



Jennifer Yoxall, Co-Chair
50 Cooks Lane
Guilford, CT 06437
jyoxall@comcast.net

Testimony for SB 3 – February 29, 2024

Good afternoon Mr. Chairman, members of the Committee. My name is Jennifer Yoxall. I'm co-chair of the Connecticut Municipal UAV Task Force. UAV stands for "Unmanned Aerial Vehicle" – more commonly known as a drone. I'm here to testify against Section 4 of SB 3, which would ban the purchase and use of Chinese-made drones by state and local agencies.

The Connecticut Municipal UAV Taskforce was formed in July of 2021 and now consists of nearly 250 people involved in existing state or local drone programs or interested in starting one. Our members come from 68 towns across Connecticut, State Police, and several out-of-state agencies such as Boston Police. Members of federal agencies with related interests such as the FAA and TSA regularly attend our meetings. Our mission is education, collaboration, and communication to help build and run drone programs that are vital to keeping the public safe.

Our members are primarily first responders. They range from those involved with longstanding programs to others just beginning the process. Our group has grown to its current size in less than 3 years, with new members joining every month, because first responders recognize the game-changing capabilities drones bring to their arsenal. This bill will drastically impair our members' ability to continue existing programs or start new ones; and based on discussions with members, conservatively, it will ground at least half a million dollars of taxpayer-funded drones.

I understand the security concerns motivating this bill, but as we do with many things worthwhile, we need to weigh the benefits against the risks. First, the benefits. There is a profound lack of understanding as to how first responders use drones – in part because publicizing success stories takes time away from critical job duties. So here are just a few examples. If someone is lost in the woods, a drone with a thermal camera can locate them in a fraction of the time a foot search would take. In the dead of winter, or if the person is injured, every minute counts. Drones can drop emergency supplies to people cut off from roads by natural disasters or help first responders thread their way through debris to provide life-saving assistance. Drones can enable police to follow and apprehend an armed suspect running through a neighborhood. They can also de-escalate potentially dangerous situations, for example, by showing that a suspect is holding something other than a gun. Drones with thermal cameras can see through smoke, helping firemen know if someone is trapped in a burning building.

Drones also help protect our first responders so they can protect us. Drones can alert firemen to hot spots on the roof of a burning building, so they don't fall through. Drones with sniffers can detect hazardous materials from a safe distance. If a vehicle is lodged in a raging river, a drone can reveal if anyone is inside so first responders don't unnecessarily risk their lives battling floodwaters. The Florida Surfside collapse response included over 304 drone flights into the

rubble, with many into areas first responders could not have safely accessed. Those are just a few of the countless benefits these critical tools provide. (See attached sheet for links to specific incidents).

Now the risks. One concern is that an adversarial government may gain access to the drone videos. Our first responders typically fly in non-sensitive locations accessible to any other drone pilot and readily visible from satellites and programs like Google Earth. Any information first responder drones could provide is already available, and except in rare situations, would be of minimal value. Another concern is that an adversarial government might use the drone's software as a back-door entry into the department's computer system. Standard cybersecurity best practices, such as using a dedicated computer not connected to the department's system, can mitigate this risk. Therefore, the benefits of allowing agencies to use Chinese-made drones far outweigh the risks.

Now let's look at the impact of this bill on public safety drone programs. First responders carefully select the best tool for each job. In many cases, a drone is not only the best tool, it's the only tool. Chinese-made drones are significantly less expensive and more capable, with many more models and sizes available than American-made drones. They're also supported by a much more robust supply chain, so if they're damaged or lost, they can be replaced in a day or so, rather than weeks or even months later. With long-proven safety records, first responders can comfortably rely on them in high-stakes situations. These are just some of the many reasons most public safety drones are precisely the ones this bill would ban.

Running a safe and compliant drone program is a lot of work. They're subject to rapidly evolving FAA laws that must be understood and complied with. They require – among many other things – consistent pilot training, drone maintenance, preparation of program documents, recordkeeping, and FAA reporting. If the benefits are severely limited because the department would need multiple, more expensive drones to accomplish what one less expensive Chinese drone does, or can only afford one more expensive, less-capable drone that can't be quickly replaced, the utility of many programs will be reduced to a point where they're just not worth the effort.

As of December 31, 2023, there were 790,918 registered drones in this country, and probably as many, or even more unregistered. The vast majority are Chinese made. They can all be flown by any member of the public, including children. Under this bill, **the people who *can't* fly them are the only ones using them *specifically* to keep us safe.**

If you enact this ban knowing what you've heard today, including the limited risk and ability to mitigate for it – how would you feel if there were a school shooting, a major fire, or natural disaster, and your first responders told you, “We could have done a whole lot more, a lot more quickly, if you hadn't taken the tools out of our hands”?

I'm happy to answer any questions, and I urge you to use our group as a resource for questions or concerns on this topic moving forward.

Thank you for your consideration.



CT Municipal UAV Task Force

First Responders in Connecticut and Across the Country Use Drones to Keep People (and Pets) Safe

In Connecticut

Connecticut State Police, 2023 – Drones used by state police to apprehend three drivers who had been involved in illegal and dangerous street racing. <https://www.ctinsider.com/capitalregion/article/ct-street-takeover-plane-drone-arrests-18135566.php>

Connecticut State Police, 2022 – Drones used by state police to minimize the impact of road collisions on traffic. <https://www.ctinsider.com/news/article/How-CT-is-using-drones-to-mitigate-traffic-17116093.php>

Capitol Region Emergency Services Team (CREST), 2022 – Interior drone used in attempts to safely de-escalate a barricade situation and determine the location of the suspect without putting police in harm's way. <https://www.wtnh.com/news/police-investigation-underway-in-wethersfield/>

Vernon Police, 2020 - Drone used by to find a blind man in the woods a day after he was lost. <https://www.youtube.com/watch?v=UTCqH9OBegM>

Vernon Police, 2017 - Drone used to find a horse the day after it was lost in rough and wooded terrain. <https://patch.com/connecticut/vernon/vernons-thermal-imaging-drone-helps-find-lost-horse>

Across the Country

Weaver Chemical Fire, North Carolina, 2022 – Drone with thermal imaging enabled firefighters to monitor the building temperature to confirm it had not reached the explosive limit of the 600 tons of stored ammonium nitrate https://www.cbs17.com/news/local-news/durham-county-news/durham-fire-department-deploys-drones-over-fertilizer-plant-fire/?fbclid=IwAR1UhtBduBm7x5UntLgQuXvIWt3nkw_I9i1jF2zewwPusL_EVI6y5X8Z6fc

Surfside Collapse, 2021–DJI and Autel (Chinese-made) drones flew **304 missions** enabling first responders to determine the scope of the collapse, search for survivors and supplement day and nighttime tactical life-saving operations. <https://spectrum.ieee.org/building-collapse-surfside-robots>; <https://dronexl.co/2021/08/10/drones-survey-surfside-condo-collapse/>

Skirball and Creek Fires, California 2017 – Drone enabled firefighters to see where the fires were spreading, assess damage and locate hotspots. <https://archive.kpcc.org/news/2017/12/14/78921/how-a-drone-helped-la-firefighters-battle-the-skir/>

Heavy Texas Flooding, 2015 – Drone enabled rescuers to drop a safety line to a family trapped in their home between the road and a raging river and to locate drivers of vehicles swept away by floodwaters. <https://www.dji.com/newsroom/news/dji-drones-save-the-day-during-texas-flood-rescue#:~:text=DJI%20Drones%20Save%20the%20Day%20During%20Texas%20Flood,Inspire%201%20on%20saving%20others%20in%20his%20neighborhood.>