

Drone Briefs

NEWS AND LEGAL UPDATES FOR MUNICIPAL UAV PROGRAMS – October 2021

The new Part 107 rules allow operations over people. Can't wait to start! So which drones qualify? As of today – not one.

Updates to Part 107 allowing certain operations over people without a waiver took effect on April 21, 2021. The revised Section 107.39(c) allows flight over people for operations that meet criteria for one of four categories:

- **Category 1:** The small unmanned aircraft system ("UAS") weighs 0.55 pounds or less on takeoff and throughout the flight. Batteries and anything attached are included in the weight.
- **Category 2:** The UAS will not cause injury greater than that caused by the transfer of 11 foot-pounds of kinetic energy on impact.
- **Category 3:** The UAS will not cause injury greater than that caused by the transfer of 25 foot-pounds of kinetic energy on impact. The UAS cannot operate over open-air assemblies. It may only operate over people within closed or restricted-access sites where all participants are on notice of potential UAS overflights. It cannot operate over any people who are not: 1) directly participating in the UAS operation; or 2) under a covered structure or in a stationary vehicle.
- **Category 4:** The UAS has been issued an airworthiness certificate by the FAA under 14 CFR Part 21. The Flight Manual or other specified operating limitations does not prohibit operations over people.

For Categories 1, 2 and 3: The UAS cannot have exposed rotating parts that could lacerate human skin on contact.

For Categories 2 and 3: The UAS must be listed on an FAA-accepted Declaration of Compliance (DOC) as eligible for Category 2 or 3 operations, respectively, and the UAS must be labeled as eligible for Category 2 or 3 operations, as applicable.

For Categories 1, 2 and 4: Sustained flight over open-air assemblies requires remote ID (Category 3 prohibits sustained flight over open-air assemblies).

So why don't any drones qualify? Other than very small toy drones, the Mavic Mini appears to be the only drone that meets the Category 1 weight restrictions; however, a propeller guard (required to protect against exposed rotating parts) tips it over the 0.55-pound limit. Categories 2-4 require the manufacturer to have an FAA-approved DOC. Because the FAA has not yet approved any Remote ID means of compliance, manufacturers don't know what is required to make a compliant drone, and thus, are not in a position to submit any DOCs for FAA approval.

LAANC Can Now Be Used for Night Ops

The recent Part 107 amendments eliminated the requirement to obtain a waiver for night operations; however, the FAA's Low Altitude Authorization and Notification Capability (LAANC) service providers did not have the ability to provide controlled airspace authorizations at night. Therefore, in order to operate at night in controlled airspace, operators needed to obtain a valid LAANC daytime authorization as well as a National Authorization, which extended the LAANC authorization through the night of the date shown on the LAANC authorization.

The National Authorization letter expired on September 30, 2021. LAANC providers have now updated their service capabilities, and remote pilots with current Part 107 certificates who have passed the FAA recurrent training on or after April 6, 2021 can get near real-time LAANC approval for night operations. Even better, as service providers were updating their software, the FAA revised the LAANC grid areas, dividing them into smaller segments. Because the presence of one sensitive operation (a helipad, for example) within a grid will limit

the allowed altitude in the entire grid square, decreasing the size of the grid squares prevents sensitive uses from impacting more airspace than necessary, thus opening up many more areas for flight.

CT Municipal UAV Task Force News

The Connecticut Municipal UAV Task Force (CT MUTs) continues to grow, with over 80 members from 36 municipalities. The first speaker meeting was held at the Branford Fire House on September 2, 2021. Chief Charles Werner from DroneResponders gave an eye-opening presentation on the many ways drones can be used in public safety followed by a discussion a variety of topics, including funding options, the benefits of joint exercises between fire and police, and possibilities for regional training exercises.

The group's website www.ctmuts.weebly.com has information on training, program development, funding and waivers as well as notifications about UAV-related events and educational opportunities. They've also launched a YouTube Channel where recordings of speaker meetings are posted. If your municipality is interested in Part 107 or other training, let them know by filling out the Event Survey [here](#).

Next meeting: Thursday, October 7, 2021 at 1:00 p.m. (via Zoom). Contact [Jennifer Yoxall](#) or [Donald Janelle](#) to sign up or for more information.

Connecticut drones in the news and at work

Ridgefield's Community Emergency Response Team (CERT) recently used their drone during the Ridgefield Triathlon to provide overflight for the swim portion of the race. They worked with the Newtown Dive Team and the Ridgefield Fire Department to watch for struggling swimmers, verify the race number of anyone pulled into a boat, and confirm that all participants made it safely out of the water.

Photo courtesy of Sean McEvoy



What have your drones been up to?

We'd love to include your drone news and photos in our newsletters. Please forward photos, articles and information to [Jennifer Yoxall](#).

Resources

Below is a list of public safety UAV educational resources we have found particularly helpful. It is by no means exclusive:

DRONERESPONDERS – www.droneresponders.org
(news, podcasts, videos, research, monthly webinars with the FAA, form documents)

Airborne Public Safety Association - www.publicsafetyaviation.org
(newsletters, form documents, reports, videos)

Public Safety Flight – www.psflight.org
(flight safety guidance, research, podcasts with the FAA)

FAA – <https://www.faa.gov/uas/>
(general UAS information)

piXL Drone Show - www.pixldroneshow.com
(video interviews)

Skyfire Consulting - skyfireconsulting.com
(educational videos, newsletter)

Other useful links

Drone Zone - www.droneregistration.com
(register your drone, file for waivers)

FAA UAS Facility Maps – www.faa.maps.arcgis.com
(controlled airspace limits)

FAASTeam – www.faasafety.gov
(register for recurrent training)

For more information or to join the mailing list, please contact:

Attorney Jennifer Sills Yoxall
Counsel
203.575.2603
JYoxall@carmodylaw.com

Jennifer is an instrument-rated private pilot with over 25 years of experience. She holds a part 107 remote pilot certificate, is an FAA Safety Team (FAASTeam) Drone Pro and a civilian representative to the TSA CT Rapid Incident Response Team.