



Follow-up to 10/9/07 Airport Futures Planning Advisory Committee's Questions and Comments

Regulatory Overview

Who established the standards for Federal Aviation Regulation Part 161 for noise based flight restrictions?

Federal Aviation Regulation Part 161 was established by the Federal Aviation Administration at the direction of Congress which passed the Airport Noise and Capacity Act of 1990 (ANCA). ANCA set six criteria for creating noise based restrictions. Those six criteria are excerpted below. Congress then required that the FAA create rules to implement the law which became Federal Aviation Administration Part 161. Those standards expanded upon the six criteria from ANAC and are also excerpted below.

The full text of the Airport Noise and Capacity Act can be found in the PDX Airport Futures website in the document library.

The full text of Federal Aviation Regulation Part 161 can be found at:
http://www.faa.gov/airports_airtraffic/airports/environmental/airport_noise/

Where do Part 161 Standards apply?

Part 161 standards would apply at any airport wanting to restrict aircraft activity based upon noise reasons. A number of existing airports have restrictions and curfews that pre-date the 1990 ANCA legislation. The curfews and restrictions have been grandfathered and allowed to remain. Any changes to them would require that the airport go through a Part 161 process. Examples of airports with restrictions include San Diego, San Jose, and Orange County.

Who approves noise based flight restrictions developed under FAR Part 161?

The Airport Noise and Capacity Act gave the Federal Aviation Administration the responsibility to approve or deny flight restrictions.

Excerpt from the Airport Noise and Capacity Act of 1990:

The Secretary may approve the restriction only if the Secretary finds on the basis of substantial evidence that:

- (A) the restriction is reasonable, nonarbitrary, and nondiscriminatory;
- (B) the restriction does not create an unreasonable burden on interstate or foreign commerce;
- (C) the restriction is not inconsistent with maintaining the safe and efficient use of the navigable airspace;
- (D) the restriction does not conflict with a law or regulation of the United States;
- (E) an adequate opportunity has been provided for public comment on the restriction; and

(F) the restriction does not create an unreasonable burden on the national aviation system.

Excerpt from the Federal Aviation Administration Federal Aviation Regulation Part 161:

The following information comes from Federal Aviation Administration Part 161 and outlines the standards for approving a restriction on Stage 3 quiet aircraft.

Sec. 161.305 Required analysis and conditions for approval of proposed restrictions.

Each applicant proposing a noise or access restriction on Stage 3 operations shall prepare and make available for public comment an analysis that supports, by substantial evidence, that the six statutory conditions for approval have been met for each restriction and any alternatives submitted. The statutory conditions are set forth in 49 U.S.C. App. 2153(d)(2) and paragraph (e) of this section. Any proposed restriction (including alternatives) on Stage 3 aircraft operations that also affects the operation of Stage 2 aircraft must include analysis of the proposals in a manner that permits the proposal to be understood in its entirety. (Nothing in this section is intended to add a requirement for the issuance of restrictions on Stage 2 aircraft to those of subpart C of this part.) The applicant shall provide:

(a) The complete text of the proposed restriction and any submitted alternatives, including the proposed wording in a city ordinance, airport rule, lease, or other document, and any sanctions for noncompliance;

(b) Maps denoting the airport geographic boundary, and the geographic boundaries and names of each jurisdiction that controls land use within the airport noise study area;

(c) An adequate environmental assessment of the proposed restriction or adequate information supporting a categorical exclusion in accordance with FAA orders and procedures regarding compliance with the National Environmental Policy Act of 1969 (42 U.S.C. 4321);

(d) A summary of the evidence in the submission supporting the six statutory conditions for approval; and

(e) An analysis of the restriction, demonstrating by substantial evidence that the statutory conditions are met. The analysis must:

(1) Be sufficiently detailed to allow the FAA to evaluate the merits of the proposed restriction; and

(2) Contain the following essential elements needed to provide substantial evidence supporting each condition for approval:

(i) Condition 1: The restriction is reasonable, nonarbitrary, and nondiscriminatory. (A) Essential information needed to demonstrate this condition includes the following:

(1) Evidence that a current or projected noise or access problem exists, and that the proposed action(s) could relieve the problem, including:

(i) A detailed description of the problem precipitating the proposed restriction with relevant background information on factors contributing to the proposal and any court-ordered action or estimated liability concerns; a description of any noise agreements or noise or access restrictions currently in effect at the airport; and measures taken to achieve land-use compatibility, such as controls or

restrictions on land use in the vicinity of the airport and measures carried out in response to 14 CFR part 150; and actions taken to comply with grant assurances requiring that:

(A) Airport development projects be reasonably consistent with plans of public agencies that are authorized to plan for the development of the area around the airport; and

(B) The sponsor give fair consideration to the interests of communities in or near where the project may be located; take appropriate action, including the adoption of zoning laws, to the extent reasonable, to restrict the use of land near the airport to activities and purposes compatible with normal airport operations; and not cause or permit any change in land use, within its jurisdiction, that will reduce the compatibility (with respect to the airport) of any noise compatibility program measures upon which federal funds have been expended.

(ii) An analysis of the estimated noise impact of aircraft operations with and without the proposed restriction for the year the restriction is expected to be implemented, for a forecast timeframe after implementation, and for any other years critical to understanding the noise impact of the proposed restriction. The analysis of noise impact with and without the proposed restriction including:

(A) Maps of the airport noise study area overlaid with noise contours as specified in Secs. 161.9 and 161.11 of this part;

(B) The number of people and the noncompatible land uses within the airport noise study area with and without the proposed restriction for each year the noise restriction is analyzed;

(C) Technical data supporting the noise impact analysis, including the classes of aircraft, fleet mix, runway use percentage, and day/night breakout of operations; and

(D) Data on current and projected airport activity that would exist in the absence of the proposed restriction.

(2) Evidence that other available remedies are infeasible or would be less cost-effective, including descriptions of any alternative aircraft restrictions that have been considered and rejected, and the reasons for the rejection; and of any land use or other nonaircraft controls or restrictions that have been considered and rejected, including those proposed under 14 CFR part 150 and not implemented, and the reasons for the rejection or failure to implement.

(3) Evidence that the noise or access standards are the same for all aviation user classes or that the differences are justified, such as:

(i) A description of the relationship of the effect of the proposed restriction on airport users (by aviation user class); and

(ii) The noise attributable to these users in the absence of the proposed restriction.

(B) At the applicant's discretion, information may also be submitted as follows:

(1) Evidence not submitted under paragraph (e)(2)(ii)(A) of this section (Condition 2) that there is a reasonable chance that expected benefits will equal or exceed expected cost; for example, comparative economic analyses of the costs and benefits of the proposed restriction and aircraft and nonaircraft alternative measures. For detailed elements of analysis, see paragraph (e)(2)(ii)(A) of this section.

(2) Evidence not submitted under paragraph (e)(2)(ii)(A) of this section that the level of any noise-based fees that may be imposed reflects the cost of mitigating noise impacts produced by the aircraft, or that the fees are reasonably related to the intended level of noise impact mitigation.

(ii) Condition 2: The restriction does not create an undue burden on interstate or foreign commerce. (A) Essential information needed to demonstrate this statutory condition includes:

(1) Evidence, based on a cost-benefit analysis, that 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. In preparing the economic analysis required by this section, the applicant shall use currently accepted economic methodology, specify the methods used and assumptions underlying the analysis, and consider:

(i) The effect of the proposed restriction on operations of aircraft by aviation user class (and for air carriers, the number of operations of aircraft by carrier), and on the volume of passengers and cargo for the year the restriction is expected to be implemented and for the forecast timeframe.

(ii) The estimated costs of the proposed restriction and alternative nonaircraft restrictions including the following, as appropriate:

(A) Any additional cost of continuing aircraft operations under the restriction, including reasonably available information concerning any net capital costs of acquiring or retrofitting aircraft (net of salvage value and operating efficiencies) by aviation user class; and any incremental recurring costs;

(B) Costs associated with altered or discontinued aircraft operations, such as reasonably available information concerning loss to carriers of operating profits; decreases in passenger and shipper consumer surplus by aviation user class; loss in profits associated with other airport services or other entities; and/or any significant economic effect on parties other than aviation users.

(C) Costs associated with implementing nonaircraft restrictions or nonaircraft components of restrictions, such as reasonably available information concerning estimates of capital costs for real property, including redevelopment, soundproofing, noise easements, and purchase of property interests; and estimates of associated incremental recurring costs; or an explanation of the legal or other impediments to implementing such restrictions.

(D) Estimated benefits of the proposed restriction and alternative restrictions that consider, as appropriate, anticipated increase in real estate values and future construction cost (such as sound insulation) savings; anticipated increase in airport revenues; quantification of the noise benefits, such as number of people removed from noise contours and improved work force and/or educational productivity, if any; valuation of positive safety effects, if any; and/or other qualitative benefits, including improvements in quality of life.

(B) At the applicant's discretion, information may also be submitted as follows:

(1) Evidence that the affected carriers have a reasonable chance to continue service at the airport or at other points in the national airport system.

(2) Evidence that other air carriers are able to provide adequate service to the airport and other points in the system without diminishing competition.

(3) Evidence that comparable services or facilities are available at another airport controlled by the airport operator in the market area, including services available at other airports.

(4) Evidence that alternative transportation service can be attained through other means of transportation.

(5) Information on the absence of adverse evidence or adverse comments with respect to undue burden in the notice process required in Sec. 161.303, or

alternatively in Sec. 161.321, of this part as evidence that there is no undue burden.

(iii) Condition 3: The proposed restriction maintains safe and efficient use of the navigable airspace. Essential information needed to demonstrate this statutory condition includes evidence that the proposed restriction maintains safe and efficient use of the navigable airspace based upon:

(A) Identification of airspace and obstacles to navigation in the vicinity of the airport; and

(B) An analysis of the effects of the proposed restriction with respect to use of airspace in the vicinity of the airport, substantiating that the restriction maintains or enhances safe and efficient use of the navigable airspace. The analysis shall include a description of the methods and data used.

(iv) Condition 4: The proposed restriction does not conflict with any existing Federal statute or regulation. Essential information needed to demonstrate this condition includes evidence demonstrating that no conflict is presented between the proposed restriction and any existing Federal statute or regulation, including those governing:

(A) Exclusive rights;

(B) Control of aircraft operations; and

(C) Existing Federal grant agreements.

(v) Condition 5: The applicant has provided adequate opportunity for public comment on the proposed restriction. Essential information needed to demonstrate this condition includes evidence that there has been adequate opportunity for public comment on the restriction as specified in Sec. 161.303 or Sec. 161.321 of this part.

(vi) Condition 6: The proposed restriction does not create an undue burden on the national aviation system. Essential information needed to demonstrate this condition includes evidence that the proposed restriction does not create an undue burden on the national aviation system such as:

(A) An analysis demonstrating that the proposed restriction does not have a substantial adverse effect on existing or planned airport system capacity, on observed or forecast airport system congestion and aircraft delay, and on airspace system capacity or workload;

(B) An analysis demonstrating that nonaircraft alternative measures to achieve the same goals as the proposed subject restrictions are inappropriate;

(C) The absence of comments with respect to imposition of an undue burden on the national aviation system in response to the notice required in Sec. 161.303 or Sec. 161.321.