DEPARTMENT OF EMERGENCY MANAGEMENT **CITY AND COUNTY OF HONOLULU** 650 SOUTH KING STREET • HONOLULU, HAWAII 96813 PHONE: (808) 723-8960 • FAX: (808) 524-3439

KIRK CALDWELL MAYOR



MELVINN KAKU DIRECTOR

PETER J.S. HIRAI DEPUTY DIRECTOR

February 6, 2017

The Honorable Lorraine R. Inouye, Chair The Honorable Donovan M. Dela Cruz, Vice Chair Committee on Transportation and Energy

The Honorable Karl Rhoads, Chair The Honorable Mike Gabbard, Vice Chair Committee on Water and Land Senate State Capitol 415 South Beretania Street, Room 225 Honolulu, Hawaii 96813

Dear Chair Inouye, Chair Rhoads, Vice Chair Dela Cruz, Vice Chair Gabbard, and Members:

# SUBJECT: SUPPORT OF S.B. 632 RELATING TO UNMANNED AERIAL VEHICLES

I am Melvin Kaku, Director of the Department of Emergency Management (DEM), City and County of Honolulu.

DEM strongly supports SB 632 which proposes to prohibit certain activity by unmanned aerial vehicles (UAVs) at public parks and beaches.

The purpose of this bill is to provide and maintain a proactive and dedicated program throughout the State of Hawaii. This will keep our communities and visitors safe and protected by describing impermissible uses of UAVs and establishing enforcement actions for violations and penalties.

With the advent of the current utilization of UAVs across the nation and throughout the State of Hawaii, it is logical and prudent that Chapter 261, Hawaii Revised Statues, be further amended to regulate the use of these devices in the airways at our public parks and beaches.

I urge your committee to pass SB 632. Thank you for the opportunity to testify.

incerely Melvir N. Kaku Director

### TESTIMONY BEFORE THE SENATE COMMITTEE ON TRANSPORTATION AND ENERGY AND THE SENATE COMMITTEE ON WATER AND LAND

S.B. No. 632 Relating to Unmanned Aerial Systems

Monday, February 6, 2017 2:00 pm State Capitol, Conference Room 225

### Kerstan J. Wong Manager, Engineering Hawaiian Electric Company, Inc.

Chairs Inouye and Rhoads, Vice Chairs Dela Cruz and Gabbard, and Members of the Committees:

My name is Kerstan Wong and I represent Hawaiian Electric Company and its subsidiary utilities Maui Electric Company and Hawaii Electric Light Company, collectively "Hawaiian Electric."

S.B. 632 attempts to regulate the airspace over a public park or beach. We do not support this bill as currently drafted since the Federal Aviation Administration (FAA) regulates this airspace, not the State.

S.B. 632 also inhibits certain federally approved Unmanned Aerial Vehicle permissions. For example, Hawaiian Electric has a Certificate of Authorization (COA) issued by the FAA that authorizes Hawaiian Electric to fly over parks and beaches to conduct aerial assessments of its facilities.

We recommend the language on page 1, lines 13-15 be amended to state:

"No person shall launch, land or recover an unmanned aerial system at a public park or beach <u>unless they are a commercial UAS operator with a Certificate of</u> <u>Authorization or Certificate of Waiver from the Federal Aviation Administration</u>."

Thank you for this opportunity to testify.



1919 S. Eads St. Arlington, VA 22202 703-907-7600 **CTA.tech** 

DATE: February 5, 2017

TO: Senator Lorraine R. Inouye Chair, Committee on Transportation and Energy

> Senator Karl Rhoads Chair, Committee on Water and Land

Submitted Via Capitol Website

RE: SB 632, Relating to Unmanned Arial Vehicles Hearing Date: February 6, 2017 at 2:00 p.m. Conference Room: 225

Dear Chairs Inouye and Rhoads and Members of the Joint Committees:

We offer these comments on behalf of the Consumer Technology Association ("CTA"). CTA represents more than 2,200 companies, 80 percent of which are small businesses and startups. As a champion of innovation, CTA is a long-time advocate of clear rules authorizing unmanned aircraft systems ("UAS" or drones) in a safe manner within the national airspace. CTA has been continually involved in the Federal Aviation Administration ("FAA") rulemaking activities concerning the operation and certification of small UAS. We also are a partner with several other organizations and the FAA in the *Know Before You Fly* campaign, which educates prospective drone users about the safe and responsible operation of UAS.

CTA appreciates the legislature's efforts to ensure the safe use and enjoyment of the state's public parks and beaches, but cautions against adoption of SB 632, which prohibits the launching, landing, or recovering of UAS at a public park or beach without the prior consent of the Hawaii Department of Transportation.

Drones hold tremendous promise for businesses, professionals, and hobbyists. In areas such as real estate, security, agriculture, architecture, engineering and delivery, drones can provide significant commercial benefits to consumers and



Producer of

businesses in both rural and urban areas. Unfortunately, SB 632 would create unintended consequences to the legitimate personal and commercial use of drones.

On December 17, 2015, the FAA released a UAS Fact Sheet reminding state and local jurisdictions that they lack authority to regulate airspace.<sup>1</sup> In particular, the UAS Fact Sheet identified regulations that impose operational bans or otherwise regulate navigable airspace as problematic. It notes that "[s]ubstantial air safety issues are raised when state and local governments attempt to regulate the operation or flight of aircraft" and "[a] navigable airspace free from inconsistent state and local restrictions is essential to the maintenance of a safe and sound air transportation system." SB 632 would intrude into this purely federal regulatory system by establishing operational restrictions at the local level.

The FAA has issued numerous letters to localities cautioning against the adoption of no-fly zones and other operational restrictions. It has specifically stated that any "prohibition of UAS being flown within certain distances of sports stadiums, airports, or other venues constitutes . . . an operational restriction and would be inconsistent with the Federal statutory and regulatory framework."

SB 632 would restrict certain UAS operations at public parks and beaches, areas typically occupied by people. We note that UAS flights over people, unless permitted by an already-established FAA waiver process, would violate Safety Guidelines already promulgated by the FAA.<sup>2</sup>

For the above reasons, we would respectfully request that SB 632 should be deferred so that these issues can be considered. Thank you for the opportunity to testify regarding this measure.

Sincerely,

/s/

Douglas K. Johnson Vice President, Technology Policy djohnson@cta.tech

<sup>1</sup> State and Local Regulation of Unmanned Aircraft Systems (UAS) Fact Sheet, Federal Aviation Administration Office of the Chief Counsel (Dec. 17, 2015) ("UAS Fact Sheet") <u>https://www.faa.gov/uas/resources/uas\_regulations\_policy/media/UAS\_Fact\_Sheet\_Final.pdf</u>.

<sup>&</sup>lt;sup>2</sup> <u>https://www.faa.gov/uas/where\_to\_fly/</u>

From:	mailinglist@capitol.hawaii.gov
Sent:	Sunday, February 5, 2017 3:50 PM
То:	TRE Testimony
Cc:	ccaallmmaa@yahoo.com
Subject:	*Submitted testimony for SB632 on Feb 6, 2017 14:00PM*

Submitted on: 2/5/2017 Testimony for TRE/WTL on Feb 6, 2017 14:00PM in Conference Room 225

Submitted By	Organization	<b>Testifier Position</b>	Present at Hearing
MICHAEL R CALMA	Individual	Oppose	No

Comments:

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, improperly identified, or directed to the incorrect office, may not be posted online or distributed to the committee prior to the convening of the public hearing.

From:	mailinglist@capitol.hawaii.gov
Sent:	Tuesday, February 7, 2017 10:02 AM
То:	TRE Testimony
Cc:	mike.elliott@droneserviceshawaii.com
Subject:	Submitted testimony for SB632 on Feb 8, 2017 13:41PM

Submitted on: 2/7/2017 Testimony for TRE/WTL on Feb 8, 2017 13:41PM in Conference Room 225

Submitted By	Organization	<b>Testifier Position</b>	Present at Hearing
Michael Elliott	Individual	Oppose	Yes

Comments: Aloha, My name is Mike Elliott and I am one of the owners of Drone Services Hawaii. We have been working with the FAA for over two years to promote safe and legal drone operations for hobbyist and professional licensed UAS pilots in Hawaii. We oppose this bill as it would preclude ALL drone flight for hobbyist and professional alike. We understand the need for permitting by the film office for professionals, but it is a broken process and by trying to follow the LEGAL process, I along with other like minded professionals who want to follow the rules and work with the film offices lost over \$75,000 in work last year alone. We want to see the rights of hobbyist protected to fly drones at beaches and parks. The rule in place for City County parks was written in 1978. The FAA and AMA do consider drones as model aircraft for hobbyist use and the AMA has embraced the hobby as well as promoted it with the support to the numerous race events in the US. Last October we helped host the World Championship drone race series for Drone Worlds. 37 countries participated. The largest event to date. We understand the perceptions and concerns of some citizens and lawmakers but this bill is not the way to address it. We ask that this bill not move forward.

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From:	mailinglist@capitol.hawaii.gov
Sent:	Monday, February 6, 2017 7:35 PM
То:	TRE Testimony
Cc:	matt.tom.rn@gmail.com
Subject:	*Submitted testimony for SB632 on Feb 6, 2017 14:00PM*

Submitted on: 2/6/2017 Testimony for TRE/WTL on Feb 6, 2017 14:00PM in Conference Room 225

Submitted By	Organization	<b>Testifier Position</b>	Present at Hearing
Matt Tom	Individual	Oppose	No

Comments:

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, improperly identified, or directed to the incorrect office, may not be posted online or distributed to the committee prior to the convening of the public hearing.

From:	mailinglist@capitol.hawaii.gov
Sent:	Monday, February 6, 2017 6:46 PM
То:	TRE Testimony
Cc:	reynel808@gmail.com
Subject:	Submitted testimony for SB632 on Feb 6, 2017 14:00PM

Submitted on: 2/6/2017 Testimony for TRE/WTL on Feb 6, 2017 14:00PM in Conference Room 225

Submitted By	Organization	<b>Testifier Position</b>	Present at Hearing
Reynel Salgado	Individual	Oppose	No

Comments: If we ban launch and landing of drones on public parks and beaches is going to encourage drone user to use their drones on places that can violate personal privacy. As a taxpayer we have the right to utilize public parks and beaches. Passing of this bill does not encourage responsible drone flying in our communities.

Please note that testimony submitted <u>less than 24 hours prior to the hearing</u>, improperly identified, or directed to the incorrect office, may not be posted online or distributed to the committee prior to the convening of the public hearing.

From:	mailinglist@capitol.hawaii.gov
Sent:	Monday, February 6, 2017 1:37 PM
То:	TRE Testimony
Cc:	kb3vlo@gmail.com
Subject:	Submitted testimony for SB632 on Feb 6, 2017 14:00PM

Submitted on: 2/6/2017 Testimony for TRE/WTL on Feb 6, 2017 14:00PM in Conference Room 225

Submitted By	Organization	<b>Testifier Position</b>	Present at Hearing
Donald Cridlebaugh	Individual	Oppose	No

Comments: This is insane... as a professional I have to carry insurance on my business, My UAS, I have to contact the Hawaii film office 2 weeks in advance. I have to pay for film permits (for the chance to try to film). I have to coordinate all of this with my client who needs the filming done (this could be a simple as shooting pictures for someone's wedding). I will have to now figure out how to contact the DOT? find someone who has the time to talk to me among the mountain of other tasks they will handle throughout their day. This is just more red tape thats going to send me and my family away from these islands. I love the Ohana here and my family and business is a part of the community here. If I have to leave I will not be teaching STEM classes (robotics electronics etc.) to many of our youth on island. they won't have the ability to learn as freely as someone teaching them how to build a "drone" and program it and then go to a safe place to fly it. The FAA already handles the airspace. we need to enforce other laws we already have. Another Question is how are you going to enforce this on tourists? There is no way to track them. if they aren't following the rules then at worst they will lose a "drone" no big deal for someone who took a chance got some awesome photos and only took a chance at losing it. (Most won't get caught in the first place and many will find it later after the fact). Again here is another instance of the people who follow the rules get screwed out of fun and experience in the newest and fastest growing aspect of robotics and remote control and all of the skill sets that follow. This is pasted in from a fellow operator This may not apply as well to this SB but there are others that it applies well to. If I weren't working I'd be there in person. I apologize for my spelling/grammar but I found out about this only a short time again ------The FAA has sole authority over the National Airspace System (NAS). The Federal Aviation Act of 1958 created the Federal Aviation Agency (which later become the Federal Aviation Administration, or FAA). That act empowered the FAA to oversee and regulate safety and use of the NAS by both military and civilian aircraft. The NAS is defined as from the ground up. The 2014 NTSB ruling in Pirker v. Huerta concluded that Unmanned Aircraft Systems (UAS) are by definition aircraft, and fall under FAA regulations. As such, UAS are under the control of the only FAA while they are in the NAS. Section 1, "The purpose of this Act is to establish unmanned aerial vehicle laws that complement federal regulation." While states may enact laws that parallel Federal

Laws, they may not enact laws contrary to Federal Laws. And if states do enact such laws, the Federal Law will preempt state law. Article VI of the U.S. Constitution states: "This Constitution, and the Laws of the United States which shall be made in Pursuance thereof; and all Treaties made, or which shall be made, under the Authority of the United States, shall be the supreme Law of the Land; and the Judges in every State shall be bound thereby, any Thing in the Constitution or Laws of any state to the Contrary notwithstanding." Therefore, SB314 violates Article VI, and it's Supremacy Clause if it attempts to pass regulation that goes beyond the powers of the FAA. And there sections of this bill that violate Article VI. Unmanned Aerial Vehicle Definitions. Why does this fall under the control of the Dept. of Commerce and Consumer Affairs? "Personal Information" includes "photographs" in its definition. While there has been no direct SCOTUS rulings that address of photography as a First Amendment right, rulings have involved speech and conduct. And the definition used in Texas v. Johnson (1995) reads, in part, "whether [a]n intent to convey a particularized message was present, and [whether] the likelihood was great that the message would be understood by those who viewed it." That has been used in lesser courts to include photography. So laws that include "photography" limitations must include expectation of privacy and intent wording and their definitions. Chapter 3 Prohibited Acts: Penalty (1) mentions "In violation of chapter 263" but doesn't say chapter of what? I'm assuming it's 263 of the Hawaii Revised Codes. But it's unclear. (2), (3), and (5) are all in violation of the FAA's authority and are subject to Federal Preemption based on Article VI and the Supremacy Clause. A state may not impose additional rules for aircraft. There are no federal rules that prohibit hobby flights from 5 miles of an airport (they just have to call and advise as per PL 112-95, Section 336), or over 400'AGL. While it is a not a good idea to fly near First Responders, Hawaii cannot impose a limit on how close UAS flights can be. At best they can include language about interfering with LEO operations. And they probably should. They just need to word it carefully. (4) is in violation of the First Amendment. Since photography is in the definition of "Personal Information", and there is no exception of photos taken from public thoroughfares, it violates the rights of a photographer to take photos and sell them if anyone is identifiable. That includes public beaches. So while it's perfectly legal for a photographer to take and sell photos of a public beach from the ground, the bill would make doing it from a UAS illegal. That makes no sense whatsoever. (6), (7), & (8) pretty much mirror 107 & 101, so they're fine. Although the FAA does frown on states writing law that parallels theirs. But they are allowed. (9) &(10) go back to a state trying to control the NAS, which is counter to the 1958 FA Act, as well as Article VI's Supremacy Clause. A state may not set limits for aircraft while they are in the air. Additionally, (9) includes the phrase "without the property owner's written consent and subject to any restrictions that the property owner may impose on the operation of the unmanned aerial vehicle;". As per Causby v. US (1946) and others, and a land owner has the right to prohibit use of airspace over his land only if flights, "interferes with his right to light, air, view, or the safe and peaceful occupation and enjoyment of his land." Occasional over flights of drones will not impede "enjoyment". Causby dealt with the constant flights of military aircraft. (10) grants multiple provisions for imposing limits on NAS use, by both gov't and private organizations and citizens. Chapter 7 Civil cause of action; remedies. The problem with this section is that it also includes the personal information definition, and allows

(encourages?) someone to sue a UAS operator if the "victim" feels this is warranted. And this includes if someone is found innocent of any true crime. While it's not a definite issue, this opens up a huge door for lawsuits after the fact. If that happens, it could ruin someone financially for a perfectly legal activity.

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From:	mailinglist@capitol.hawaii.gov
Sent:	Monday, February 6, 2017 12:16 PM
То:	TRE Testimony
Cc:	gabe@tomsbackhoe.com
Subject:	Submitted testimony for SB632 on Feb 6, 2017 14:00PM

Submitted on: 2/6/2017 Testimony for TRE/WTL on Feb 6, 2017 14:00PM in Conference Room 225

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

Comments: This bill is vague, doesn't adequately define "unmanned aerial system" and will mostly be unenforceable. Also, this bill doesn't allow for other model aircraft activities which don't bother other park goers. I would recommend continuing to defer to FAA guildlines.

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I oppose the SB632 bill.

I don't believe that this is a necessary law and should not get passed this stage. There are already a number of restrictions in place for unmanned aerial systems that protect the general public and the hobbyist. Many members of the community and I operate unmanned aerial systems responsibly and safely on a regular basis.

I understand that there is a sentiment among many people that UAS or drones are an invasion of privacy because it is a flying camera. This is a not unnatural reaction to something that is new and unfamiliar, but the truth is the people operating UAS are not doing so to record you. They are doing it because it is fun and they are enjoying the park or beach in a new way.

While flying at any public park, I take care to not fly in areas around people and when someone begins to walk through the area in which we are flying I (and others I'm flying with) make sure to land our unmanned crafts or bring them close to where we're located to wait for those people to get safely out of that area before resuming flight. These public parks are a shared space and it is up to everyone to treat each other with respect and aloha. It is unfair to only prohibit UAS, many things can disrupt the activities of others and even put them in danger. Cars blast loud music for hours, a stray baseball could hit someone, a bicycle could collide with a pedestrian, canoes can hit swimmers. The bill is unnecessary because there are already laws in place about putting other people in danger and making people feel threatened like reckless endangerment and assault. It's up to everyone to act responsibly and respectfully when sharing these spaces

Written opposition to SB632.

This proposed bill is both unnecessary and unfair. Myself and many other members of the community operate unmanned arial systems (UAS) responsibly and safely on a regular basis. We do this without disrupting or interfering other people from using the beaches or parks.

I understand that there is a sentiment among many people that UAS or drones are an invasion of privacy because it is a flying camera. This is a not unnatural reaction to something that is new and unfamiliar, but the truth is the people operating UAS are not doing so to record **you**. They are doing it because it is fun and they are enjoying the park or beach in a new way.

When I operate a UAS at a public beach or park, I take particular care to make sure I am doing it safely and to not interfere with other people using the park or beach. These public parks are a shared space and it is up to everyone to treat each other with respect and aloha. It is unfair to only prohibit UAS, many things can disrupt the activities of others and even put them in danger. Cars blast loud music for hours, a stray baseball could hit someone, a bicycle could collide with a pedestrian, canoes can hit swimmers. The bill is unnecessary because there are already laws in place about putting other people in danger and making people feel threatened like reckless endangerment and assault. It's up to everyone to act responsibly and respectfully when sharing these spaces.

I strongly urge you to not pass this legislation.

**Christopher Sass** 

Written opposition to SB632.

This proposed bill is both unnecessary and unfair. Myself and many other members of the community operate unmanned arial systems (UAS) responsibly and safely on a regular basis. We do this without disrupting or interfering other people from using the beaches or parks.

I understand that there is a sentiment among many people that UAS or drones are an invasion of privacy because it is a flying camera. This is a not unnatural reaction to something that is new and unfamiliar, but the truth is the people operating UAS are not doing so to record you. They are doing it because it is fun and they are enjoying the park or beach in a new way.

When I operate a UAS at a public beach or park, I take particular care to make sure I am doing it safely and to not interfere with other people using the park or beach. These public parks are a shared space and it is up to everyone to treat each other with respect and aloha. It is unfair to only prohibit UAS, many things can disrupt the activities of others and even put them in danger. Cars blast loud music for hours, a stray baseball could hit someone, a bicycle could collide with a pedestrian, canoes can hit swimmers. The bill is unnecessary because there are already laws in place about putting other people in danger and making people feel threatened like reckless endangerment and assault. It's up to everyone to act responsibly and respectfully when sharing these spaces.

From:	mailinglist@capitol.hawaii.gov		
Sent:	Sunday, February 5, 2017 9:20 PM		
То:	TRE Testimony		
Cc:	davetheguitar@hotmail.com		
Subject:	Submitted testimony for SB632 on Feb 6, 2017 14:00PM		

Submitted on: 2/5/2017 Testimony for TRE/WTL on Feb 6, 2017 14:00PM in Conference Room 225

Submitted By	Organization	<b>Testifier Position</b>	Present at Hearing
Scott Woodward	Individual	Oppose	No

Comments: The FAA already has rules in place for the safe conduct of UAS from beaches, and in controlled airspace. Prohibiting use from or over a public park or beach is unnecessarily prohibitive to the freedoms of the general public and cannot be allowed to be passed.

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From:	mailinglist@capitol.hawaii.gov		
Sent:	Sunday, February 5, 2017 7:44 PM		
То:	TRE Testimony		
Cc:	me@kevinmccarthy.org		
Subject:	Submitted testimony for SB632 on Feb 6, 2017 14:00PM		

Submitted on: 2/5/2017 Testimony for TRE/WTL on Feb 6, 2017 14:00PM in Conference Room 225

Submitted By	Organization	<b>Testifier Position</b>	Present at Hearing
Kevin McCarthy	Individual	Oppose	No

Comments: I oppose this bill. I love flying my unmanned aerial vehicles in public parks. I do not think it is a public safety hazard any more than riding a bicycle or a scooter. It is a positive hobby that teaches children and adults alike important STEM skills like electronics and software.

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From:	mailinglist@capitol.hawaii.gov
Sent:	Sunday, February 5, 2017 7:36 PM
То:	TRE Testimony
Cc:	ccaallmmaa@yahoo.com
Subject:	*Submitted testimony for SB632 on Feb 6, 2017 14:00PM*

Submitted on: 2/5/2017 Testimony for TRE/WTL on Feb 6, 2017 14:00PM in Conference Room 225

Submitted By	Organization	<b>Testifier Position</b>	Present at Hearing
MICHAEL R CALMA	Individual	Oppose	No

Comments:

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From:	mailinglist@capitol.hawaii.gov
Sent:	Sunday, February 5, 2017 6:52 PM
То:	TRE Testimony
Cc:	corteman@gmail.com
Subject:	*Submitted testimony for SB632 on Feb 6, 2017 14:00PM*

Submitted on: 2/5/2017 Testimony for TRE/WTL on Feb 6, 2017 14:00PM in Conference Room 225

Submitted By	Organization	Testifier Position	Present at Hearing
Manuel Cortes	Individual	Oppose	No

Comments:

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