

May '98

Seattle-
International Airport
 Tacoma

**Regulatory
Environmental
Meeting**

[> The Barnard Dunkelberg & Company Team]

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**FAA Aviation Noise
Abatement Policy, 1976**

ANCLUC
AICUZ

**Aviation Safety and Noise
Abatement Act, 1979**

FAR Part 150 Explanation

What it is

What it means

Who does one

New Policy

“Proposed Amendment”

**Airport Noise and
Capacity Act, 1990**

1st acknowledgement
noise was a
problem

**Aviation Noise Abatement
Policy, 1976**

- Based on LDN - 365 days

First recognition by the Federal Aviation Administration, Air Carriers, Airport Operators and Communities that an aircraft noise problem existed. That there were responsibilities for aircraft noise impacts.

Beginnings of
land use studies

Resulted in voluntary Aircraft Noise Control and Land Use Compatibility Studies (ANCLUCS), funded by the FAA and prepared by airport Sponsors. Twenty year planning horizon, no coordination required and no regulatory guidance.

~~Beginnings of~~
looked at
existing noise
only and
looked at land
use

Department of Defense initiated Air Installation Compatible Use Zones (AICUZ) Studies that addressed military aircraft noise associated with military air bases.

Based on LDN For 5 days per week

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Aviation Safety and Noise Abatement Act (ASNA)

Congress passed Act in 1979, directed FAA to set forth procedures for aircraft noise and land use compatibility. Act specifically directed FAA to:

- Develop single system of measuring noise
- Develop single system of determining noise impact
- Identify land use compatibility

Act established for first time noise set aside for funding noise studies and noise projects.

Established Noise Compatibility Programs and Noise Exposure Maps.

Promulgated FAR Part 150

Maryland
CA
TX

OR
have state
reqs
for
land
use

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*This is a
guideline -
not mandatory
FAA never says
the maps are
accurate only that
the process
followed was*

Federal Aviation Regulation Part 150

Voluntary five year aircraft noise
and land use compatibility studies.

Two distinct but complimentary
elements, Noise Exposure Maps and
Noise Compatibility Program.

Noise Exposure Maps

Two maps, one for the existing
year and one for the fifth year
after date of submittal.

Each map depicts DNL noise
contours with noise sensitive land
uses and the approximate
number of people within each
contour.

The NEMs are accepted at the
Regional level, no time frame for
such acceptance

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*approval take
180 days
then airport
is available
to receive Fed. money
they are not
guaranteed money.*

New FAA Policy on Funding Remedial Measures

Generally, AIP funds will not be available for sound attenuation or purchase of noise sensitive uses after October 1, 1998 for existing uses. Once communities are notified that certain areas are within the 65 or greater DNL contour, then it is their responsibility to prevent additional or new development to occur. The policy applies only to the construction of new homes within the 65 DNL contours, not to homes that already have been built in these areas. It is meant to get the FAA out of the business of retroactively soundproofing homes that local jurisdictions allow to be built with inadequate sound insulation in high noise contours.

5.2

Proposed Amendment

Supposedly, an amendment to FAR Part 150 is forthcoming. It may address different years for producing NEMs and may address procedures for submittal of maps and programs. May also have specific procedures for update existing Part 150 Studies.

*may try to
develop contours
for ~~8, 10, 12,~~
15 year
contours.*

Airport Noise and Capacity Act of 1990

Act basically articulated a new National Noise Policy that severely restricted the ability of an airport Sponsor to implement noise restrictions. Set the date for the phase out of Stage 2 aircraft, over 75,000 pounds, from the US fleet and restricted the ability of airports to implement noise restrictions. Promulgated FAR Part 91 amendments and a new FAR Part 161.

Noise restrictions implemented prior to October 1990 were essentially "grandfathered" by the Act and will remain in effect. However, any change or amendment to an existing restriction must follow FAR Part 161 requirements. An amendment may open up the entire restriction to analysis by the FAA.

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FAR Part 91

Identifies the date and procedures for the phase out of Stage 2 aircraft, over 75,000 pounds, in the United States. Applies to all civilian aircraft operating in the US over 75,000 pounds in weight. Foreign or domestic.

There have been no exceptions to phasing out the Stage 2

Jan 1, 2000

Generally all older aircraft, (B-727, B-737-200, DC-9) will either be re-engined, hush kitted, or replaced by the year 2000. These will be replaced by newer Stage 3 aircraft.

To date, there have been no exceptions or waivers granted.

only FAA has
control of
where planes fly

FAR Part 161

Regulation that states the methodology an airport must follow to implement any type of access restriction or noise restriction. Noise or access restriction is defined by the Regulation as:

“..means restrictions (including but not limited to provisions of ordinances and leases) affecting access or noise that affect the operations of Stage 2 or Stage 3 aircraft, such as limits on the noise generated on either a single-event or cumulative basis; a limit, direct or indirect, on the total number of Stage 2 or Stage 3 aircraft operations; a noise budget or noise allocation program that includes Stage 2 or Stage 3 aircraft; a restriction imposing limits on hours of operations; a program of airport-use charges that has the direct or indirect effect of controlling airport noise; and any other limit on Stage 2 or Stage 3 aircraft that has the effect of controlling airport noise.”

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8.2

Voluntary agreements are not regulated, except by procedure.

Restrictions to Stage 2 aircraft (regardless of weight) must be based on an exhaustive noise analysis (based on FAR Part 150) and a rigorous cost/benefit analysis to determine the cost to the user being regulated and the benefits of the restriction. The cost benefit methodology must be approved by the FAA. The restriction does not need FAA approval, but has procedural time frames and notice requirements to be met.

The method of analysis must be approved by FAA. The restriction does not have to be approved by FAA.

8.3

Restrictions to Stage 3 aircraft (regardless of weight) must be based on an exhaustive noise analysis (based on FAR Part 150) and a rigorous cost/benefit analysis to determine the cost to the user being regulated and the benefits of the restriction. The cost benefit methodology must be approved by the FAA as well as the restriction. Procedural time frames and notice requirements to be met.

Generally, Part 161 was a deliberate attempt by the FAA, in consideration for the airlines phasing out Stage 2 aircraft, to make it very difficult for airport Sponsors to enact any time of noise or access restrictions. This will become especially difficult with Stage 3 aircraft after the year 2000.

*Regulates noise
at the source
engine
manufactures
etc.*

FAR Part 36

Regulation that governs the noise that aircraft emit, applies to both the engine and airframe manufactures. This area has been preempted by the Federal government and is an attempt to regulate noise at the source.

Applies to all aircraft, including helicopters. Stage 1, Stage 2 and Stage 3 aircraft. Based on noise levels measured at precise locations, number of seats, number of engines and date of manufacture. Not all Stage 3 aircraft emit the same noise levels, but are within a range. Stage 1 aircraft are those not meeting Stage 2 requirements.

Some discussion in the industry about a Stage 3.5 or Stage 4 requirement.