U.S. Department
of Transportation
**Federal Aviation
Administration**

Western-Pacific Region 300 Ala Moana Blvd, Rm 7116
Airports District Office Honolulu, HI 96813
MAIL: Box 50244
Honolulu, HI 96850-0001
(808) 541-1230
FAX: (808) 541-3462

May 11, 1995

Mr. Owen Miyamoto
Airports Administrator
State of Hawaii, DOT
Honolulu International Airport
Honolulu, Hawaii 96819

Dear Mr. Miyamoto:

This responds to your letter dated January 3D, 1995, and the March 1992 "Cost/Benefit Analysis Related to Alternative Noise Restrictions Kahului Airport," (the 1992 KPMG Study). In the January 30 letter, you indicate that the State of Hawaii has begun the process of restricting nighttime Stage 2 aircraft operations at Kahului Airport. Based upon the information that you have provided to date, the Federal Aviation Administration (FAA) is unable to conclude that you have complied with the procedural requirements of the Airport Noise and Capacity Act of 1990 (hereinafter referred to as "ANCA"), as implemented by 14 CFR Part 161.

Our major concerns about compliance with Part 161 are summarized here. General guidance concerning compliance with Part 161 is set forth in "Attachment A" to this letter. "Attachment B" sets forth detailed comments on the procedural issues and the adequacy of the 1992 KPMG Study.

Before we address the compliance issues, as a matter of policy we strongly encourage the State of Hawaii, in its capacity as the airport proprietor, to consider the use of voluntary agreements to achieve its noise abatement objectives. Voluntary agreements may be negotiated with aircraft operators to provide noise relief in a way that avoids undue economic burden. In contrast to mandatory restrictions, such arrangements are not subject to Part 161 analysis requirements.

1992 KPMG Study

We address three issues relating to the adequacy of the analysis in the 1992 KPMG study. First, the FAA has serious concerns about the study's underlying assumption that the State of Hawaii has authority to implement a local phase out requirement. The plain language of ANCA, as amended in 1991, raises an issue concerning whether Congress intended to permit the State of Hawaii to apply at its airports the schedule for transition to quieter aircraft that currently applies to the contiguous 48 states.

In 1990, Congress adopted ANCA to require the airlines to phase out operations by the loudest aircraft, Stage 2 civil subsonic turbojet weighing more than 75,000 pounds, by the year 2000. Congress also directed the Secretary of Transportation to issue regulations establishing interim
dates for a national transition schedule to quieter Stage 3 aircraft. Congress explicitly provided that Hawaii was exempt and that the phase out did not apply to Stage 2 aircraft used solely for air transportation outside the 48 contiguous United States. (See, 49 USC 46530, formerly Section 9308(d) of ANCA.)

In 1991, Congress amended ANCA with regard to the State of Hawaii. Congress established a cap, as of November 5, 1990, on the number of Stage 2 aircraft that may be operated within Hawaii and between Hawaii and points outside the contiguous United States. (See 49 USC 47528(e) , formerly Section 9308(i) of ANCA.) Congress' decision to exempt and cap the number of Stage 2 aircraft operations that may operate in Hawaii and between Hawaii and areas outside of the contiguous United States, in our view, expresses intent to permit Stage 2 operations to continue in Hawaii beyond the year 2000 because of the unique role aviation plays there. The cost- benefit analysis for any phase out proposal should address why a local phase out requirement is not federally preempted.

Even if Hawaii's statutory exemption does not preempt a local phase out schedule, such a proposal must be adopted in compliance with ANCA. Both the plain meaning and the legislative history of ANCA support interpretation of ANCA to require compliance for all restrictions on operations by Stage 2 aircraft proposed after October 1, 1990. We note your apparent agreement that Part 161 would apply to a local phase out proposal, based upon your most recent correspondence. In the January 1995 letter, you state that a contract is being issued for additional work "to provide the Part 91 compliance Cost/Benefit Analysis." Second, unless and until a lawful local phase out requirement is adopted, the 1992 KPMG analysis must start with the same operational levels as those permitted by ANCA for the State of Hawaii. The study may not assume that operations at Kahului Airport will match the Federal schedule in 14 CFR 91.801 et seq. ("Condition 2" in Subpart D of 14 CFR Part 161 provides additional guidance concerning how to evaluate costs and benefits.)

Third, the 1992 KPMG Study must also be revised to provide clear information concerning the potential benefits of the proposed restriction. For example, it is unclear how many people are expected to benefit from the nighttime restriction, to what extent they are expected to benefit, and what methodology was used to assess benefits. This is discussed in

more detail in Attachment B. The study should also be revised to provide additional information about potential costs to aviation, to the local economy, and to the traveling public. The reasonableness of the nighttime restriction as a matter of Federal law will' depend not only upon the costs and benefits to the State, as airport proprietor, but also upon whether the restriction would impose an undue burden on interstate or foreign commerce or be unjustly discriminatory.

Procedural Issues

Turning to the procedural issues, on or about May 24, 1993, you notified us that you intended to conduct two public hearings on June 28, 1993, concerning a proposal to prohibit operations by Stage 2 aircraft at Kahului between 10 PM and 6 AM effective December 31, 1995. In the notice, you indicated that the period for comment on the proposal would close on July 8, 1993. The notice did not reference the availability of a cost-benefit analysis, nor was it apparent that you had provided actual notice to all parties required under 14 CFR Part 161.205.

Part 161, Subpart C. We suggested that the public hearing be delayed until the proper Part 161 steps were completed.

The following year, in August 1994, you submitted a copy of the 1992 KPMG cost-benefit analysis to the FAA. We are providing guidance concerning the 1992 KPMG study so that you can determine whether to proceed with the proposal. We believe that the 1992 KPMG cost-benefit analysis must be updated and that a new notice and opportunity to comment must be provided.

Based upon information available to date, the May 1993 notice was not adequate because the State did not: (1) notify all appropriate parties; (2) notify the public that the 1992 KPMG study was available for review (14 CFR 161.203); (3) establish a public docket (14 CFR 161.207); or (4) provide the FAA with the full text of the proposed restriction (14 CFR Section 161.203(d)). Until these steps are taken, the
FAA will not publish the required announcement of the proposal in the Federal Register (14 CFR 161.207).

In any event, since three years have elapsed since the 1992 KPMG study was issued, the analysis should be reevaluated to determine whether the information is still accurate or should be updated (14 CFR 161.203(c) and 161.205). The results of any airport noise compatibility or environmental studies that are underway or that have been completed since 1992 should be considered.

Please contact David Welhouse of my staff if you wish to discuss, or have questions about, these comments. We would be happy to facilitate any negotiations that you wish to open with the airlines.

Sincerely,

Howard S. Yoshioka
Manager, Honolulu Airports District Office

2 Enclosures

ATTACHMENT A: FORMAT FOR SUBPART C, PART 161

MAXIMUM REQUIREMENTS FOR A STAGE 2 RESTRICTION (PROCEDURAL):
Notice and analysis published and released not less than 180 days prior to set effective date.

(161.203 (b))
Evidence that airport operator:
Published: local newspapers
Posted: at airport
Directly notifed in writing: parties listed in Part 161, including evidence of knowledge of all parties required to be notified (new
entrants, nonscheduled users, community groups, etc.)

(161.203 (c))
Evidence that the notices:
included all of the required information, including need and goal, identification of aircraft types expected to be effected, enforcement,
etc.

(161.203(c) (7))
Evidence that the notices:
provided a minimum 45 days to comment from the date of notice (at which time all required information is to be completed and made available)

The analysis' focus shall be on the elements required by 161.205, with the six conditions for approval referenced at section 161.305 as factors
to be examined in developing the 161.205 analysis:

(161.205(a))
anticipated or actual costs and benefits of proposal
description of alternative restrictions (comparing costs and benefits to proposal)
description of nonrestrictive alternatives comparing costs and benefits to proposal

(161.205 (b))
A study area must be defined and the Integrated Noise Model must be used to model noise.

(161.205 (b))
"Currently accepted economic methodology" must be followed and the methods used to analyze the costs and benefits of proposal and
alternatives must be specified.

(161.205 (b))
"Separate detail on the costs and benefits of the proposed restriction with respect to the operations of Stage 2 aircraft weighing less than
75,000 pounds if the restriction applies to this class" must be included. (If this class is exempted from a proposed Stage 2
restriction, there would be "benefits" to that class. A separate analysis demonstrating the noise impacts generated by that class and providing reasons for their exemption would be required to demonstrate that exempting the class is not unjustly discriminatory against any other user class.)

(161.205(c))
May include analysis requirements of section 161.305 - If it does, requires:

(a) complete text (required by Subpart C, 161.203(c))
(b) maps (required by Subpart C, 161.20S(b))
(c) no environmental analysis is required by Subpart C
(d) no separate Summary of the detailed analysis of (e) is required, but is helpful. It should be encouraged but not assumed to be mandatory under Subpart C.
(e) an analysis of the restriction, demonstrating by substantial evidence that the statutory conditions are met. The analysis must be sufficiently detailed to allow the FAA to evaluate the merits of the proposed restriction and contain the following essential elements needed to provide substantial evidence supporting each condition for approval. (This is recommended by Subpart C, 161.20S(c). If followed, each of the six conditions' elements should be evaluated as applicable to the proposed Stage 2 restriction.)

(161.207)

evidence to be submitted to the FAA that a public docket or other method has been made available for comments.

(161.209)
Provide for changes to the proposed restriction as a result of comments, and any follow-on work required, including:
--notifying interested parties (including any new ones who commented that were not initially notified --161.209(a))
--additional analyses
--changes to original data as a result of new information
Note: If change is not "substantial", no additional comment timeframe or effective date is required

(161.209)
Provide for evaluating changes to either the analysis or the proposed restriction to determine whether they are considered "substantial" by part 161 standards, and if so:
--to reinitiate notice (161.203), including any new "interested party" (161.209)
--to include the appropriate additional information to notified parties and include a new effective date of not less than 180 days from the date the new information is released for public comment
--to provide for another minimum 45-day comment period

This summary is not a substitute for the Federal regulation. Complete instructions are provided in 14 CFR Part 161.

ATTACHMENT B

Comments on Cost/Benefit Analysis Related to Alternative Noise Restrictions Kahului Airport (KPMG Study) dated March 1992

Page 1. The KPMG Study was initiated after publication of ANCA. Thus, it is essential that the applicability of Part 91 to operators of aircraft in the State of Hawaii be properly considered within the context of the cost-benefit analysis. All aircraft operators must comply with 14 CFR Part 91. Compliance for operators that do not operate Stage 2 airplanes in the contiguous United States may be accomplished by a simple restriction in its operations specifications without any Stage 2 airplane actually being removed from service.

Congress' 1991 modification to ANCA had the effect of capping the aircraft operator"s baseline Stage 2 aircraft fleet (no more Stage 2 aircraft than the number in the fleet as of November 5, 1990). This maximum number of Stage 2 aircraft in an operator's fleet applies only to operations wholly within the State of Hawaii, and to operations from Hawaii to locations outside the contiguous United States. The Stage 2 phaseout requirements of Part 91 continue to apply to aircraft operations within the 48 contiguous states.

Page 2. "The Litigation", second paragraph, states that the plaintiffs allege that the State "as proprietors of the Kahului Airport, have available, without violating federal law, many ways to restrict access to the Kahului airport." The airport operator may not restrict access except in accordance with applicable provisions of the Airport Noise and Capacity Act of 1990 (ANCA) and 14 CFR Part 161.

Page 6. See comments on page 1 relative to item 1 of the Stipulation Agreement.

Page 8. Items 9 and 10 of the Stipulated Agreement: Items 9 and 10 share the same problem, however, for clarity they are commented on separately. A brief technical discussion is useful before commenting on the issues.

Single Event Noise Exposure Level (SENEL) is the time summation of A-weighted sound for a single aircraft flyover. A-weighted sound is sound which has been filtered or weighted to reduce the effect of low frequency noise and is designed to approximate human response to noise. The SENEL computation is made for noise signals which exceed a certain level. In this sense SENEL is arbitrary in that the user selects the critical cut off value. In contrast, Sound Exposure Level (SEL) computations consider all A-weighted noise levels above the 10 dB down point from the maximum level. Thus, SENEL is a special case of SEL.

Item 9 of the Stipulation states that SENEL will be used to estimate the interior single-event noise levels. This appears to refer to the issue of sleep interference. Yet, throughout the study the methods and computational descriptions refer only to SEL. The paper lacks a much needed discussion of why SENEL is the selected metric, exactly how it is used in the study, how is it measured, and what is the critical cut off value.

In general, there is no one metric agreed upon by experts as the best for measuring sleep disturbance. Indeed, studies (e.g., "Report of a Field Study of Aircraft Noise and Sleep Disturbance", United Kingdom) have found that at outdoor event levels below 90 dBA SEL average sleep disturbances are unlikely to be affected by aircraft noise. In the range of 90 to 100 dBA SEL, which encapsulates the values in the table on page 45 of the study, the chance of an average person being awakened is about 1 in 75. However, these are average effects and clearly more susceptible people exist. In addition, FAA was a party to the FICON (Federal Interagency Committee on Noise) report of August 1992 ("Federal Agency Review of Selected Airport Noise Analysis Issues"), which examined the effect of sleep disturbance using SEL. DNL supplemented with SEL, to measure sleep disturbance effects, is consistent with FAA guidelines.

Item 10 refers to the use of both SENEL and DNL for arriving at potential noise and access restrictions. Yet, the discussion of metrics on page 31 and the description of the derivation of single-event levels on page 44 reference SEL only. Further, the single-event levels are described as generated by Integrated Noise Model (INM) version 3.9, which does not compute SENEL. Thus, there may be a misunderstanding of metric terminology, or, as pointed out above, further clarification in the study is required.

The FAA is not required to approve under Part 161 proposed restrictions on Stage 2 aircraft operations. FAA approval is required for proposed restrictions on Stage 3 aircraft operations. Also note that the FAA's authority under other Federal laws and regulations would still apply. That is, the legal standards prohibit adoption of restrictions that are unreasonable, unjustly discriminatory, that impose an undue burden on air commerce or that attempt to regulate air carrier routes, rates, or services.
It is not clear what the term "to Stage 3 levels" means in relation to operations at Kahului Airport. No level has been identified in this section.

Soundproofing appears to be included in the stipulation as an option to a nighttime Stage 2 restriction. Why does The KPMG Study conclude that all airports in the entire State would have to soundproof homes? Is there a requirement under State law that if an area around one airport is mitigated through soundproofing all other areas around airports must be? This does

not seem to be consistent with the fact that several other airports in the State have conducted independent Part 150 studies where at least some programs have included soundproofing measures.

Page 9. Upon which Noise Exposure Map (NEM) will the conditions 16 and 17 be based--current or projected conditions? The NEM which shows smaller contours would be more likely to invoke the condition permitting a re-opening of the issue if impacts increase beyond those shown on the NEMs. What factors are being used to determine "significant" change?
The FAA is concerned that condition 17 could cause a "freeze" in total operations at the airport. This is of concern and could be a significant cost factor, since the document states that Kahului serves most of the passengers and cargo on the island of Maui. An additional analysis should evaluate the actual impact on commerce and effect on the air carriers or air service.
We understand that the State has purchased Kapalua-West Maui Airport. The reference to that airport should be updated.

Page 14. As discussed above, based on past and recent studies, the FAA considers the DNL metric to be the preferred metric for measuring aircraft noise impacts. If it is supplemented by other metrics to characterize specific effects, SEL is the preferred measure to demonstrate transmission loss and noise level reduction through the use of insulation.

Page 15. We are concerned that the KPMG Study states that other noise issues will be addressed by other consultants. How does the exclusion of discussion of the other noise issues affect this analysis (e.g., limitations on scope, alternatives)? Will the effects on air commerce and the environmental benefits be analyzed?

For purposes of the ANCA's applicability to the State of Hawaii, the years 1995 and 2004 may not be appropriate for purposes of analysis under Part 161, Subpart C (it may still be required to be included separately as part of the Stipulation Agreement but would not reflect accurate assumptions for the Part 161 analysis) (see page 15, fourth paragraph). The State should work with affected aircraft operators to get accurate estimates on the numbers of Stage 2 aircraft expected to be in their fleet and operating within the State. This will provide the most likely scenario for purposes of an adequate cost-benefit analysis to satisfy Subpart C of Part 161. (161.205(b))

Due to the age of the 1992 KPMG Study, updated information should be included on the status of Stage 3 aircraft and whether airlines have firm plans to use the Stage 3 QC aircraft at Kahului Airport as assumed in this section of the study, and when.

Pages 16 through 22. It is noted at the beginning of the 1992 KPMG Study that no final proposal was to be selected but that available options were to be evaluated. What comments have been received on the proposed restrictions set forth on these pages? We also note that Alternative 2 was recommended at the end of the study. For purposes of Part 161, your proposal needs to be clarified.

Page 16. See FAA comments in the body of the main letter concerning the applicability of ANCA and the 14 CFR Part 91 phaseout schedule to aircraft operators based in Hawaii.

Under ANCA, consideration must be given to how the proposal affects all user classes (including helicopters). Also, a separate analysis of the restriction must be done considering the costs and benefits to aircraft weighing less than 75,000 pounds versus costs and benefits to those aircraft weighing greater than 75,000 pounds. (161.205(b))

Page 17. To comply with a local fleet mix rule, a carrier would lose the efficiencies inherent in scheduling that allow optimal selection of size and type of aircraft to serve each market. Forcing an aircraft operator to use the same ratio of Stage 2 and Stage 3 aircraft at an airport as are represented in its fleet may be inefficient and wasteful of economic resources. The resultant burden to aircraft operators of this proposal must be factored in.

The KPMG Study should discuss all aircraft operators, who among them is impacted, their current operations and how they would be affected. Hawaiian Airlines and Aloha Airlines may be the largest operators, but are they the only operators at the airport that would be affected? Consideration of impacts to all users is necessary for an adequate analysis and for determining the effects among user classes.

Page 18. We note that item 2 on page 18 would impact Stage 3 aircraft operators and would require FAA approval under Part 161 (or agreement under Subpart B, unless voluntary agreements could be accomplished, as explained in the FAA letter transmitting these comments).

Page 19. Item number 4 requires a separate analysis covering aircraft weighing less than 75,000 pounds.

Item 5 refers to a draft Noise Compatibility Program (NCP). The Part 150 was stopped due to litigation shortly after the Noise Exposure Maps (NEM) were accepted. There was no NCP produced.

How was the 76.3 EPNdB level set? The KPMG Study does not provide enough information to show that this level is not arbitrary or that it does not cause unjustly discriminatory results. This noise level would impact Stage 3 aircraft and would require FAA approval (or Agreement under Subpart B or by individual aircraft operator voluntary agreement).

It is not clear whether the level of 76.3 under item 4 is the proposed target level or whether it is merely a figure inserted as an example of how a proposal could be worded. If this is the proposed level, 76.3 dB would affect Stage 3 aircraft and the proposal would also require compliance with Subpart D of Part 161, or alternately, Subpart B, Agreements. We note that option 8, page 22, also would require compliance with both Subparts C and D.

Page 20. The FAA would not support a "target noise level threshold at a specific location" that uses noise monitoring to determine compliance. This encourages what FAA considers to

be an unsafe practice to "beat the box." FAA has not objected to using published, certificated noise levels (e.g., levels published in FAA Advisory Circulars) to set thresholds.

Page 21. The proposal for differential landing fees, as described in the 1992 KPMG Study should be reevaluated for consistency with the recently published Department of Transportation (DOT) policy on rates and charges (published in the *Federal Register* at 60 FR 6906 on February 3, 1995). The following language from that policy should be considered:

> Rates, fees, rentals, landing fees, and other service charges ("fees") imposed on aeronautical users for the aeronautical use of the airport ("aeronautical fees") must be fair and reasonable.
>
> 2.1.1 Revenues from aeronautical fees may not exceed the costs to the airport proprietor of providing airport services and facilities currently in aeronautical use (aeronautical costs) unless otherwise agreed to by the affected aeronautical users.
>
> 2.2 The "rate base" is the total of all aeronautical costs that may be recovered from aeronautical users through aeronautical fees. Airport proprietors must employ a reasonable, consistent, and "transparent" (i.e., clear and fully justified) method of establishing the rate base and adjusting the rate base on a timely and predictable schedule.
>
> 2.3 In the absence of an agreement with aeronautical users, costs that may be included in the rate base (allowable costs) are limited to all operating and maintenance expenses directly and indirectly associated with the provision of aeronautical facilities and services (including environmental costs, as set forth below); all capital costs associated with the provision of aeronautical facilities and services currently in use, and current costs of planning future aeronautical facilities and services.
>
> 2.3.2 Airport proprietors may include reasonable environmental costs in the rate base to the extent that the airport proprietor incurs a corresponding actual expense. All revenues received based on the inclusion of these costs in the rate base are subject to Federal requirements on the use of airport revenue.
>
> 3. Aeronautical fees may not unjustly discriminate against aeronautical users or user groups.
>
> 3.1 Unless aeronautical users agree, aeronautical fees imposed on any aeronautical user or group of aeronautical users may not exceed the costs allocated to that user or user group under a cost allocation methodology adopted by the airport proprietor that is consistent with this guidance.

> 3.4 Allowable costs--costs properly included in the rate base-- must be allocated to aeronautical users by a transparent, reasonable, and not unjustly discriminatory rate-setting methodology. The methodology must be applied consistently and cost differences must be determined quantitatively, when practical.
>
> 3.4.1. Common costs (costs not directly attributable to a specific user group or cost center) must be allocated according to a reasonable, transparent and not unjustly discriminatory cost allocation formula that is applied consistently, and does not require any air carrier, foreign air carrier or other aeronautical user group to pay costs properly allocable to other users.

It is the FAA's view that any imposition of a noise tax through a landing fee must be shown to be a monetary recovery of noise liability insurances, payments, liability, soundproofing program, etc. Such a fee may or may not be justified according to its consistency with the new Rates and Charges policy.

Page 22. A full or partial curfew would have to be noise based. Depending on the specific proposal, it could impact Stage 3 aircraft operations, requiring FAA approval unless agreement is reached with aircraft operators. Any proposal would need to consider the issue of unjust discrimination among user groups.

Page 23. It is stated that cargo operators will replace their QC aircraft with larger aircraft having more freight capacity. There is no analysis to support this assumption. Lengthening the runway would increase capacity, and thus airport access. To be determined is the extent to which any subsequent limitation on runway use would impact current airport access. Aircraft, regardless of their use for either cargo or passengers, should be given equal treatment with regard to runway access.

Other problems which are not discussed in this section include: (1) potential airspace conflicts between Kahului and Puunene; (2) costs to reopen puunene; (3) County restrictions on Kapalua-West Maui preventing night flights plus the fact that there are no lights at the airport.

Page 24. The statement to "soundproof.. .to a standard that reduced the interior SENEL caused by Stage 2 aircraft operations to a level that would be experienced within an uninsulated home by the operation of Stage 3 aircraft..." is unsubstantiated and requires quantification. First, on page 45, it is stated that the sound attenuation treatment cost estimates for the Kahului environs were provided by Y. Ebisu & Associates. No further description is offered as to how the estimates were arrived at, nor is there a reference as to whether the procedures conform to FAA guidelines set out in "Guidelines for the Sound Insulation of Residences Exposed to Aircraft Operations" (available from the National Technical Information Service, Order # ADA258032). Thus, further description is required on the technique used to derive the cost estimate ($3.7M). Second, a description or SEL estimates need to be provided for the current interior sound level, given the current (baseline) level of Stage 2 operations. Only INM estimated exterior SEL values are given in

the study. Further, target interior SEL values need to be provided under Stage 3 operations. If no quantitative target levels are specified, there is no way of knowing when or if the goal has been attained.

Selected Alternatives.

Alternative 1. Pages 29 and 46: This alternative appears to propose an "apples and oranges" mixed restriction. (See FAA's comments in the cover letter transmitting these comments for further explanation.)

Distributing operations of aircraft by the same percentage as aircraft in its fleet could impose unique costs due to rescheduling and/or mismatched scheduling to maintain airport operations that occur at the same Stage 2 and Stage 3 ratio represented by the aircraft operator's fleet. An aircraft operator's aircraft (fleet) ratio is not necessarily proportionate to its operations ratio at a particular airport. A Stage 2/Stage 3 aircraft fleet ratio does not imply that a carrier would logically schedule a similarly staged operational mix at every airport. Operating and bus~ness conditions dictate that efficient allocations consider the size of aircraft, volume of traffic, type or market (cargo, passenger, seasonal, for example), weather conditions, normal aircraft rotations, etc. Thus, the FAA does not agree that "there would be no additional cost or benefit associated with its implementation."

This alternative needs to be clarified as to whether the 1992 KPMG Study is referring to a State-level compliance, and/or an airport-specific fleet mix compliance. Both compliance scenarios present problems but for different reasons.

Alternative 2. Pages 29 and 46 through 50: To distinguish between nighttime operators by type of carrier or by type of aircraft could be unjustly discriminatory. Non-discriminatory means of addressing a nighttime noise problem include establishing a technically supportable decibel level restriction or time of day restriction that is applied without unjust discrimination. Congress also made the distinction by aircraft stage, and by aircraft weight (less than versus greater than 75,000 pounds. Part 161 requires separate analysis for each weight class) .

Since the market is relatively small (compared to the United States mainlands) local restrictions that reallocate limited resources (aircraft) are likely to have more obvious, direct effects on operations at other island airports.

The costs and benefits of this alternative would need to be adjusted based on the corrected baseline assumptions. Any costs incurred by carriers attributable to the phaseout of Stage 2 aircraft in Hawaii must be attributed to this proposal.

Impacts to other airports (regional and national system impacts) would need to be addressed. It is stated that Aloha Airlines could pull its Stage 3 aircraft used for night operations at other airports. What other airports? Do those alternate airports have operational restrictions in place that would preclude this shift? Have these alternate airports been investigated to determine whether the noise environment at these airports is such that there would not be a

"significant" increase in noise as a result of this proposal? Would such a shift in use of aircraft types impact scheduling for the affected aircraft operator(s)?

What effect on individual operators or carriers will occur regarding their ability to comply with the FAA phaseout schedule? Is a conflict presented that would undermine the schedule? Will any effect on foreign operators occur?

The assumption in the fourth paragraph on page 49 is faulty. Aloha Airlines does not operate within the contiguous United States; the number of Stage 2 aircraft in its fleet is not affected by its need to comply with Part 91 since the regulatory phaseout applies only to operations within the continental United States. Thus, the conclusion in The KPMG Study that "Aloha Airlines would be acquiring more Stage 3 aircraft during those years to comply with FAR Part 91" is not correct. Does another factual basis exist for this assumption?

Fuel efficiency costs are an important factor to consider in a cost- benefit analysis. If carriers have to perform sub-optimal scheduling to comply with a local phaseout rule, costs incurred, including loss of fuel efficiencies from less than optimal fleet allocations, would need to be considered.

Although there may not be a dollar value on the reduction in decibels that would occur, what quantifiable information is available? (what changes in the noise contours, give the fleet forecast assumptions, numbers of people removed from contour, numbers of people not disturbed
at night, noise levels before and after alternative is implemented, etc.) Will the effect on Kahului require Stage 2 operations to be concentrated at other airports? If so, what will be the effect on the noise contours?

Alternative 3.pages 29 and 50 through 53: It appears that this proposal would adversely affect cargo operators; the cost-benefit analysis should clearly demonstrate how this proposal is not unjustly discriminatory.

Would this proposal include all aircraft, regardless of weight?

What are the benefits, including impacts on numbers of people, or noise level on people, reduced?

Compliance with Subparts C and Subpart D (or alternatively, Subpart B) is required for this alternative, since it applies to both Stage 2 and Stage 3 aircraft.

On what facts is it assumed (page 53, second paragraph) that no operations will shift to other airports but that all affected aircraft operations will be accommodated during daytime and evening hours at Kahului Airport with the imposition of this nighttime curfew? Where are the nearest "substitute" airports and can they accommodate the required type of operations?

It is not clear (page 53, first indented paragraph) how another carrier could pick up the revenue at Kahului if there are no operations permitted at night.

What comments have been received from the USPS to the assumption in this analysis (page 53, second indented paragraph) that the USPS would amend their next-day delivery commitment to two-day delivery? A voluntary agreement with all potentially impacted carriers is one solution to be considered.

Costs to the local economy from imposition of a nighttime airport access ban should be more fully explored. From the description, businesses that rely on the goods being transported could be impacted. Comparative costs of warehousing expenses, retail storage vs. on-time delivery are an example of the costs to local businesses. If night cargo operations were banned, goods may become more scarce, or prices may rise as companies compete to put goods on other aircraft that arrive before the curfew. Consultation with affected users should help determine the degree of such an impact. These and other possible scenarios seem to indicate that a nighttime curfew at an airport that provides a vital service to the inter-island communities would impact the local economy.

Alternative 4, pages 29 and 54: This alternative would impact both Stage 2 and Stage 3 aircraft operations and Subparts C, and D (or B), of Part 161 would need to be satisfied. Distinctions between aircraft types and aircraft uses may not be unjustly discriminatory.

It is not possible to determine the net noise benefit of this alternative from the graphics provided (grid analyses). There is no analysis or explanation of why the particular noise level was selected. It is assumed that this is simply an alternative way of carrying out the same goal as Alternative 3, no nighttime flights.

The same question applies as to why night operations that have been moved from Kahului Airport would nQt affect noise levels at an alternate airport (page 54)?

Alternative 5, pages 29 and 30; pages 54 through 58: This proposal actually impacts scheduling of operations at Honolulu International and the cost/benefit analysis should evaluate this secondary impact at HNL, and any systemwide impacts. Consideration should be given to ground operations, impacts on other scheduled operations, etc. This proposal, as worded, appears to impermissibly regulate air carrier rates, routes or services by imposing a restriction on carrier scheduling. This would be in violation of 49 USC section 41713, formerly section 105 of the Federal Aviation Act.

We also note that Aloha Airlines and possibly other carriers would be negatively impacted since the fleet is in passenger use until after 11 p.m. Aloha Airlines, cited as the only carrier providing nighttime turbojet aircraft operations at the airport, would be significantly burdened by this restriction. Futhermore, if the restriction is written to impact only the cargo carrier (Aloha Airlines) and other, noisier aircraft were exempted, this would appear to be unjustly discriminatory.

Since this alternative limits all cargo operations, regardless of the stage of aircraft, Subpart C for Stage 2 restrictions and Subpart D, or alternately Subpart 5, for Stage 3 restrictions would also need to be satisfied. In addition, singling out cargo operations may be unjustly discriminatory.

This type of proposal may be conducive to successful negotiations between the airport operator and potentially affected aircraft operators as a voluntary agreement.

It is not clear whether the carriers named on page 55 had a qualifying baseline of Stage 2 aircraft that they could operate under the proposed restrictions in either Alternative 5 or 6.

There is a statement made on page 55, "any additional restrictions that might be imposed on aircraft between 10 p.m. and 11 p.m. would be reviewed separately in the FAR Part 150 Program for the Airport." A noise or access restriction would need to also comply with applicable Part 161 requirements. It is advisable to incorporate any alternatives that are being given serious consideration under Part 150 into a revised cost-benefit analysis.

Alternative 6. Pages 30 and 58 through 60: Impacts on airlines' scheduling capabilities due to required use of Stage 3 aircraft, and system impacts due to holding operations at HNL, should be considered under this option.

The FAA has similar concerns with the wording of this alternative, that appears to interfere with regulation of rates, routes, and services (49 USC section 41713).

Benefits and costs should be re-evaluated using the appropriate fleet baseline and probable level of phaseout of the Stage 2 fleet that would be operating in Hawaii (page 60).

Is the assumption that Aloha Airlines will have Stage 3 QC aircraft based on their aircraft orders, or based on the assumption of the applicability of Part 91. phaseout requirements (page 60)? This should be modified as appropriate.

Alternative 7. pages 30 and 60 through 61: On page 30, the connection between this alternative and the requirement to use larger aircraft should be stated.

In the first paragraph on page 60, the 1.992 KPMG Study assumes that larger Stage 3 aircraft would be replacing smaller aircraft, thereby reducing the number of air cargo operations at night. On what facts is this assumption based? Do these operators have such equipment or do they have plans to purchase such equipment? Have they committed in any way to reducing the number of nighttime operations once larger Stage 3 (QC) aircraft are in the fleet?

Neither the need nor the benefit is clear for this alternative (top of page 61.).

Regarding the "one carrier" that has expressed the desire to provide direct cargo service to the mainland, is it a new cargo carrier? Is this a new destination for an existing (or new carrier)? How does this statement apply to the goal of the Alternative 7 to reduce noise impacts at Kahului Airport?

This alternative may be more conducive to a voluntary agreement between the airport operator and affected aircraft operators.

Alternative 8. pages 30 and 61 through 62: We note that this is a non- restriction alternative, and one contained in the Stipulation Agreement that may be used as an alternative to aircraft operating restrictions. The FAA endorses implementing a non-restriction alternative to reduce noise impacts on residences as the preferred alternative when it is available. FAA funding eligibility criteria include a minimum of a 5 dB interior noise reduction from existing noise levels and the NLR goal of a maximum of dB 45 in habitable rooms.

It is not clear (page 62) why the State must also consider the costs of similar soundproofing of residences at all airports in the airport system. Is there a State requirement that all homes around all airports in the State system must be soundproofed?

Alternative 9. pages 30 and 62: We note that this is also a nonrestriction alternative, which may be used in conjunction with Alternatives 8 and 1.0. Any costs associated with this alternative and with Alternative 1.0 should be attributed directly to implementation of either of these alternatives.

Why would avigation easements cost more than soundproofing (Alternative 8)? Does this factor-in the cost of both soundproofing and easements?

It is not clear why the State would be required to purchase avigation easements across the State.

Alternative 10. page 30 and pages 62 and 63: This is also a non- restriction alternative. Why does this alternative have implications State-wide?

pages 31 and 32. Given that the KPMG Study was performed in 1991, use of INM version 3.9 is appropriate. Any new start analysis should use the most recent version of the model (version 4.11 as of the date of these comments).

Hush kits have been developed for the B737-200 and DC-9-30 with JT8D-9 engines, which makes them Stage 3 aircraft.

The paragraphs state that the contractor "adjusted" the INM data base to reflect modifications to the engines of these two aircraft types. The adjustments were based on noise level data collected during the certification process for the modified engines and were "verified" by the FAA Office of Environment and Energy. Further explanation is required on how the INM data base was modified. That is, were noise- power-distance curves for the retrofitted aircraft substituted for those used in the INM, etc.? Who in the Office of Environment and Energy verified/approved the procedures used?

page 32. This section "Aircraft Operations" indicates that the most recent data used was for the year 1989. Please verify currency of data (e.g., fleet mix, number of operations, airport layout, land uses,etc) .

Page 33 is missing from our copy of the cost/benefit analysis. There is no Exhibit D in the report.

Page 35. We note that Part 91 contains three interim phase-in/phase-out dates for the years 1996, 1998, and 2000. We question the applicability of the years 1995 and 2004 to operations at Kahului Airport in light of the effects of the phaseout on operations within the State.

As stated in comments on page I, the ANCA (and its subsequent non- addition amendment affecting the State of Hawaii) established a Federal transition schedule to an all-Stage 3 fleet.

The last sentence is incorrect. The Stipulation states that the State will prepare a cost-benefit analysis and that if-the KPMG Study warrants, the State agrees to initiate rulemaking.

Page 38. It is our understanding that Hawaiian Airlines has a large portion of Stage 3 aircraft in its fleet. How does this affect the results of the assumption on this page that Hawaiian Airlines would modify 25% of its fleet to meet Stage 3 standards by 1995? What input has been received from this and other aircraft operators at Kahului Airport regarding their fleet mix for operations within the State? Costs to purchase or modify aircraft to meet the Part 91 schedule at the airport would be attributable to the site-specific restriction, and not to the ANCA or Part 91.

We note that establishing "percentage fleet mix" requirements could impose a burden similar to an accelerated phaseout proposal. Such a restriction would inhibit distribution of resources (available aircraft). Your study should evaluate the economic and related costs on airport users. This data would include fleet forecasts and normal Stage 2 attrition forecasts; affected air carriers and other operators; impact on operators' access to the airport; number of Stage 2 operations, delays, gate space, enplanements; analysis of origin and destination, secondary impacts, and management decisions necessary to distribute Stage 2 and Stage 3 aircraft. Consultation with affected operators would provide much of this information and may result in some workable voluntary solution.

Page 39. Y. Ebisu & Associates also provided the modified aircraft arrival profiles used in the cost benefit study which it is stated were prepared by KPMG Peat Marwick.

There is no description of the arrival profiles nor is there a description of the departure profiles. It is difficult to evaluate this study without any information on the INM input files. The Part 150 Noise Compatibility Program is being prepared by other consultants for the airport (reference
page 15 of the Study). If it will be completed, will the latter be providing more information?

Under "Other Considerations," why was 10,000 feet picked for the extended length of Runway 2/20? Also, how can international operations be assumed?

Page 40. How many people are affected by aircraft noise, and at what noise levels? How many are affected by nighttime noise?

How does the revised AC 91-53A affect the KPMG Study's assumptions and recommendations?

(Second indented paragraph:) Does this paragraph state that the general aviation aircraft will NOT be using noise abatement departure procedures (NADP)? Would implementing NADPs for general aviation aircraft beneficially affect noise and/or the noise contour?

Page 44. The rationale for selecting the particular noise analysis locations should be included in this cost/benefit analysis. Referencing a separate document (the Part 150 study) is not sufficient unless it is made available as an attachment to the cost/benefit analysis.

Page 46. The assumptions (referenced in the first full paragraph) should be corrected in accordance with actual fleet mix and applicability of the ANCA phaseout schedule to Hawaii. Are there estimates on the costs to Aloha, Hawaiian, and any other affected aircraft operator to re-engine or to purchase Stage 3 aircraft due to the imposition of either the national phaseout or an airport-specific accelerated phaseout? Such costs would be attributed to the proposed restriction at Kahului Airport and not to the ANCA or to Part 91.

(Costs to convert aircraft that serve the mainland and that are therefore subject to the Part 91 phaseout would be attributed to part 91 and would not be subsequently counted in the additional costs attributed to a local rule.)

Page 47. In the discussion of new grid values, how many people are affected and subsequently removed from the noisier footprints under each scenario?

Page 63. The conclusions in the "Summary of Cost/Benefit Analysis" are erroneous and should be corrected using the appropriate ANCA phaseout schedule and current data from the affected users' existing and planned fleet mix.

The addressing of aircraft type and operation type (cargo, passenger) should not be unjustly discriminatory.

Page 65. We note that the cost/benefit analysis concludes with a recommendation to use Stage 3 aircraft for nighttime air cargo operations. This is Alternative 2 in the cost/benefit analysis. Any amended cost-benefit analysis may emphasize a preferred alternative and compare the costs and benefits of other alternatives to those of the preferred alternative. (section 161.205(a))