

STATE OF HAWAI'I OFFICE OF PLANNING
TECHNICAL ASSISTANCE MEMORANDUM

TAM – 2016 – 1

ISSUED: 05-02-2016

AUTHORITIES: State Planning, HRS Chapter 225M; Hawaii State Planning Act, HRS Chapter 226; Hawaii Land Use Law, HRS Chapter 205; Aeronautics, HRS Chapter 261; Airport Zoning Act, HRS Chapter 262

SUBJECT: Federal Aviation Administration (FAA) Order 5190.6B

The Office of Planning provides technical assistance to state and county agencies in administering the statewide planning system.¹ This technical advisory discusses an FAA Order which may impact the use of land adjacent to or in the immediate vicinity of Hawaii's airports.

Background

Pursuant to FAA Order 5190.6B²:

"20.1. Background. Land use planning is an important tool in ensuring that land adjacent to, or in the immediate vicinity of, the airport is consistent with activities and purposes compatible with normal airport operations, including aircraft landing and takeoff. Ensuring compatible land use near federally obligated airports is an important responsibility and an issue of federal interest. In effect since 1964, Grant Assurance 21, Compatible Land Use, implementing Title 49 United States Code (U.S.C.) § 47107(a)(10), requires, in part, that the sponsor:"

"...take appropriate action, to the extent reasonable, including the adoption of zoning laws, to restrict the use of land adjacent to or in the immediate vicinity of the airport to activities and purposes compatible with normal airport operations, including landing and takeoff of aircraft. In addition, if the project is for noise compatibility program implementation, it will not cause or permit any change in land use, within its jurisdiction, that will reduce its compatibility, with respect to the airport, of the noise compatibility program measures upon which federal funds have been expended."

¹ HRS §§ 225M-2(b), 226-53(10).

² https://www.faa.gov/airports/resources/publications/orders/compliance_5190_6/media/5190_6b_chap20.pdf

There are a number of sources that can assist an airport sponsor in dealing with noise, obstructions, and other incompatible land uses. These include, but are not limited to:

- a. Hazardous Wildlife Attractants on or Near Airports, AC 150/5200-33B, August 28, 2007.³
- b. Construction or Establishment of Landfills near Public Airports, AC 150/5200-34A, January 26, 2006.
- c. Federal and State Coordination of Environmental Reviews for Airport Improvement Projects. (RTF format) – Joint Review by Federal Aviation Administration and National Association of State Aviation Officials (NASAO), issued March 2002.⁴
- d. Land Use Compatibility and Airports, a Guide for Effective Land Use Planning (PDF format), issued by the FAA Office of Environment and Energy.⁵
- e. Compatible Land Use Planning Initiative (PDF format), 63 Fed. Reg. 27876, May 21, 1998.⁶
- f. A Model Zoning Ordinance to Limit Height of Objects Around Airports, Advisory Circular
- g. (AC) 150/5190-4A.
- h. Glint/Glare Hazards, Airport Airspace Analysis (iOE/AAA), Combined Federal Regulation CFR Part 77 (e-CFR format) – Current as of December 15, 2015 (same as obstruction process below).
- i. Obstruction Evaluation/Airport Airspace Analysis (iOE/AAA), Combined Federal Regulation CFR Part 77 (e-CFR format) – Current as of December 15, 2015.
- j. Avigation and Noise Easements – Permitting agencies shall ensure that all permits issued to projects near airports are compatible with avigation easement agreements between the State of Hawaii Department of Transportation, Airports Division (DOT-A) and property owners. These easements grant the DOT-A the right of flight of aircrafts, the safe operations of airports, and acceptance of certain noise levels and other phenomena associated with the airport. The right to flight includes the prevention of wildlife hazard through appropriate mitigation and monitoring. In all land-use zone changes, this easement is required and must satisfy DOT-A requirements.

Pertinent Information from FAA's Land-Use Practices on or near Airports That Potentially Attract Hazardous Wildlife, Glint/Glare Hazards and Obstruction Hazards:

³ http://www.faa.gov/documentLibrary/media/advisory_circular/150-5200-33B/150_5200_33b.pdf

⁴ <https://www.faa.gov/airports/resources/publications/reports/environmental/media/eis-faa-nasao-report.pdf>

⁵ http://www.faa.gov/about/office_org/headquarters_offices/apl/noise_emissions/planning_toolkit/media/III.B.pdf

⁶ <https://www.gpo.gov/fdsys/pkg/FR-1998-05-21/pdf/98-13577.pdf>

2-1. General. The wildlife attracted to the airport environment vary considerably, depending on several factors, including land-use practices on or near the airport. Other hazards that attract wildlife include glint/glare hazards, certain street and property lighting designs, and aerial obstruction hazards, all of which threaten aviation safety. In addition to the specific considerations outlined below, airport operators should refer to Wildlife Hazard Management at Airports, Glint/Glare, and Obstruction guidance materials prepared by the FAA.

Pertinent Information from FAA Order 5190.6B Compatible Land Use and Airspace Protection:

4-3. Other Land-Use Practice Changes. As a matter of policy, the FAA encourages operators of public-use airports who become aware of proposed land use practice changes that may attract hazardous wildlife within 5 statute miles of their airports, to include glint/glare hazards and aerial obstructions to promptly notify the FAA. The FAA also encourages proponents of such land use changes to notify the FAA as early in the planning process as possible. Advanced notice affords the FAA an opportunity (1) to evaluate the effect of a particular land-use change on aviation safety and (2) to support efforts by the airport sponsor to restrict the use of land next to or near the airport to uses that are compatible with the airport.

Land use practices that may attract hazardous wildlife, and may also be a glint/glare hazard or an aerial obstruction hazard to existing flight paths include, but are not limited to:

- Underwater waste discharges
- Aquaculture activities conducted outside of fully enclosed buildings
- Water features on properties such as fountains or ponds, areas of permanent or temporary standing water, and furrow irrigation and drainage systems
- Landfills and material recycling/processing facilities
- Photovoltaic/Solar panels
- Utility poles and lines
- Wind turbines
- Antenna towers
- High rise building structures
- Cranes
- Tethered Air Balloon Devices
- Street and exterior property lights
- Certain landscape, trees, and ground cover

4-3.a. Airports that have received Federal grant-in-aid assistance are required by their grant assurances to take appropriate actions to restrict the use of land next to or near

the airport to uses that are compatible with normal airport operations. The FAA recommends that airport operators to the extent practicable oppose off-airport land-use changes or practices within the separations identified in Sections 1-2 through 1-4 that may attract hazardous wildlife, and/or be glint/glare, and/or obstruction hazards. Failure to do so may lead to noncompliance with applicable grant assurances. The FAA will not approve the placement of airport development projects pertaining to aircraft movement in the vicinity of hazardous wildlife attractants, or where glint/glare and/or obstruction hazards exist without appropriate mitigating measures. Increasing the intensity of wildlife control efforts is not a substitute for eliminating or reducing a proposed wildlife hazard, nor is the placement adjustments to mitigate glint/glare and obstruction hazards. Airport operators should identify hazardous wildlife, glint/glare, and obstruction hazards during any planning process for new airport development projects.

Application

The State of Hawai‘i Department of Transportation, Airports Division (DOT-A) discourages such land uses that may attract hazardous wildlife within five (5) statute miles of airport boundaries, pursuant to FAA Advisory Circular 150/5200-33B, (August 28, 2007). Attached are maps depicting the five (5) statute miles from airports in the State of Hawai‘i, including glint/glare hazards pursuant to Federal Aviation Administration Notice Of Interim Policy dated October 23, 2013 and aerial obstruction to existing flight paths pursuant to Combined Federal Regulation CFR Part 77 (e-CFR format) – Current as of December 15,2015.

State, county, and federal agencies who have jurisdiction over areas within five (5) statute miles of airport boundaries and have permit authority over future land uses that may attract hazardous wildlife shall consider FAA Advisory Circular 150/5200-33B, including glint/glare hazards and aerial obstruction(s) to existing flight paths in accordance with the FAA Obstruction Evaluation/Airport Airspace Analysis (iOE/AAA), Combined Federal Regulation CFR Part 77 in their decision making on plans and permits,

Consultation with the DOT-A (Airport Operations) shall be performed at the most earliest time where a future land use that may attract hazardous wildlife, glint/glare hazard or aerial obstruction(s) is proposed. Agencies should inform applicants of permits or approvals of such proposed land uses to consult with the DOT-A (Airport Operations) as soon as possible.

Where applicable, when a land-owner petitions the State of Hawaii Land Use Commission (LUC) with a request for a land use district boundary amendment, the State will propose an LUC condition requiring an avigation and noise easement be granted to DOT-A and the terms of the easement must meet the requirements of the DOT-A, including mitigation to minimize potential wildlife hazards to aircrafts and airport operations.

In cases where the respective counties are the authority for land use district boundary amendments (petitions under fifteen (15) acres), the respective counties should contact DOT-A for any requirements of an avigation and noise easement.

When a landowner in the vicinity of the airport pursues redevelopment of a property, the landowner must grant an avigation and noise easement to the DOT-A to ensure compatible land use in the vicinity of the airport. The terms of the easement must satisfy DOT-A requirements.

Grant of avigation and noise easements to DOT-A is necessary for the safety of air transportation which is a public benefit. State, County, and Federal regulatory and service agencies that work with any aspect of the conditions identified in an avigation and noise easement must take appropriate actions and incorporate the DOT-A avigation easement requirements in their decisions.

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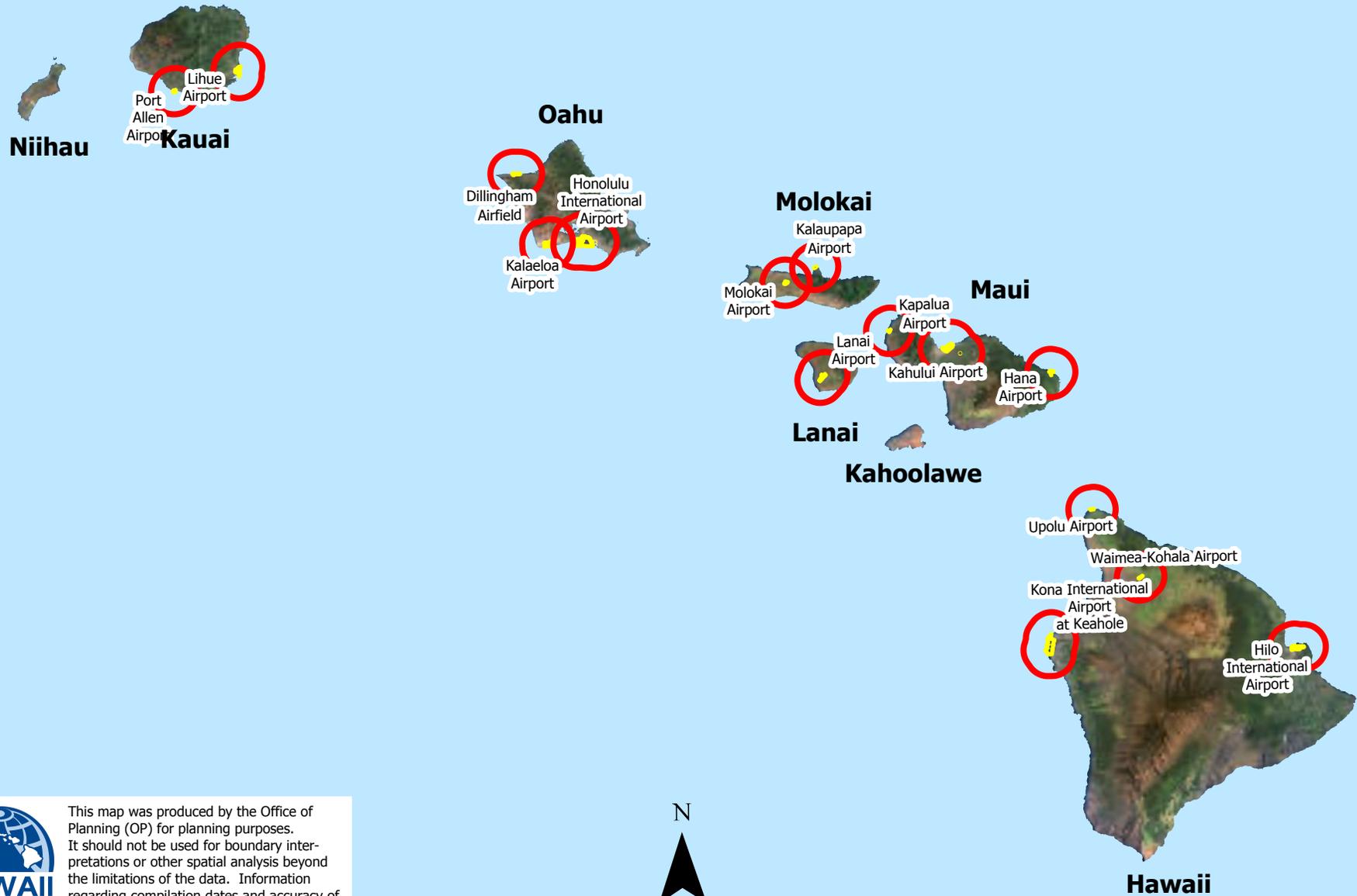
Department of Transportation
Airports Division
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400 Rodgers Boulevard, Suite 700
Honolulu, HI 96819-1880

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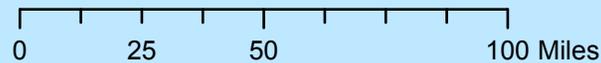
Note: A Technical Assistance Memorandum (TAM) is an informational statement of the law, regulations, or policies. It is accurate on the date issued. Subsequent changes in the law or regulations, judicial decisions, or changes in policies could affect the validity of the information presented in a TAM.

State of Hawaii

-  5 Nautical Mile Buffer Around Airport
-  State DOT Airports

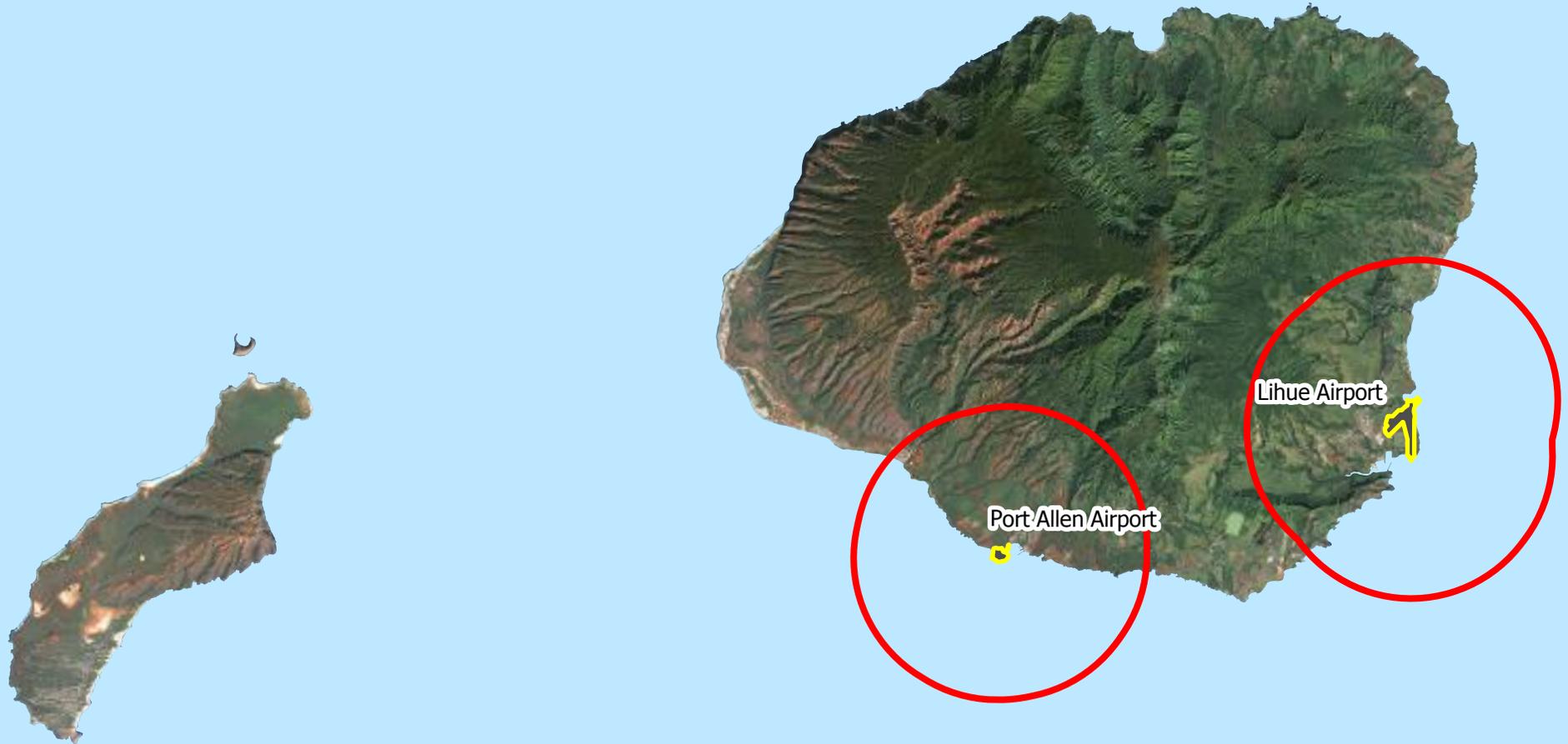


This map was produced by the Office of Planning (OP) for planning purposes. It should not be used for boundary interpretations or other spatial analysis beyond the limitations of the data. Information regarding compilation dates and accuracy of the data presented can be obtained from OP. Map No.: 20151014-01-DK Map Date: 10/14/15 Sources: DOT Airports: State of Hawaii, DOT, 2014.

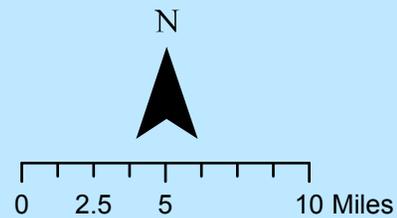


Kauai County

-  5 Nautical Mile Buffer Around Airport
-  State DOT Airports

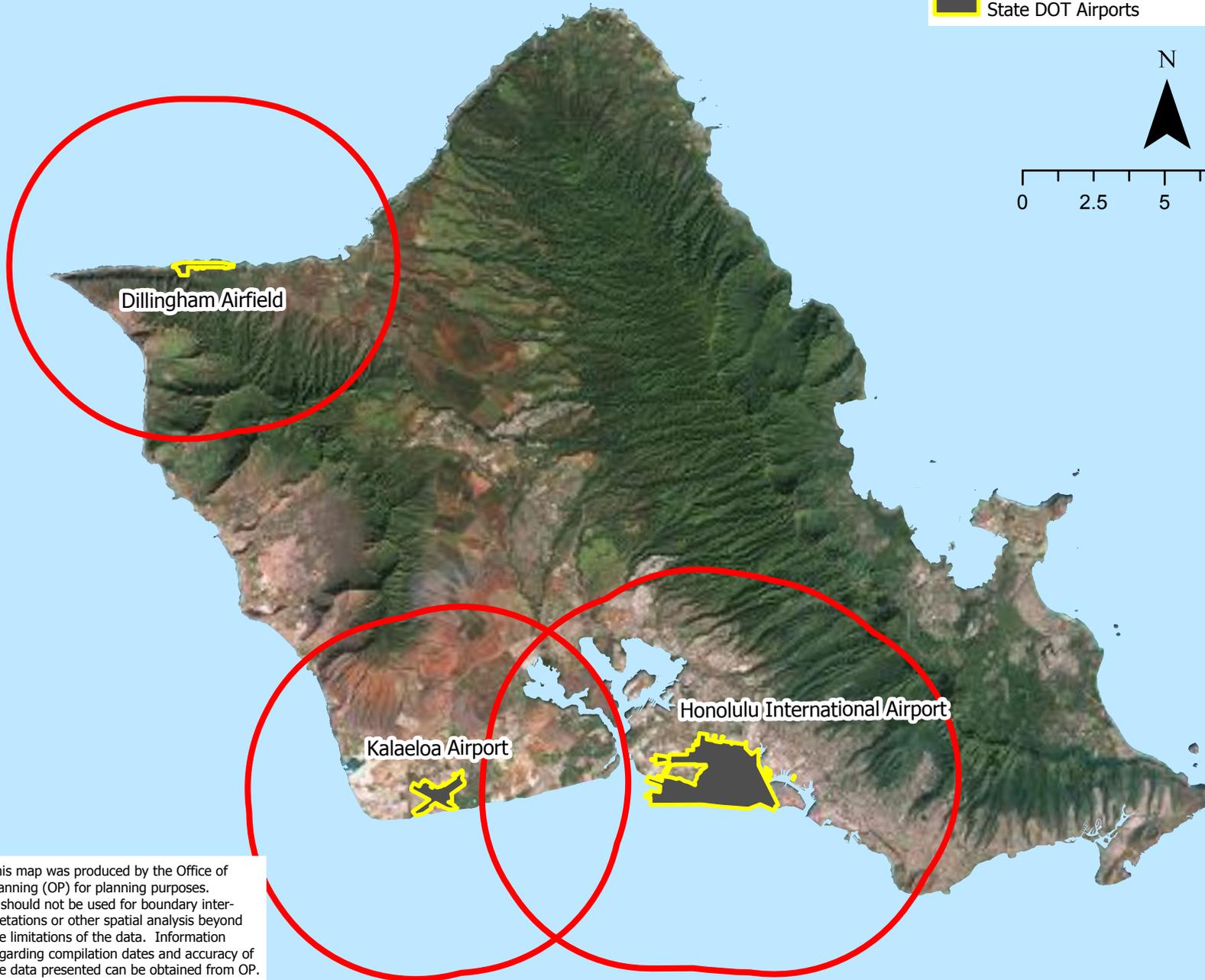


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Map Date: 10/14/15
Sources:
DOT Airports: State of Hawaii, DOT, 2014.



Honolulu County

-  5 Nautical Mile Buffer Around Airport
-  State DOT Airports



Dillingham Airfield

Kalaeloa Airport

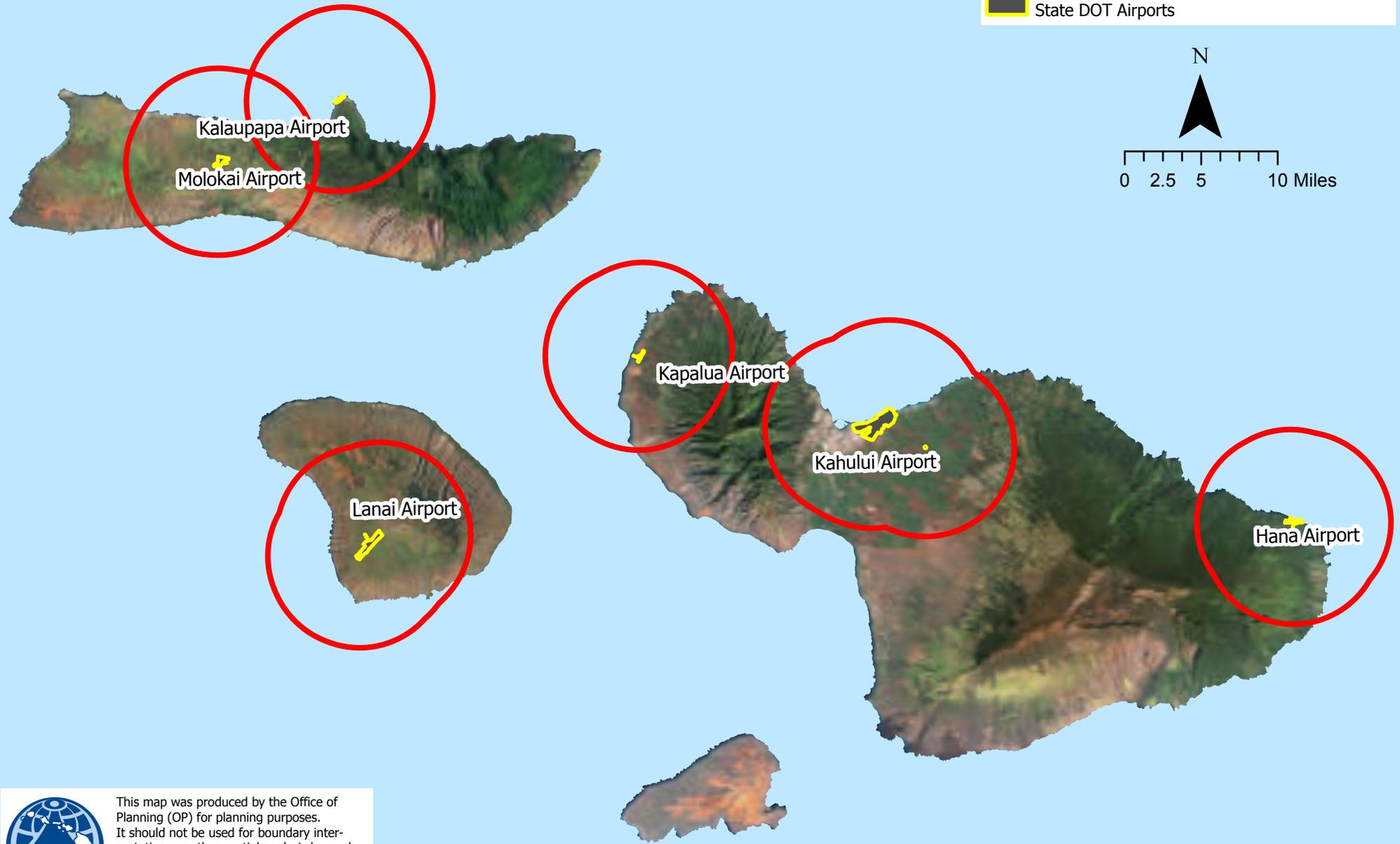
Honolulu International Airport



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Maui County

-  5 Nautical Mile Buffer Around Airport
-  State DOT Airports



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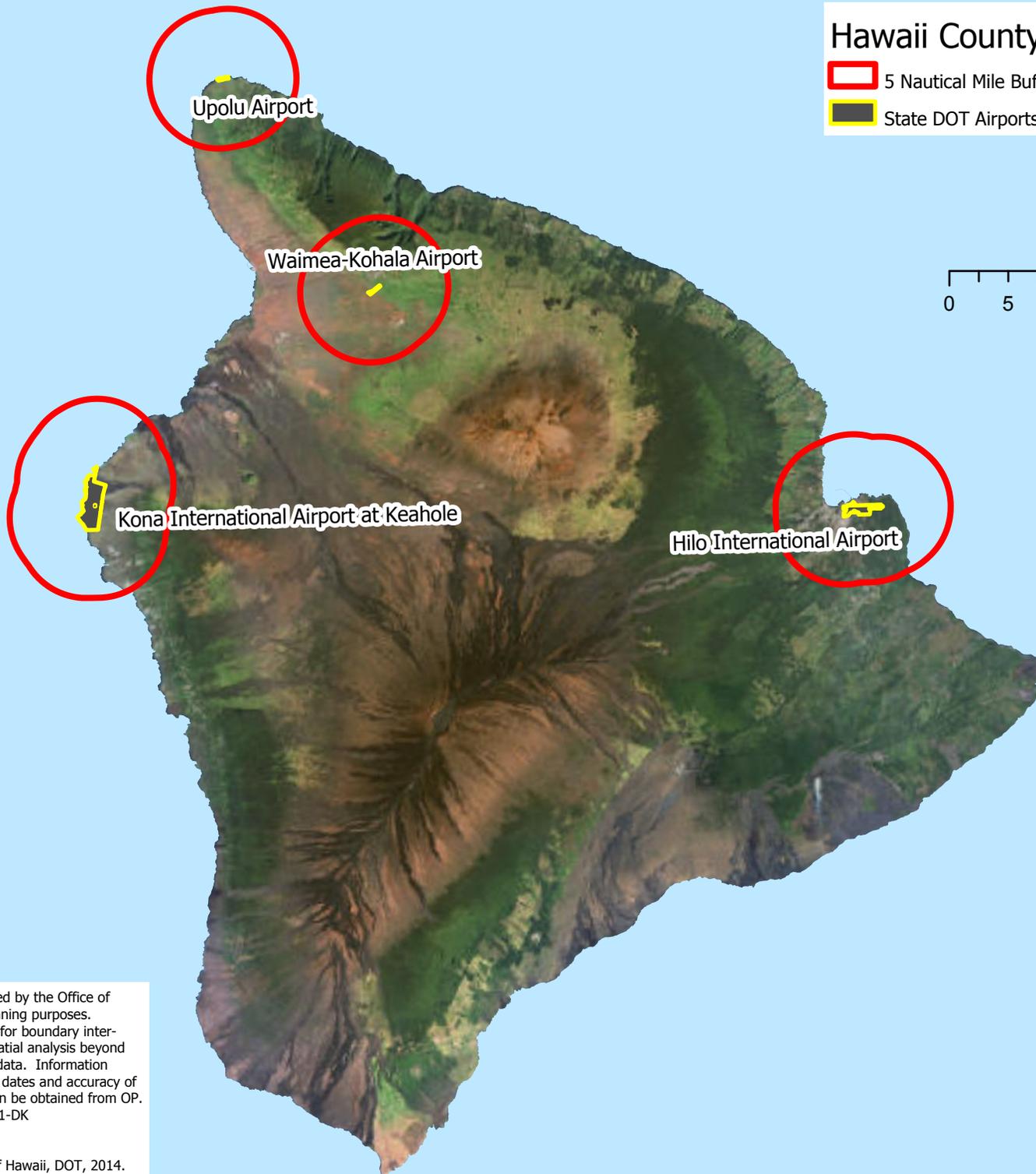
Hawaii County

-  5 Nautical Mile Buffer Around Airport
-  State DOT Airports

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