U.S. Department
of Transportation
Federal Aviation
Administration

800 Independence Ave., SW.
Washington, DC 20591

MAY 19 2004

Mr. Max A. Wolfe
Chief Operating Officer
Landrum & Brown
11279 Cornell Park Drive
Cincinnati, OH 45242

Dear Mr. Wolfe: Max

This is in response to your October 7, 2003, request to me for Federal Aviation Administration (FAA) guidance. You asked us to review the October 7 draft analysis entitled "Evaluation of a Curfew at Burbank-Glendale-Pasadena Airport" ("Draft Evaluation"). You asked for guidance on two issues; one regarding whether the rationale would affect possible FAA approval of the proposal, and the second regarding possible conflicts with our policy.

I apologize for the length of time it has taken to provide you a response. The Part 161 Review Team, consisting of several offices within the FAA, has taken a hard look at the documentation you submitted, along with past information your firm has provided related to this proposal. Any changes to your analysis, and more complete Part 161 documentation, could affect our comments.

The Draft states that the Burbank-Glendale-Pasadena Airport Authority (Airport Authority) is proposing a "full curfew on night operations" at the (recently renamed) Bob Hope Airport (BUR). Of the restrictions your firm has informally discussed with us in past meetings, this is the Airport Authority's preferred restriction alternative.

Based on our review of the limited information presented on a "full curfew" restriction on all aircraft types, this proposal would not be consistent with the statutory requirements that a restriction be reasonable, nonarbitrary, and nondiscriminatory. Also, it appears to us that the benefit/cost analysis would not support the proposed restriction.

We have identified certain issues that raise specific concerns. The nighttime noise of large commercial aircraft at Bob Hope Airport has, to a great extent, been controlled by an existing voluntary air carrier curfew. Your Draft Evaluation points out that the voluntary curfew has a compliance rate of approximately 97%. This voluntary curfew reduces the magnitude of the nighttime noise problem and commensurately raises the

bar in terms of evidence that will be required to justify the need for, and benefits, of a mandatory curfew.

Smaller, quieter aircraft also operate at the airport during curfew hours. Restriction of these aircraft may not contribute measurably to reducing either the noise contour or sleep awakenings. If the evidence does not warrant their restriction at night, a full curfew would be unjustly discriminatory. The FAA would expect to see more analysis of these aircraft types to show the proposed restriction would not unjustly discriminate against them.

We thought it would be helpful to identify the particular statutory conditions, as defined in greater detail in Part 161, that cause issues to be raised with regard to the full curfew proposal and rationale. We have concerns about the proposal satisfying four of the six statutory conditions.

The first statutory condition requires that a restriction be reasonable, nonarbitrary, and nondiscriminatory (49 U.S.C. § 47524 (c)(2)(A), 14 C.F.R. §161.305(e)(2)(i)). Essential information needed to demonstrate this condition includes, but is not limited to, evidence that other available remedies are infeasible or would be less cost-effective, including descriptions of other restrictive and non-restrictive alternatives that have been considered and rejected, descriptions of measures proposed under Part 150 that were not implemented, and reasons for rejecting or not implementing other measures.

The second statutory condition relates to the burden on commerce and, as implemented in Part 161, requires as "essential information" a benefit/cost analysis. The analysis must show the estimated potential benefits of the restriction have a reasonable chance to exceed the estimated potential cost of the adverse effects on interstate and foreign commerce (49 U.S.C. § 47524 (c)(2)(B), 14 C.F.R. §161.305(e)(2)(ii)).

The fourth statutory condition requires that the restriction not conflict with any existing Federal law or regulation, including Federal grant agreements (49 U.S.C. § 47524 (c)(2)(D), 14 C.F.R. §161.305(e)(2)(iv)).

The sixth statutory condition requires that the proposed restriction not create an unreasonable burden on the national aviation system based on evidence, including an analysis demonstrating that nonaircraft alternative measures to achieve the same goals as the proposed restriction are inappropriate (49 U.S.C. § 47524(c) (2)(F), 14 C.F.R. § 161.305(e)(2)(vi)).

Together, these criteria require a proposal for a restriction on airport use to be justified by a demonstrated noise problem and the existence of noncompatible land uses. The proposed restriction must be effective in addressing the identified problem and be supported by evidence that other available remedies are infeasible or would be less cost-effective. It must not be unjustly discriminatory against any class of aviation user. It must reflect a balanced approach under which the potential

benefits reasonably exceed the potential burden on commerce and that fairly considers both local and Federal interests. Some of the statutory criteria place airport use restrictions in the context of measures of last resort, rather than first response, for mitigating aircraft noise. The statute reflects the national interest in maintaining the efficiency and capacity of the national air transportation system and ensuring that Federally-funded airports maintain reasonable public access.

Further detailed discussion of the FAA's review is included in the enclosure. The conclusions in this letter of course refer only to the proposed full curfew. We understand that a substantial number of residences are located within the CNEL 65 dB contour at Bob Hope. We also understand that the Airport Authority will continue to be interested in seeking ways to mitigate the actual impacts of aircraft noise on the community including, as you discussed with us previously, other types of restrictions. The FAA made a commitment at the start of the Part 161 study process to be available to work informally with you and local representatives. We would like to continue to work with you as we have in the past to identify potential viable means for noise mitigation.

We trust these comments will serve as a guide as you consider other options. Please feel free to contact me at any time to arrange future meetings.

Sincerely,

Victoria L. Catlett
Community and Environmental
Needs Division, APP-600
Office of Airport Planning and
Programming

Enclosure

cc: Richard Simon

Incomplete Information:

As indicated in the incoming letter and section 1 of the Draft Evaluation, "[m]any elements of the forthcoming [14 C.F.R. Part 161] application are not included in this documentation, including the six tests required for approval, a benefit/cost analysis of the other viable alternatives, documentation of public involvement and stakeholder consultation, and the environmental analysis." As a result, the FAA's guidance is preliminary and partial. Any changes to your analysis, as well as more complete Part 161 documentation, could affect our comments.

Statutory Conditions:

The FAA regulations implementing the Airport Noise and Capacity Act, 14 C.F.R. Part 161, allow airport owners to select a preferred restriction alternative. If each of the statutory conditions for approval is met, then the FAA may approve the restriction as proposed by the airport. If the restriction does not fully satisfy these conditions for approval, the airport owner may request that the FAA approve part of the restriction, or an alternative restriction, that would meet these six statutory conditions for approval. (See §§ 161.305 and 161.311.) In sum, the Airport Authority could propose and the FAA could approve a full nighttime curfew *only if* the Airport Authority is able to provide "substantial evidence" that the curfew restriction meets *each* of the six statutory conditions (49 U.S.C. § 47524(c)(2), 14 C.F.R. §161.305(e)(2)). For restrictions on Stage 3 aircraft, these conditions effectively incorporate the Airport Authority's obligations under Airport Improvement Program grant assurances, 49 U.S.C. § 47107(a), and the FAA will review the proposed restriction for both ANCA and grant compliance as part of the same review. The FAA's comments regarding the statutory conditions of concern are contained in the body of the letter to which this enclosure is attached.

Rationale Provided in the Draft Evaluation:

Your stated Part 161 study goal in section 5.2 of the Draft Evaluation is "to eliminate or significantly reduce nighttime flight noise at Burbank Airport, now and in the future." The Draft Evaluation's rationale for a full curfew appears to be based upon three issues: California State law requirements, nighttime noise, and residential property values.

Section 5.1 of the Draft Evaluation refers to the State of California's requirement that airport proprietors with a defined "noise problem (incompatible land uses within the 65 CNEL contour)" develop noise programs to "reduce and ultimately eliminate" the noise problem. You state that proprietors of airports with noise problems are permitted to operate the airport only if they obtain a State variance. You also state that the Airport Authority is operating under a variance issued on September 25, 2002, effective for

three years. The information you presented to show that a nighttime restriction would be consistent with state requirements includes:

a. Projections of baseline noise contour increases to the west and south over time as the number of operations increases. Section 6.3, page 11.

b. Notable decrease of the noise contours (that is, smaller than for the baseline case in each study year) with a nighttime curfew. Section 6.3, page 11.

c. Decline in the number of homes within the 65 CNEL contour (that is, decreasing from 1,262 to 502 in 2015) with a curfew. Section 6.3, page 13.

d. Deferred requirements for acoustical treatment of noise-sensitive land uses around the airport. Section 7.2.3, page 20.

The rationale related to the problem of nighttime flight noise at Bob Hope Airport is based on the following:

a. Decline in potential awakenings, decrease in sleep disturbance, and improvement of quality of sleep. Sections 7, 7.1, 7.2, and 7.5, pages 13, 14 and 27.

b. Decline in noise disturbance for people spending time in enjoying out-of-doors during the early night, late evening, and early morning hours. Sections 7.1 and 7.5, pages 14 and 27.

c. Feedback from the citizenry. (The Draft Evaluation notes citizens "expressing a desire to impose a curfew on all nighttime operations." It notes "intense public concern about the noise from operations at BUR." And it states that "nighttime activity generates complaints more than three times as frequently as daytime operations and more than 20 times as frequently as evening operations.") Section 5.1, pages 4-5.

There is an obvious connection between the CNEL contours and nighttime noise. Changing the nighttime noise environment would also be a way to change the CNEL contour, because the CNEL metric heavily weights nighttime noise.

Rationale related to diminution in residential property values in high-noise areas is contained in Section 7.2.2., page 16, "Property Value Recovery".

Cost-Benefit and Supplemental Analyses:

The Airport Authority has selected the 65 CNEL contour, consistent with California law, to define its noise impacted area. The study then inappropriately uses supplemental metrics to change the noise study area for analysis purposes beyond the

boundaries of the 65 CNEL. There is not enough scientific study to relate awakenings to impacts on a single event basis and to define a noise-impacted area on this basis. There is also an inadequate basis for using complaint data to define a noise-impacted area. The noise study area should remain constant and consistent for purposes of contour changes, calculations of noncompatible land uses and impacted people, and any supplemental analyses. With respect to awakenings, the Federal Interagency Committee on Aviation Noise (FICAN) 1997 sleep disturbance relationship only predicts the maximum percent of the exposed population expected to be behaviorally awakened. The Draft Evaluation uses this percentage to calculate total number of awakenings by assuming a simple direct relationship between number of events and number of awakenings. Estimates of sleep awakenings are probably not strictly additive since two or more such events in close proximity are unlikely to equal two awakenings. The FICAN report does not address this issue, and the research in this area is limited. Rather than trying to place a value on each awakening, it may be more useful to estimate the number of residents adversely affected by nighttime noise and develop a cost by affected resident.

We have several more detailed comments on the calculations of benefits and costs. We understand it is your preference to discuss these details in a meeting.