



Unmanned Aircraft Systems Policy Statement and Guidelines for Local Regulation

Objective

The purpose of this paper is to lay the foundation for an integrated regulatory framework for unmanned aerial systems (UAS), or drones, comprised of a seamless web of federal, state and local regulations that will work in harmony, complementing one another to ensure an effective regulatory approach that reduces risk and increases the positive uses of drones.

This objective is particularly urgent given the active efforts in state legislatures across the country, including California, to strip cities of the ability to enact reasonable regulations that protect their residents and enable productive use of drones.

While the efforts of the drone industry to achieve local pre-emption have so far failed here in California, the industry is engaged in a nationwide push, seeking to preempt cities in every state. We expect that the industry will continue to push for policies in Sacramento to eliminate local governments' ability to enact reasonable and common sense restrictions on behalf of their communities.

Overview

To accomplish the paper's objective of laying the foundation for reasonable regulation based on time, place and manner restrictions by for local governments, this paper will describe the broad existing authority of cities to address drone-related concerns and assess how local government regulations fit into an overall regulatory scheme for this technology. In addition, the League has compiled a variety of resources for cities, attached as appendices, which include the following:

- **Appendix A: FAA Guidance to Cities, Counties, and States**
- **Appendix B: Do's and Do Not's of a Municipal Drone Ordinance**

Introduction

As of this writing (February 2017), the impetus for this guidance from the viewpoint of California cities is twofold: (1) to preserve the authority of cities to address uniquely local concerns as drone operations increase dramatically, and (2) to enable cities to welcome the economic benefits of drone operations through narrowly-tailored and enforceable rules.

In recent years, California cities have seen a significant rise in the number of drone-related incidents that illustrate the challenges cities will need to address now and in the future. In the

past year, there have been numerous incidents in which drones interfered with first responders, including firefighting aircraft, air ambulance helicopters, and law enforcement helicopters.¹ Drone interference with firefighting aircraft reached such a level that in July 2016, the U.S. Department of the Interior confirmed that it was partnering with private sector entities on technology to help ground drones entering restricted airspace.² Drones have crashed into power substations leaving entire neighborhoods without power.³ Drones have been seen flying over critical infrastructure without permission.⁴ Drones have been operated above police stations.⁵ Drones have flown over large public gatherings, falling from the sky, injuring children and damaging property.⁶ The drone industry has not released statistics about their failure rates, or the standards to which their products are built, meaning it is impossible to know if or when a drone will simply fall from the sky injuring people or property below.⁷ While federal law prevents drones from flying over unprotected people, there is no federal prohibition on flying over or adjacent to almost any other place (like roads, outside windows of apartments, schools, and single family homes, police stations, fire houses, etc.) meaning communities are at the mercy of falling or out-of-control drones, the reliability of whose construction is unknown.

While some activities are prohibited by federal law, cities face a challenge in enforcing federal law or relying on existing law to address unsafe or reckless operation of this technology. Opponents of municipal regulations may argue that general conduct based rules like recklessness or general statutes like nuisance are enough. Yet cities across the nation have had substantial difficulty prosecuting cases using statutes of general applicability.⁸

¹ In its recent Fact Sheet, the FAA stated that “incidents involving unauthorized and unsafe use of small, remote-controlled aircraft have increased from 238 sightings in all of 2014 to 780 through August of [2015]. During this past summer, the presence of multiple UAS in the vicinity of wild fires in the western U.S. prompted firefighters to ground their aircraft on several occasions.” See State and Local Regulation of Unmanned Aircraft (UAS) Fact Sheet, Federal Aviation Authority (December 17, 2015).

² “As Sand Fire Rages, Feds Turn Up Heat in Fight Against Drones Interfering in Wildfires,” CNBC (July 26, 2016)

³ Drone Hits West Hollywood Power Lines Causes Power Outage, ABC 7 (OCTOBER 26, 2015), [HTTP://ABC7.COM/NEWS/DRONE-HITS-WEST-HOLLYWOOD-POWER-LINES-CAUSES-POWER-OUTAGE/1052589/](http://abc7.com/news/drone-hits-west-hollywood-power-lines-causes-power-outage/1052589/)

⁴ Drone’s Eye View in the South Bay, EASY READER NEWS (September 4, 2014), <http://www.easyreadernews.com/86621/drones-eye-view-south-bay/>.

⁵ Serna, Joseph, LAPD Seeks to Limit Civilian Drone Flights over Police Stations, LA TIMES (August 1, 2014), <http://www.latimes.com/local/lanow/la-me-ln-lapd-civilian-drone-hollywood-lot-20140801-story.html>.

⁶ Weikel, Dan, 11-month-old Girl Hit in Head by Crashing Drone; FAA Investigating, LA TIMES (September 15, 2015), <http://www.latimes.com/local/lanow/la-me-ln-pasadena-drone-flight-20150916-story.html>.

⁷ Citation: Micro UAS task force report

⁸ The City of Seattle, for example, recently required a 4-day trial to prosecute someone for reckless endangerment, despite actual injuries inflicted after a drone flew over a parade, fell from the sky and struck two people. A local prohibition on flights over crowds or in certain downtown areas would have eliminated the need for a long, fact intensive trial and would have allowed the city to make it clear to operators that the conduct was prohibited. Similarly, the City of Los Angeles in prosecuting a person for violation of its drone ordinance, reviewed potential arguments that could be raised under the pre-emption doctrine, and opted to limit the charge to reckless operation of a drone endangering life or property. The jury’s verdict was Not Guilty in that they found the defendant operated his drone recklessly, but that it did not rise to the level of endangering life or property. The City cited its concern with a speedy resolution and a desire not to have resources tied down contesting an appeal.

Enforcement though, is only one part of the discussion. More important is the fact that cities have always had the authority to regulate certain kinds of conduct ranging from skateboards and bicycles on city streets and sidewalks, to the usage of heavy equipment, to the requirement that individuals obtain commercial film permits prior to operating in designated areas of the city at certain points in time. These are traditional police, land use, and zoning powers that protect the safety and tranquility of communities, ensure order, and provide for the general welfare.

If a city has the power to make reasonable time, place and manner restrictions around 1st Amendment and 2nd Amendment rights, certainly drone operators can be expected to similarly abide by time, place and manner restrictions. There is no Constitutional right to fly a drone wherever and whenever someone wishes, especially not when property rights, privacy rights, public safety, nuisance protections and the police power are in conflict with that operation.

Notwithstanding the challenges articulated above, the economic benefits and opportunities are enormous. Drone sales are skyrocketing and productive uses are increasing.⁹ Drones are saving money, saving time, and saving lives in cities across the country and across California. This is nowhere more true than in how cities and counties are using drones themselves. Police, fire, and other city agencies are using drones to enhance the ways they serve their citizens, including search and rescue activities,¹⁰ emergency medical response,¹¹ firefighting, accident investigation, and more.¹² Thus, cities have to weigh the real and immediate benefits of drone use against the safety, privacy, and nuisance concerns that often loom large.

The task of balancing costs and benefits, however, does not rest solely on cities. Federal and state regulators have and will continue to play a role in articulating the rules that will help ensure safe drone operations. An appropriate role for Federal and state regulators, does not mean that preemption is the answer. On the contrary, local regulations can and should complement federal and state regulations in an integrated regulatory framework. This is a critical point because downtown San Francisco is very different from Oxnard, or Napa. State and federal regulators will never know on which sidewalk special coordination is needed prior to operating a drone, they won't know about local public gatherings, nor will they know which areas of town raise particular concerns. Cities, however, are quite adept at making these types of decisions based on local information and local context. In addition, in the event of drone incidents, it is local agency first responders (primarily police and fire) who will get the call. Local governments can and should enact ordinances to guide that response when local police and fire agencies are inevitably called upon.

⁹ See Selyukh, Alina, FAA Expects 600,000 Commercial Drones In The Air Within A Year, NPR, (August 29, 2016) <http://www.npr.org/sections/thetwo-way/2016/08/29/491818988/faa-expects-600-000-commercial-drones-in-the-air-within-a-year>; Lowry, Joan, FAA Faces Big Drone Demand, TIMESUNION, (September 16, 2016) <http://www.timesunion.com/news/article/FAA-faces-big-drone-demand-9228572.php>; "Fact Sheet: New Commitments to Accelerate the Safe Integration of Unmanned Aircraft Systems", The White House, 2016.

¹⁰ Juarez, Leticia, Riverside County Sheriff's Dept. to use Drones in Search and Rescue, ABC NEWS 7 (April 1, 2016), <http://abc7.com/news/riverside-county-sheriffs-dept-to-use-drones-in-search-and-rescue-missions/1273122/>.

¹¹ Starr, Michelle, Ambulance Drone Delivers Help to Heart Attack Victims, CNET (October 28, 2014), <https://www.cnet.com/news/ambulance-drone-delivers-help-to-heart-attack-victims/>

¹² Stoltze, Sherrif Launches First Police Drones in LA County, SCPR (January 12, 2014), <http://www.scpr.org/news/2017/01/12/68076/sheriff-launches-first-police-drones-in-la-county/>.

Finally, the technology that powers drones is rapidly evolving and, in fact, many of the challenges faced by cities today will be solved by the technology of tomorrow. Such technologies include advanced permitting systems, geo-fencing, detailed mapping systems built into the drones, and eventually air traffic management for drones (also known as Unmanned Traffic Management).¹³

This, then, is the task for cities: preserving the existing authority to adopt narrowly-tailored rules relating to drone operations consistent with their local police power and FAA guidance, while enabling the many benefits of drone technology. The League's objective is to arm cities to exercise their authority in a responsible and defensible fashion.

Background

Industry Advocates of Preemption

In advocating before the U.S. Congress as well as the Federal Aviation Administration (FAA) and in various state legislatures around the country, some members of the UAS industry have argued that state and local regulations are completely pre-empted by the federal regulations promulgated by the FAA. The pre-emption of any other regulations in U.S. airspace, they argue, is total. In advancing this argument, the industry has claimed that any outdoor operation by a drone is effectively in the navigable airspace, and thus cities have no authority to regulate any activity by a drone.

The reality as expressed by the FAA is somewhat different. The FAA has publicly staked out a more qualified form of pre-emption in the area of UAS regulation, both in its December 2015 fact sheet, as well as in its long awaited rules for drone operation, so-called Part 107 rules.¹⁴ For example, the FAA articulated a number of areas where state and local laws may be appropriate to regulate some of the concerns associated with drone operations, including:

- “State law and other legal protections for individual privacy may provide recourse for a person whose privacy may be affected through another person’s use of a UAS.”
- “State and local laws, such as trespassing, may provide a remedy for companies whose small UAS operations are deliberately interfered with by people entering the area of operation without permission.”
- “State law and other legal protections may already provide recourse for a person whose individual privacy, data privacy, private property rights, or intellectual property rights may be impacted by a remote pilot’s civil or public use of a UAS.”
- “Property rights are beyond the scope of this rule. However, the FAA notes that, depending on the specific nature of the small UAS operation, the remote pilot in command may need to comply with State and local trespassing rules.”

¹³ Drone Advisory Committee, Introduction (posted on December 8, 2016), <http://videos.sorensonmedia.com/FAA/DAC+Intro+v5/08231d21Be51fR410508361Tba21bc019464>.

¹⁴ 14 C.F.R. Part 107

- “[H]obbyists or other third parties who do not have the facility owner’s permission to operate UAS near or over the perimeter or interior of amusement parks and attractions may be violating State or local trespassing laws.”

Additional Guidance from the FAA

In fact, in January of 2017, the FAA Administrator, Michael Huerta, appeared at the U.S. Conference of Mayors annual conference in Washington D.C. and indicated that *state and local governments have substantial authority*, that the rules for manned aviation do not necessarily apply to unmanned aircraft, and that a national conversation is necessary. That conversation has begun at the FAA’s Drone Advisory Committee and because it may lead to state and local governments having greater authority, we expect the industry will be pushing hard for preemption this year as it may be their last chance.

In addition to the general guidance provided in the Fact Sheet and the context of Part 107, the FAA, in response to queries from cities, counties, and states, has provided even more concrete statements of the scope of municipal authority.

*For specific guidance from the FAA on this point, please see the letters from the FAA attached as **Appendix A: FAA Guidance to Cities, Counties, and States.***

State Preemption

After unsuccessful efforts to effect federal preemption, certain interests within the UAS industry have pursued preemption at the state level.

Opponents of municipal drone regulations commonly make an argument about an alleged “patchwork quilt” of laws. According to this argument, reasonable time, place, and manner restrictions relating to drones will be confusing for operators to understand. This argument also stems from federal precedent relating to airliners transiting flying across the country, which is entirely irrelevant when applied to drone operations which take place between homes and above city sidewalks where airliners have never operated.

An argument about a patchwork is also an oversimplification and mischaracterization of the role municipalities play in an integrated regulatory environment. Different cities require different building and film permits: does this “patchwork” hamper construction? Some cities permit bicycles on certain sidewalks, while prohibiting them on others. Cities throughout California have, for decades, prohibited model aircraft in certain parks while allowing them in other parks. This is the essence of local control. The use of a loud or dangerous piece of equipment may make sense in a light commercial district, however the use of the same equipment in a residential neighborhood may require greater coordination or protections. The only elected officials who understand this context are local officials. While the patchwork argument is a strawman, it would be wise for cities to avoid enabling this argument (as discussed below).

The rules that apply to automobiles or other ground-based vehicles are a useful example in this case. Drivers, commercial or recreational, are subject to a host of rules (federal, state or local) that govern when and where you can drive in a given community. Nonetheless, stop signs, traffic lights, speed limits and time-based restrictions (such as around schools) do not make it “confusing” or impossible to operate a car.

Rather, it is those very rules, clearly conveyed to drivers, that allow cities to welcome vehicles. Cities know that if a safety risk emerges (e.g., an area where accidents are likely to happen or speeding habitually), they will have the flexibility to put a stop sign or change the speed limit. Similarly, cities can allow commercial driving knowing that they have the authority to restrict such activity if it poses a nuisance or hazard to citizens (for instance, limiting the hours when trash trucks may operate in a given neighborhood or the size of a vehicle that may operate on a certain road). Cities know that in crowded pedestrian areas, skateboarding, rollerblading, or bicycling may need to be prohibited, and on certain beaches and in certain parks even throwing a ball may be prohibited at certain times.

The invention of drones didn’t suddenly make local control unnecessary. On the contrary, it is an argument in favor of local control where cities can determine how to best to welcome the beneficial uses of drones while balancing the potential harms. Through this iterative discussion at the local level, the best policies will emerge. The answer to the fallacious “patchwork quilt” argument is for cities to narrowly tailor rules to their particular concerns and effectively communicate relevant rules to operators.

*For a discussion of this issue in greater detail, please see the League guidance attached as **Appendix C: Do’s and Do Not’s of a Municipal Drone Ordinance.***

Local Regulatory Framework

Given the background above and the nature of this relatively new technology, local governments, in crafting a local regulatory framework, should strive to craft and enact regulations that accomplish the following objectives:

- 1) Are narrowly crafted so as to enhance public safety without being unduly restrictive.
- 2) Are a reasonable use of municipal police power under Article XI, Section 7 of the California Constitution.
- 3) Do not invite charges of federal pre-emption, based on the guidance provided by the Federal Aviation Administration.¹⁵
- 4) Are harmonized with state and local regulations to ensure an integrated and intelligible regulatory framework.
- 5) Encourage positive commercial and recreational uses of drones by providing clear guidelines.

To that end, the League of California Cities has drafted a process for developing a city ordinance as well as guidance on the types of language that a city may consider using without increasing its litigation risk or incurring a preemption challenge upon enforcement.

Guidelines for Local Regulation of Operation of Unmanned Aerial Vehicles.

Ordinance Development Process

1. The governing body shall provide input to a working group of city officials, to be headed by the City Manager, or his or her designee, on the local regulatory and public safety priorities preserving municipal constitutional police powers that in the governing body's judgement must be incorporated into the local regulatory framework relating to the operation of UAS in the jurisdiction.
 - a. These reserved police powers should include:
 - 1) A specific prohibition against careless and reckless operations that endanger life or property.¹⁶
 - 2) Designated take-off and landing zones for UAS within the city limits.
 - 3) Permissible hours of operation.
 - 4) Rules for operation of UAS during parades, public holiday celebrations or other city-wide civic events.
 - 5) Rules for operation in parks, and on waterfront areas.

¹⁵ See "State and Local Regulation of Unmanned Aircraft Systems (UAS) Fact Sheet, released by the Office of the Chief Counsel of the Federal Aviation Administration, December 17, 2015.

¹⁶ Careless and reckless operations are specifically prohibited by Section 21407 of California's State Aeronautics Act. More importantly, the state, and by implication local district attorneys, can prosecute individuals for violation of this provision. However, careless and reckless operation may not be sufficient to obtain a conviction unless such operation rises to the level of endangering life or property. Local ordinances will likely have to be carefully worded so as to require a substantial danger of such an outcome, or include other language that meets a specific, heightened standard.

- 6) Rules for operation of UAS during local emergency conditions.¹⁷
- 7) Rules placing conditions on the operation of UAS in certain areas of the city (near police stations, schools, or busy pedestrian walkways)
- 8) Accountability measures to insure that operators are aware of and accountable to local rules.
- 9) The right to condition the ability to take off and land on receipt of a permit issued by the city, or submission of notice of UAS operations to the city under certain limited circumstances.
- 10) The right to enact and enforce rules of general applicability in a manner that addresses unsafe drone operations (trespass, nuisance, or noise)
- 11) Compliance with due process provisions (notice to the public and a comment period for the proposed ordinance prior to adoption)

The working group shall develop a local regulatory framework for a draft ordinance governing the operation of UAS that reflects the priorities identified by the governing body.

2. The City Manager shall appoint the other members of the working group. It is recommended that the composition of the working group include the Chief of Police and the Fire Chief, or at a minimum, that they be consulted.
3. The development of the local regulatory framework shall include input from relevant community stakeholders, including but not limited to: local businesses, local drone clubs and other local model aviation organizations, local aviation associations, schools, local utilities, and if there is an airport of any size within five miles of the jurisdiction, the local airport authority.
4. Upon completion of the local regulatory framework, the City Manager shall review it and either approve it for submission to the City Attorney, or return it to the working group for revision.
5. Once a framework has been approved, the City Attorney shall then prepare a draft ordinance based on the framework. The draft ordinance shall be submitted to the working group for review prior to being submitted to the City Council.
6. Upon its completion, the draft ordinance shall be submitted to the City Council for approval.
7. Once approved by the City Council, the ordinance should be posted online on the City's website, to ensure that the public and in particular drone operators are on notice about the local regulations.
8. The UAS ordinance should be reviewed by the working group periodically for possible revision, which must be approved by the City Council. This may become necessary as the FAA further develops rules for either recreational or commercial UAS.
9. If revision is deemed necessary by the working group, the working group shall reconvene to determine what revisions may be necessary, if any. Steps 4 through 7 of these guidelines should be followed if any revisions are to be proposed to the UAS ordinance.

¹⁷ Prohibiting recreational UAS operations during local emergencies is clearly within the scope of cities' constitutional police power.