

SB2608

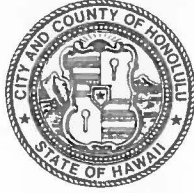
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LATE

TESTIMONY

POLICE DEPARTMENT
CITY AND COUNTY OF HONOLULU

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OUR REFERENCE KK-LC

February 18, 2014

The Honorable Clayton Hee, Chair
and Members
Committee on Judiciary and Labor
State Senate
Hawaii State Capitol
415 South Beretania Street
Honolulu, Hawaii 96813

Dear Chair Hee and Members:

Subject: Senate Bill No. 2608, S.D.1, Relating to Unmanned Aircrafts

I am Kurt Kendro, Major of the Traffic Division of the Honolulu Police Department (HPD), City and County of Honolulu.

The HPD strongly opposes the passage of Senate Bill No. 2608, S.D.1, Relating to Unmanned Aircrafts (UAV).

The use of a UAV by law enforcement is fundamentally a search and seizure issue with the belief that information gathered will be used improperly against innocent persons. The court system in the State of Hawaii provides greater protection for people than any other state in the nation when it comes to the gathering of evidence for use in a criminal proceeding. The basis for this comes from Hawaii court decisions, the Hawaii Constitution, and the Hawaii Revised Statutes.

Some of the relevant areas that protect the people of Hawaii are as follows:

- Article I, Section 7 of the Hawaii Constitution provides a more extensive right of privacy than that of the United States Constitution (*State v. Tanaka*, 1985).
- "In our view, Article I, Section 7 of the Hawaii Constitution recognizes an expectation of privacy beyond the parallel provisions in the Federal Bill of Rights." (*Hanson I*, 1997)
- "This court is the final arbiter of the meaning of the provisions of the Hawaii Constitution. Nothing prevents our constitutional drafters from fashioning greater protections for criminal defendants than those given by the United States Constitution." (*State v. Santiago*, 1971)

- Where evidence sought to be admitted in state court is the product of acts that occurred on federal property or in another state, by Hawaii law enforcement officers or officers of another jurisdiction, such evidence can only be admitted in a state prosecution if obtained in a manner consistent with the Hawaii Constitution and applicable case law. (*State v. Torres, 2011*)
- Hawaii Revised Statutes, Chapter 711, Section 710-1110.9, Violation of privacy in the first degree, and Section 710-1111, Violation of privacy in the second degree, offer even more privacy protections to individuals.

There are countless legitimate uses of UAVs to assist law enforcement to protect the community as well as provide information to aid in investigations.

- There is the ability to provide an immediate aerial platform to photograph critical and fatal crash scenes while the investigation is ongoing. This can provide investigators with important information in real time and at the scene utilizing relatively inexpensive technology which is vital in determining the cause of these serious crashes.
- Outdoor crime scenes can be spread out over large areas. The aerial platform provides the opportunity to search for evidence, providing an overall perspective of the scene in a quick and efficient manner.
- In incidents of hostage and barricade situations, it provides a tactical advantage to law enforcement to get aerial imagery in real time as the situation is occurring. This provides information that is vital and critical to the deployment of personnel as well as to employ strategies to safely resolve the situation.
- In large scale events such as the recent Pro Bowl, the UAV aerial platform can provide real time imagery of traffic congestion, enhance the security of the event, and protect the attendees with no disruption.

The HPD agrees that there needs to be regulation of the use of UAVs and would suggest that the provisions of Senate Bill No. 2152, Relating to Unmanned Aircraft Systems, or House Bill No. 1657, Relating to Unmanned Aircraft Systems, be adopted.

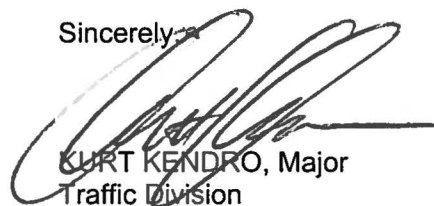
The HPD strongly urges you to oppose Senate Bill No. 2608, S.D. 1, Relating to Unmanned Aircrafts.

Thank you for the opportunity to testify.

APPROVED:


LOUIS M. KEALOHA
Chief of Police

Sincerely,


KURT KENDRO, Major
Traffic Division



Safety - Education - Advocacy

STATEMENT OF STEVE BUNTING

**BEFORE THE
SENATE COMMITTEE ON JUDICIARY AND LABOR**

S.B. 2608, S.D.1

RELATING TO UNMANNED AIRCRAFTS

**PRESENTED
FEBRUARY 18, 2014**

Good morning Chairman Hee, Vice Chairman Shimabukuro, and Members of the Committee. Thank you for the opportunity to testify on behalf of the Remote Control Flight Leadership Initiative (RCFLI). RCFLI is a national nonprofit that seeks to protect the rights of remotely controlled model aircraft enthusiasts to safely engage in their hobby. I'm a member of the Board of Directors and the Government Relations Representative of RCFLI.

RCFLI asks that any legislation that is passed in Hawaii be mindful of model aircraft hobbyists by including language similar to that which is contained in the Federal Aviation Administration Modernization and Reform Act of 2012, passed by Congress in 2013, which I will further discuss in a moment.

There are approximately 300,000 citizens nationwide that recreationally fly remote control aircraft. According to the Academy of Model Aeronautics, there are eight individual model flying clubs in Hawaii with approximately 200 members. The aircraft they fly range from non-powered sailplanes and replica World War II fighters to electric helicopters and multirotor aircraft. Participants in the hobby are a representative cross-section of our country, coming from all walks of life and from every state in the nation.

The use of remotely controlled aircraft is poised to expand at a breathtaking pace. The technology behind these aircraft is advancing in leaps and bounds. This has been noticed by business and the government and that, in turn, has been noticed by the public. Concerns over privacy have become paramount in our electronic age and that concern is well placed when it comes to aerial image capture by remotely controlled aircraft.

RCFLI shares those concerns. Although we are remote control aircraft hobbyists, we are citizens first. While we believe that existing laws might be able to address the public's concerns about invasions of privacy by both government and private actors, we applaud the efforts of the Hawaii State Legislature to address privacy before the conduct

becomes widespread. However, RCFLI requests that any legislative response you consider counterbalances the right to privacy with the rights of Hawaii's citizens to engage in the recreational use of remote control aircraft, including those that are capable of image capture.

One method to accomplish this is to mirror the federal response in the FAA's Modernization and Reform Act of 2012. In that Act, Congress exempted model aircraft from the FAA's upcoming regulations on drone aircraft. Model aircraft were defined as:

1. Capable of sustained flight in the atmosphere.
2. Flown within the visual line of sight of the person operating the aircraft
3. Flown strictly for hobby or recreational purposes.

The legislation further stated that hobby aircraft must be operated in accordance with community-based safety guidelines and within the programming of a nationwide community-based organization.

RCFLI thinks the federal definition; including the intended use demarcation is an appropriate response because the conduct of any hobbyist that violates the privacy of the public can be handled through existing statutory or common law. A peeping tom should still be prosecuted as a peeping tom regardless of their methods.

In that SB 2608 also regulates image capture by model aircraft in addition to governmental and commercially operated systems, RCFLI asks that the law not be strict liability and that the hobbyist's mens rea, or intent, is a factor. RCFLI believes that the hobbyist's intent is the relevant factor in determining liability for images captured in situations where the public has an expectation of privacy.

To give an example, a member of RCFLI volunteered his equipment and expertise to aid home and small business owners in the wake of Hurricane Sandy. Numerous aerial surveys were conducted, documenting the destruction along the New Jersey shoreline. During the surveys, images of citizens on public and private property, on foot and in

their cars, were captured. A broadly tailored statute would make this sort of volunteer work illegal.

RCFLI asks that any statute the legislature considers ensure that these sorts of inadvertent image capture be expressly authorized. In the alternative, RCFLI believes that the statute should remain silent on the matter.

Internationally, other countries around the world are also trying to understand the implications of and regulate the use of remotely controlled aircraft. Australia, New Zealand, and Canada all have comprehensive regulations and all three countries have a legal demarcation centered on the nature of use. Like the U.S. Federal Government, these countries exempt remotely controlled aircraft below a certain weight that are used for a recreational purpose. It is instructive that these countries do not prohibit aerial photography if there is no commercial purpose.

RCFLI recognizes that the rapid advancement and proliferation of this technology has raised significant and particularized privacy concerns. However, it behooves the legislature to consider a comprehensive response that does not punish citizens of Hawaii who are engaging in the rewarding pastime of flying model aircraft. RCFLI asks that you consider implementing a system that differentiates among the weight class of the model as well as between commercial and non-commercial use. We believe that this framework along with existing common law and statutory privacy laws will allow citizens of Hawaii to fly model aircraft as well as be protected from intentional invasions of privacy. To that end, RCFLI offers the following recommendations:

1. The state legislature should review all of Hawaii's existing "peeping tom" and other privacy statutes to make sure that the use of unmanned aerial vehicles are included as a "means" used to invade privacy is prohibited.

2. The legislation should be amended to include language in section 803, subsection (b) that specifically exempts “hobby aircraft” as defined in the FAA Modernization and Reform Act of 2012 as aircraft:
 - a. capable of sustained flight in the atmosphere;
 - b. flown within visual line of sight of the person operating the aircraft;
 - c. flown for hobby or recreational purposes; and
 - d. operated in accordance with community-based safety guidelines and within the programming of a nationwide community-based organization.

RCFLI hopes that you will consider the concerns of Hawaii’s model aircraft hobbyists and amend Senate Bill 2608 to exclude remote control model aircraft. I will be happy to answer any questions you may have.



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February 18, 2014

HEARING BEFORE THE
SENATE COMMITTEE ON JUDICIARY

TESTIMONY ON **SB 2608 SD1**
RELATING TO UNMANNED AIRCRAFT SYSTEMS
Room 16
10:00 AM

Aloha Chair Hee and Members of the Committee:

I am Christopher Manfredi, President of the Hawaii Farm Bureau Federation (HFBF). Organized since 1948, the HFBF is comprised of 1,832 farm family members statewide, and serves as Hawaii's voice of agriculture to protect, advocate and advance the social, economic and educational interests of our diverse agricultural community.

Hawaii Farm Bureau understands that the intent of this measure is precautionary, however, we **OPPOSE THIS MEASURE UNLESS THERE AMENDMENTS TO ALLOW BENEFICIAL USES FOR AGRICULTURE.**

UAV are important tools that provide useful agricultural information to farmers and ranchers. They are used to scout crops, detect nutrient deficiencies, assess flood and drought damage, forecast weather patterns, and monitor wildlife (for example; could be used to track Axis deer on Maui and Molokai). Ranchers can use UAVs to identify water stress and invasive weeds on ranchlands, to ensure the integrity of fences, and to locate cattle in distant pastures. Information provided by UAVs can protect farmers' and ranchers' crops and livestock and improve efficiency, which reduces cost of production, in turn, making them more competitive in the marketplace.

Yesterday, 2/17/14, the *Star-Advertiser* reported on the latest progress in UAV use and we provide relevant sections of the article.

Alaska leads the nation in the use of UAS: to count wildlife, study fisheries, inspect pipelines and monitor the environment. In Hawaii, similar opportunities exist. Additional applications in Hawaii's future will likely include precision agriculture, identification and eradication of invasive species, cinematography, search and rescue, law enforcement, harbor security and disaster response.

Hawaii is teamed with Alaska and Oregon as part of the so-called Pan-Pacific Test Site, one of the six official FAA test sites. As early as six months from now, UAS (in addition to those already operated locally by military and civil agencies) may begin operating in Hawaii skies in support of the airspace integration effort. It is only natural that questions be answered about noise, safety and personal privacy as we prepare to host this activity.

This follows the direction by the U.S. Congress to FAA to write regulations on UAV technology for commercial purposes while ensuring public safety and addressing privacy concerns.

Investments in this technology have already been made in Hawaii to develop this important tool for agricultural use. This measure hinders this unique opportunity. We agree with the Department of Transportation that users with a Certificate of Authorization from the FAA should be permitted use during this development phase.

An interesting article on ranchers' use of UAVs is available at: <http://www.cattlenetwork.com/cattle-news/Drone-on-the-range-242818871.html>

We appreciate your support of agriculture and respectfully request the amendment of this measure to recognize these new opportunities. Thank you.



Dean Sensui, Executive Producer

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Testimony on Senate Bill 2608
Relating to Unmanned Aircraft Systems

Senate Committee on Judiciary and Labor

Chairman Clayton Hee, Vice Chairperson Maile Shimabukuro, and members of the Committee:

Small radio-controlled aircraft (or Unmanned Aerial Vehicles) have become a useful and important tool in the film, TV and news industries. Radio controlled aircraft have been around for decades. After the advent of small, lightweight high-resolution cameras, and stable flying platforms, they became increasingly popular among independent filmmakers to get unique perspectives for movies and TV shows.

National Geographic and the Discovery Channel quickly adopted them as have some local filmmakers.

These relatively lightweight machines can get low-altitude aeriels without the cost and risk of full-scale helicopters. Just recently they've been used to get dramatic aeriels of surfers on record-breaking waves in Hawai'i. Getting world-class images like these would be impossible with conventional helicopters as they would put surfers and cameramen at tremedous risk.

UAV's are capable of capturing other breathtaking scenics of Hawai'i which greatly enhance the attractiveness of our island state. They can get perspectives that are impossible through other means. The value of dramatic images in Hawaii's online showcase is incalculable to our tourist industry.

While there can be privacy issues, the truth is that there are many legitimate uses for this emerging technology that would be unnecessarily curtailed by an outright ban. Rescue work, emergency situation assessment, natural resource management, pollution monitoring and commercial fishing are few of the many possibilities. The technology is so new that it's yet to be determined what other useful purposes they can serve.

Regarding the risk of privacy invasion, much more could be accomplished at much less cost with a camera mounted atop a long pole. A setup like that could be used in all kinds of weather, day and night, in conditions which would prohibit the operation of any UAV. There are already laws in place that protect individual privacy.

Please set aside this bill until more can be learned about the legitimate application of this technology. And let's see what regulations the FAA develops for the use of low-altitude, lightweight UAV's.

Aloha,

A handwritten signature in black ink, appearing to read "Dean Sensui", written over a horizontal line.

Dean Sensui
Executive Producer
Hawai'i Goes Fishing

I would like to go on record as strongly opposing this bill. I am one of many Hawaii UAV operators who safely and conscientiously operate a small remote-controlled unmanned aerial vehicle(UAV or “drone”). As a professional underwater photographer, I am amazed at the revolution in photography that UAVs will bring. I have focused mostly on the underwater realm for the last 14 years, but have recently begun taking pictures with my UAV and amazed at the new frontiers this opens up. Before now if you wanted landscape images you would need to hire a helicopter and have a very restricted range for flying. Remote areas were off-limits. And it is extremely cost prohibitive. UAVs, operated safely and ethically, open up a whole new world of possibilities artistically and commercially.

My concern is that this bill is very poorly thought out. It attempts to restrict all UAV usage and make it illegal for private UAV operators to use their equipment anymore. It would be the most restrictive law passed anywhere in the US and would be a huge deterrent to the growing drone industry in Hawaii. Keep in mind that Hawaii is one of the few states actively cooperating with the FAA to develop UAV regulations. Imagine how ridiculous we would look if we went to the FAA and said “Here are the guidelines, but we mean it for everywhere else because Hawaii is a no-drone state”.

A further concern of mine is that this bill was hastily crafted in ignorance. It reminds me of legislation that was considered to further protect the privacy of celebrities when they visit Hawaii. Legislation that was rightly shot down. Hopefully this bill will see the same fate. Whoever crafted the bill seems to have little understanding of the technology, the industry, or the hobbyist community. The majority of UAVs on the market that also carry cameras carry something like a GoPro. GoPros shoot very wide angle shots—great for landscape images, horrible for trying to take close-up images. Even these UAVs sound like an angry hive of hornets when they are within 200 feet of you. You’re not going to use one of these for stalking or surveillance. In order to achieve a zoomed shot, you will need a larger UAV capable of a larger payload so it can lift the larger camera needed to take the shot. This means a much bigger UAV, a much louder UAV, and still a horrible idea if you want to use it for stalking or surveillance. Also keep in mind that most current UAVs have a battery capacity of 7-25 minutes of flight time. And that gets whittled down to less air time when carrying a heavier payload. In other words, the potential for UAVs to be used to the ends this bill seeks to prevent is remote at best. At its heart, that is the reason why this bill is such a BAD idea. And what’s worse, there are already statutes on the books that prevent stalking of any form. It’s still illegal even if done from a drone or UAV or a car or a helicopter or the 10th floor of a building. This bill is not necessary and it will do a lot more harm than good.

In closing, I would like to tell you that I am in several Facebook groups for UAV users and on a daily basis people from around the world post images and videos of the amazing places they live—Singapore, Malaysia, Ireland, UK, Spain, Italy, Dubai, United Arab Emirates—the list goes on. Other countries are embracing the technology and showing the beauty of their homelands with this new technology. There are a number of us here in Hawaii doing the same. One such UAV pilot had his incredible video footage of Pipeline during winter shown all over the world in online magazines of all types. The exposure for Hawaii was phenomenal. He shot video of Maui’s “Jaws” when it was big during winter and that went viral as well. Think of all the unexplored ideas that await and all the incredible things that can be done with these UAVs. Please don’t kill this avenue of creativity in an ill-thought-out bill to protect privacy in an unnecessary and redundant way.

Mahalo nui loa,

John Johnson

Testimony to SB-2608 – Relating to unmanned aircraft.

OPPOSITION to bill

Thank you Chair Hee, Vice Chair Shimabukuro, and Members of the Senate Committee on Judiciary and Labor:

My name is Lance Jeffery and I would like to make a few comments about Senate bill 2608. I have been heavily involved in Unmanned Aerial Systems for about 2 years now and I have adopted an extremely rigid protocol and set of safety guidelines when flying.

While I am in favor of regulation and safety requirements of Unmanned Aerial Systems (UAS), I am in complete opposition to this bill. Unmanned Aerial Systems should be allowed to be flown by private citizens as long as the proper safety and training protocols are followed. Flying permits can be applied for just as you would any other film permit.

An overall ban on these systems is not the proper way to handle the massively expanding arena of drone use by private citizens for hobby or commercial use.

I am a TV producer and these machines are a game changer for my business. Anyone – be it photography or videography – in the production business or countless other commercial enterprises would testify that UAS systems help us in ways that was never thought possible.

I am a business man and a father and a real life example of someone you would be harming because the time wasn't taken to take a real look at the UAS industry and coming up with industry guidelines.

This current bill does ZERO to ensure safety and privacy of Hawaii's citizens. Prohibiting the use of these machines will not keep them out of the sky. Please understand that I am not trying to be flippant will I tell you that the use of these systems is here to stay. And you need to seize this opportunity to establish regulation and protocol. These machines are not a safety concern or a privacy concern when handled by professionals. They are a tool used to give us a better

product, obtain a valuable vantage point or access hard to reach areas.

I would welcome the opportunity to be a part of the process and I want there to be regulation. We are the professionals in the community and we are here to assist and create guidelines. From hobbyists or professionals shooting a real estate video, there are a lot of people out there being reckless and someone could get hurt, so lets ensure public safety and stringent professional guidelines by throwing OUT THIS bill and working on a real solution together. A solution that allows private citizens fly unmanned aerial systems with safety and proper guidelines in place.

Committees on Transportation and International Affairs and Public Safety, Intergovernmental and Military Affairs

February 17, 2014

Testimony Presented By:

Gabriel Hanohano
Resident of Papakolea area, zip code 96813.

My name is Gabriel Hanohano, I am a resident of the Papakolea area and a model aircraft enthusiast. I am speaking today in opposition to SB2608 SD1.

Specifically, I believe the restriction of "unmanned aircraft" that this bill imposes is too broad in scope because

1. The use of the term "drone" or "unmanned aircraft" targets ALL aerial vehicles, not just "drones." And will negatively affect a large populace of the people of Hawai'i.
2. It does not include an exemption when there is no reasonable expectation of privacy.

Model aviators have been operating what are defined in this bill as "unmanned aircraft" for over 100 years; families, children, enthusiasts, hobbyists, etc. have been enjoying this recreation for generations. However SB2608 haphazardly places ALL aerial vehicles as a "drone" with no regard in differentiation otherwise. Also the bill disregards the use of aerial vehicles for environmental and safety purposes, which in fact STATE divisions are already using aerial vehicles to help benefit and study our lands. Also the benefits and gains of showing imagery from our gorgeous state; its landscapes, its beaches, its beauty to the world only increases our tourism trade. Despite this however, in the end to we wish to deny the joy to ohana and keiki around the state because of the misuse of a single word "drone."??

As with any technology, there is always the potential for misuse, and the violation of privacy is a reasonable concern. We expect certain places to be private, and would certainly feel violated if photographs were taken of us while in those private places. However, as I refer to our 1st Amendment Rights we also accept that other places are not private, and understand that we may have our photographs taken without our consent. Places such as public parks and roads, when we are visiting someone else's property or place of business, or when we are clearly visible from public or private property are examples of these.

SB2608 does not make allowances for surveillance performed when no reasonable expectation of privacy should exist. I believe this omission will lead to a number of unintended consequences for ALL model aviators. Again, I emphasize ALL; model airplanes, helicopters, multi-rotor helicopters, etc. For example, there are actual PUBLIC events at that a club flying fields are open to the public. Events for example are held at Dillingham airfield, Ford Island, Kaneohe Marine Core base airshow, multiple public parks across the state, etc. We may be flying aircraft that intentionally take pictures of the event. These events are enjoyed by hundreds, and at the Kaneohe Marine Core airshow, thousands. This bill would absolutely stop all of that and affect those who never had any intent to invade someone's privacy.

Additionally, SB2608 DOES NOT clarify or define a concern for privacy only a concern for "abuse." , I am very concerned about how intent will be determined and who will determine it? When someone flies an aircraft with a camera, of course they are intentionally taking pictures. Will someone be able to file a complaint because they believe my intent is to photograph them? Again to avoid these definitions and specifics, the bill simply "blankets" ALL aerial vehicles and does not address the TRUE issue here of privacy. Where are these definitions? Why do only the Police have that right? Do the police even know or use so-called "drones" for crime-fighting?

As a final statement I would also like to remind you of the First Amendment Rights: Taking photographs of things that are plainly visible from public spaces is a constitutional right – and that includes federal buildings, transportation facilities, government officials and the public carrying out their daily duties. Simply put, when in public spaces where you are lawfully present you have the right to photograph anything that is in plain view. Airspace IS public space. Such photography whether from the air or ground is a form of expressing their first amendment rights as ALL photographers enjoy and is important in a free society.

While this may not be enough assurance that all model aircraft will be operated in a respectable manner; (do speed limit laws stop ALL cars from being operated respectably?) this form of enjoyment should not be denied simply by the unproven fears of the few.

Mahalo for your time and I hope that my testimony may have shed some light on my opposition of bill SB2608.

I have attached some additional information on pertinent federal law and standards a national association, the Academy of Model Aeronautics that address this matter.

Sincerely,

Gabriel Hanohano
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What is a “Model Aircraft”?

Section 336 of the FAA Modernization and Reform Act of 2012 (Public Law 112-95) [Reference 1] contains the rules regarding operation of model aircraft and a definition: “SEC. 336. SPECIAL RULE FOR MODEL AIRCRAFT.

(a)

IN GENERAL.—Notwithstanding any other provision of law relating to the incorporation of unmanned aircraft systems into Federal Aviation Administration plans and policies, including this subtitle, the Administrator of the Federal Aviation Administration may not promulgate any rule or regulation regarding a model aircraft, or an aircraft being developed as a model aircraft, if—

(1)

the aircraft is flown strictly for hobby or recreational use;

(2)

the aircraft is operated in accordance with a community-based set of safety guidelines and within the programming of a nationwide community-based organization;

(3)

the aircraft is limited to not more than 55 pounds unless otherwise certified through a design, construction, inspection, flight test, and operational safety program administered by a community-based organization;

(4)

the aircraft is operated in a manner that does not interfere with and gives way to any manned aircraft; and

(5)

when flown within 5 miles of an airport, the operator of the aircraft provides the airport operator and the airport air traffic control tower (when an air traffic facility is located at the airport) with prior notice of the operation (model aircraft operators flying from a permanent location within 5 miles of an airport should establish a mutually-agreed upon operating procedure with the airport operator and the airport air traffic control tower (when an air traffic facility is located at the airport)).

(b)

STATUTORY CONSTRUCTION.—Nothing in this section shall be construed to limit

the authority of the Administrator to pursue enforcement action against persons operating model aircraft who endanger the safety of the national airspace system.

(c)

MODEL AIRCRAFT DEFINED.

—In this section, the term “model aircraft” means an unmanned aircraft that is—

(1)

capable of sustained flight in the atmosphere;

(2)

flown within visual line of sight of the person operating the aircraft; and

(3)

flown for hobby or recreational purposes.”

For model aircraft operations, who establishes the “community-based set of safety guidelines” what is the “nationwide community-based organization”?

The Academy of Model Aeronautics [Reference 2] is a “self-supporting, non-profit organization whose purpose is to promote development of model aviation as a recognized sport and worthwhile recreation activity. The organization is open to anyone interested in model aviation. The AMA is the official national body for model aviation in the United States.”

The AMA requires all members to follow a safety code [Reference 3].

The Safety Code makes reference to other requirements when “using the assistance of a camera or First-Person View” and when using an “autopilot or stabilization system”.

Both of those documents contain the explicit privacy protection safeguards copied below [References 4 and 5].

“PRIVACY PROTECTION SAFEGUARDS:

The use of imaging technology for aerial surveillance with radio control model aircraft having the capability of obtaining high-resolution photographs and/or video, or using any types of sensors, for the collection, retention, or dissemination of surveillance data information on individuals, homes, businesses, or property at locations where there is a reasonable expectation of privacy is strictly prohibited by the AMA unless written expressed permission is obtained from the individual property owners or managers.”

What is currently being done at the federal level?

Bills have been introduced in both the United States Senate and House addressing the issue of privacy and the use of “Drones” [References 6 and 7]. Both include an exemption for model aircraft:

“MODEL AIRCRAFT PROVISION.

Nothing in this Act may be construed to apply to model aircraft as defined in section 336(c) of the FAA Modernization and Reform Act of 2012.”

References

1. FAA Modernization and Reform Act of 2012 (Public Law 112-95)

[http://www.faa.gov/regulations_policies/reauthorization/media/PLAW-112publ95\[1\].pdf](http://www.faa.gov/regulations_policies/reauthorization/media/PLAW-112publ95[1].pdf)

2. Academy of Model Aeronautics (AMA)

<http://www.modelaircraft.org>

3. Academy of Model Aeronautics National Model Aircraft Safety Code

<http://www.modelaircraft.org/files/105.pdf>

4. Radio Controlled Model Aircraft Operation Utilizing “First Person View” Systems (AMA Document #550)

<http://www.modelaircraft.org/files/550.pdf>

5. Radio Controlled Model Aircraft Operation Utilizing Failsafe, Stabilization and Autopilot Systems (AMA Document #560)

<http://www.modelaircraft.org/files/560.pdf>

6. S1639 : Drone Aircraft Privacy and Transparency Act of 2013

<http://beta.congress.gov/bill/113th/senate-bill/1639>

7. HR 2868 : Drone Aircraft Privacy and Transparency Act of 2013
<http://beta.congress.gov/bill/113th/house-bill/2868>

I, Charles Devaney, write this testimony in **opposition of SB2608 SD1** which prohibits the use of unmanned aerial platforms for the use of data collection except for use by law-enforcement officials.

SB2608 SD1 refers to “unmanned aircraft” as an “aircraft that is operated without direct human intervention onboard the aircraft.” This definition is too broad in scope when defining “unmanned aircraft” because it includes products that would either never be used by law enforcement for investigative purposes and/or items that are commonly used by both children and adults. For example, the current definition includes children’s toys, such as model airplanes, and other products sold to the average consumer for recreational purposes such as the “A.R Drone” sold at the local Brookstone. The definition would also include unmanned aircraft used by the Nature Conservancy for tracking invasive plants. In fact, the current definition would include numerous products sold in a hobby industry that has existed since the 1930s. Subjecting the average consumer and hobbyist to potential civil liability would effectively crush this industry in Hawaii.

SB2608 SD1 effectively eliminates the civil use of any unmanned aircraft for recreational and/or commercial use. For example, under the SB2608 SD1, as currently written, an individual who takes a photograph in any public place with the camera on his “unmanned aircraft,” and that photograph, even inadvertently, includes a third-party, the individual would be subject to civil liability. This is so even if the individual never publishes the photograph. However, if the same individual takes the exact same photograph with his smart phone, camera, or video camera, the individual is not subject to civil liability.

Moreover, the FAA already has a policy outlining the commercial use of unmanned aircraft which eliminates the need for additional verbiage in a state statute. Specifically, the FAA’s Advisory Circular 91-57 ([linked below](#)), regulates the use of such aircraft and provides that they must be operated a sufficient distance from populated areas, and away from noise sensitive areas such as parks, schools, hospitals, churches etc. The FAA also requires that model aircraft not be flown higher than 400 feet above the surface (AGL). The Circular also states that operation of unmanned aircraft within 3 miles of airport requires notification to the control tower or flight service station.

SB2608 SD1 does not include an exemption for civil use where there is no reasonable expectation of privacy.

Let Hawaii grow! SB2608 SD1 as written is non productive and destructive to research and public safety.

Charles Devaney

Student/Researcher

University of Hawaii at Manoa

Greetings to all who are here, Respected members of this committee, Ladies and gentlemen.

My name is William Van Osdol, who also goes by the name of Billy V.; a 31 year veteran of broadcast here in our community.

To all of you that are here, Aloha no, Aloha Kākou.

I am here today in opposition to the bill you are now considering.

I have always stood on the forefront of technology since I became involved with broadcast. I came from the time where reel-to-reel tape was used and edited, and have been happy to be thrust upon the age of computers where paper use in the studios are diminishing. We no longer house records or CD's as everything is a soundfile. New songs are sent to us via email or the internet. I was among the first broadcasters using an iPad regularly on morning television. 18 months ago I purchased my first drone.

Drones have come a long way in the relative short time they have been available to the public. From just being a novelty, to it's actual use in the field for normal consumers. This bill will end that very quickly.

While I do not have a solution for the problems you are trying to avoid with this relatively new technology; I can only stand before and tell you how I've used it responsibly.

First my excitement about flight. I wanted to fly from when I was a child. While working for KCCN FM 100 radio in the 1990's I was on-air in the afternoons and flew for a time of 9 months in a small Cessna 150 as a passenger doing traffic reports for then radio personality/now Senator Brickwood Galuteria and Kimo Kahoano; flying back and forth, in and out of Class C airspace over O'ahu.

After becoming dear friends with those who would pilot the aircraft, I became interested in flying myself garnering over 100 hours of flight time. As hours and duties changed I found myself not flying anymore and today unable to command an aircraft for medical reasons.

My joy of flying has never diminished, so when the chance to fly drones that would have cameras to be able to fly and see the standpoint of flying

from the “cockpit”/front view was exciting. To pilot the aircraft was exciting. I have spent many flight hours practicing with my drone practicing to be able to fly it with precision, confidence and able to produce shots that would be either useful or wonderful.

I have used the drone flying above while walking thru the Kane‘ohe Christmas Parade. I have used it to film the UH Band and Athletics members having a Jingle Bell Run event on the UH Campus. I have taken it to several places on the island of O‘ahu and I have both video and still photography shots of the Pali Lookout, over Magic Island at Ala Moana Beach Park, in Hau‘ula, over my house in Alewa; can‘t wait to take video and pictures over Kamehameha Schools Ho‘olaule‘a, Events with the American Cancer Society, Eat The Street, Lantern Floating Hawai‘i and 40,000 people; since I am at a LOT of events.

On several occasions I have been approached by photographers in events such as yesterdays Great Aloha Run and said, “I‘ll buy that from you right now”. I‘ve never sold any of the photos or footage that I‘ve taken; although I‘ve posted them on either the Hawaiian 105 KINE or personal Facebook almost everytime.

I am hopeful that I will be able to continue this hobby that I so much enjoy; it allows me to continue something that I can no longer do in regards to flight, get the beauty shots of our Hawai‘i nei that I couldn‘t do otherwise and enjoy the great outdoors in a way I could not do otherwise from the air. Legally.

While my voice is in opposition of the bill in current form, I also understand and recognize the reasons why it is important to look into this new technology and to be ahead of the game in its responsible use.

Mahalo Nui Loa, Mālama Pono.

Committees on Transportation and International Affairs and Public Safety, Intergovernmental
and Military Affairs

February 17, 2014

Testimony Presented By:

Travis J Ryan

Resident of Honolulu, 96814

My name is Travis Ryan. I am a resident of Honolulu, and an entrepreneur currently researching the use of model aircraft and supporting platforms to simplify and enhance existing logistics and sensing methods. I am speaking today in opposition to SB2608 SD1.

Identified Issues

SB2608 SD1 refers to “unmanned aircraft” as an “aircraft that is operated without direct human intervention onboard the aircraft.” This definition is too broad in scope when defining “unmanned aircraft” because it includes products that would either never be used by law enforcement for investigative purposes and/or items that are commonly used by both children and adults. For example, the current definition includes children’s toys, such as model airplanes, and other products sold to the average consumer for recreational purposes such as the “A.R Drone” sold at the local Brookstone. The definition would also include unmanned aircraft used by the Nature Conservancy for tracking invasive plants. In fact, the current definition would include numerous products sold in a hobby industry that has existed since the 1930s. Subjecting the average consumer and hobbyist to potential civil liability would effectively crush this industry in Hawaii.

SB2608 SD1 effectively eliminates the civil use of any unmanned aircraft for recreational and/or commercial use. For example, under the SB2608 SD1, as currently written, an individual who takes a photograph in any public place with the camera on his “unmanned aircraft,” and that photograph, even inadvertently, includes a third-party, the individual would be subject to civil liability. This is so even if the individual never publishes the photograph. However, if the same individual takes the exact same photograph with his smart phone, camera, or video camera, the individual is not subject to civil liability. Moreover, the FAA already has a policy outlining the commercial use of unmanned aircraft which eliminates the need for additional verbiage in a state statute. Specifically, the FAA’s Advisory Circular 91-57 ([linked below](#)), regulates the use of such aircraft and provides that they must be operated a sufficient distance from populated areas, and away from noise sensitive areas such as parks, schools, hospitals, churches etc. The FAA also requires that model aircraft not be flown higher than 400 feet above the surface (AGL). The Circular also states that operation of unmanned aircraft within 3 miles of an airport requires notification to the control tower or flight service station.

SB2608 SD1 does not include an exemption for civil use where there is no reasonable expectation of privacy.

Proposed Changes

I propose an amendment to SB2608 SD1 to define “unmanned aircraft” explicitly exempting “model aircraft” from its definition. Model aircraft include but are not limited to airplanes, helicopters, multi-rotor helicopters, and gliders. These are all types of “unmanned aircraft” that are generally used by average individuals for recreational use -- not by law enforcement or other governmental entities for investigative purposes.

I propose an amendment to SB2608 SD1 to include an exemption for civil use where there is no reasonable expectation of privacy and within existing FAA guidelines.

I propose an amendment to SB2608 SD1 to include an exemption for civil use of “unmanned aircraft” that takes into account the subjective intent of the user so that a legal line may be drawn between innocent recreational use and illegal criminal activity.

Final Thoughts

I would like to remind this committee that the bedrock of American judicial proceedings is the presumption of innocence principle. This means the burden of proof is on he who declares, not he who denies. By presuming that any non-governmental use of “unmanned aircraft” necessarily violates the right to privacy, SB2608 SD1 infers that the civil use of unmanned aircraft will always be nefarious in nature. This clearly runs counter to presumption of innocence and unnecessarily vilifies the overwhelming majority of “unmanned aircraft” enthusiasts. The inclusion of exemptions such as those outlined above will prevent individuals who use “unmanned aircraft” for purely recreational use from being subjected to unwarranted civil liability. It will also allow individuals like myself to continue research and development of technologies our law enforcement and rescue teams can utilize right here in Hawaii!

Senator Clayton Hee mentioned “The intent is to go slow, to do it properly.” As I’m sure Senator Hee would agree, technology companies move very quickly as new innovations can sometimes happen overnight. Inflexible regulation cannot keep pace with rapidly developing technologies. Passing an overly broad bill like SB2608 SD1 would stymie the dynamic ingenuity upon which Hawaii’s entrepreneurs and inventors thrive. Beyond the identifiably affected industries lies a landscape of potential discovery and innovation that SB2608 SD1 would effectively barricade. So if the intent is to “do it properly,” let’s do this in a way that fosters innovation and protects the good people of Hawaii from frivolous liability. Let’s stick with existing FAA regulations; include language that takes into account the intent of the average, non-governmental user; and push the people & law enforcement to uphold the core principles of our justice system and prove nefarious intent.

I implore this committee to leave the gateways to discovery and innovation unobstructed by superfluous legislation that contravenes these principles. Don’t put an obsolete label on Hawaii. Let’s encourage innovation!

References

FAA Advisory Circular 91-57

http://www.faa.gov/documentLibrary/media/Advisory_Circular/91-57.pdf

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Date: Monday, February 17, 2014 10:06:55 AM

SB2608

Submitted on: 2/17/2014

Testimony for JDL on Feb 18, 2014 10:00AM in Conference Room 016

Submitted By	Organization	Testifier Position	Present at Hearing
Lee McIntosh	Individual	Support	No

Comments: Mr. Chair and Members of the Committee on Judiciary and Labor: Aloha, my name is Lee McIntosh and I live on the Big Island. I support SB2608 SD1, which prohibits the use of unmanned aircraft except under certain conditions. I have some recommendations that I hope the committee will consider: The definition of aircraft is not defined. Can a model airplane or helicopter fall under this definition? Under exceptions, (1) should be deleted and fall under (2). No agency, state or federal, for any reason, should be able to operate an unmanned aircraft without a warrant. Please give consideration for exceptions for private businesses that may wish to use an unmanned aircraft for something related to their business that does not pose a threat to privacy or safety, such as taking pictures of a large property or house to help in its sell. Thank you for the opportunity to testify regarding SB2608 SD1.

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SB 2608
SUPPORT

Aloha & Mahalo for the opportunity to testify in Support of this Bill! My name is Lisa Mitchell, and I appreciate the legislative intent of this bill to narrow the uses of unmanned aircraft, given the federal mandate(s) !!!

Ideally, I support a PEACEFUL & Enlightened society with cutting edge technology to improve conditions for our environment & its people

But, as stated; technology gets Abused!!!

This bill does a good job in curbing the appetite of the abuse & I therefore support its passage.

MAHALO NUI

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SB2608

Submitted on: 2/17/2014

Testimony for JDL on Feb 18, 2014 10:00AM in Conference Room 016

Submitted By	Organization	Testifier Position	Present at Hearing
Marcus Reimel	Individual	Oppose	No

Comments: My name is Marcus Reimel and I am an avid photographer for over 20 years in Hawaii. I have recently began using a remote controlled model aircraft to take photos and video with a wide angle GoPro. It is an amazing new perspective to see Hawaii's natural beauty. I am concerned that the language in this bill will restrict hobbyists using it in a safe manner, according to the FAA advisory of 1981. While I appreciate the intent of this bill to protect the privacy of the public, I believe it is premature since the FAA has stated they are working on drafting new measures by next year. Also, they are doing testing and Oregon has partnered with Alaska and Hawaii to study larger drones. I suggest you look at how Oregon defined a drone to not include model aircraft in their legislation (Oregon HB 2710). This would be a great amendment to SB 2608. Thank you for your consideration. Aloha, Marcus Reimel

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SB2608

Submitted on: 2/17/2014

Testimony for JDL on Feb 18, 2014 10:00AM in Conference Room 016

Submitted By	Organization	Testifier Position	Present at Hearing
Gabriel Hoeffken	Individual	Oppose	No

Comments: I think the bill is too broad and will have many negative and unintended consequences for our people and economy. This bill would make it illegal for RC hobbyists to fly with any type of camera attached. This would be unfair as many long-time RC hobbyists have invested much time, money and energy into this hobby. Most of these people have no interest in eaves dropping on their neighbors nor is most hobbyist level gear capable of this. Most cameras used in this hobby like the well know Gopro line of cameras are wide-angle, meaning they do NOT get a close-up detailed view of what they are recording. (For this you would need a tele-photo lens, which would require a much more substantial drone as well as expensive heavy duty stabilization) This law will also effect film-makers and photographers whom are already using this technology to great positive effect. Imagine a production company deciding to use an alternate location as it will be illegal for them to use their drone mounted cameras here in Hawaii. Lastly, the FAA is currently working on guild-lines for unmanned drone aircraft which should be out next year, why not wait and see what their guild-lines are first, then if needed pass additional legislation if needed.

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SB2608

Submitted on: 2/17/2014

Testimony for JDL on Feb 18, 2014 10:00AM in Conference Room 016

Submitted By	Organization	Testifier Position	Present at Hearing
Joel dela Cruz	Individual	Oppose	No

Comments: The bill as written doesn't seem to make any exception for private property. Sort of like the use of drugs is illegal on private or public property. As written I see no exception. So if a blimp with a camera on private property would be illegal. As written it would make it illegal to fly a toy rc chopper with a camera inside your house. Looks like weather balloons would be illegal as well.

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February 17, 2014

Aloha.

I am writing in **opposition** to SB 2608 SD 1 **as it is currently written**.

While protection of citizens from unreasonable and possibly unlawful surveillance is a noteworthy objective, particularly in light of Public Law 112-95 (2012), passage of SB 2608 SD 1 with its present language may prove harmful to private citizens and to the vast array of businesses who may use unmanned aerial vehicles for photography, filmmaking, and research.

Specifically, §803-B, which reads in part: "...it shall be unlawful for any law enforcement agency, state or local public agency, **person, or entity** to use an unmanned aircraft to gather information, including but not limited to **images, photographs, or recordings**."

Taken in this broad context, this language would in essence prevent photographers, videographers, and filmmakers from filming anything in the air without hiring a helicopter, plane, or other manned aircraft.

Having made a film in Hawaii that required aerial photography, I know firsthand that it is an incredibly costly exercise. Surely, the proliferation of a much less expensive and more environmentally-friendly technology to accomplish the same purpose is something we should be encouraging.

Other states that have passed legislation in this regard have enacted proscriptions on the use of drones by law enforcement (Florida and Illinois, as examples), using specific language demonstrating that the intent of their new statutes were to protect citizens from unlawful surveillance, not issuing a blanket embargo on the use of these aircraft.

Further, some state legislation (Idaho) has specifically delineated that use of unmanned aerial vehicles for commercial photography activity was exempt from the enacted prohibitions.

Clearly, resolution of the privacy, surveillance, and probable cause warrant issues is paramount, but surely we can accomplish that while also ensuring that the absolutely lawful use of this technology for commercial purposes is not unnecessarily curtailed at the same time.

Respectfully,

Matthew A Nagato

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SB2608

Submitted on: 2/17/2014

Testimony for JDL on Feb 18, 2014 10:00AM in Conference Room 016

Submitted By	Organization	Testifier Position	Present at Hearing
Brandt Haapala	Individual	Oppose	No

Comments: I, Brandt Haapala oppose SB2608. In the past few years quadcopters have become very popular in photography and videography fields. Some of the most amazing footage and pictures of Hawaii that I have seen has been has been filmed from a quadcopter. As an extreme sports enthusiast I feel the best way to capture the action is from an aerial perspective. I also feel it would be extremely beneficial for farming, dlhr, real estate aerial photography, sporting events, weddings, search and rescue, surveying, and the list goes on. Please take this into consideration as it would be a blow to all other fields beyond law enforcement.

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SB2608

Submitted on: 2/17/2014

Testimony for JDL on Feb 18, 2014 10:00AM in Conference Room 016

Submitted By	Organization	Testifier Position	Present at Hearing
Patrick J. Moore	Individual	Oppose	No

Comments: This proposed law makes no sense! There are many good reasons for drone use by private citizens! It is not right to try to not allow law abiding citizens the right to take video and photos from the air. The craft typically can fly less than half an hour. The proposed law is also unenforceable. Please vote "no" on this ridiculous idea. Mahalo.

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SB2608

Submitted on: 2/17/2014

Testimony for JDL on Feb 18, 2014 10:00AM in Conference Room 016

Submitted By	Organization	Testifier Position	Present at Hearing
Josephine Sanchez	Individual	Oppose	No

Comments:

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SB2608

Submitted on: 2/17/2014

Testimony for JDL on Feb 18, 2014 10:00AM in Conference Room 016

Submitted By	Organization	Testifier Position	Present at Hearing
Jae Kwak	Individual	Oppose	No

Comments: Senators, I believe this bill was crafted with the intent of limiting UAV use for the purposes of law enforcement. Before the military began using drones for combat and surveillance use, the hobbyist community enjoyed the global camaraderie of radio controlled aerial vehicles, ie. rc helicopters, planes, and multicopters. This bill is overly reaching and too broad in its interpretation. The FAA in its wisdom allows the use of aerial vehicles for personal use, and strictly prohibits rc flight for commercial usage. I believe some language must be embedded into this bill to acknowledge the hobbyist community and the personal use of rc aircraft for recreational use. Please exempt personal use of rc aircraft with or without still or video cameras from this bill. There are existing statutes on our books that regulate surveillance. Please do not create additional legislation without understanding the ramifications and unintended consequences. There is nothing more breath taking than flying an rc vehicle over the shorelines of the north shore, or tracking the movements of an amazing surfer, or getting a birds eye view of Waianae and sharing this through video. Please do not take this from the hobbyist community. Thank you.

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SB2608

Submitted on: 2/17/2014

Testimony for JDL on Feb 18, 2014 10:00AM in Conference Room 016

Submitted By	Organization	Testifier Position	Present at Hearing
Paul Hanada	Individual	Oppose	No

Comments: Please do not allow this bill to move forward. Thank you.

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SB2608

Submitted on: 2/17/2014

Testimony for JDL on Feb 18, 2014 10:00AM in Conference Room 016

Submitted By	Organization	Testifier Position	Present at Hearing
Kaimana	Individual	Oppose	No

Comments:

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SB2608

Submitted on: 2/17/2014

Testimony for JDL on Feb 18, 2014 10:00AM in Conference Room 016

Submitted By	Organization	Testifier Position	Present at Hearing
tony lathrop	Individual	Oppose	No

Comments: Aloha, I would like to submit my opposition to the proposed bill limiting the use of personal recreational or commercial UAV devices. The bill as written is far to limiting on the freedoms of Americans. As written it's obvious that no thought has gone into the economic impacts to an industry ready and able to contribute to the economy and government tax collection. Please abandon this bill until more balanced and fair thought can be put into it.

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Attachments: [SB2608.doc](#)

SB2608

Submitted on: 2/17/2014

Testimony for JDL on Feb 18, 2014 10:00AM in Conference Room 016

Submitted By	Organization	Testifier Position	Present at Hearing
Richard Blatt	Individual	Comments Only	No

Comments: To Whom It May Concern, There is a quiet buzz in the press as of late concerning the use of drones. This buzz is getting louder by the day, in fact as many as 11 states and counting are proposing legislation to regulate the use of drones in some form or another [citation A]. While it may be frightening to imagine tiny surveillance robots peering into your bedroom windows; that is simply not all that is at stake here. Much of the proposed legislation reaches far beyond regulating potentially invasive drone activity, and essentially criminalizes something that can otherwise be a fun and beneficial hobby. There has been a massive growth in the remote-controlled aircraft hobby that is centered around piloting a small (most commonly 2-10 lbs), oftentimes foam-constructed model aircraft via a low-resolution video camera; this is called FPV or first-person view flying [Citation G]. The image captured by the camera is transmitted from the aircraft to the pilot, via radio waves [Citation E]. The pilot can then fly and navigate from a small screen or goggles with embedded-screens. Sometimes high definition cameras are attached to these aircraft and are used to record stunning videos of beautiful countryside. As a safety measure, and navigational aid, these aircraft are often, but not always - depending on the purpose of the aircraft, equipped with flight sensors [Citation B], GPS sensors and/or a compass. Many of the model aircraft are equipped with flight stabilization systems as well. These sensors and stabilization systems enable the pilot to view navigational data, which is superimposed onto the video feed in the form of GPS coordinates, critical flight data [Citation C] and even an arrow pointing towards the launch point. The sensors and data also enable the airplane to automatically and safely fly back to the point at which it was launched in the unlikely event that control of the aircraft is lost. Thousands of regular people are enjoying this hobby. Many universities and companies are even utilizing the technology to do scientific research and schools are also using the technology as a relatively inexpensive, and fascinating way to engage young students in learning the fundamentals of flight and engineering, as well a develop skills in math and science [Citation F]. For the vast majority of people who participate in flying camera-equipped model aircraft, the thought of invading the privacy of others is practically non-existent; we are simply enjoying the hobby and the opportunity to view our world from a birds-eye view. While it is possible that a person's private property may be filmed in the process, it is

certainly not the intent. As all of the fear and paranoia that surrounds drones continues to spread, broad legislation continues to be proposed. I feel it is very important to make a clear distinction between drone activity that is invasive, and drone activity that is fun, safe, educational and rewarding [Citation D] . In other words, there is a whole other side of this drone debate that is going completely unheard and if you will give hobbyists the time, they would be grateful for the opportunity to present the case of the “good drone” on behalf of the hobby and educational communities who are greatly benefitting from, and enjoying this wonderful new area of technology. Finally, on behalf of local hobbyists, I would like to encourage the creators of this bill to consider adding a clause that would exclude hobbyists from the restrictions posed in SB2608. Feel free to contact me for more information regarding FPV and hobby-related UAV activity. Thank you for your time. Respectfully, Richard Blatt

A brief word about myself, I am a US Navy Veteran and stay-at-home father of two. I enjoy flying model airplanes through the use of FPV as a hobby.

Citation A: 1) Article that briefly describes 9 states proposing anti-drone legislation: <http://www.dronejournalism.org/post/42042217053/update-nine-states-looking-to-restrict-uav-use-more> 2) One particularly broad and over-reaching bit of legislation proposed in Oregon: <http://www.leg.state.or.us/13reg/measpdf/sb0001.dir/sb0071.intro.pdf> 3) Citation B: Flight sensors include airspeed, altitude, battery voltage, battery current and more. Citation C: Critical flight data includes airspeed, ground speed, distance from pilot, altitude, temperatures, motor rpm and more. Citation D: 1) http://www.youtube.com/watch?feature=player_embedded&v=h5SLm59rP6A 2) http://www.youtube.com/watch?feature=player_embedded&v=br9FWCZSdCQ 3) http://www.youtube.com/watch?feature=player_embedded&v=A7z9dv6mVs8 Citation E: The use of video transmitters requires the user to obtain a HAM radio license. Citation F: High School level: a) <http://juneauempire.com/state/2011-08-22/fairbanks-high-school-student-makes-unmanned-aircraft-project-public-service#.URKEI6WzgSQ> b) <http://www.suasnews.com/2012/02/11842/outback-challenge-high-school-competition-2012-rules-released/> c) <http://www.allvoices.com/contributed-news/13949476-flying-a-helicopter-with-your-brain> Citation G: Model aircraft types include Fixed-wing and rotor-style aircraft and even lighter than air aircraft (balloons and blimps).

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SB2608

Submitted on: 2/18/2014

Testimony for JDL on Feb 18, 2014 10:00AM in Conference Room 016

Submitted By	Organization	Testifier Position	Present at Hearing
Justin Edwards	Individual	Oppose	No

Comments: I was involved with a bill in Texas that wanted to protect people from privacy invasion from drones and I learned many things about this that I wanted to share. I am also an avid RC pilot and enjoy flying multicopters commonly referred to as "drones". Small remote control helicopters should not be lumped into bill even if people refer to them as "drones". People's privacy should be protected and the best way to do this is to make sure the bill makes the INTENTIONAL use of UAVs / Drones for spying on others illegal. This way, you target the .01% that might want to harm others while letting the vast majority of people learn, create, and enjoy their hobby. I think it is very important that you specifically name the things that are prohibited versus banning them outright. There are so many positive things that can be accomplished through the use of our tiny remote control helicopters (they really are not drones) that putting in a general ban will not only likely stifle the Hawaiian technology economy but will also prohibit many useful things that benefit all peoples; things like whale research, invasive species invasion, crop monitoring, etc etc - the list goes on and on. Thank you for your time and consideration. Sincerely, Justin Edwards

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To: [JDLTestimony](#)
Cc: david.freitas82@gmail.com
Subject: Submitted testimony for SB2608 on Feb 18, 2014 10:00AM
Date: Tuesday, February 18, 2014 7:05:56 AM

SB2608

Submitted on: 2/18/2014

Testimony for JDL on Feb 18, 2014 10:00AM in Conference Room 016

Submitted By	Organization	Testifier Position	Present at Hearing
Kawika Freitas	Individual	Oppose	No

Comments: I do not support this bill, it prohibits growth. We need to be more open to other industries to help promote something besides Tourism.

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From: mailinglist@capitol.hawaii.gov
To: [JDLTestimony](#)
Cc: mauikennels@yahoo.com
Subject: Submitted testimony for SB2608 on Feb 18, 2014 10:00AM
Date: Tuesday, February 18, 2014 7:18:45 AM

SB2608

Submitted on: 2/18/2014

Testimony for JDL on Feb 18, 2014 10:00AM in Conference Room 016

Submitted By	Organization	Testifier Position	Present at Hearing
Tamara McKay	Individual	Oppose	Yes

Comments: Regarding this bill for unmanned aircraft and banning its use is unconstitutional. It is understood that setting guidelines to assist in controlling misuse is understandable, but to ban the use without considering solutions and how it impacts the creative use for photographers and videographers is unjust. I am a current and recent owner of the phantom drone, and have added it to my business possibilities such as over head shots for real estate agents who sell large properties. We take into account neighbors and their privacy. I also use my drone for ranching photography as well as Polo events. This is done with the permission and encouragement of the ranches and Polo associations. I chair a fair event, and find it useful for overhead shots to properly layout the placement of tents and activities. I could go on with a list of the creative uses for this piece of equipment, but would like to focus on a solution. Let's consider obtaining a license to fly for professional photographers. As with the hunting license in Hawaii, you can renew annually for a small fee, but you have to attend a hunters course in the beginning. This would help regulate ensuring the proper use, guidelines, safety, trespassing and cover privacy topics. If questioned by the authorities, a photographer must present their card. I would suggest a card with the photographers photo on it to avoid any misuse. Doing this simple action would not only assist in proper use and protection, but will draw revenue for the local county and states. I hope that you will consider my solution rather than ban creativity with the new equipment available. Cell phones have been in every aspect of our lives and allowed in restaurants to record countless situations...good and bad. Arial photography can be regulated and allow amazing positive uses, along with allow artist to show the world another view of the beauty around us. Thank you for your time and consideration. Mahalo Nui Loa Tamara McKay (808)280-0928

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I'm Todd Stellanova, founder of Droneflow, an unmanned aerial robotics startup in Hilo on the Big Island.

Although this bill is well-intentioned, it would harm the budding civilian drone technology sector in Hawaii. We are working with the University of Hawaii and others to develop peaceful drone applications in areas such as agriculture, livestock monitoring, conservation of rare and endangered species, volcano monitoring, and wildfire tracking. The bill as written restricts drone use to a very narrow portion of the many beneficial uses drones may have. Furthermore, the bill is somewhat redundant as the FAA has already restricted commercial drone use a great deal, and in fact the law enforcement uses the bill allows are specifically disallowed by the FAA without going through a lengthy approval process. This bill does nothing to help Hawaii participate in the growing drone technology field, but it does muddy the water with laws that conflict with federal policies.

The senators may not be aware that Hawaii was selected, as part of a Alaska-Hawaii-Oregon consortium, as one of a handful of FAA-approved test sites for unmanned aerial vehicles. There was an intense competition to win this award, and Hawaii beat out major drone development centers in California and elsewhere. We need to take advantage of this award to develop high-tech jobs in Hawaii.

I recently gave a presentation at the Hawaii TechWorks startup incubator in Hilo on the many potential peaceful uses of civilian drones, and why it makes sense to develop and test new drone technology in Hawaii specifically. A full video of this presentation is available here: <https://www.youtube.com/watch?v=KHDterAfS4Y>

I encourage everyone to learn all they can about the many potential uses for aerial robots, rather than assuming that all drones are good for is peeking over your neighbor's fence. Instead, let's explore how Hawaii can take advantage of drones to do jobs that are dirty, dangerous, or dull.

From: mailinglist@capitol.hawaii.gov
To: [JDLTestimony](#)
Cc: jonikamiya@gmail.com
Subject: Submitted testimony for SB2608 on Feb 18, 2014 10:00AM
Date: Tuesday, February 18, 2014 7:30:33 AM

SB2608

Submitted on: 2/18/2014

Testimony for JDL on Feb 18, 2014 10:00AM in Conference Room 016

Submitted By	Organization	Testifier Position	Present at Hearing
Joni Kamiya	Individual	Oppose	No

Comments: We should not ban technology until we know the full scope of the applications of it. Asking for a ban at the request of conspiracy theorists is illogical and will have unintended consequences for others who can and use this technology to so many other fields from agriculture to photography and environmental studies. Enough with activists' ignorance and use rational thinking in our laws.

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To: [JDLTestimony](#)
Cc: randy@randyjaybraun.com
Subject: Submitted testimony for SB2608 on Feb 18, 2014 10:00AM
Date: Tuesday, February 18, 2014 7:33:50 AM

SB2608

Submitted on: 2/18/2014

Testimony for JDL on Feb 18, 2014 10:00AM in Conference Room 016

Submitted By	Organization	Testifier Position	Present at Hearing
Randy Jay Braun	Individual	Comments Only	No

Comments: As written, this bill prohibits any citizen from making an aerial photograph or video from an unmanned aerial vehicle, with no exceptions. Yet, this bill allows for law enforcement agencies to be the only exceptions to the law and apply for the use of UAV photography. The bill is an attack on photographers, film makers, and artists. Invasion of personal privacy has not been, and will not be an issue that is related to consumer level "drones". For example, the tiny GoPro-type cameras attached to these quadcopters have super-wide angle lenses which generally render any person unidentifiable beyond 50 feet in distance. I am one of the approximately 100 serious UAV flyers in Hawaii who makes low aerial images for the sake of art. The assumption that we are spying on other people stems from mis-information, and their fear of the unknown. (Google Earth already has all of our back yards posted publicly, so this point is mute.) Personally, I plea that this "knee-jerk" response to an amazing new and safe technology be placed on hold at least until the FAA re-evaluates guidelines for small-format UAV's. We UAV/Photography enthusiasts in Hawaii are already beginning to self-regulate. I ask that you continue to allow our unique island state to be explored from new angles. Give us the flexibility to create artistic images without hiring an expensive, dangerous, obtrusive manned helicopter. Please become informed about this safe technology and how these UAV's may be used for social goodness. Thank you for my opportunity to testify to your committee.
Sincerely, Randy Jay Braun Camera Artist Kula, Maui, Hawaii

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SB2608

Submitted on: 2/18/2014

Testimony for JDL on Feb 18, 2014 10:00AM in Conference Room 016

Submitted By	Organization	Testifier Position	Present at Hearing
Larry Osborn	Individual	Oppose	Yes

Comments: Recently the Federal Aviation Agency (FAA) announced the selection of six sites from among more than two dozen applicants to serve as test ranges to "allow the agency to develop research findings and operational experiences to help ensure the safe integration of UAS (unmanned aircraft systems) into the nation's airspace..." Today UAS cannot routinely fly in the U. S. national airspace (NAS) and their use by our government agencies is severely limited because of this. Commercial use of UAS in the NAS is prohibited except for training and research. The Association for Unmanned Vehicle Systems International (AUVSI) estimates that it costs the American economy \$27M a day for every day that UAS are not integrated into the NAS. Moreover, the same study predicts that integration of UAS into the NAS will create more than 34,000 manufacturing jobs and more than 70,000 new jobs in the first three years. The economic benefit to Hawaii alone is projected to be \$194M in the next ten years. Alaska leads the nation in the use of UAS. They are used to count wildlife, study fisheries, inspect pipelines, and monitor the environment. In Hawaii similar opportunities exist. In addition to those mentioned above, UAS applications in the future in Hawaii will likely include precision agriculture, identification and eradication of invasive species, cinematography, search and rescue, law enforcement, harbor security, and disaster response. The list will grow as they can be safely operated in our airspace. Every dollar allocated by our legislature in support of the FAA test site effort has the potential to multiply, bringing jobs and economic benefit directly to the people of Hawaii. Our local schools that deliver STEM education programs to our children are preparing the workforce now. Hawaii is teamed with Alaska and Oregon as part of what has been named the Pan-Pacific Test Site, one of the six officially designated FAA Test Sites. As early as six months from now UAS (in addition to those already being operated locally by military and civil agencies) may begin operating in Hawaii skies in support of the airspace integration effort. It is only natural that questions need to be answered about noise, safety, and personal privacy as we prepare to host this activity in our state. The unmanned aircraft supporting airspace integration will operate initially in restricted airspace over sparsely populated areas, or over the open ocean. As confidence is gained in the reliability of the vehicles, their control systems, and the procedures developed to ensure safe operations in controlled airspace, they may be seen along defined airways or approach corridors to our airports, where you now see

manned military, commercial and private aircraft. UAS will not be flying in our residential neighborhoods. Thus it is extremely unlikely that the testing contemplated by the FAA and commercial interests in Hawaiian airspace will even be discernible to the public. With the proliferation of UAS technology and the ease with which it can be employed, comes the possibility of misuse. Because of this our state legislature is contemplating several laws to protect the privacy of individuals. Some public advocacy groups are concerned that the proposed legislation does not go far enough, while others representing law enforcement argue that they will be restricted from effectively discharging their responsibilities. The right balance in privacy legislation can be found in a set of guidelines developed by the Aerospace States Association (ASA) a bi-partisan organization of Lieutenant Governors and state appointed delegates formed to promote a state-based perspective in federal aerospace policy development. In constructing these guidelines, ASA polled such diverse groups as the American Civil Liberties Union (ACLU), The Electronic Privacy Information Center (EPIC), the Association for Unmanned Vehicle Systems International (AUVSI), an industry association Academia and legal experts were also consulted. The recommendations by ASA are quoted below.

Warrants: States may consider requiring a warrant for government surveillance of an individual or their property where the individual is specifically targeted for surveillance in advance without their permission. All other observation activities should not require a warrant, to the extent allowed under Supreme Court rulings. Additionally, if there is not a specific person identified for surveillance in advance, it is generally not possible to obtain a warrant. Requiring one would eliminate UAS benefits, but can be addressed per recommendation number two, below.

Data Concerns: Some are worried about government use of data derived from warrantless observations. States may consider addressing this by prohibiting the repurposing of data collected from Government use of UAS in warrantless observation unless a warrant allows the repurposing. States may consider prohibiting commercial UAS and model aircraft flights from tracking specific, identifiable individuals without their consent. States can consider prohibiting weapons to be carried by any UAS in commercial airspace.

5. States may consider endorsing the International Association of Chiefs of Police Aviation Committee (IACP) "Recommended Guidelines for the use of Unmanned Aircraft." These guidelines define UAS and provide guidance for community engagement, system requirements, operational procedures, and image retention for UAS operations by law enforcement organizations. States may consider emphasizing that the FAA regulates commercial UAS, and that they and model aircraft operations should be operated in a manner not to present a nuisance to people or property. Legislation that goes beyond these guidelines, such as proposals to limit the use or ownership of UAS, or statutes that require UAS registration with the state, will adversely impact Hawaii's economy, unduly limit the effectiveness of agencies charged with law enforcement, and saddle state officials with expensive and burdensome regulatory responsibilities that are unnecessary. The privacy and safety of the public can be adequately protected by following the guidelines above, while preserving the legitimate and necessary prerogatives of law enforcement officials to discharge their responsibilities. UAS integration into the NAS will usher in an exciting future featuring new products, services, jobs, and economic growth. Most importantly, Hawaii has an opportunity to lead. None of this can happen if this bill is made into law.

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Cc: Charles.K.Chai@hawaii.gov
Subject: Submitted testimony for SB2608 on Feb 18, 2014 10:00AM
Date: Tuesday, February 18, 2014 7:57:18 AM

SB2608

Submitted on: 2/18/2014

Testimony for JDL on Feb 18, 2014 10:00AM in Conference Room 016

Submitted By	Organization	Testifier Position	Present at Hearing
Charles Chai	Individual	Oppose	No

Comments: I am opposed to SB2608 as it is too restrictive on the rights of civilians in using unmanned aircraft (drones) for recreational use. The FAA already prohibits commercial use of drones without a permit. The text of the bill suggests that cameras on unmanned aircraft are only used to violate privacy. However, in actual use that is rarely the case. See Eric Sterman's drone video of surfing entitled "Pipeline Winter 2013". Drones tend to be flown in public areas such as parks, beaches, with use in private areas being the yard of the owner. Furthermore, due to the height that these drones fly at and the wide angle of the camera lens, the images these drones captures are those of landscapes rather than details of individual people, and it is not against the law to take photographs in public places. If the bill is truly focused on preserving rights to privacy, this can be done through other means than outright banning use for all citizens of the state. The issues with privacy and surveillance are already covered in HRS §711-1111 "Violation of privacy in the second degree", concerning surveillance in a private place. Why not simply extend that statute to apply to drones as well? This way, people could still continue to operate drones at public areas as they are now while putting in place restrictions to prevent violations of privacy as already defined in existing statute.

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Cc: kahokuvideoproductions@gmail.com
Subject: Submitted testimony for SB2608 on Feb 18, 2014 10:00AM
Date: Tuesday, February 18, 2014 8:04:03 AM

SB2608

Submitted on: 2/18/2014

Testimony for JDL on Feb 18, 2014 10:00AM in Conference Room 016

Submitted By	Organization	Testifier Position	Present at Hearing
K Young	Individual	Oppose	No

Comments: the eminent banning of the use of an unmanned vehicle except for the use of safety and law enforcement is unethical and unlikely. Any device flown remotely can be considered a UAV. so as an example Walmart, Brook stone and other retailers should pull anything that is designed to fly out doors off the shelves. many hobby store would suffer in business sales also. Granted operators observe rules and regulations and practice safe flight checks and routine part maintenance, i strongly believe that Multirotors such as Quad copters, Hexacopters and octocopter(and similar) can be operated safely. i believe that the 400 foot ceiling should be kept in effect as well as observed safety laws. Unsafe practices should be punishable by restitution and confiscation, but completely banning these hobby craft would not be very effective. People will still fly. but if regulations are placed into effect, and more parks where these can be safely operated without the danger of injury to others and property is present, one would believe that individual will understand the importance of safety. please receive my testimony in good standing as a citizen of Hawaii and please scrutinize as much as possible before passing this bill. there are other ways besides a complete ban of UAV aircraft for hobby use.

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In regards to SB2608 on the matter of the use of Unmanned Drones, I am opposed to the current bill as it is written. As an individual, I am a Drone Hobbyist that actively conducts research of flight control software for unammned drones. I use the telemetry data, which includes GPS information, flight system health status, Inertial Measurement Unit data, and sometimes photos for the development of the systems that provide benefit to civilians. Unlike COTS amateur drones, the system that I research with is meant for expert users with a strong background in softare and flight systems.

As it is mentioned in the Bill, the aim is to protect the Hawaii Citizens right to privacy. I can see that this is stemming from the fear that the law enforcement will encroach on People's Rights. Law Enforcement can conduct surveillance of citizens stealthfully due to the low operational noise of drones and their ability to be rapidly deployed. From my perspective, I support the strict regulation of drones for Law Enforcement use by Police.

However, I strongly oppose Bill especially in the wording, "...person, or entity to use an unmanned aircraft to gather information, including but not limited to images, photographs, or recordings." Though the fear lies in the abuse of the technology by Law Enforcement Agencies, many other agencies will benefit from the use of drones and the wording of the Bill negates the use of the technology for such purposes. One use is in the monitoring of Forestry and Wildlife in controlling fires and invasive species. Drones could fill the gaps in the manpower shortages and provide a perspective of situations that otherwise would require the renting/use of expensive manned aircraft. Other non-rights violating use would be the use of Drones in the inspection of the integrity of buildings and structures where convetional methods would put peoples safety at risk. Aerial mapping of archialogical sites are also in jeopardy if this Bill is passed in it's current state.

But with the increased availability of commerical Amateur drones, I do feel there needs to be more regulation to protect the safety of the people around the Drones in flight and to regulate the use of Image/Video captures with Drones. In some states, regulations to ensure responsible use of the drones are in place to prevent "accidents" due to flight mishaps that might cause property damage or personal injury. As a side note, I operate only in fields and parks, operating in areas free of people. Federal rules prohibit the commerical use of photographing with Drones, but this is where many of the COTS drones are being used the most now. I believe the Bill needs to be reworded to support preventing commercial use of drones for photography until which time the Federal government laxes their regulations on such use.

The Bill would effective kill all academic and research work done with Drones. Was this the intent of our Senate representatives? If invasion of privacy is of concern, then there needs to be a focus on the use of cellphones also. I'm certain that there are more cases of privacy violations through the use of cellphones than with drones. Since privacy is the main concern, please redo the Bill and be more receptive of the technology instead of creating a total restriction that excludes Hawaii in helping to develop a technology that can benefit the people.

If I may suggest, the state should create a committee to thoroughly invetigate the benefits and drawbacks of this technology and then include these findings in a new Bill that would not totally restrict the use of the Technology. Please, take the time to be educated before making such a Bill. Don't deprive Hawaii from the benefits of this technology.

Thank you for your time. Please feel free to contact me if you have any questions.

Aloha,

I am a researcher at the University of Hawai'i at Hilo. I recently returned with a Hawaii UAV team from the Philippines where we used low cost small UAV's to support Yolanda Relief efforts. On the Big Island of Hawaii, I am working with a number of farmers and natural resource organizations where we use Unmanned Aircraft to map invasive species, forest biomass, map crop diseases and a number of other scientific applications.

A Certificate of Authorization (COA) is required by the FAA for Public organizations such as the University to fly Unmanned Aircraft. We are going through the Federal permitting process and will be acquiring a COA for the University very shortly. The COA process specifically outlines rules and regulations for our flights such as limiting them below 400ft altitude and keeping flights in a very specifically defined area away from populated areas.

Prohibiting the use of Unmanned Aircraft will greatly harm scientific research, natural resource protection, local agriculture research, and Hawaii's technology industry. I urge you to oppose Senate Bill 2608, Hawaii's economy and a future tech industry for the State will be irreparably damaged.

Re: Testimony in Opposition to SB 2608, Relating to Unmanned Aircrafts

Dear Chair Hee, Vice Chair Shimabukuro, and Members of the Committee,

With a deep sense of the importance of providing a homegrown framework for protection against the misuse of drone technology, I thank you for the opportunity to offer testimony in opposition to SB 2608, which is one of several bills that seek to address the legislative vacuum concerning drone use in Hawai'i.

While the purpose and intent of SB 2608 is described as making it "unlawful for any law enforcement agency, state or local public agency, person, or entity to use an unmanned aircraft to gather information . . . expect under specified circumstances", the bill's allowable uses are overly wide in certain areas and vague in others. In the main, SB 2608 is silent on the issue of drone weaponization and thus allows for armed drones by public and private entities. This runs contrary to the International Association of Chiefs of Police (IACP), which supports strict limits on weaponized drones: "Equipping [drones] with weapons of any type is strongly discouraged. Given the current state of the technology, the ability to effectively deploy weapons from a small UA is doubtful." The IACP Aviation Committee also recommends that police drones should be marked "in a high visibility paint scheme . . . [because this] will facilitate line of sight control by the aircraft pilot and allow persons on the ground to monitor the location of the aircraft." These are just a few of the important considerations in evaluating proposed legislation concerning drone use in Hawaii.

While I support the use of drones by public entities to preserve human life, I have serious concerns about the current incarnation of SB 2608. The bill is flawed for the following reasons:

1. Insufficient oversight: A public entity should be required to obtain approval by the Department of Transportation before acquiring drone technology;
2. The retention of data inadvertently collected from law-abiding citizens by law enforcement while en-route to or during approved missions should be reduced from 30 days to 48 hours;
3. Drones must not be weaponized, e.g.:

§____ Weaponization. In no case shall a person or public agency equip a remotely operated vehicle with a weapon or deploy a remotely operated vehicle that is equipped with a weapon in the State.

For the purpose of this section, "weapon" means any device designed to harm or incapacitate a human being by use of a projectile, explosive, biological or chemical agent, electricity, visible or invisible directed energy, radiation, or any other means;

4. The sensor or surveillance technology that will be used to collect private information

must be defined and included under this bill's regulatory scheme, e.g.:

"Sensing device" means a device capable of acquiring data or information from its surroundings, including but not limited to:

- (1) Cameras using any wavelength of the electromagnetic spectrum, including visible, ultraviolet, or infrared frequencies;
- (2) Microphones;
- (3) Thermal detectors;
- (4) Chemical detectors;
- (5) Radiation detectors;
- (6) Facial recognition technology or other soft biometric recognition technology;
- (7) Laser radar; and
- (8) Wireless receivers in any frequency.

5. Section 803-C(5), which allows law enforcement to use drones for activities conducted by U.S. military, should be struck from the bill.

6. The Department of Transportation should have the power to confiscate a public operator's drone for violation of the act.

7. To encourage, rather than wall off, public criticism, legislation should expressly require detailed reports on the type of device used, location of operation, and data collected and that reports submitted to the Legislature and Judiciary be made public.

I thank you for this opportunity to testify in opposition to SB 2608 and I respectfully urge you to hold this bill.

Mahalo,

From: mailinglist@capitol.hawaii.gov
To: [JDLTestimony](#)
Cc: donniemcgean@gmail.com
Subject: Submitted testimony for SB2608 on Feb 18, 2014 10:00AM
Date: Tuesday, February 18, 2014 9:31:00 AM

SB2608

Submitted on: 2/18/2014

Testimony for JDL on Feb 18, 2014 10:00AM in Conference Room 016

Submitted By	Organization	Testifier Position	Present at Hearing
donnie mcgean	Individual	Oppose	No

Comments: This bill should not be passed. Aerial photography of Maui should not be restricted to law enforcement only. Real estate agents, wedding coordinators, photographers and other citizens should have the right to pursue aerial photography. Aerial photography is offering a whole new perspective on activities normally filmed at eye level. I have seen a keiki mountain bike race in Makawao by aerial, incredible surfing at Honolua Bay by aerial and magnificent and new views of the mountains and the ocean. We should not limit aerial photography to just law enforcement. What would be next, limiting cell phone photos to law enforcement? Mahalo, Donnie McGean

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Cc: pete@mauirealestate.com
Subject: Submitted testimony for SB2608 on Feb 18, 2014 10:00AM
Date: Tuesday, February 18, 2014 10:38:18 AM

SB2608

Submitted on: 2/18/2014

Testimony for JDL on Feb 18, 2014 10:00AM in Conference Room 016

Submitted By	Organization	Testifier Position	Present at Hearing
Joseph Peter Jalbert	Individual	Comments Only	No

Comments: The wording of this bill is confusing. Does it create a complete prohibition on unmanned aircraft except for strictly structured guidelines for law enforcement? If that is the case, I think it is an overreach. Small unmanned drones have been used for some impressive photography and videography of water sports, Hawaii's natural beauty and real estate related photos. I would be open to legislation that required permits for drone use, but an outright prohibition seems extreme.

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Cc: johann@808photo.me
Subject: Submitted testimony for SB2608 on Feb 18, 2014 10:00AM
Date: Tuesday, February 18, 2014 10:44:38 AM

SB2608

Submitted on: 2/18/2014

Testimony for JDL on Feb 18, 2014 10:00AM in Conference Room 016

Submitted By	Organization	Testifier Position	Present at Hearing
Johann Meya	Individual	Oppose	No

Comments: Many industries could benefit from the use of uavs such as the Film industry, Photography industry, Agriculture, and Organizations such Fire Departments, DLNR, Search and Rescue Operations - the list is very long. Privacy and Safety is one of the main concerns for me, and these could be addressed for example by requiring a certification and a licensing process to operate uavs. There is very little difference between filming from a helicopter, or filming from a uav. One might as well ban aerial filming/photography from helicopters as well. An outright ban is very misguided and limits new opportunities for many industries. Examples: Film Industries Small budget to feature films would benefit from the lower cost of filming from uavs Agriculture Agriculture resource management DLNR Invasive species management Law Enforcement Search and Rescue Fire Department Photography Weddings, Aerial Photography, Real Estate photography, Amature Photography, Hobbyists

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Senate Bill 2608 was written to limit the use of unmanned aerial aircraft in the State of Hawaii over and above any existing FAA regulations and any regulations that may be enacted by the FAA in the coming years. While its intentions are noble - to protect the privacy of Hawaii's citizens - the language of the bill would also restrict a good deal of legitimate aerial photography already being done in the state.

I have been doing unmanned aerial photograph in the State of Hawaii since 2007. I am primarily a landscape photographer, and use the aerial perspective to showcase the beauty of Hawaii. My aerial photography of Hawaii has been featured on several tourism web sites promoting travel to the state. One was featured in Modern Luxury Hawaii, and an article describing my techniques was featured in Hana Hou Magazine.

All of my photographs have been made at less than 500' of altitude - far below the federally mandated limit for manned aircraft over populated areas. Reproducing them using conventional, manned aircraft could pose a threat to life and property that my current methods don't. Here are three examples:



This is Kiholo Bay, done as a panorama at roughly 150' of altitude. While Kiholo Bay does not constitute a populated area according to the FAA, the proximity to the honu that use Kiholo Bay as a sanctuary would make using conventional aircraft at this altitude unwise.



This is Pololu Valley, also done as a panorama, from just below the height of the cliffs. Again, Pololu Valley does not constitute a populated area according to the FAA, but making such a photograph using a conventional aircraft would have been disruptive to the people visiting Pololu this day.



This last one I made of my son while he was setting up a kite to fly at Hapuna Beach. Needless to say, trying to reproduce this with a traditional manned aircraft would have posed a significant risk to him and to the people around him.

The definition of "unmanned aircraft" in Senate Bill 2608 is broad enough to include kites, moored balloons, model rockets, model airplanes and helicopters, and many other forms of unmanned aircraft that have been historically used for aerial photography, some dating back to the 1800's. If Senate Bill 2608 passes, photographers like me will no longer be able to pursue this kind of photography legally here in Hawaii, and companies promoting tourism and trade with Hawaii will no longer be able to use the photos.

Passing legislature that outlaws unmanned aerial photography with the promise that legitimate uses may be legalized in the future is not the answer. Please do not vote for Senate Bill 2608.

Sincerely,

Tom Benedict