

JAN 24 2007

A BILL FOR AN ACT

RELATING TO AIRCRAFT NOISE.

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

1 SECTION 1. The legislature finds that in recent years
2 other states have actively addressed citizen concerns about
3 aircraft noise that disrupt normal living conditions, and that
4 these states have promulgated comprehensive noise abatement
5 regulations to improve and restore the health, welfare, and
6 quality of life of their urban populations, and to sustain the
7 general public's valued experience of natural and recreational
8 resources.

9 The State of Hawaii owns and operates airports within the
10 State, and the director of transportation is responsible for
11 adopting standards, procedures, and rules for the purpose of and
12 commensurate with protecting and ensuring the general public's
13 interest. Research concluding that certain levels of noise
14 affecting the public health and welfare warrants action from the
15 State to manage noise levels in the public interest.

16 This Act provides the means for aircraft owners and
17 operators and the airport traffic control center to work



1 cooperatively with the department, as the airport proprietor, to
2 control and reduce aircraft noise impacts on communities in the
3 vicinity of State airports.

4 The purpose of this Act is to provide immediate regulatory
5 relief from aircraft noise impacts on the urban population and
6 recreational resources within airport flight control and noise
7 abatement areas.

8 SECTION 2. Chapter 261, Hawaii Revised Statutes, is amended
9 by adding a new part to be designated and to read as follows:

10 **"PART . AIRCRAFT NOISE ABATEMENT**

11 **§261- Legislative findings and purpose.** The legislature
12 recognizes that aircraft noise impacts in urban areas constitute
13 a public health and welfare problem on the ground. The
14 legislature is determined to ensure that all possible actions
15 are taken to protect and promote the health and welfare of the
16 general public. The department shall do everything within its
17 authority to protect the public health and welfare and shall
18 work with federal agencies and other affected parties to meet
19 the responsibilities to alleviate aircraft noise impacts on the
20 general public.

21 **§261- Policy with regard to airport noise.** The
22 department shall be guided by the underlying policy to develop



1 and implement programs to reduce aircraft noise impacts in the
2 affected noise sensitive areas in an orderly manner.

3 **§261- Construction.** State noise standards governing the
4 operation of aircraft and aircraft engines are based on two
5 separate legal grounds: the power of airport proprietors to
6 impose noise ceilings and other limitations on the use of the
7 airport, and the power of the State to act to an extent not
8 prohibited by federal law. The aircraft noise standards and
9 implementing rules shall be liberally construed and applied to
10 promote protection of the public from noise and to resolve
11 incompatibilities between the airport and the community.

12 **§261- Threshold noise level.** For implementation of the
13 aircraft noise standards the threshold noise level shall be a
14 noise level which is ten decibels below the numerical value of
15 the appropriate community noise equivalent level.

16 **§261- Noise abatement departure profiles.** The department
17 shall maintain noise abatement departure profiles to specify to
18 each air carrier using the airport facility the departure
19 profile to be flown off each end of the airport. Both close-up
20 and distant profiles shall be used and shall outline acceptable
21 criteria for speed, thrust settings, and aircraft configurations
22 used in connection with each noise abatement departure profile.



1 The noise abatement departure profiles shall be combined with
2 preferential runway use selections and flight path techniques to
3 minimize noise impacts to the greatest extent possible. The
4 close-in noise abatement departure profile shall be specified
5 and maintained to benefit noise sensitive areas close to the
6 airport and the distant noise abatement departure profile shall
7 be specified and maintained for noise sensitive areas farther
8 from the airport.

9 **§261- Airport noise and operations monitoring system.**

10 (a) The department shall use the airport noise and operations
11 monitoring system as a critical part of the airport flight
12 pattern procedure to quantify the impact of operational
13 procedure amendments. Specific airspace analyses, such as
14 flight management systems procedure validation analysis and
15 upcoming global positioning system validation and utility
16 analysis, shall represent a managed transition to the
17 implementation of new navigational technologies. The multiple
18 applications with analytical capabilities within the aviation
19 environment shall provide analytical insight for airspace
20 management, the noise environment, airport operations, airport
21 planning, and public relations.



- 1 (b) The department shall maintain the airport noise and
2 operations monitoring system to include the following functions:
- 3 (1) Data input;
 - 4 (2) Noise data;
 - 5 (3) ARTS data;
 - 6 (4) Noise data acquisition functions;
 - 7 (5) Flight track data acquisition functions;
 - 8 (6) ARTS IIIE collection and editing system;
 - 9 (7) Airport noise and operations monitoring system flight
10 track import;
 - 11 (8) Query generator map server;
 - 12 (9) Event analyzer;
 - 13 (10) Radar track replay;
 - 14 (11) Gate and corridor analysis;
 - 15 (12) Query generator report;
 - 16 (13) Airport noise and operations monitoring system to GIS;
 - 17 (14) Operations analysis;
 - 18 (15) Information dissemination;
 - 19 (16) Reports;
 - 20 (17) Data files;
 - 21 (18) Internet; and



1 (19) Any additional updates and upgrades in the furtherance
2 of airport noise abatement.

3 (c) The department shall produce monthly operational and
4 airspace usage reports to provide for new levels of community
5 awareness relative to airport and aircraft noise abatement
6 operations.

7 **§261- Airport noise monitoring program.** The department
8 shall establish an airport noise monitoring program. The
9 monitoring program shall include at least the following:

10 (1) A general monitoring system plan, that shall identify
11 monitoring locations and the type of instrumentation
12 to be employed;

13 (2) A statistical sampling plan proposed for intermittent
14 monitoring at community locations;

15 (3) Noise monitoring system measurement with an accuracy
16 within plus or minus one and one-half decibels on the
17 community noise equivalent level scale and a record of
18 the hourly noise level for each hour of the day
19 together with identification of the hour, and the
20 community noise equivalent level for each day;

21 (4) Specific locations of the monitoring system chosen so
22 that the community noise equivalent level from sources



1 other than aircraft in flight is equal to or less than
2 fifty-five decibels, as in a residential area;

3 (5) The requirement that the intermittent monitoring
4 schedule obtain a realistic statistical sample of the
5 noise at each location. At a minimum, measurements
6 shall be taken continuously for twenty-four-hour
7 periods during four seven-day samples throughout the
8 year, chosen so that for each sample, each day of the
9 week is represented and the results account for the
10 effect of annual proportion of runway utilization;

11 (6) A quarterly review and audit of noise monitoring data
12 by the department; and

13 (7) Any additional information as pertinent.

14 **§261- Aircraft noise abatement master plan; advisory**

15 **committee.** (a) The department shall develop and implement an
16 aircraft noise abatement master plan, for aircraft operations
17 for each airport under the State's control.

18 (b) The aircraft noise abatement master plan shall include
19 but not be limited to an assessment of impact on close-in and
20 distant areas surrounding the airport. The department shall
21 submit the aircraft noise abatement master plan to the
22 legislature no later than twenty days prior to the convening of



1 the regular session of 2008, and thereafter shall review the
2 master plan annually.

3 (c) The department shall implement improvements to
4 existing noise relief policies and continue innovations in the
5 area of noise abatement by combining the technical expertise and
6 aviation experience of airline industry personnel with the
7 first-hand knowledge and concerns of the affected communities.

8 (d) The department shall establish a community advisory
9 committee to meet on a periodic basis, comprised of members of
10 interested and affected community groups and representatives of
11 airline and helicopter operators, the flight standards district
12 office, the air traffic control center, the department, elected
13 officials and staff, and from time to time representatives of
14 the Hawaii congressional delegation. The balanced forum shall
15 provide for the discussion and evaluation of noise impacts and
16 abatement in the vicinity of the airport to each end of the
17 island, and shall ensure cooperation between the airport and the
18 affected communities in achieving noise impact reduction to
19 those communities wherever possible.

20 **§261- Community noise levels.** (a) The department shall
21 by rule designate noise impact areas and communities surrounding
22 each airport. The department's determination shall be based on



1 existing evidence of community noise reaction to single event
2 noise impacts and noise interference with speech and sleep.

3 (b) The department, by rule, shall establish the criterion
4 level of noise acceptable to a reasonable person residing in the
5 vicinity of the airport, established as a community noise
6 equivalent level, with reference to speech, sleep, and community
7 reaction. The criterion level shall be determined based on
8 urban residential areas where houses are of typical Hawaiian
9 construction with open windows for tropical cross ventilation.

10 In developing the criterion level, the department shall be
11 guided by land uses within the noise impact area, including but
12 not limited to:

13 (1) Residences, including but not limited to detached
14 single-family dwellings, multi-family dwellings, high-
15 rise apartments, and condominiums;

16 (2) Public and private schools of standard construction or
17 that do not have adequate acoustic performance to
18 ensure an interior community noise equivalent level of
19 forty-five decibels or less in all classrooms due to
20 aircraft noise;

21 (3) Hospitals, convalescent and retirement homes that do
22 not have adequate acoustic performance to provide an



1 interior community noise equivalent level of forty-
2 five decibels or less due to aircraft noise in all
3 rooms used for patient care;

4 (4) Churches, temples, synagogues, and other places of
5 worship that do not have adequate acoustic performance
6 to ensure an interior community noise equivalent level
7 of forty-five decibels or less due to aircraft noise;

8 (5) National parks and landmarks, state monuments, and
9 public parks established for the protection of natural
10 resources and the public's recreational welfare; and

11 (6) Other land uses as determined by community reaction to
12 be noise sensitive.

13 **§261- Airport noise complaint response program; airport**
14 **noise abatement website.** (a) The department shall maintain a
15 twenty-four-hour a day noise complaint hot line seven days per
16 week and an airport noise abatement website to significantly
17 enhance the flow of noise related information for concerned
18 citizens. The website shall provide information on the
19 following:

- 20 (1) Operations;
- 21 (2) Noise data;
- 22 (3) The airport noise and operations monitoring system;



- 1 (4) Meetings and events;
- 2 (5) GIS and global positioning system information;
- 3 (6) Runway information;
- 4 (7) Interactive mapping capabilities; and
- 5 (8) Any additional features and capabilities in the
- 6 furtherance of airport noise abatement.

7 (b) A noise complaint form shall be posted on the website
8 for online filing of complaints, and each complaint shall be
9 logged into a noise complaint database. Response letters shall
10 be provided to those requesting a written response to their
11 noise complaints, and a monthly summary report shall be
12 generated each month and made available on the noise abatement
13 website.

14 **§261- Methodology for controlling and reducing noise**
15 **problems.** The department shall develop and implement means and
16 methodologies for controlling and reducing noise levels in areas
17 surrounding airports. The department shall adopt rules that may
18 include but not be limited to:

- 19 (1) Encouraging use of the airport by aircraft classes
20 with lower noise level characteristics and
21 discouraging use by higher noise level aircraft



- 1 classes, and supporting quieter, cleaner Stage IV
2 aircraft technology;
- 3 (2) Establishing shoreline departure flight paths vectored
4 over water at three miles offshore and arrival flight
5 paths vectored over water at two miles offshore to
6 minimize aircraft noise impacts in residential areas;
- 7 (3) Ensuring that any airspace traffic changes will not
8 result in aircraft noise impacts within the airport
9 noise abatement area;
- 10 (4) Implementing effective noise abatement climb and
11 descent procedures;
- 12 (5) Raising minimum altitudes for commercial jet aircraft
13 to eight thousand feet and establishing the minimum
14 altitude for tour helicopters at two thousand feet, in
15 addition to using noise abatement approach and
16 departure techniques;
- 17 (6) Developing, filing, and maintaining a helicopter fly-
18 neighborly program formulated with community
19 concurrence;
- 20 (7) Prohibiting tour helicopter flights over residential
21 areas and national, state, and public parks;



- 1 (8) Recognizing and relying on single-event noise impact
2 instead of day-plus-night sound average in determining
3 harmful effects of aircraft noise considered hazardous
4 to the public health and well-being;
- 5 (9) Recognizing unique geographic features in the vicinity
6 of the airport with measurement plans tailored to fit
7 locations for which the specified community noise
8 equivalent level monitoring is impractical, such as
9 forty-five-decibel locations where aircraft noise is
10 amplified by mountain slope walls;
- 11 (10) Planning runway utilization schedules to take into
12 account residential areas, noise characteristics of
13 aircraft, and noise sensitive time periods;
- 14 (11) Restricting flights by Stage II and noisy Stage III
15 aircraft to daytime hours with a nighttime curfew for
16 departures and arrivals between the hours of 10 p.m.
17 and 7 a.m., except in emergencies;
- 18 (12) Restricting departures to sixty-eight decibels and
19 landings to seventy-five decibels between the hours of
20 10 p.m. and 7 a.m., except in emergencies, with no
21 adjustment for gross weight;



- 1 (13) Establishing penalties for breaking the curfew or
2 exceeding the decibel level limits between 10 p.m. and
3 7 a.m. at \$2,600 for the first violation, \$3,375 for
4 the second violation, and not to exceed \$5,000 for any
5 violations thereafter;
- 6 (14) Establishing noise regulations for military flights
7 similar to those for civilian flights, with noise
8 abatement headings over water between 7 p.m. and 7
9 a.m.;
- 10 (15) Establishing a nominal passenger ticket fee solely for
11 noise abatement and environmental protection,
12 reimbursable annually to aircraft owners and operators
13 remaining in compliance with noise abatement
14 procedures including established offshore flight
15 paths;
- 16 (16) Establishing a Fly Quiet program that encourages
17 airlines and tour helicopters to operate as quietly as
18 possible and promotes participatory compliance by
19 grading performance, with scores published publicly in
20 a quarterly adherence report;
- 21 (17) Enforcing noise abatement requirements by monitoring
22 aircraft noise in real time and creating incentives



1 for violators along with issuing graduated fines and
2 restricting access, depending on the frequency of
3 violations;

4 (18) Enabling near real-time noise monitoring and aircraft
5 tracking information to be merged and accessible
6 electronically by the interested and affected
7 community; and

8 (19) Use of noise measurement systems that are more
9 extensive or technically improved over time,
10 particularly where a major noise problem requires more
11 comprehensive noise monitoring, such as noise
12 abatement flight procedures.

13 **§261- Rules.** The department shall adopt noise standard
14 rules under chapter 91 that shall include but not be limited to
15 the following:

16 (1) Providing a positive basis to resolve existing
17 aircraft noise impacts on communities surrounding the
18 airport and to prevent the development of new noise
19 problems by establishing a quantitative framework
20 within which the various interested parties (i.e., the
21 airport traffic control center, local communities,
22 aircraft operators, and department) can work together



- 1 cooperatively to reduce and prevent aircraft noise
2 impact problems;
- 3 (2) Defining noise impact areas surrounding the airport
4 and establishing maximum noise levels for these areas;
5 and
- 6 (3) Controlling and reducing noise problems in the areas
7 surrounding airports.

8 **§261- Reports.** (a) The department shall report to the
9 governor and the legislature on a quarterly basis on the
10 aircraft noise abatement program. The reports shall include at
11 least the following:

- 12 (1) A map illustrating the location of the noise impact
13 boundary;
- 14 (2) An estimate of the number of dwelling units and the
15 number of people residing therein, and the number of
16 schools, hospitals, retirement homes, parks, places of
17 worship, and other existing noise sensitive locations;
- 18 (3) Daily community noise equivalent level measurements
19 with identification of the date on which each
20 measurement was made;
- 21 (4) Hourly noise level measurements with identification of
22 the date on which each measurement was made;



1 (5) The total number of aircraft operations during the
2 calendar quarter;

3 (6) The estimated number of operations of the highest
4 noise level aircraft type in the calendar quarter; and

5 (7) Any other data pertinent to the activity.

6 (b) The quarterly reports shall be retained by the
7 department for at least three years, and shall be made available
8 to the community upon request."

9 SECTION 3. Section 261-12, Hawaii Revised Statutes, is
10 amended to read as follows:

11 "**§261-12 Rules, standards.** (a) [~~Powers to adopt.~~] The
12 director of transportation may perform such acts, issue and
13 amend such orders, adopt such reasonable general or special
14 rules and procedures, and establish such minimum standards,
15 consistent with this chapter, as the director deems necessary to
16 carry out this chapter and to perform the duties assigned
17 thereunder, all commensurate with and for the purpose of
18 protecting and insuring the general public interest and safety,
19 the safety of persons operating, using, or traveling in
20 aircraft, and the safety of persons and property on land or
21 water, and developing and promoting aeronautics in the State.

22 All rules shall be adopted under chapter 91. No rule of the



1 director shall apply to airports or air navigation facilities
2 owned or operated by the United States.

3 In furtherance of the duties assigned under this chapter,
4 the director may adopt rules relating to:

- 5 (1) Safety measures, requirements and practices in or
6 about the airport premises;
- 7 (2) The licensing and regulation of persons engaged in
8 commercial activities in or about the airport
9 premises;
- 10 (3) The regulation of equipment and motor vehicles
11 operated in or about the airport operational area;
- 12 (4) Airport security measures or requirements, and
13 designation of sterile passenger holding areas and
14 operational areas;
- 15 (5) The regulation of motor vehicles and traffic;
- 16 (6) Any other matter relating to the health, safety and
17 welfare of the general public and persons operating,
18 using, or traveling in aircraft.

19 (b) The director shall adopt aircraft noise standard rules
20 to protect the public health, welfare, and quality of life
21 within aircraft noise abatement areas in the vicinity of state
22 airports.



1 [~~(b)~~] (c) Any other law to the contrary notwithstanding,
2 no tour aircraft operation shall be permitted in any airport
3 under the State's control without having a permit. The director
4 shall adopt rules to regulate tour aircraft operations by permit
5 which shall include but not be limited to:

- 6 (1) Identification of the types of aircraft to be
7 utilized;
- 8 (2) The number of operations daily for each type of
9 aircraft used and the days and hours of operation;
- 10 (3) Verification that the applicant is in compliance with
11 all state statutes, including but not limited to this
12 section;
- 13 (4) Verification that the applicant has the Federal
14 Aviation Administration certificate 121 or 135;
- 15 (5) A written assessment by the department of the impact
16 to the surrounding area and to the subject state
17 airport;
- 18 (6) Revocation of a permit based on the failure to comply
19 with the information provided by the applicant and the
20 terms and conditions set forth by the department in
21 the permit; and any false statement or
22 misrepresentation made by the applicant;



- 1 (7) Establishment of penalties for revocation and
- 2 suspension of a permit for failure to comply with
- 3 permit conditions;
- 4 (8) Annual renewal of permits; and
- 5 (9) Any change of operations under the existing permit to
- 6 be approved by the director.

7 No permit shall be authorized unless accompanied by a
8 Hawaii sectional aeronautical chart marked to indicate routes
9 and altitudes to be used in conducting aerial tours and noise
10 abatement procedures to be employed in the vicinity of
11 identified noise sensitive areas.

12 For the purposes of this subsection, "tour aircraft
13 operations" means any business operation which offers aircraft
14 for hire by passengers for the purpose of aerial observation of
15 landmarks and other manmade or natural sites within an island of
16 the State, and for the purpose of transporting passengers for
17 tourist-related activities.

18 ~~[(e)]~~ (d) ~~[Definitions.]~~ For the purpose of this section,
19 if not inconsistent with the context:

20 "Sterile passenger holding area" means any portion of a
21 public airport designated by the director and identified by
22 appropriate signs as an area into which access is conditioned



1 upon the prior inspection of persons and property in accordance
2 with the approved Federal Aviation Administration air carrier
3 screening program.

4 "Operational area" means any portion of a public airport,
5 from which access by the public is prohibited by fences or
6 appropriate signs, and which is not leased or demised to anyone
7 for exclusive use and includes runways, taxiways, all ramps,
8 cargo ramps and apron areas, aircraft parking and storage areas,
9 fuel storage areas, maintenance areas, and any other area of a
10 public airport used or intended to be used for landing, takeoff
11 or surface maneuvering of aircraft or used for embarkation or
12 debarkation of passengers.

13 Notwithstanding the restriction on access by the public
14 into operational areas, entry may be authorized for airport
15 operational area related purposes with the prior permission of
16 the director or the director's duly authorized representative.

17 [~~(d) Conformity to federal legislation and rules.~~] (e) No
18 rules, orders, or standards prescribed by the director shall be
19 inconsistent with, or contrary to, any ~~[act]~~ Act of the Congress
20 of the United States or any regulation promulgated or standard
21 established pursuant thereto.



1 [~~(e) How made.~~] (f) All rules having the force and effect
2 of law, shall be adopted by the director pursuant to chapter 91.

3 [~~(f) Distribution.~~] (g) The director shall provide for
4 the publication and general distribution of all of its rules and
5 procedures having general effect."

6 SECTION 4. Statutory material to be repealed is bracketed
7 and stricken. New statutory material is underscored.

8 SECTION 5. This Act shall take effect upon its approval.
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Report Title:

Aircraft Noise; Noise Abatement

Description:

Requires the department of transportation to monitor noise levels from airport operations, establish an aircraft noise abatement master plan, and maintain a 24-hour noise complaint hot line and website. Establishes advisory committee.

