
A BILL FOR AN ACT

RELATING TO UNMANNED AERIAL SYSTEMS TEST SITES.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF HAWAII:

1 SECTION 1. The legislature finds that there is a national
2 need to safely integrate unmanned aerial systems into the
3 national air space. The integration of unmanned aerial systems
4 flights into the national air space will generate commercial
5 potential of this technology, estimated to be worth more than
6 \$13,600,000,000 during the first three years of integration and
7 more than \$82,000,000,000 between 2015 and 2025, and create
8 approximately 103,776 new jobs by 2025.

9 The legislature further finds that Hawaii offers many
10 unique qualities to support unmanned aerial systems operations
11 including: expansive over-water areas unencumbered by other
12 aviation uses; proximity to the United States Pacific Command,
13 which is projected to be a significant user of future unmanned
14 aerial systems; opportunities for joint operations with Kauai's
15 Pacific missile range facility; and opportunities for long-range
16 point-to-point tests with partner ranges in Alaska and Oregon.
17 Hawaii's proposed test ranges link to military and restricted
18 areas used for current unmanned aerial systems operations.



1 These sites include the Pohakuloa training area on the island of
2 Hawaii, Bradshaw and Wheeler Army airfields, and Kauai's Pacific
3 missile range facility. Test points within the ranges will be
4 used to support shore-and ship-based development, testing and
5 certification of new unmanned aerial systems, training and crew
6 certification of operational unmanned aerial systems, and
7 development of expanded and joint capabilities involving
8 existing communications systems and operations tactics using
9 unmanned aerial systems. The proposed Hawaii ranges have
10 provided an important focus for the development of scientific
11 applications of unmanned aerial systems, including numerous test
12 flights.

13 The legislature additionally finds existing and potential
14 civilian uses of unmanned aerial systems are wide-ranging,
15 including emergency search and rescue operations; wildfire
16 detection and management; fisheries management; agricultural
17 monitoring; reef health surveys; hazardous spills monitoring;
18 dam and reservoir overflow detection; tsunami damage surveys and
19 assessment; algal bloom detection and mapping; air quality
20 monitoring; motor vehicle traffic management; lava flow
21 monitoring; aerial photography for mapping; disaster management



1 and damage assessment; power line monitoring; flood and
2 pollution control; land use surveys; watershed management;
3 wildlife tracking; geographical, geological, and archaeological
4 surveys; atmospheric monitoring for commercial airline
5 turbulence avoidance; and light detection and ranging mapping of
6 coastal topography to detect beach erosion. In developing these
7 applications, innovative research, business, and education
8 opportunities will emerge, including the development of
9 miniaturized, high performance remote sensing instruments;
10 unmanned aerial systems tracking systems, including command and
11 control hardware and software; training courses and
12 certification programs for unmanned aerial systems operators;
13 and education programs for potential users of unmanned aerial
14 systems technologies.

15 The legislature also finds that in 2012, the United States
16 Congress directed the Federal Aviation Administration to
17 establish unmanned aerial systems research programs at six
18 national test sites for the development of unmanned aerial
19 systems operating standards and regulations. Hawaii, in
20 partnership with Alaska and Oregon, submitted a tri-state
21 proposal to establish the Pan-Pacific Unmanned Aerial Systems



1 Test Range Complex and was designated by the Federal Aviation
2 Administration as one of the six national test site operators,
3 providing the tri-state team six months to organize and
4 implement the Pan-Pacific Unmanned Aerial Systems Test Range
5 Complex. The University of Alaska has established a board of
6 directors to support performance of the management team and is
7 establishing a Pan-Pacific Unmanned Aerial Systems Test Range
8 Complex management team, to include a chief operating officer
9 from all three states.

10 The purpose of this Act is to establish a Hawaii unmanned
11 aerial systems test site chief operating officer position to
12 serve on the Pan-Pacific Unmanned Aerial Systems Test Range
13 Complex management team, establish a Hawaii unmanned aerial
14 systems test site advisory board that will formulate an
15 implementation plan and oversee test site development in the
16 State, and appropriate funds for personnel and procurement costs
17 associated with establishing the Hawaii unmanned aerial systems
18 test site.

19 SECTION 2. Chapter 201, Hawaii Revised Statutes, is
20 amended by adding two new sections to part V to be appropriately
21 designated and to read as follows:



1 "§201- Hawaii unmanned aerial systems test site advisory
2 board; established. (a) There is established a Hawaii unmanned
3 aerial systems test site advisory board, as a subcommittee of
4 the Hawaii aerospace advisory committee, to oversee the planning
5 and operation of the Hawaii unmanned aerial systems test site.

6 (b) The board shall be composed of seven members as
7 follows:

8 (1) The adjutant general, or the adjutant general's
9 designee;

10 (2) The director of transportation, or the director's
11 designee;

12 (3) The director of business, economic development, and
13 tourism, or the director's designee;

14 (4) The president of the University of Hawaii, or the
15 president's designee;

16 (5) One member representing the Hawaii business community,
17 to be appointed by the governor pursuant to section
18 26-34; and

19 (6) Two members representing the aerospace or aviation
20 industries, to be appointed by the governor pursuant
21 to section 26-34.



1 Each board member shall serve for a term of four years;
2 provided that the initial terms shall be staggered, as
3 determined by the governor.

4 (c) Members of the board shall not receive compensation
5 for their services but shall be reimbursed for necessary
6 expenses, including travel expenses, incurred in the performance
7 of their duties under this section.

8 §201- Hawaii unmanned aerial systems test site chief
9 operating officer. There is established within the department
10 the position of chief operating officer who shall manage the
11 operations of Hawaii's unmanned aerial systems test site. The
12 chief operating officer shall:

13 (1) Monitor, oversee, and recommend operations of unmanned
14 aerial systems test site activities;

15 (2) Facilitate opportunities for public and private use of
16 unmanned aerial systems test site facilities;

17 (3) Assist unmanned aerial systems test ranges;

18 (4) Leverage aerospace and related technological
19 capabilities in the State's academic, public, and
20 private sectors to support testing and evaluation at
21 Hawaii's unmanned aerial systems test ranges;



- 1 (5) Promote innovative education and workforce development
2 programs to enhance public awareness of the benefits
3 and opportunities that unmanned aerial systems
4 technologies and applications can bring to the State;
5 (6) Monitor national and global trends in unmanned aerial
6 systems development and testing, and recommend
7 policies and programs to advance unmanned aerial
8 systems testing in Hawaii;
9 (7) Establish and maintain a public website with updated
10 information on the program and provide information on
11 the Hawaii unmanned aerial systems test site
12 initiative;
13 (8) Contract for services and implement agreements,
14 subject to chapter 103D, as may be necessary to
15 conduct operations at Hawaii's unmanned aerial systems
16 test ranges;
17 (9) Serve as Hawaii's representative on the Pan-Pacific
18 Unmanned Aerial Systems Test Range Complex management
19 team; and
20 (10) Submit an annual report no later than twenty days
21 prior to the convening of each regular session, which



1 shall include the status of work, expenditures, and
2 trends regarding Hawaii's unmanned aerial systems test
3 site.

4 The chief operating officer shall be subject to chapter 84
5 and may employ on a full-time basis one administrative assistant
6 for Hawaii's unmanned aerial systems test site operations and
7 activities."

8 SECTION 3. Section 84-17, Hawaii Revised Statutes, is
9 amended by amending subsection (c) to read as follows:

10 "(c) The following persons shall file annually with the
11 state ethics commission a disclosure of financial interests:

12 (1) The governor, the lieutenant governor, the members of
13 the legislature, and delegates to the constitutional
14 convention; provided that delegates to the
15 constitutional convention shall only be required to
16 file initial disclosures;

17 (2) The directors and their deputies, the division chiefs,
18 the executive directors and the executive secretaries
19 and their deputies, the purchasing agents and the
20 fiscal officers, regardless of the titles by which the



1 foregoing persons are designated, of every state
2 agency and department;

3 (3) The permanent employees of the legislature and its
4 service agencies, other than persons employed in
5 clerical, secretarial, or similar positions;

6 (4) The administrative director of the State, and the
7 assistants in the office of the governor and the
8 lieutenant governor, other than persons employed in
9 clerical, secretarial, or similar positions;

10 (5) The hearings officers of every state agency and
11 department;

12 (6) The president, the vice presidents, assistant vice
13 presidents, the chancellors, and the provosts of the
14 University of Hawaii and its community colleges;

15 (7) The superintendent, the deputy superintendent, the
16 assistant superintendents, the complex area
17 superintendents, the state librarian, and the deputy
18 state librarian of the department of education;

19 (8) The administrative director and the deputy director of
20 the courts;



(9) The members of every state board or commission whose original terms of office are for periods exceeding one year and whose functions are not solely advisory;

(10) Candidates for state elective offices, including candidates for election to the constitutional convention, provided that candidates shall only be required to file initial disclosures; [and]

(11) The administrator and assistant administrator of the office of Hawaiian affairs[-]; and

(12) The Hawaii unmanned aerial systems test site chief operating officer."

SECTION 4. There is appropriated out of the general revenues of the State of Hawaii the sum of \$ or so much thereof as may be necessary for fiscal year 2015-2016 and the same sum or so much thereof as may be necessary for fiscal year 2016-2017 for the purpose of staffing and operating Hawaii's unmanned aerial systems test site activities.

The sums appropriated shall be expended by the department of business, economic development, and tourism for the purposes of this Act.



- 1 SECTION 5. Statutory material to be repealed is bracketed
2 and stricken. New statutory material is underscored.
3 SECTION 6. This Act shall take effect on July 1, 2050.



Report Title:

Public Safety; Unmanned Aerial Systems; Test Site; Appropriation

Description:

Establishes the Hawaii unmanned aerial systems test site chief operating officer position to, among other things, serve on the Pan-Pacific Unmanned Aerial Systems Test Range Complex management team. Establishes an advisory board to oversee and manage unmanned aerial systems test site operations. Appropriates funds to staff and operate Hawaii's unmanned aerial systems test site activities. Takes effect on 7/1/2050. (SD2)

The summary description of legislation appearing on this page is for informational purposes only and is not legislation or evidence of legislative intent.





DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT & TOURISM

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

DAVID Y. IGE
GOVERNOR

LUIS P. SALAVERIA
DIRECTOR

MARY ALICE EVANS
DEPUTY DIRECTOR

Statement of
LUIS P. SALAVERIA
Director

Department of Business, Economic Development & Tourism
before the

HOUSE COMMITTEE ON ECONOMIC DEVELOPMENT AND BUSINESS

Tuesday, March 24, 2015
9:00 a.m.

State Capitol, Conference Room 312

in consideration of

SB 661, SD 2

RELATING TO UNMANNED AERIAL SYSTEMS TEST SITES.

Chair Kawakami, Vice Chair Kong, and Members of the Committee.

The department supports the intent of this bill to establish the Hawaii unmanned aerial systems test site chief operating officer position to serve on the Pan-Pacific Unmanned Aerial Systems Test Range Complex (PPUTRC) management team, as well as an advisory board to oversee unmanned aerial systems test site operations.

With respect to the Chief Operating Officer referenced on page 6, line 9, of this bill, and the administrative assistant referenced on page 8, line 5, we recommend that these individuals be hired as contractors to the department, which would both expedite the hiring process and provide maximum flexibility in implementing their professional assignments.

We support this measure, provided that its passage does not replace or adversely impact priorities indicated in the Executive Budget.

Thank you for the opportunity to testify on this bill.

LATE

STATE OF HAWAII
DEPARTMENT OF DEFENSE

TESTIMONY ON SENATE BILL 661 SD2
A BILL RELATING TO UNMANNED AERIAL SYSTEMS TEST SITES

PRESENTATION TO
THE HOUSE COMMITTEE ON ECONOMIC DEVELOPMENT & BUSINESS

BY
BRIGADIER GENERAL ARTHUR J. LOGAN
ADJUTANT GENERAL
AND DIRECTOR OF THE HAWAII EMERGENCY MANAGEMENT AGENCY
March 24, 2015

Chair Kawakami, Vice Chair Kong, and Members of the House Committee on Economic Development:

I am Brigadier General Arthur J. Logan, State Adjutant General and the Director of the Hawaii Emergency Management Agency. I am testifying in **support** of Senate Bill 661 SD2.

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

UAS technologies already in use include: wildlife counts, fisheries management, disaster management, and cinematography. UAS has great potential in any application where an aerial task needs completing. In these tasks, UAS offers several advantages over manned flight:

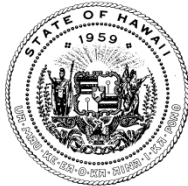
- Lower-costs
- Reduced safety risks and increased capability related to manned operations
- Reduced impacts on the environment

There are positive economic impacts to Hawaii as a result of test range users as well as creation of new jobs to support commercial industry testing and services.

The establishment and appropriation of funding for Hawaii's Chief Operating Officer and Advisory Board is critical in both establishing Hawaii's test ranges and tracking both state and national efforts to address UAS safety and privacy concerns, including the development of federal regulations pertaining to such issues.

Thank you for allowing me to testify in **support** of Senate Bill 661 SD2.

DAVID IGE
GOVERNOR



Testimony of
FORD N. FUCHIGAMI
DIRECTOR

Deputy Directors
JADE T. BUTAY
ROSS M. HIGASHI
EDWIN H. SNIFFEN
DARRELL T. YOUNG

IN REPLY REFER TO:

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

March 24, 2015
9:00 a.m.
State Capitol, Room 312

LATE

S.B. 661, S.D. 2
RELATING TO UNMANNED AERIAL SYSTEMS TEST SITES

House Committee on Economic Development and Business

The Department of Transportation **supports** this bill, which provides funding for a Chief Operating Officer, staff, and provisions for an advisory board for the Hawaii segment of the Pan Pacific UAS Test Range Complex (PPUTRC), under the auspices of the Department of Business, Economic Development, and Tourism.

Thank you for the opportunity to submit this testimony.



1003 Bishop Street • Pauahi Tower • Suite 2630 • Honolulu, HI 96813

Phone: (808) 532-2244 • Fax: (808) 545-2025

Testimony to the House Committee on Economic Development & Business

Tuesday, March 24, 2015

9:00 a.m.

Conference Room 312

LATE

RE: RELATING TO UNMANNED AERIAL SYSTEMS TEST SITES – SENATE BILL 661 SD2

Chair Kawakami, Vice Chair Kong and Members of the Committee:

My name is Gary Kai and I am the Executive Director of the Hawaii Business Roundtable. The Hawaii Business Roundtable fully supports Senate Bill 661, SD2 relating to Unmanned Aerial Systems Test Sites. The bill establishes the Hawaii unmanned aerial systems test site chief operating officer position to, among other things, serve on the Pan-Pacific Unmanned Aerial Systems Test Range Complex management team and appropriates funds to staff and operate Hawaii's unmanned aerial systems test site activities.

The Hawaii Business Roundtable strongly believes that a strong research and innovation sector can be a large and important magnet for new money and new fields of job growth in Hawai'i. Research on U.S Cities finds that "adding one additional skilled job in the tradable sector, such as the visitor industry and the military which bring in new dollars to the state, generates 2.5 jobs in local goods and services." And importantly, the high-tech sector generates almost double that number at 4.9 jobs.

As the Committee on Public Safety, Intergovernmental and Military Affairs and Higher Education and the Arts, has stated "Hawaii offers many unique qualities to support unmanned aerial systems operations including expansive over-water areas unencumbered by other aviation uses; proximity to the United States Pacific Command, which is projected to be a significant user of future unmanned aerial systems; and opportunities for long-range point-to-point tests with partner ranges in Alaska and Oregon." We totally support their insights.

Hawaii also be the beneficiary of the research being done with many potential uses here. These potential uses include emergency search and rescue operations; agricultural management; reef, land, and watershed surveys, volcanic activity surveys, and tsunami, hurricane and other natural disaster management and assessment. The potential benefits are of great significance to Hawaii.

This legislation is one very good example of growing our Research and Innovation Economy which is critical for the future of our young people. It provides them with the choice to live and

work in their island home -- and the opportunity to come home after gaining experience on the mainland or abroad. Furthermore it helps to improve the quality of their lives and the lives of all who live here.

Thank you very much for the opportunity to testify.

Gary K. Kai, Executive Director
Hawaii Business Roundtable