



Peace and Justice Commission

WORKSESSION
April 29, 2014

To: Honorable Mayor and Members of the City Council
From: Peace & Justice Commission
Submitted by: Noah Sochet, Chairperson, Peace & Justice Commission
Subject: Drone Policy for the City of Berkeley

RECOMMENDATION

Adopt a Resolution and Proclamation declaring Berkeley to be free from drones and enact an Ordinance to secure these aims.

FISCAL IMPACTS OF RECOMMENDATION

Unknown.

CURRENT SITUATION AND ITS EFFECTS

At its regularly scheduled meetings on October 7, 2013 and November 4, 2013 (*via a procedural clarification vote*), the Peace and Justice Commission approved a recommendation that the City Council adopt a Resolution and Proclamation declaring Berkeley to be free from drones and enact an Ordinance to secure these aims.

M/S/C: (Jailer Shannon/Meola)
Ayes: Bohn, Jailer Shannon, Kenin, Meola, Sorgen
Noes: Lippman
Abstain: Maran, Peirotos
Absent: Nicely (excused), Sochet (excused)

BACKGROUND

I. Introduction.

On December 18, 2012, the Berkeley City Council reviewed a resolution submitted to it by the Berkeley Peace and Justice Commission to "Proclaim Berkeley a No Drone Zone and Enact an Ordinance to that Effect."¹ The Council referred the issue of drones, or

¹ "Proclaim Berkeley a No Drone Zone and Enact an Ordinance to That Effect." City of Berkeley. N.p., n.d. Web. <http://www.ci.berkeley.ca.us/Clerk/City_Council/2012/12Dec/Documents/2012-12-18_Item_05_Proclaim_Berkeley_a_No_Drone.aspx>.

unmanned aerial vehicles, in Berkeley back to the Peace and Justice Commission, the Berkeley Police Review Commission, and the Berkeley Disaster and Fire Commission for further review and study, and asked them to report back to Council for further consideration of the issues and a Council Workshop.

Council asked those commissions to review a proposal to permit police use of drones upon approval of City Manager, or upon approval of the Chief of Police in emergency situations when the City Manager isn't available, in the following circumstances:

- 1) In the case of a disaster;
- 2) To assist in locating missing persons;
- 3) To assist in rescue efforts;
- 4) To assist in police pursuit of known suspects who have committed serious or violent crimes.

Since that time, four cities [Charlottesville, Virginia, St. Bonifacius, Minnesota, Evanston Illinois, and Iowa City, Iowa] have banned drones. Other cities and at least thirty-one states are considering similar legislation. In Seattle, Washington, in February, 2013, Mayor Mike McGinn ordered the Seattle Police Department to abandon its plan to use drones after residents and privacy advocates protested and McGinn said the two drones purchased by the city with federal funds would be returned to their vendors.

On May 1, 2013, the Peace and Justice Commission and the Police Review Commission jointly held a "Town Hall on Drones: Informing Policy in Berkeley." The Town Hall meeting provided opportunities for individuals and organizations to address the Commissions and the public on various aspects of drone usage. The Town Hall focused on:

- 1) Technical Aspects of and Limitations of Drones
- 2) Public Safety (what might drones be good for?)
- 3) Civil Liberties Concerns; and
- 4) Moral and Political Consequences of Drones.

Representatives of the following organizations made presentations to the Commissions: American Civil Liberties Union (ACLU), the Electronic Frontier Foundation (EFF), the Association for Unmanned Vehicle Systems International (AUVSI), Alameda County Against Drones (ACAD), the Bill of Rights Defense Committee (BORDC), Berkeley Copwatch, and Clinical Professor Jennifer Urban from the University of California School of Law's Technology & Public Policy Clinic. Unfortunately, neither the Berkeley Police Department (BPD) nor the Berkeley Fire Department (BFD) accepted invitations to send their representatives to participate in any way in the Town Hall on Drones. An invitation for co-sponsorship was also extended to the Berkeley Disaster and Fire Safety Commission but was declined.

Each presenter answered questions from Commissioners, and ample time was devoted to public comment. Of all of the presenters, only the presenter from AUVSI, a drone industry advocacy and trade group, favored the use of drones in Berkeley. Of the approximately twenty comments from the public, eighteen speakers expressed strong opposition to the use of drones in Berkeley, while two expressed willingness to see drones used in emergency situations with appropriate safeguards. One person expressed a desire for Berkeley to use a drone to search for his granddaughter in an emergency situation and another person expressed his desire for "some use of drones." Many speakers urged commissioners to pursue a "No Drone Zone" policy in Berkeley.

The evidence and opinions presented by the various expert presenters addressed the issues raised by Council and lead us to find that Berkeley should effectively be a Drone Free Zone. In this report, the Commission responds to the four circumstances that the Council proposed for allowed use of drones by the Berkeley Police Department. Discussion of the first three circumstances will be grouped together as "humanitarian uses of drones."

II. "Humanitarian" Uses of Drones.

Circumstance 1: in the case of a disaster.

Circumstance 2: to assist in locating missing persons.

Circumstance 3: to assist in rescue efforts.

Concerns raised at the Town Hall as well as in the Commission's independent research included four broad categories: safety, usability, mission creep, and privacy implications.

A. Safety issues.

Drones are largely unproven in American civilian airspace, and have only seen widespread use in combat theaters, where large drones are the least safe class of aircraft currently in operation.² They are known to go off course, disappear, and crash into other objects. They can be easily hacked and manipulated off course and used in ways not intended by their operators. An FAA official testified to Congress that U.S. Customs and Border Protection has reported 52.7 drone accidents per 100,000 hours of flight time, seven times the civil aviation rate of 7.11 accidents per 100,000 hours.³ According to a 2005 Department of Defense report, every 100,000 flight hours saw 191

² <http://www.businessweek.com/news/2012-06-18/drones-most-accident-prone-u-dot-s-dot-air-force-craft-bgov-barometer>.

³ *Evaluation of Traffic Alert and Collision Avoidance System*, FEDERAL AVIATION ADMINISTRATION (Mar. 21, 2011), http://www.faa.gov/about/initiatives/uas/media/TCASonUAS_FinalReport.pdf.

AAI Shadow UAVs destroyed or in need of drastic repairs, compared to just four manned F-16s⁴.

In the fall of 2012, a drone crashed into a police SWAT Team Bearcat vehicle. “A police drone made to look like a mini-helicopter crashed into an armored SWAT vehicle after its test flight in Montgomery County, Texas, near Houston... the prototype drone was flying about 18-feet off the ground when it lost contact with the controller's console on the ground.” Many similar examples of drone failures have been well documented.

Given the serious safety limitations of drones, we consider the potential benefits of drones in a disaster response setting to be outweighed by the hazard to public safety represented by unmanned aerial vehicles flying in Berkeley.

B. Limitations on usability.

Current FAA regulations permit small drones limited to 25 pounds or under and below 400 feet only, for the use of first responders. They must be flown in daylight and their “vision” is much more limited than that of human pilots. They do not have the same ability as piloted aircraft to avoid collisions. Internationally, drones often crash and have near misses with other aircraft in airspace much less crowded than that of the United States.

Drones have short flight time allowances and capabilities, and issues with wind resistance. They cannot be flown on windy days⁵ and cannot withstand the heat of fires. They must be flown in the line of sight of their operator. .⁶

For these technical and legal reasons, drones are not suitable for the uses suggested by Council. In addition, they would pose a physical danger to people on the ground.

C. Mission Creep.

⁴ "Unmanned Aircraft Systems Roadmap 2005-2030." Federation of American Scientists. N.p., n.d. Web. <https://www.fas.org/irp/program/collect/uav_roadmap2005.pdf>.

⁵ *Homeland Security: Unmanned Aerial Vehicles and Border Surveillance*, CONGRESSIONAL RESEARCH SERVICE (July 8, 2010), <https://www.fas.org/sgp/crs/homesecc/RS21698.pdf>; Eric Beidel, *Army Pilots: Flying Drones Tougher than It Looks*, NATIONAL DEFENSE MAGAZINE (Feb. 2011), <http://www.nationaldefensemagazine.org/archive/2011/February/Pages/ArmyPilotsFlyingDronesTougherThanItLooks.aspx>; Sara Peck, *Civilian Drones Have Yet to Pass Weather Test*, NATIONAL DEFENSE MAGAZINE (Aug. 2008), <http://www.nationaldefensemagazine.org/archive/2008/August/Pages/CivilianDronesHaveYettoPassWeatherTest.aspx>. *But see*, Edwin Kee, *Pilotless Robot Plane Smart Enough to Navigate Through Bad Weather*, UBERGIZMO (July 9, 2012), <http://www.ubergizmo.com/2012/07/pilotless-robot-plane-smart-enough-navigate-bad-weather/>.

⁶ *The FAA Is Set to Issue Rules for Operating Civilian Drones*, STAR TRIBUNE (Feb. 17, 2013), <http://m.startribune.com/business/?id=191499731>.

We agree with the Council that Berkeley should not have any weaponized drones. But Berkeley should not go down the slippery slope of *any* drone use. The surveillance capabilities of drones are far too invasive and defeat the protections of privacy and Fourth Amendment rights⁷ in the field.

Members of the public raised concerns at the Town Hall meeting about failures in the BPD's compliance with Public Records Act requests and Council oversight of the Department, including an officer's tampering with drug evidence. Several speakers expressed low confidence in the Department's ability to manage the constitutional risks of unmanned flying machines with high-tech spying abilities, including audio, visual, and thermal imaging technologies. A representative of Berkeley Copwatch, which has been observing Berkeley Police conduct for 23 years, said: "We can't get police accountability on the ground. If it [surveillance by drones] goes into the air, we're going to lose tracking effectiveness. If we can't control the police, the best guidelines will not have an impact."

"Mission Creep" refers to the gradual broadening of the original objectives of a program, as seen in the expansion of the paramilitary policing tactics known as SWAT. Originally intended and marketed as a quick-response tactic for hostage situations, SWAT teams nationally now deploy thousands of times each year for routine police work⁸. If used by government agencies to surveil residents, drones could pose a significant hazard to civil liberties in Berkeley. While local agencies may purchase drones with the best of intentions, the Peace and Justice Commission is convinced that the only way to prevent the violation of civil liberties in the use of drones is to prevent their acquisition by government agencies including the BPD.

D. Right to Privacy.

According to Town Hall testimony from Linda Lye, staff attorney with the American Civil Liberties Union, deploying drones not only raises serious Fourth Amendment concerns, it would likely violate the California Constitution's Article I, Section I, which grants privacy protection for personal information. She listed four reasons to oppose drones:

- 1) Their low cost encourages widespread surveillance.
- 2) Their small size and advanced abilities prevent people from knowing they are being spied on.
- 3) Their night-vision and infrared capabilities can "see through walls" to spy on people inside.

⁷ http://www.law.cornell.edu/constitution/fourth_amendment

⁸ Balko, Radley. "Overkill: The Rise of Paramilitary Police Raids in America." Cato Institute. N.p., n.d. Web. 02 Sept. 2013. <<http://www.cato.org/publications/white-paper/overkill-rise-paramilitary-police-raids-america>>.

- 4) Use of drones in the San Francisco Bay Area, a major flashpoint of U.S. social protests that have long been spied on, infiltrated, beaten, and arrested by law enforcement, is a bad idea.

The example of a nude sunbather in his/her back yard was given. He/she can cover up upon observing a helicopter in the sky, but could have no knowledge of a hovering hummingbird-size drone.

Current law guarantees us a “reasonable expectation of privacy,” but no court has defined “reasonable” as it would relate to drone surveillance. The technology has evolved much faster than the law.

Lye stated that, “If drones were to be involved, they should be used upon issuance of a warrant based on probable cause and there should be no sharing of gathered information between departments.” Recent revelations about the DEA, NSA and other agencies’ sweeping electronic surveillance programs⁹ underscore the lack of privacy controls within law enforcement, and the inadequacy of warrant requirements in the context of 21st century surveillance.

E. Conclusion on “humanitarian” uses of drones.

The humanitarian uses suggested for drone technology are themselves fraught with danger to safety. Drones have a bad safety record and often crash. Their usability is limited by both technical and legal factors, making it unlikely that they will offer effective aid for missing persons, fighting fires, etc. History shows that high-tech equipment in the hands of a military-like force without effective civilian oversight is prone to abuse and mission creep. In particular, drone technology lends itself to a massive breach of California’s constitutional right to privacy.

III. Circumstance 4: “to assist in police pursuit of known suspects who have committed serious or violent crimes.”

A. Overview.

This part of Council’s referral suggests that drone deployment be allowed in pursuit of a fleeing suspect in a serious or violent crime. It should be noted that the BPD has not proposed acquisition of drones; nor have they made an argument that drones will assist them in this scenario.

⁹ Stanley, Jay. "How NSA Overreach May Backfire Even On Agency’s Own Terms." American Civil Liberties Union. N.p., 23 Aug. 2013. Web. 02 Sept. 2013. <<https://www.aclu.org/blog/national-security-technology-and-liberty/how-nsa-overreach-may-backfire-even-agencys-own-terms>>.

At first blush, the idea may sound unobjectionable, on a par with giving Segways to mall officers. However, we must understand the capabilities offered by drone manufacturers. The military has worked for at least five years to integrate “sense through the walls,” or STTW, technology into UAVs.¹⁰ This capability has the clear potential to violate the Fourth Amendment on a massive scale. Taking STTW together with the capacity for facial recognition,¹¹ for hovering undetected outside residential windows, for large-scale closed-circuit TV recording, license plate readers, and Internet packet sniffers, we may find that we have lost our right to be secure in our homes and persons.

There are two strong arguments against procuring and using drones for the pursuit of criminal suspects. They are the same as the arguments for the Fourth Amendment, which has itself been maligned as a provision that “only benefits criminals.”

- 1) Government use of these technologies violates the constitutionally guaranteed *right of suspects to the presumption of innocence*, and the prohibition against searches conducted without a *warrant based upon probable cause*.
- 2) The harm goes far beyond criminal suspects, *to the general public*. Surveillance technology is very difficult to control and can easily be used on a massive level. Due to the advanced nature of the technology, case law has not been written to determine whether judicial warrants are necessary for drone use as in the case of wiretaps, or not necessary as in the case of casual observation in public areas. “Fishing expeditions” against dissenters, along with large-scale violations of privacy, are likely.

In the fall of 2012, the Berkeley City Council enacted new policing policies to confine intelligence gathering and sharing to cases of actual criminal conduct. Information the BPD shares with the FBI or the regional intelligence fusion center may be retained indefinitely without regard to constitutional safeguards. The new Berkeley policies put restrictions on sharing Suspicious Activity Reports (SARs), mutual aid, collaboration with immigration authorities, and surveillance on non-violent civil disobedience.¹²

¹⁰ Jay Stanley, *We Already Have Police Helicopters, So What's the Big Deal over Drones?*, AMER. CIVIL LIBERTIES UNION (Mar. 8, 2013), <http://www.aclu.org/blog/technology-and-liberty-criminal-law-reform/we-already-have-police-helicopters-so-whats-big-deal>; Michael Rundle, *Camera 'Can See Through Walls' By Turning Plain Surfaces into Mirrors*, HUFFINGTON POST (July 26, 2012), http://www.huffingtonpost.co.uk/2012/07/16/camera-can-see-through-walls_n_1675356.html; Michael Zennie, *Death from a Swarm of Tiny Drones*, DAILY MAIL (Feb. 19, 2013), <http://www.dailymail.co.uk/news/article-2281403/U-S-Air-Force-developing-terrifying-swarms-tiny-unmanned-drones-hover-crawl-kill-targets.html>; Noah Shachtman, *Army Tracking Plan: Drones that Never Forget a Face*, WIRED (Sept. 28, 2011), <http://www.wired.com/dangerroom/2011/09/drones-never-forget-a-face/>.

¹¹ Business Insider, May 27, 2013, <http://www.businessinsider.com/facial-recognition-technology-and-drones-2013-5>

¹² http://www.ci.berkeley.ca.us/Clerk/City_Council/2012/09Sep/City_Council_09-18-2012_-_Regular_Meeting_Annotated_Agenda.aspx; specific information at http://www.ci.berkeley.ca.us/Clerk/City_Council/2012/09Sep/Documents/2012-09-18_Item_10a_Consideration_of_Revisions.aspx

Sharing drone-gathered intelligence would violate Berkeley's newly passed protections. Even gathering such information would create a risk that it would find its way into the federal government's vast trove of data gathered on citizens and others (see below, "New Technology Poses a Risk to Civil Liberties").

B. Drones and the Fourth Amendment

Let us review the law on "unreasonable search and seizure," which is prohibited by the Fourth Amendment. The Supreme Court has established strict rules about electronic surveillance against "U.S. persons" in the case of wiretapping.¹³ The government must obtain a search warrant showing *probable cause*—the same level of evidence needed to make an arrest—to believe that a specific person is, has, or is about to commit a specific crime, and where the wiretap will be located.

Drone technology is new and quickly evolving, and the proper standards for their use might not be the same as for wiretapping. But neither should they be the same as for helicopter surveillance. The Peace and Justice Commission contends that drones are closer to wiretapping than they are to helicopters. Drones are far from a passive "eye in the sky;" they come with extremely sophisticated monitoring devices with incredibly invasive power. Our judgment is that use of a device that can secretly monitor anyone's voice, movements, or expressions, sample their DNA, and photograph them behind walls fits the definition of a search, subject to the probable cause protection, as intended by the authors of the Bill of Rights.

C. New Technology Poses a Risk to Civil Liberties

Since the Peace and Justice Commission initially brought the drone issue to Council in late 2012, the issue of government surveillance has exploded nationally and beyond. Beginning in June 2013, Edward Snowden revealed secret programs including "Prism" and "XKeyscore" that allow the National Security Agency to mine data from all telephone and email communications and website visits, without a warrant.¹⁴ Millions of such records have been monitored over the last seven years. The Drug Enforcement Agency's Hemisphere program dwarfs the NSA program, gaining access to call information dating back to 1987.¹⁵

¹³ "Getting a Court Order Authorizing a Wiretap", Electronic Frontier Foundation, <https://ssd.eff.org/wire/govt/wiretapping-authorization>

¹⁴ "XKeyscore: NSA tool collects 'nearly everything a user does on the internet'," The Guardian, July 31, 2013, <http://www.theguardian.com/world/2013/jul/31/nsa-top-secret-program-online-data>

¹⁵ http://www.nytimes.com/2013/09/02/us/drug-agents-use-vast-phone-trove-eclipsing-nsas.html?pagewanted=all&_r=0

Less well-known technology is contributing to the surveillance state as well. Homeland Security is moving forward with facial recognition software called the Biometric Optical Surveillance System (BOSS), capable of scanning large crowds and automatically identifying people by their faces.¹⁶ The ultimate in invasive databases, full DNA profiles, are being built by local police departments across the country. The DNA is taken not only from convicted felons but from those merely suspected of a crime, and even of crime victims; the Orange County District Attorney has compiled 90,000 such profiles.¹⁷

Relatively low-technology practices such as “stop-and-frisk” also raise civil liberties concerns. New York City has been a flashpoint on this subject. Hundreds of thousands of law-abiding, overwhelmingly Black and Latino New Yorkers are subjected to this practice annually, leading to charges of officially sanctioned racial profiling.¹⁸ Mayor Bloomberg explicitly profiled the entire Black and Latino communities saying most crimes are committed by people of color, and that therefore indiscriminate stopping of members of these communities, without reasonable suspicion, is appropriate.

A common thread in the argument for these practices pits security against liberty. Bloomberg credits “stop and frisk” for reducing crime (though violent crime has dropped nationally over the same period). President Obama, in his speech on NSA surveillance, spoke of “tradeoffs” between national security and “modest encroachments on privacy.” But security and constitutional rights cannot be seen as a balancing act. Without freedom of speech, assembly, association, due process, equal protection, privacy, and other fundamental rights, security has no meaning. When society treats Black and Brown people as inherently criminal, and entire mosques as “terrorist organizations” (as the NYPD has reportedly done for years¹⁹), we must see how unsafe we have made ourselves in the name of public safety.

Government’s disdain for constitutional protections causes renewed concern that data gathered in seemingly benign drone surveillance may be secretly, and in violation of the California Constitution’s explicit right to privacy, utilized for sweeping investigations against people of color and other marginalized groups, activists, and journalists.

At the Town Hall Forum, Professor Jennifer Urban noted that the 1982 Truth in Evidence Initiative did away with the federal exclusionary rule in California, allowing suppressed evidence to be used in criminal cases. Information gathered in violation of

¹⁶ http://www.nytimes.com/2013/08/21/us/facial-scanning-is-making-gains-in-surveillance.html?pagewanted=all&_r=1&

¹⁷ The New York Times, June 12, 2013, <http://www.nytimes.com/2013/06/13/us/police-agencies-are-assembling-records-of-dna.html?pagewanted=all>

¹⁸ New York Civil Liberties Union, <http://www.nyclu.org/issues/racial-justice/stop-and-frisk-practices>

¹⁹ The Washington Post, August 28, 2013, http://www.washingtonpost.com/national/documents-nypd-labels-mosques-terrorism-enterprises-to-record-sermons-and-spy-on-imams/2013/08/28/dd6a7732-0fb0-11e3-a2b3-5e107edf9897_story.html

the constitutional ban on unreasonable search carries a frightening potential for abuse in court proceedings as well as investigations and in the chilling of dissent. The use of drones would exacerbate this problem by increasing the amount of evidence gathered that ought to be suppressed.

D. CONCLUSION on “police pursuit of suspects.”

Use of the enhanced surveillance capabilities of drones both violates the prohibition against warrantless surveillance and is a potentially limitless and invasive fishing expedition against the entire community, on a par with the NSA’s massive Prism program. In the name of public safety, we put the public’s security at risk.

Public safety and security is a desire we all share. We reject the contention of New York City Mayor Michael Bloomberg that those who defend civil liberties “play no constructive role in keeping our city safe,”²⁰ and George W. Bush’s argument that “Either you are with us, or you are with the terrorists.”²¹ People across the political spectrum agree that without freedom, we have no safety or security. Civil liberties are not an abandonment of society to unrestrained crime and violence, but the core of our social compact. Neither are they abstractions or luxuries that must be balanced with security.

IV. Alameda County Sheriff Drone Acquisition

Beyond the question of drone policy for Berkeley, public comment at the Town Hall also touched on County law enforcement policy, which impacts the City as well.

We urge the Berkeley City Council to write the Alameda County Board of Supervisors to reiterate Council’s opposition to the acquisition of a drone by Sheriff Ahern.

V. Conclusion

RATIONALE FOR RECOMMENDATION

As the public has learned this year, the amount of personal information collected by and available to the federal government is much greater than we could have imagined. Berkeley has taken a step away from this rerun of George W. Bush’s “Total Intelligence Awareness,”²² by refusing to share non-criminal intelligence with the national security network. By agreeing not to acquire the massively powerful data collectors called drones, the City can take another step for constitutionality, privacy, and true security.

²⁰ About.com, April 30, 2013: <http://civilliberty.about.com/b/2013/04/30/bloomberg-civil-libertarians-are-extremists-who-play-no-constructive-role-in-keeping-new-york-city-safe.htm>

²¹ “Address to a Joint Session of Congress,” George W Bush, <http://georgewbush-whitehouse.archives.gov/news/releases/2001/09/20010920-8.html>

²² <http://www.npr.org/2013/06/19/192770397/the-watchers-have-had-their-eyes-on-us-for-years>

The Peace and Justice Commission urges the Berkeley City Council to pass a No Drone Zone ordinance based on the model drone legislation produced by the Bill of Rights Defense Committee. That model, adapted for Berkeley, accompanies this report and recommendation, below.

ALTERNATIVE ACTIONS CONSIDERED

A range of other possible uses of drones was considered. Based on the above analysis, these other alternative policy approaches were deemed insufficient in addressing the privacy and other constitutional issues posed by more a more expanded use of drones.

CITY MANAGER

The City Manager takes no position on the content and recommendations of the Commission's Report.

CONTACT PERSON

Eric Brenman, Secretary, Peace & Justice Commission, (510) 981-5114

Attachments:

1: Proposed Resolution and Ordinance

Exhibit A: Berkeley Planet Article re Drones Forum, May 13, 2013

RESOLUTION NO. ##,###-N.S.

CITY OF BERKELEY DRONE LEGISLATION: NO DRONE ZONE

WHEREAS, the Berkeley Peace and Justice Commission advises the City Council on all matters relating to the City of Berkeley's role in issues of peace and social justice (Berkeley Municipal Code (BMC) Chapter 3.68.070); and

WHEREAS, the Berkeley Peace and Justice Commission and the Berkeley Police Review Commission, together, held a community forum entitled "Town Hall on Drones: Informing Policy in Berkeley" on May 1, 2013 from 6:00pm to 10:00pm at the North Berkeley Senior Center located at 1901 Hearst Avenue in Berkeley; and

WHEREAS, at the Town Hall meeting, community members, advocacy groups, religious groups, professional organizations, legal experts, as well as drone advocates, spoke publicly on the question of whether the City of Berkeley should allow drones in its airspace; and

WHEREAS, the overwhelming message from the community was to declare Berkeley a No Drone Zone, disallowing the use of government drones in the city's airspace; and

Public policy discourse vital to democracy & preservation of constitutional rights

WHEREAS, the premature deployment of unmanned aerial vehicles ("drones") has outpaced public policy discourse throughout the United States, and poses a serious threat to the privacy and constitutional rights of the residents of Berkeley; and

WHEREAS, the Federal Aviation Administration's guidance on the use of drones as of 2013 provides that drone flights may not be conducted over urban or populated areas, heavily trafficked roads, or open-air assemblies of people, absent a convincing showing that such operations can be conducted safely;²³ and

WHEREAS, the Federal Aviation Administration Modernization and Reform Act of 2012 directs the FAA to create regulations that will enable drones to fly throughout U.S. airspace by September, 2015;²⁴ and

Drones are military technology driven by corporate interests

WHEREAS, military drones have been used overseas for unlawful and extrajudicial targeted killings of foreign nationals and US Citizens,²⁵ have killed hundreds of

²³ *Fact Sheet – Unmanned Aircraft Systems*, FEDERAL AVIATION ADMINISTRATION (Feb. 19, 2013), http://www.faa.gov/news/fact_sheets/news_story.cfm?newsId=14153.

²⁴ *Id.*

²⁵ Michael Boyle, *Obama's Drone Wars and the Normalization of Extrajudicial Murder*, THE GUARDIAN (June 11, 2012), <http://www.guardian.co.uk/commentisfree/2012/jun/11/obama-drone-wars-normalisation-extrajudicial-killing>; Stanford International Human Rights & Conflict Resolution Clinic, *LIVING UNDER DRONES*, <http://www.livingunderdrones.org/numbers/> (last visited Apr. 2, 2013).

civilians,²⁶ including children, and have jeopardized US national security by furthering anti-American sentiment and destabilizing communities that are bombed;²⁷ and

WHEREAS, the proliferation of drone technology is being driven not by necessity, but by corporate interests poised to profit from drone proliferation;²⁸ and

WHEREAS, the lobby group the Association for Unmanned Vehicle Systems International, along with several drone manufacturers, spent at least \$21,960,500 on lobbying in 2011 alone;²⁹ and

WHEREAS, drone proliferation threatens the risk of unmanned aerial vehicles becoming increasingly available to journalists, bloggers, news organizations, and others who gather and disseminate public and nonpublic information on the Internet for profit or for political or other reasons; and

WHEREAS, drone proliferation threatens the risk of unmanned aerial vehicles becoming increasingly available to violent criminal organizations such as “the Cartel” and gangs; and

WHEREAS, some local police forces around the country have attempted to purchase military drone hardware for civilian use, reflecting a broader trend towards the militarization of local police agencies;³⁰ and

WHEREAS, the blurring line between civilian police and the military, exemplified by the police deploying drone technology developed to fight the War on Terror, erodes ties and trust between police and community members and thereby damages public safety;³¹ and

²⁶ *Supra*, LIVING UNDER DRONES.

²⁷ Steve Coll, *Kill or Capture*, THE NEW YORKER (Aug. 2, 2012), <http://www.newyorker.com/online/blogs/comment/2012/08/kill-or-capture.html>; Jefferson Morley, *What Drones Sow*, SALON.COM (June 12, 2012), http://www.salon.com/2012/06/12/hatred_what_drones_sow/; David Kilcullen & Andrew McDonald Exum, *Death from Above, Outrage Down Below* (May 16, 2009), <https://www.nytimes.com/2009/05/17/opinion/17exum.html?pagewanted=all>.

²⁸ Glenn Greenwald, *Domestic Drones and Their Unique Dangers*, THE GUARDIAN (Mar. 29, 2013), <http://www.guardian.co.uk/commentisfree/2013/mar/29/domestic-drones-unique-dangers>.

²⁹ *See*, First Street Research Group, *Drones in U.S. Air Space: The Next Lobby Frontier* (May 1, 2012), <http://firststreetresearch.cqpress.com/2012/05/01/drones-in-u-s-air-space-the-next-lobby-frontier/>; Galius Publius, *Drone Industry Wrote the Legislation Governing Domestic Drone Use*, AMERICABLOG (Feb. 17, 2012), <http://americablog.com/2012/02/drone-industry-wrote-the-legislation-governing-domestic-drone-use.html>.

³⁰ Declan McCullagh, *DHS Built Domestic Surveillance Tech into Predator Drones*, CNET.COM (Mar. 2, 2013), http://news.cnet.com/8301-13578_3-57572207-38/dhs-built-domestic-surveillance-tech-into-predator-drones/.

³¹ Lenese C. Herbert, *Can't You See What I'm Saying? Making Expressive Conduct a Crime in High-Crime Areas*, 9 Geo. J. on Poverty L. & Pol'y 135 (2002); David Harris, *War on Terror, Local Police, and Immigration Enforcement: A Curious Tale of Police Power in Post-9/11 America*, 38 Rutgers L.J. 1, 3 (2006); Matthew C. Waxman, *Police and National Security: American Local Law Enforcement and Counterterrorism After 9/11*, 3 J. Nat'l Security L. & Pol'y 377 (2009); David Thacher, *The Local Role in Homeland Security*, 39 Law & Soc'y Rev. 635 (2005); Adam Wolf, *The Adversity of Race and Place: Fourth Amendment Jurisprudence in Illinois v. Wardlow*, 5 Mich. J. Race & L. 711 (2000).

WHEREAS, the argument that law enforcement requires drones, but will use them only for emergency response, is unpersuasive; and

Human/ Civil Rights Implications

WHEREAS, the City of Berkeley adopted Ordinance No. 5,985-N.S., the “City of Berkeley Human Rights Ordinance, 1990 ADOPTING A HUMAN RIGHTS POLICY BASED ON ARTICLES 55 AND 56 OF THE UNITED NATIONS CHARTER”³²; and

WHEREAS, persistent or ambient surveillance of the sort enabled by drones entails serious constitutional abuses of police authority by effectively circumventing the longstanding requirements concerning warrants and due process contained within the United Nations Charter Article 55, the Fourth Amendment to the United States Constitution, Article I, Section 1 of the California Constitution, and the Berkeley Human Rights Ordinance; and

WHEREAS, drones can be outfitted with super-sensory technologies such as thermal imaging software³³ and the capability to “see through” walls;³⁴ and

WHEREAS, drones are capable of hovering outside the windows of private dwellings to peer inside;³⁵ and

WHEREAS, drones can be outfitted with technologies such as license plate readers³⁶ and Internet packet sniffing technology³⁷ that enable pervasive surveillance without particularity, circumventing the requirements of the United Nations Charter Article 55, the Fourth Amendment to the United States Constitution, Article I, Section 1 of the California Constitution, and the Berkeley Human Rights Ordinance (Ord 5985); and

WHEREAS, drone technology has the potential to extend closed-circuit television surveillance to every square foot of public land;³⁸ and

³² Full text of Berkeley Human Rights Ordinance, passed in 1990: <http://mcli.org/wp-content/uploads/2012/05/Berkeley-Human-Rights-Ordinance-1990.pdf>

³³ *Draganfly Thermal Infrared Camera*, DRAGANFLY INNOVATIONS, INC., <http://www.draganfly.com/uav-helicopter/dragonflyer-x6/features/flir-camera.php>.

³⁴ Elec. Privacy Info. Ctr., *Domestic Unmanned Aerial Vehicles (UAVs) and Drones*, EPIC.ORG, <https://epic.org/privacy/drones/> (last visited Apr. 2, 2013); William Saletan, *Nowhere to Hide*, SLATE.COM (Sept 17, 2008), http://www.slate.com/articles/health_and_science/human_nature/2008/09/nowhere_to_hide.html.

³⁵ Scott Bomboy, *Why a Drone Can Hover Over Your Home, and You Can't Stop It*, NATIONAL CONSTITUTION CENTER (Mar 8, 2013), <http://news.yahoo.com/why-drone-hover-over-home-t-stop-173607447.html>.

³⁶ Elec. Privacy Info. Ctr., *Domestic Unmanned Aerial Vehicles (UAVs) and Drones*, EPIC.ORG, <https://epic.org/privacy/drones/>.

³⁷ *Id.*; Jesse Emspak, *Home-made Drone to Help Phone and Wi-fi Hackers*, NEWSIDENTIST (Aug. 5, 2011), <http://www.newscientist.com/article/dn20771-homemade-drone-to-help-phone-and-wifi-hackers.html>; Elec. Privacy Info. Ctr., *US Drones Intercept Electronic Communications*, EPIC.ORG (Feb. 28, 2013), <http://epic.org/2013/02/epic-foia---us-drones-intercept.html>.

³⁸ *Supra*, *Domestic Drones and Their Unique Dangers*.

WHEREAS, most drones send the data they obtain in open and unencrypted broadcasts that can be, and have been, intercepted by unintended recipients using common and inexpensive technology;³⁹ and

WHEREAS, drone control uplinks are vulnerable to both malicious and unintentional interference;⁴⁰ and

WHEREAS, drone technology is developing so rapidly that the potential impacts on privacy and Fourth Amendment rights is difficult to predict;⁴¹ and

Additional Legal Concerns

WHEREAS, local law enforcement agencies report over-inclusive ‘suspicious behavior’ to national intelligence agencies and fusion centers;⁴² and

WHEREAS, the extreme focus of local law enforcement resources and attention on people of color,⁴³ immigrants,⁴⁴ low-income people,⁴⁵ and activists⁴⁶ is significantly disproportionate to the actual criminal threat they pose; and

WHEREAS, expanded law enforcement capabilities often invite “mission creep” and grow pervasive and entrenched;⁴⁷ and

³⁹ Noah Shachtman & David Axe, *Most U.S. Drones Openly Broadcast Secret Feeds*, WIRED (Oct. 29, 2012), <http://www.wired.com/dangerroom/2012/10/hack-proof-drone/>.

⁴⁰ Geoffrey Ingersoll, *The US Deliberately Crashed a Predator Drone into an Afghan Mountain*, BUSINESS INSIDER (Sep. 8, 2012), <http://www.businessinsider.com/drone-piloted-by-ohioans-deliberately-crashed-in-afghanistan-2012-9>; Noah Shachtman, *Air Force Insists: Drone Cockpit Virus Just a ‘Nuisance’*, WIRED (Oct. 12, 2011), <http://www.wired.com/dangerroom/2011/10/drone-virus-nuisance/>.

⁴¹ Jay Stanley, *We Already Have Police Helicopters, So What’s the Big Deal over Drones?*, AMER. CIVIL LIBERTIES UNION (Mar. 8, 2013), <http://www.aclu.org/blog/technology-and-liberty-criminal-law-reform/we-already-have-police-helicopters-so-whats-big-deal>; Michael Rundle, *Camera ‘Can See Through Walls’ By Turning Plain Surfaces into Mirrors*, HUFFINGTON POST (July 26, 2012), http://www.huffingtonpost.co.uk/2012/07/16/camera-can-see-through-walls_n_1675356.html; Michael Zennie, *Death from a Swarm of Tiny Drones*, DAILY MAIL (Feb. 19, 2013), <http://www.dailymail.co.uk/news/article-2281403/U-S-Air-Force-developing-terrifying-swarms-tiny-unmanned-drones-hover-crawl-kill-targets.html>; Noah Shachtman, *Army Tracking Plan: Drones that Never Forget a Face*, WIRED (Sept. 28, 2011), <http://www.wired.com/dangerroom/2011/09/drones-never-forget-a-face/>.

⁴² Raquel Ronzone, *Howard Zinn: (A) Anti-War Activist and Historian or (B) extremist*, DAILY KOS (Oct. 19, 2012), <http://www.dailykos.com/story/2012/10/19/1147007/-Howard-Zinn-A-anti-war-activist-and-historian-or-B-extremist>; *More About Fusion Centers*, AMER. CIVIL LIBERTIES UNION, <http://www.aclu.org/spy-files/more-about-fusion-centers>.

⁴³ *Floyd, et al. v. City of New York, et al.*, CTR. FOR CONSTITUTIONAL RIGHTS, <http://ccrjustice.org/floyd> (Apr. 2, 2013); *More About Suspicious Activity Reporting*, AMER. CIVIL LIBERTIES UNION (Jan. 18, 2013), <http://www.aclu.org/spy-files/more-about-suspicious-activity-reporting> (last visited Apr. 2, 2013).

⁴⁴ *Stories from the History of U.S. Government Surveillance*, TRACKED IN AMERICA, <http://www.trackedinamerica.org/>.

⁴⁵ *Poverty & Privacy*, ELEC. PRIVACY INFO. CTR., <https://epic.org/privacy/poverty/> (last visited Apr. 2, 2013).

⁴⁶ *More About State and Local Police Spying*, AMER. CIVIL LIBERTIES UNIONS, <http://www.aclu.org/spy-files/more-about-state-and-local-police-spying> (last visited Apr. 2, 2013).

⁴⁷ Merriam Webster’s Dictionary defines “mission creep” as “the gradual broadening of the original objectives of a mission or organization.” For example, fusion centers focus on drug crimes rather than the national security purpose they were established for. *See, Investigative Report Criticizes Counterterrorism Reporting*, U.S. SENATE PERMANENT SUBCOMMITTEE ON INVESTIGATIONS (Oct. 3, 2012),

<http://www.hsgac.senate.gov/subcommittees/investigations/media/investigative-report-criticizes-counterterrorism-reporting-waste-at-state-and-local-intelligence-fusion-centers>; Nadia Kayyali, *Fusion Centers: Budgetary Salt on Constitutional Wound*, PEOPLE’S BLOG FOR THE CONSTITUTION (Oct. 4, 2012),

<http://www.constitutioncampaign.org/blog/?p=10141>; Jamie Doward, *‘Mission Creep’ Fears Grow as Met Calls for More Tasers*, THE GUARDIAN (Mar. 16, 2013), <http://www.guardian.co.uk/world/2013/mar/17/tasers-met-police->

First Amendment implications

WHEREAS, statistics show that local law enforcement agencies have frequently violated constitutional limits by scrutinizing groups engaging in protected First Amendment activity,⁴⁸ including anti-war groups,⁴⁹ Second Amendment rallies, third-party voters and Muslim lobbyists, as potential national security threats; and

WHEREAS, persistent or ambient surveillance, coupled with currently expanding programs to monitor and criminalize nonviolent activism, threatens to chill First Amendment-protected association;⁵⁰ and

WHEREAS, a potential chilling effect on First Amendment activity from the use of drones is compounded by the capability of some drone models to be armed with tear gas, rubber bullets, and other weapons;⁵¹ and

No need for drones/Drones not safe

WHEREAS, many of the drone models currently available to law enforcement have limited flying time,⁵² cannot be flown in inclement weather,⁵³ must be flown in sight of an operator,⁵⁴ and can only be flown during the day, thus making them ill-suited to search and rescue missions and best suited for pervasive surveillance; and

WHEREAS, currently existing technology, including helicopters, has proven adequate to capably address emergency situations; and

increase; Jennifer Abel, *The TSA's Mission Creep is Making the US a Police State*, THE GUARDIAN (APR. 18, 2012), <http://www.guardian.co.uk/commentisfree/cifamerica/2012/apr/18/tsa-mission-creep-us-police-state>; *Surveillance of Political Activity*, AMER. CIVIL LIBERTIES UNION, <http://www.nyclu.org/content/testimony-police-surveillance-of-political-activity-history-and-current-state-of-handschu-de> (Apr. 2, 2013).

⁴⁸ Shahid Buttar, *COINTELPRO 2.0*, HUFFINGTON POST (Aug. 2, 2010), http://www.huffingtonpost.com/shahid-buttar/cointelpro-20_b_664943.html.

⁴⁹ *Documents Shed New Light on Surveillance of Peace Activists*, AMER. CIVIL LIBERTIES UNION (Oct. 12, 2006), <http://www.aclu.org/national-security/documents-shed-new-light-pentagon-surveillance-peace-activists>; Raquel Ronzone, *Howard Zinn: (A) Anti-War Activist and Historian or (B) extremist*, DAILY KOS (Oct. 19, 2012), <http://www.dailykos.com/story/2012/10/19/1147007/-Howard-Zinn-A-anti-war-activist-and-historian-or-B-extremist>.

⁵⁰ National Lawyers Guild, *Developments in the Policing of National Special Security Events (2013)*, available at <http://www.nlg.org/sites/default/files/NLG%20Report%20Developments%20in%20the%20Policing%20of%20NSSEs%20at%202012%20RNC%20and%20DNC.pdf>.

⁵¹ *Groups Concerned Over Arming of Domestic Drones*, CBS.COM (May 23, 2012), <http://washington.cbslocal.com/2012/05/23/groups-concerned-over-arming-of-domestic-drones>; Buck Sexton, *Aerial 'Shadowhawk' Police Drones Can Now Deploy Tasers and Tear Gas*, THE BLAZE (Mar. 12, 2012), <http://www.theblaze.com/stories/2012/03/12/want-to-see-the-aerial-drone-police-could-soon-deploy-in-your-town/>.

⁵² *Aerial Vehicle Systems*, AERYON LABS, INC., <http://www.aeryon.com/products/avs.html> (last visited Apr. 2, 2013).

⁵³ *Homeland Security: Unmanned Aerial Vehicles and Border Surveillance*, CONGRESSIONAL RESEARCH SERVICE (July 8, 2010), <https://www.fas.org/sgp/crs/homesecc/RS21698.pdf>; Eric Beidel, *Army Pilots: Flying Drones Tougher than It Looks*, NATIONAL DEFENSE MAGAZINE (Feb. 2011), <http://www.nationaldefensemagazine.org/archive/2011/February/Pages/ArmyPilotsFlyingDronesTougherThanItLooks.aspx>; Sara Peck, *Civilian Drones Have Yet to Pass Weather Test*, NATIONAL DEFENSE MAGAZINE (Aug. 2008), <http://www.nationaldefensemagazine.org/archive/2008/August/Pages/CivilianDronesHaveYettoPassWeatherTest.aspx>.

⁵⁴ *But see*, Edwin Kee, *Pilotless Robot Plane Smart Enough to Navigate Through Bad Weather*, UBERGIZMO (July 9, 2012), <http://www.ubergizmo.com/2012/07/pilotless-robot-plane-smart-enough-navigate-bad-weather/>.

⁵⁴ *The FAA Is Set to Issue Rules for Operating Civilian Drones*, STAR TRIBUNE (Feb. 17, 2013), <http://m.startribune.com/business/?id=191499731>.

WHEREAS, drones are largely unproven in American civilian airspace, and have only seen widespread use in combat theaters, where they are the least safe class of aircraft currently in operation;⁵⁵ and

WHEREAS, an FAA official testified to Congress that Customs and Border Protection has reported 52.7 drone accidents per 100,000 hours of flight time, seven times the civil aviation rate of 7.11 accidents per 100,000 hours;⁵⁶; and

WHEREAS, drones currently in production do not have the see-and-avoid capability of manned aircraft, and drone collision avoidance systems seeking to mitigate this problem have thus far proven ineffective.⁵⁷

NOW THEREFORE BE IT RESOLVED that Berkeley with this Resolution and by Proclamation, declares Berkeley to be free from drones, and enacts this Ordinance to secure those aims.

I. DEFINITIONS

A. "Drones" refers to any powered aerial vehicle controlled autonomously or remotely that does not carry a human operator. Drones include, but are not limited to, powered aerial vehicles that store and/or transmit sensor data, such as photos, video, thermal images, and intercepted wireless communications; and unmanned aerial vehicles capable of firing lethal, less-lethal projectiles, crowd control measures, or any other anti-personnel weapon.

B. "Berkeley airspace" includes all airspace above the territorial boundaries of Berkeley, to the extent to which such airspace can legally be regulated by [name of city or county]. This legislation does not seek to interfere with the authority of the Federal Aviation Administration.

C. "Law enforcement agency" means a lawfully established state or local public agency that is responsible for the prevention and detection of crime, local government code enforcement, and the enforcement of penal, traffic, regulatory, game, or controlled substance laws.

D. "Aggrieved party" means a person whose personal information has been captured by unlawful drone use.

⁵⁵ The Global Hawk, Predator, and Reaper drones have a combined rate of 9.31 accidents for every 100,000 hours of flight time, more than triple the fleetwide average of 3.03. See Brendan McGarry, *Drones Most Accident-Prone U.S. Air Force Craft*, BGOV BAROMETER (June 18, 2012), <http://www.businessweek.com/news/2012-06-18/drones-most-accident-prone-u-dot-s-dot-air-force-craft-bgov-barometer>.

⁵⁶ FAA Vice President for Systems Operations Nancy Kalinowski, Statement to Subcommittee on the Role of Unmanned Aerial Systems (July 15, 2010), http://www.faa.gov/news/testimony/news_story.cfm?newsId=11599.

⁵⁷ *Evaluation of Traffic Alert and Collision Avoidance System*, FEDERAL AVIATION ADMINISTRATION (Mar. 21, 2011), http://www.faa.gov/about/initiatives/uas/media/TCASonUAS_FinalReport.pdf.

E. "Personal information" means information about an individual including but not limited to their effects, papers, affiliation with religious or political ideologies or groups, biometric information, movements, address, or administrative information such as social security number or agency-issued identification.

F. "Surveillance" means the monitoring or close observation of an individual or group for the purpose of gathering information related to possible or suspected criminal activity by that person or by someone else.

G. "Anti-personnel weapon" means any projectile, chemical, electrical, directed-energy (visible or invisible), or other device designed to harm, incapacitate, or otherwise negatively impact a human being.

II. DRONE FREE ZONE

A. The City of Berkeley shall be known as a "drone-free zone" and a "No Drone Zone" and;

1. No agency or department of Berkeley shall purchase, lease, borrow, or otherwise acquire or utilize a drone;

2. No officer or employee of Berkeley shall make any use of drones or the data they have collected in the discharge of their duties;

3. No officer or employee of Berkeley shall request or accept, handle, analyze, or transmit any kind of data gathered by third parties using drones, including private parties, security contractors, or other government agencies;

4. Under no circumstances shall any officer or employee of Berkeley use drones to monitor or observe any person;

5. Under no circumstances shall any personally identifying information captured by drones, whether by agencies of Berkeley or otherwise, including images of identifiable individuals, be retained or shared with any agency or fusion center.

6. Failure of a Berkeley officer or employee to comply with the provisions of this chapter shall constitute malfeasance in office.

7. Drones are hereby banned from airspace over the City of Berkeley, including drones in transit. Under this Ordinance, flying a drone within the airspace of the City of Berkeley shall be considered a misdemeanor. Exemptions will be made for hobbyists to continue to fly remote controlled model aircraft in specified areas, away from dwellings and the urban cityscape of people and buildings as long as those devices are not equipped with any kind of camera or audio surveillance equipment.

B. No information gained through drone surveillance shall be used to support a declaration of probable cause or otherwise justify or further a criminal investigation.

C. Evidence obtained or collected in violation of this ordinance is not admissible as evidence in a criminal prosecution in any court of law [in this county] including use during trial, at sentencing, before a grand jury, as rebuttal evidence, or during administrative hearings in any court of law in the state.

D. No officer or employee of Berkeley shall present such evidence in any court of law, including state or federal courts, for use during trial, at sentencing, before a grand jury, as rebuttal evidence, or during administrative hearings.

E. All information or records of information collected through the use of drones in violation of this Ordinance shall be destroyed as soon as practicable, and within no case later than twenty-four (24) hours after capture or receipt.

III. IMPLEMENTATION

A. This Ordinance shall be rigorously and consistently enforced.

B. All violations of this Chapter, all investigations into violations of this Chapter, and all reports or complaints regarding Unlawful Drone Use made to any Berkeley office or department, shall be reported to the Berkeley Police Review Commission. The Berkeley Police Review Commission shall electronically compile all such reports, keep them in perpetuity, and make them available to any person who inquires.

C. Berkeley agencies, including, but not limited to the City Attorney, City Manager, Police Department, shall work together with the Police Review Commission to establish the scope of this law and ensure that members of the public can understand its particulars. This effort shall include, but not be limited to, a description of all Berkeley airspace not under exclusive Federal jurisdiction.

D. An aggrieved party may initiate a civil action against a law enforcement agency or agent to obtain all appropriate relief in order to prevent or remedy a violation of this Ordinance.

1. Such aggrieved party shall be entitled to reasonable attorneys' fees and costs of suit plus the greater of actual damages or an amount equal to \$1,000 per violation.

2. Such relief shall include the ability to request expungement of all information or records of information where the direct or indirect source of such information is unlawful drone use.

E. Individuals who have reason to believe they have been subject to drone surveillance shall be entitled to request a record of such surveillance, including but not limited to any personally identifying information obtained by such surveillance.

IV. SEVERABILITY

A. The provisions of this Ordinance shall be severable. If any phrase, clause, sentence or provision of this Ordinance is declared by a court of competent jurisdiction to violate the Constitution of the United States or the Constitution of the State of California, or if its applicability to any agency, person or circumstance is held invalid, the validity of the remainder of the Ordinance and its applicability to any other agency, person or circumstances shall not be affected.

V. DISTRIBUTION AND POLICY STATEMENT

A. Berkeley calls on the United States Congress and Berkeley's representatives to Congress, to adopt legislation prohibiting the use of drones domestically, and prohibiting information obtained from any domestic use of drones from being introduced into a Federal or State court, and precluding the domestic use of drones equipped with anti-personnel devices, meaning any projectile, chemical, electrical, directed-energy (visible or invisible), or other device designed to harm, incapacitate, or otherwise negatively impact a human being.

B. The City Manager shall send copies of this ordinance to our US Congressional and Senate representatives, the US Senate Committee on the Judiciary, the US Senate Select Committee on Intelligence, the US House of Representatives Committee on the Judiciary, the US House of Representatives Permanent Select Committee on Intelligence, the US Attorney General, and the President of the United States.

Page One

[Drones or No Drones? The Debate Drones On \(News Analysis\)](#)

By Gar Smith

Monday May 13, 2013 - 10:35:00 AM



Wendy Kenin

Berkeley citizens express their concerns over drones.



Gar Smith
UAVSI drone on display at hearing



Wendy Kenin
Members of the Peace and Justice Commission listen to testimony.

Late last year, when word leaked that police in Alameda County and Berkeley were preparing to jump on the post-911 bandwagon by acquiring unmanned, aerial

surveillance drones, it was the kind of news that makes a pacifist go ballistic. So, on December 18, 2012, squadrons of anti-drone activists homed in on a City Council meeting to demand that the city -- home of the country's first "Nuclear-Free Zone" -- declare itself a "No Drone Zone."

Despite the unanimous public outcry against the idea of "drones in Berkeley," when it came time to act, the council was split -- with a majority clearly entranced by the promise of the city owning its own high-tech drone to handle "emergency situations." The council ordered a time-out for further study. They did, however, agree to send a letter to Alameda's Sheriff and Board of Supervisors asking that the county "delay any action on the purchase of a drone until the City of Berkeley has completed its evaluation of the issue."

(Note: It's not just the anti-war crowd that bristles at the idea of UAVs flying over public parks and backyard barbecues. The specter of homegrown drones has united Republicans, Democrats and Tea Partiers in 29 states that are currently working on new tri-partisan laws to rein in any potential use of drones in US cities. In February, Charlottesville, Virginia, became the first US city to enact a drone-free ordinance.)

An Anti-Drone Quorum at the Forum

As part of the evaluation process, Berkeley's Peace & Justice Commission hosted a "Town Hall Forum on Drones" on May 1. Joined by members of the Police Review Commission, the two city panels heard testimony from five expert witnesses and 30 members of the audience. The Town Forum did not hear from either the BPD or the BFD, however. Police and fire department officials turned down invitations to participate in the discussion.

The pros and cons raged for more than two hours. Only one of the five experts spoke in support of drones and only two members of the audience had anything good to say about the proposal to release unmanned spybots into the urban airspace.

The sole pro-drone voice belonged to Patrick Egan, a spokesperson for the Association for Unmanned Vehicle Systems International (AUVSI). Egan brought along a display table featuring a small drone and a series of aerial photos that he had snapped. Egan promised to provide the board with copies of an AUVSI book called "First To Deploy -- Unmanned Aircraft For SAR & Law Enforcement." ["SAR" refers to Search and Rescue.] However, instead of a report linking drones and cops, AUVSI provided a 38-page study on "The Economic Impact" of UAVs. The only part that was relevant to California was on page 24 where three charts predicted drone deployment would create several thousand new jobs, \$1.8 billion in "total economic impact," and more than \$10 billion in added state tax revenues by 2015.

A Chorus of Criticism

The remaining speakers (from the ACLU, Bill of Rights Defense Committee, CopWatch and the Electronic Frontier Foundation) chose to ignore the promise of economic gain and focused, instead, on the social and constitutional negatives.

ACLU staff attorney Linda Lye began by noting the many ways drones raise serious Fourth Amendment privacy concerns. Lye also argued that deploying drones would likely violate the State Constitution's Article I, Section 1, which grants privacy protection for personal information. Lye listed four reasons to oppose drones: (1) They make surveillance "cheap", (2) they are "less obvious" to people being spied on, (3) they come with night-vision and infra-red capabilities that can "see through walls" to spy on the people inside and (4) they would be used in the SF Bay Area, which is one of the Federal government's "fusion centers" – a major hub for collecting and analyzing intercepted communications and intelligence data.

The Alameda Sheriff would be one of the first state police agencies to acquire a drone. (Sacramento reportedly acquired a drone in 2007.) The Sheriff's latest budget is for a whopping \$20 million and the ACLU has requested an explanation of what the money will be spent on. Lye said she was still "awaiting a response."

Current law guarantees citizens only a "reasonable expectation of privacy." But what is "reasonable" these days? "It could take years to resolve this in court," Lye noted, "but technology evolves much faster than constitutional law. So we need to act now."

If drones *were* to be allowed, Lye advised, they should only be used upon the issuance of a warrant based on probable cause -- and there should be no sharing of gathered information between departments.

The Rise of the Surveillance Society

Don't be tempted by promises of grants from the Pentagon and the Department of Homeland Security, Lye cautioned, since these are essentially bribes intended to prime the pump for the corporations set to benefit from the expansion of the Surveillance Society. It might not be fiscally prudent to rush to purchase any new surveillance toys, Lye argued. As an example of an investment that went sour, she pointed to the recall of the TSA's controversial full-body scanners, which she characterized as "a \$45 million mistake."

After enduring the crowd's enthusiastic applause during Lye's litany of criticisms, AUVSI's Eagan approached the microphone with an edge to his voice.

"So you don't have fixed wing aircraft in Berkeley? You don't have helicopters?" he chided, in a mistaken attempt to establish that the crowd accepted planes and choppers but had a unique bias against drones. Eagan seemed caught by surprise when someone in the audience shouted, "Police helicopters are banned in Berkeley!"

"Well, then," Eagan shot back, "I guess you [people of Berkeley] like privacy more than public safety!"

Eagan went on to argue that store and street surveillance cameras, along with telephone, computer and text spying "already exist" (so more is better?). He suggested that drones were great tools for "studying grass fires" and finding lost children. (The argument that hovering cameras can be used to "find a lost child" or "an elderly person with Alzheimer's" comes up so often, it's become something of a running joke.)

Commissioner George Lippman asked if the AUSVI received any money from companies that manufacture drones but the query failed to elicit a clear response.

Why the 'Drones to the Rescue' Argument Won't Fly

Nadia Kayyali, a Legal Fellow with the Bill of Rights Defense Committee, began her presentation by recalling how the Alameda and Berkeley cops (in cahoots with the UC Berkeley campus police) had been embarrassed by exposure of a secret plan to jointly purchase and share an armored personnel carrier. Kayyali called the new push for drones another "rushed implementation that is being fueled by money."

Kayyali quickly dismissed the "rescue drone" arguments. The battery-powered drones being considered for city purchase can't fly for more than 25 minutes at a time, they can only be flown during the day, they need to be controlled by two operators, they must be flown in "line-of-sight," they can't be operated more than 400 feet above the ground, they can't be flown on windy days and, if you tried to use one to monitor a grass fire or a burning building, it would probably start to melt.

Kayyali's conclusion? "Current drone technology is best suited for one thing: surveillance." Because drones can "hover very quietly outside of windows," Kayyali warned, the ability "to conduct covert surveillance with a small piece of equipment is unprecedented."

(The short battery life may not be a problem for future drones. Work now is underway to design metal tails that will allow drones to grab energy from city power lines and new ground-based laser systems may allow operators to recharge drones while they are still in flight.)

It's Raining Cats and Drones

Even in the best of conditions, drones would pose significant risks to public safety. "Drones are unproven in American civilian airspace" and the record of UAVs in combat situations is troubling Kayyali stated. "They are the least safe class of aircraft in operation." Customs and Border Protection has reported 52.7 drone accidents per 100,000 hours of flight time -- seven times the accident rate for all of civil aviation.

One of the latest cases of "drones behaving badly" occurred last September when the Sheriff of Montgomery County, Texas, showed up for a demonstration of his department's new \$300,000 Shadowhawk drone. The UAV successfully soared into the air -- only to plummet back to earth. It crashed into the police department's prized Bear Cat armored tank, which had been parked nearby.

In combat zones, drones have experienced what the Pentagon likes to call "control uplink failures." These glitches have caused combat drones to "go rogue," requiring soldiers to chase after them and shoot them down.

Even with the best camera technology, drones lack the critical "see-and-avoid" ability of a human pilot. To date, the FAA has not been able to find any collision avoidance system that can guarantee a drone won't fly into a commercial aircraft. (This is not a theoretical risk. In August 2011, a Shadow UAV crashed into the wing of a C-130 in the skies over Afghanistan.)

Can Drones Be Weaponized?

Kayyali cited a "large and expanding toolkit [that] makes drones incredibly powerful tools of surveillance" including "high-definition cameras, infrared systems which can see through obstacles, radar, LIDAR, the ability to intercept cell phone communications, 'less lethal' weapons, and lethal weapons."

Kayyali noted that Alameda Sheriff Gregory J. Ahern went on record on February 14 warning that he would have no qualms about using drones to monitor public demonstrations. "I'm not going to tell you we wouldn't use [a drone] in the event that a crowd turned violent."

But drones clearly have the potential to escalate those situations in which the *police* "turn violent." As Kayyali explained: "Drones are currently being armed with tear gas and rubber bullets, with obvious implications for public activism."

Can the Police Be Trusted?

In addition to the question: Can drones be trusted? Andrea Prichett, testifying on behalf of Berkeley CopWatch, raised a related question: Can the Berkeley police be trusted? "The BPD doesn't comply with the public records act," Prichett charged and "unlike Oakland and San Francisco, the BPD doesn't post its policies on police tactics." If the BPD were to obtain a drone, could the department be trusted to respect civil rights? "If we can't even get them to come to this meeting, I'm not very hopeful," Prichett noted grimly.

Two members of the Peace and Justice Commission then mentioned cases where the BPD had refused to release photos or investigative information to the Commission. "If we can't get ... one picture, how would we get photos from a drone?" a commissioner asked.

Then it was the audience's turn.

Public Testimony Favors a 'No Drone Zone'

For the next hour, drones were critiqued and ridiculed by a host of speakers from a range of organizations including The World Can't Wait, Iraq Vets Against War, Environmentalists Against War, and the Nevada Desert Experience.

A member of CopWatch spoke of the psychological stress of living under drones, citing "the intimidation factor of constant surveillance." In addition to the noise of hovering drones, sound-equipped UAVs would allow police "overseers" to bark orders and threats from the sky.

Referring to repeated problems with microphones and one speaker's attempt to screen a PowerPoint presentation, lawyer and political activist Ann Fagin Ginger (founder of Berkeley's *Meiklejohn* Civil Liberties Institute), pointedly observed: "If we can't get our mikes and computers to work, what makes us think drones will work?"

A member of the Asian Law Caucus noted that many of the police drones are built by the same companies that build drones the Pentagon uses to commit "targeted assassinations." Case in point: the 13.2-pound Stalker (yes, that's what they chose to name it) is built by the military arms giant Lockheed-Martin.

One dubious speaker ridiculed the idea of "search and rescue" drones. "Drones aren't like helicopters," she pointed out. "They don't have onboard stretchers or ropes or doctors."

"As a civil libertarian, I'm opposed to drones," one speaker added. "But as a journalist, I can't wait to get my own drone so I can spy on city politicians and monitor and record police operations in Berkeley."

One speaker held up a copy of the [March 2013 National Geographic](#) and read some choice excerpts:

Even when controlled by skilled, well-intentioned operators, drones can pose a hazard - that's what the FAA is concerned about. The safety record of military drones is not reassuring. Since 2001, according to the Air Force, its three main UAVs -- the Predator, Global Hawk, and Reaper -- have been involved in at least 120 "mishaps," 76 of which destroyed the drone. The statistics don't include drones operated by the other branches of the military or the CIA. Nor do they include drone attacks that accidentally killed civilians or US or allied troops....

GPS is vulnerable.... Its signals can be blocked by buildings or deliberately jammed. In December 2011, when a CIA drone crashed in Iran, authorities there claimed they had diverted it by hacking its GPS....

[Dave] Raquet [a lab technician] demonstrates ... with a square drone powered by rotors at each corner. On the first try the drone, buzzing like a nest of enraged hornets, flips over. On the second it crashes into a wall. "This demonstrates the need for trust," Raquet says with a strained smile.

A Pandora's Box Filled with Drones

It wasn't until well into the final hour of the debate that the two camps were able to find some common ground. Speaking from the audience, AUSVI's Chet Hartridge (seeming to sense the overwhelming consensus) conceded: "I believe in the Forth Amendment. I don't want to be photographed in the nude in my backyard either."

After listening to the evening's testimony (which clearly favored declaring Berkeley a "No Drone Zone"), Drone Subcommittee Chair Bob Meola announced that he had been convinced the Commission should return to its original demand for an outright ban on drones within the city boundaries. (Hobbyists still would be allowed to fly small drones over non-residential recreational areas.)

Another commissioner asked what would happen if the County bought a drone and tried to fly it through Berkeley's airspace. The answer came from a woman in the audience: "Shoot it down!" she hollered. This prompted another Commissioner to surmise that, if drones were ever flown over Oakland, "they would be used for target practice!"

These comments brought some welcome mirth to the high-stakes battle to keep the city's skies drone-free. As one participant noted: "If we can't stop drones in *Berkeley*, where *can* you stop this technology?"

But the unique -- and looming -- threat of drones is not a laughing matter. Returning to that *National Geographic* story, here are some additional passages the speaker did not have time to read into the record:

What, one might ask, will prevent terrorists and criminals from getting their hands on some kind of lethal drone? Although American officials rarely discuss the threat in public, they take it seriously. The militant Islamic group Hezbollah, based in Lebanon, says it has obtained drones from Iran.

Last November, a federal court sentenced a Massachusetts man to 17 years in prison for plotting to attack Washington, D.C., with drones loaded with C-4 explosives....

The answer to the threat of drone attacks, some engineers say, is more drones. "The new field is counter-UAVs...." [designed to] enable one UAV to spot and destroy another, either by ramming it or shooting it down.

Just imagine how profitable a Global Drone War on Drones could become!

You can watch the entire Town Forum on YouTube

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