airman certification under section 44703 of this title or any rule or regulation relating to airman certification; and
- **C)** without requiring airworthiness certification under section 44704 of this title or any rule or regulation relating to aircraft certification.

This language allows any Public Safety entity to operate without the normal requirements of a Pt. 107 pilot license or COA to operate in public safety applications. In order to safely facilitate the greater operational freedom allowed for this category of UAS, a set of operational requirements are defined for Public Actively Tethered UAS in Section 44806. These are listed below.

3. Operational Requirements for Public Actively Tethered UAS

Section 926 of the Act amends Section 44806 of title 49, United States Code, to say that, Public Actively Tethered UAS must be:

A) operated—

- (i) at or below an altitude of 150 feet above ground level within class B, C, D, E, or G airspace, but not at a greater altitude than the ceiling depicted on the UAS Facility Maps published by the Federal Aviation Administration, where applicable;
- (ii) within zero-grid airspaces as depicted on such UAS Facility Maps, only if operated in life-saving or emergency situations and with prior notification to the Administration in a manner determined by the Administrator; or
- B) not flown directly over non-participating persons;
- C) operated within visual line of sight of the operator; and
- D) operated in a manner that does not interfere with and gives way to any other aircraft.

This expands the operational capabilities to include the ability to operate in zero grid airspaces such as airports, in life-saving or emergency situations with notification to the FAA (like a call to the local Air Traffic Controller) which is no different than the process of operating a fire service aerial device today.

4. Public Safety Organization

Section 926 of the Security Growth and Robust Leadership in American Aviation Act defines the term "public safety organization" as an entity that primarily engages in activities related to the safety and well-being of the general public, including law enforcement, fire departments, emergency medical services, and other organizations that protect and serve the public in matters of safety and security.

This definition clarifies that all public safety personnel, whether paid or volunteer, meet the qualification of operating an **Actively Tethered UAS** without the need for a Part 107 Drone Pilot License or COA.

5. Additional Information

The Fotokite Sigma adheres to each of the defining characteristics of a Public Actively Tethered UAS in (1) and therefore may be operated by Public Safety entities with the advantages listed in (2). The Fotokite Sigma is still subject to other FAA requirements, such as the need to register your UAS with the FAA and comply with the operational requirements listed in (3). All organizations that meet the definition of a Public Safety Organization as defined in (4) can freely operate the Fotokite Sigma without need for a Part 107 Drone Pilot License or COA. Please contact Fotokite if you have any further questions regarding the Fotokite Sigma or Actively Tethered UAS.

Further information can be found here:

- https://www.congress.gov/bill/118th-congress/house-bill/3935/text