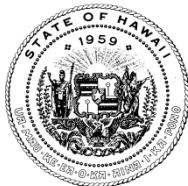


SB2608

SD1

NEIL ABERCROMBIE
GOVERNOR



Testimony of
GLENN M. OKIMOTO
DIRECTOR

Deputy Directors
FORD N. FUCHIGAMI
RANDY GRUNE
AUDREY HIDANO
JADINE URASAKI

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
869 PUNCHBOWL STREET
HONOLULU, HAWAII 96813-5097

IN REPLY REFER TO:

February 18, 2014
10:00 a.m.
State Capitol, Room 016

S.B. 2608, S.D.1
RELATING TO UNMANNED AIRCRAFTS

Senate Committee on Judiciary and Labor

The Department of Transportation (DOT) **supports** the intent of S.B. 2608, S.D.1.

The use of Unmanned Aircraft Systems (UAS) in non-military applications can be very beneficial, but can also pose significant risk if their capabilities are not thoroughly understood and controlled appropriately. The DOT supports the testing, inquiry and attention being paid to these issues.

At this time, the DOT favors the Federal Aviation Administration's current policy which allows operation of UAS only with a Certificate of Authorization, which are issued on a case-by-case basis. This should suffice until the test program and discussion clarify national policy, which in turn will indicate what controls and administrative functions are required of the state.

Thank you for the opportunity to present this testimony.

STATE OF HAWAII
DEPARTMENT OF DEFENSE

TESTIMONY ON SENATE BILL 2608
A BILL RELATING TO RELATING TO UNMANNED AIRCRAFT SYSTEMS

PRESENTATION TO
THE SENATE COMMITTEE ON
JUDICARY AND LABOR

BY

DARRYLL D. M. WONG
STATE ADJUTANT GENERAL AND DIRECTOR OF STATE CIVIL DEFENSE
February 18, 2014

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

I am Major General Darryll D. M. Wong, State Adjutant General and Director of State Civil Defense. I would like to offer comments about Senate Bill 2608.

The Federal Aviation Administration (FAA) recently selected the Pan Pacific UAS Test Range Complex (involving Alaska, Oregon, and Hawaii) as one of the six national test sites to safely integrate Unmanned Aerial Systems (UAS) into the National Airspace System. Testing UAS at these sites, in restricted, non-public airspace, will lead to the development of federal regulations that will help ensure public privacy and safety during UAS operations.

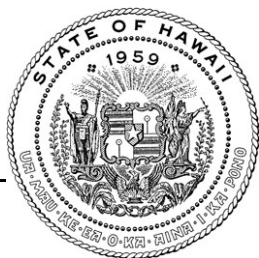
Hawaii's UAS test site operations will be overseen by an Advisory Board that will also track both state and national efforts to address UAS safety and privacy concerns, including the development of federal regulations pertaining to such issues.

Unmanned Aerial Systems integration into the National Airspace is just beginning. The FAA will strictly regulate UAS flights and they will initially be accomplished in restricted airspace isolated from any population.

We recommend that our State legislature review the preliminary findings and recommendations from this Advisory Board before enacting revisions to our State privacy statutes. The legislature can use the results from this review to formulate and implement legislation during the next biennium (Fiscal years 16/17).

This deliberately planned delay will allow State lawmakers to regulate UAS operations in Hawaii in concert with federal guidelines currently under development.

Thank you for the opportunity to provide comments on Senate Bill 2608.



**DEPARTMENT OF BUSINESS,
ECONOMIC DEVELOPMENT & TOURISM**

NEIL ABERCROMBIE
GOVERNOR

RICHARD C. LIM
DIRECTOR

MARY ALICE EVANS
DEPUTY DIRECTOR

No. 1 Capitol District Building, 250 South Hotel Street, 5th Floor, Honolulu, Hawaii 96813
Mailing Address: P.O. Box 2359, Honolulu, Hawaii 96804
Web site: www.hawaii.gov/dbedt

Telephone: (808) 586-2355
Fax: (808) 586-2377

Statement of

RICHARD C. LIM
Director

Department of Business, Economic Development & Tourism

before the

SENATE COMMITTEE ON JUDICIARY AND LABOR

Tuesday, February 18, 2014

10:00 a.m.

State Capitol, Conference Room 016

in consideration of

SB 2608, SD1
RELATING TO UNMANNED AIRCRAFTS.

Chair Hee, Vice Chair Shimabukuro, and members of the Committee. The Department of Business, Economic Development and Tourism recognizes the privacy and safety concerns addressed in this bill with regard to the operation of unmanned aerial systems (UAS) in public airspace and is pleased to provide these comments.

The Federal Aviation Administration (FAA) is currently establishing six national UAS test sites (including a Pan Pacific UAS Test Range Complex involving Alaska, Oregon, and Hawaii) to help safely integrate these technologies into the national airspace. Both safety and privacy issues will be addressed in testing unmanned aerial systems at these sites (operating in restricted, non-public airspace), leading to the development of federal regulations that will help ensure public privacy and safety during UAS operations.

Hawaii's UAS test site operations will be overseen by an Advisory Board that will also track both state and national efforts to address UAS safety and privacy concerns, including the development of federal regulations pertaining to such issues. As such, we recommend that the preliminary findings and recommendations from this Advisory Board be reviewed by our State

Legislature before enacting revisions to our State privacy statutes, and that the results from this review be used to formulate and implement legislation during the upcoming biennium (FY16/17) to regulate UAS operations in Hawaii. This in turn will help ensure that our State laws both complement and comply with federal guidelines currently under development.

Thank you for the opportunity to testify on this bill.

NEIL ABERCROMBIE
GOVERNOR OF HAWAII



**STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES**

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

**Testimony of
WILLIAM J. AILA, JR.
Chairperson**

**Before the Senate Committee on
JUDICIARY AND LABOR**

**Tuesday, February 18, 2014
10:00 AM
State Capitol, Conference Room 016**

**In consideration of
SENATE BILL 2608, SENATE DRAFT 1
RELATING TO UNMANNED AIRCRAFTS**

Senate Bill 2608, Senate Draft 1 proposes to prohibit the use of unmanned aircrafts, except by law enforcement agencies, to gather information and establishes certain conditions for law enforcement agencies to use an unmanned aircraft to obtain information, and requires all law enforcement agencies using unmanned aircrafts and the courts to report on their activities relating to unmanned aircrafts. **The Department of Land and Natural Resources (Department) offers the following comments.**

The Department supports the intent to strictly limit the use of unmanned aircraft systems (UASs) to ensure that these systems do not violate civil liberties, however requests that UASs used for resource management are not inadvertently restricted. The Department seeks an exemption be added to this prohibition for unmanned aircrafts used by agencies for the purpose of mapping or resource management. Non-governmental entities conducting resource mapping or management should be regulated by permits, rather than prohibited.

UASs enable rapid and accurate detection of resources and threats, and allow for efficient monitoring of infrastructure and management. Examples include mapping plant disease outbreaks, wildland fires, populations of invasive species, vegetation cover, game animal abundance and distribution, coral reefs, and changes of these resources over time. These technologies can survey sensitive resources in a non-invasive way. Airborne surveillance technologies are especially important for the Department as these resources are often in steep and rugged terrain and across large distances that cannot otherwise be accessed on the ground.

UASs enable managers to survey areas that otherwise would pose unacceptable safety hazards to both ground or helicopter crews, such as in search and rescue operations, wildland fire surveys, and surveys at low elevations near tree canopies.

WILLIAM J. AILA, JR.
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

ESTHER KIA'AINA
FIRST DEPUTY

WILLIAM M. TAM
DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES
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KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

UASs can perform resource monitoring more effectively than manned vehicles because flights can be pre-programmed to follow exact routes, enabling precise and full-coverage mapping that would otherwise not be feasible with aerial vehicles subject to pilot error and the reduced maneuverability of larger aircrafts. UASs can also save considerable costs and time during the regular surveys conducted by the Department and its partners in remote areas.

The Department offers the following proposed amendments:

§803-C Exceptions. This part shall not apply to:

(a) [a] A law enforcement agency under any of the following circumstances:

- (1) A finding based on credible intelligence is made by the United States Secretary of Homeland Security that the use of unmanned aircraft is necessary to counter a high risk terrorist attack by a specific individual or organization;
- (2) A search warrant is issued pursuant to this chapter that permits the use of an unmanned aircraft; provided that the search warrant shall be valid for a period not to exceed thirty days but may be extended by the court for no more than thirty additional days upon a showing of good cause;
- (3) The use of unmanned aircraft is necessary to assist in search and rescue activities or locate missing persons;
- (4) The use of an unmanned aircraft is necessary to assist in the operation, exercise, or mission of any branch of the United State military, or

(5) The use of an unmanned aircraft is necessary to assist in the disaster relief agency under chapter 127 or provide relief pursuant to the governor's declaration of a state disaster under section 209-2.

(b) A state agency or local public agency, or their permittees, for the purposes of mapping or resource management.



Committee: Committee on Judiciary and Labor
Hearing Date/Time: Tuesday, February 18, 10:00 a.m.
Place: Conference Room 019
Re: Testimony of the ACLU of Hawaii in Support of S.B. 2608, Relating to Unmanned Aircrafts

Dear Chair Hee and Members of the Committee on Judiciary and Labor:

The American Civil Liberties Union of Hawaii (“ACLU of Hawaii”) writes in support of S.B. 2608, which seeks to regulate the use of unmanned aircrafts. As the Federal Aviation Administration plans to integrate commercial Unmanned Aircraft Systems (UAS) into the national airspace, it is essential to have privacy protections in place. To that end, in addition to the regulations proposed in S.B. 2608, we suggest including the following:

- (1) A provision requiring that the annual report to the Legislature and Judiciary by entities that operate UAS include information on:
 - The type of UAS the operator used;
 - What kind of data the UAS collected (if any);
 - The areas in which the UAS operated; and
 - Security breaches or other issues that may have put personally identifiable information at risk of disclosure (if any), and steps that have been taken to avoid breaches in the future;
- (2) An explicit designation that reports submitted to the Legislature and Judiciary will remain publicly available;
- (3) A requirement that entities operating UAS hold annual public hearings with an opportunity for members of the public to present oral and written testimony;

American Civil Liberties Union of
Hawaii
P.O. Box 3410
Honolulu, HI 96801
P: (808) 522-5900
F: (808) 522-5909
E: office@acluhawaii.org
www.acluhi.org

- (4) A requirement that any entity operating UAS is required to implement oversight mechanisms to ensure compliance with all privacy protections. This includes:
- a. testing before beginning new operations to ensure that the technology complies with data use and access limitations; and
 - b. establishing a panel of independent experts to conduct annual audits of the operator's compliance with state and federal law, with the reports available to the public.

We urge the Committees to recognize the need for privacy protections that keep pace with quickly advancing technologies by supporting S.B. 2608.

Thank you for this opportunity to testify.

Sincerely,

Daniel Gluck
Senior Staff Attorney
ACLU of Hawaii

The mission of the ACLU of Hawaii is to protect the fundamental freedoms enshrined in the U.S. and State Constitutions. The ACLU of Hawaii fulfills this through legislative, litigation, and public education programs statewide. The ACLU of Hawaii is a non-partisan and private non-profit organization that provides its services at no cost to the public and does not accept government funds. The ACLU of Hawaii has been serving Hawaii for over 45 years.



Hawaii Cattlemen's Council, Inc.

P O Box 437199 Kamuela HI 96743

Phone (808) 885-5599 • Fax (808) 887-1607

e-mail: HCattlemens@hawaii.rr.com

SENATE COMMITTEE ON JUDICIARY AND LABOR

Tuesday February 18, 2014 10:00 a.m. Room 016

SB 2608 SD1 RELATING TO UNMANNED AIRCRAFTS

Prohibits the use of unmanned aircrafts, except by law enforcement agencies, to gather information and establishes certain conditions for law enforcement agencies to use an unmanned aircraft to obtain information. Requires all law enforcement agencies using unmanned aircrafts and the courts to report on their activities relating to unmanned aircrafts. (SD1)

Chairman Hee, Vice Chair Shimabukuro and Members of the Committee:

My name is Alan Gottlieb, and I am a rancher and the Government Affairs Chair for the Hawaii Cattlemen's Council. The Hawaii Cattlemen's Council, Inc. (HCC) is the Statewide umbrella organization comprised of the five county level Cattlemen's Associations. Our 130+ member ranchers represent over 60,000 head of beef cows; more than 75% of all the beef cows in the State. Ranchers are the stewards of approximately 25% of the State's total land mass.

The Hawaii Cattlemen's Council opposes SB 2608 SD1. While we support the right to privacy that this bill provides, its sweeping application would hurt some very positive beneficial uses of Unmanned Aircraft for agricultural uses.

The UAVs can be used in many positive ways to enhance agricultural productivity. The cutting edge technology in thermal, infra-red and spectral imaging recording devices, that can be attached to these UAVs, have expanded the utility of aerial reconnaissance in cropping and pasture and rangeland applications. For cattle ranching operations the UAV can save time and costs in many areas: water stress in forages, weed management, fenceline monitoring, nutrient deficiencies, detecting wildlife movement and location (eg. Deer on Maui, Molokai), cattle inventory and location, storm damage assessments, etc.

Perhaps Section 803-B of the bill can be amended to allow for the use of the technology for research, etc. following approval by an appropriate agency. This way it would allow for UH and other interested parties (besides ag.) to use technology whose potential is yet to be fully unraveled (UAVs vs remote sensing for example, for chemical spills and subsequent flow, etc.). It would safeguard the nuisance of privacy intrusion and require a reporting system annually. Furthermore, perhaps use of a UAV over the property a farmer or rancher owns or leases could be specifically exempted from the requirements of the bill.

Thank you for giving me the opportunity to testify on this very important issue.

Testimony of The Nature Conservancy of Hawai'i
Opposing S.B. 2608 SD1 Relating to Unmanned Aircrafts
Senate Committee on Judiciary and Labor
Tuesday, February 18, 2014, 10:00AM, Room 016

The Nature Conservancy of Hawai'i is a private non-profit conservation organization dedicated to the preservation of the lands and waters upon which life in these islands depends. The Conservancy has helped to protect nearly 200,000 acres of natural lands in Hawai'i. Today, we actively manage more than 35,000 acres in 11 nature preserves on Maui, Hawai'i, Moloka'i, Lāna'i, and Kaua'i. We also work closely with government agencies, private parties and communities on cooperative land and marine management projects.

The Nature Conservancy opposes the near complete prohibition on the use of unmanned aircraft proposed in S.B. 2608 SD1.

However, we are not at all opposed to appropriate regulation and permitting of unmanned aircraft to protect the public's right to privacy.

Over the last several years, we have been implementing very high resolution imaging technologies with fixed wing piloted aircraft for weed mapping at a landscape scale. This has been extremely helpful in our weed identification and control work in remote native forest and watershed areas. We believe that these kinds of natural resource management applications like tracking invasive species, checking fence lines for damage, monitoring wildfires, and gathering other critical ecological data may become much more efficient and cost effective with the appropriate, regulated use of unmanned aircraft.

We request that if the Committee advances this measure that you include an exemption for permitted use of unmanned aircraft by both government and private natural resource managers for research and management purposes.

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To: Chair Clayton Hee; Vice Chair Maile S.L. Shimabukuro

From: Khara Jabola Carolus, President, Filipino Law Students Association

Date: February 16, 2014

Hrg: Tues., February, 18, 2014 at 10:00 a.m. in Rm 016

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. Disconcertingly, 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.”¹ 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.”²

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:

1. 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;

¹ http://www.theiacp.org/portals/0/pdfs/iacp_uaguidelines.pdf

² Id.

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;

5. 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.

The Filipino Law Students Association thanks you for this opportunity to testify in opposition to SB 2608. We respectfully urge you to hold this bill.

Mahalo,

Khara Jabola-Carolus

President, Filipino Law Students Association

William S. Richardson School of Law

From: mailinglist@capitol.hawaii.gov
To: [JDLTestimony](#)
Cc: brianportal808@gmail.com
Subject: *Submitted testimony for SB2608 on Feb 18, 2014 10:00AM*
Date: Sunday, February 16, 2014 7:43:01 PM

SB2608

Submitted on: 2/16/2014

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

Submitted By	Organization	Testifier Position	Present at Hearing
Brian Santiago	Individual	Oppose	No

Comments:

Please note that testimony submitted less than 24 hours prior to the hearing, 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.

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