Noise-Based Use Restrictions

Presentation to:

Noise Compatibility Committee
October 26, 2017
Topics

- Legislative and regulatory background to noise restrictions
- Grandfathered Use Restrictions
- Airport initiatives related to new noise restrictions
- Constraints and Opportunities for Naples
Airport Noise and Capacity Act of 1990, ANCA

- Required FAA to complete phase-out of Stage 2 aircraft over 75,000 pounds by 12/31/91
  - FAA promulgated Part 91 amendment (1991)

- Required FAA to establish regulations regarding analysis, notice, and approval of airport noise and access restrictions
  - FAA implemented through FAR Part 161 (1991)

- Required FAA to develop an national aviation noise policy

- Grandfathered existing airport noise and access restrictions
## Airport Noise and Capacity Act (ANCA), 1990

<table>
<thead>
<tr>
<th>ANCA Requirement</th>
<th>FAA Implementation</th>
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Part 161: Notice and Approval of Airport Noise and Access Restrictions

- Establishes federal program for reviewing noise and access restrictions on use of Stage 2 and 3 aircraft
  - Stage 2 restrictions are moot as of January 1, 2016, when the federal government banned all Stage 2 operations (with very limited case-by-case exceptions)

- Comprehensive analysis required, e.g.:
  - Evidence of noise problem
    - Must use DNL
  - Impact analysis
    - Must consider costs to all parties (operators, passengers, shippers, governments, businesses, airports, etc.)

- Benefit-cost analysis
  - “Monetized” noise benefits must exceed costs
  - Noise shifted to another airport cannot be counted as a benefit

- Encourages voluntary agreements
Part 161: Notice and Approval of Airport Noise and Access Restrictions

- Statutory conditions for approval of an access restriction
  - Reasonable, nonarbitrary, and nondiscriminatory
  - No undue burden on interstate or foreign commerce
  - Maintain safe and efficient use of navigable airspace
  - No conflict with existing Federal law
  - Adequate opportunity for public comment
  - No undue burden on national aviation system

- Many potential roadblocks
  - No guidance for benefit/cost analysis
  - Aviation interests - a key data source, unlikely to assist
  - FAA has made its opposition clear

- Naples precedent was significant in several ways
  - FAA grant assurances are “pre-existing law,” which must be addressed in addition to Part 161
  - Airports may use local noise standards if they are formally adopted and rigorously enforced (e.g., 60 DNL at Naples)
Use Restrictions “Grandfathered” under Part 161

- 60 +/- U.S. airports claim to have adopted formal time-of-day, and/or noise-level-based operating restrictions, which can be based on published or measured noise levels.
- 200 +/- U.S. airports claim to have formal noise abatement operating procedures; i.e., noise abatement flight corridors, runway use programs, or departure profiles, etc.
- Many of these are misleading, as some “restrictions” are actually voluntary, or not well enforced.
- There are about a dozen airports with actively enforced restrictions.
## Grandfathered Restrictions

<table>
<thead>
<tr>
<th>Type of Restriction</th>
<th>Airport</th>
<th>Restriction Details</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Curfew</td>
<td>San Diego (SAN)</td>
<td>Night departure curfew with different hours for Stage 3 and non-Stage 3 aircraft</td>
<td>Non-stage 3 curfew moot</td>
</tr>
<tr>
<td></td>
<td>San Jose (SJC)</td>
<td>Published-level-based curfew on Stage 3 aircraft; Stage 2 curfew</td>
<td>Stage 2 curfew moot</td>
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<tr>
<td>Published Noise Level Limits</td>
<td>Van Nuys (VNY)</td>
<td>Night noise rule based on published noise levels for Stage 1 or 2 aircraft</td>
<td>Moot</td>
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<tr>
<td></td>
<td>Burbank (BUR)</td>
<td>Curfew applies to aircraft that have been “hushkitted” to meet Stage 3</td>
<td>Active</td>
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<tr>
<td></td>
<td>Baltimore (BWI)</td>
<td>Runway use restriction based on published noise levels</td>
<td>Active</td>
</tr>
<tr>
<td></td>
<td>Washington (DCA)</td>
<td>Curfew based on published noise level</td>
<td>Active</td>
</tr>
<tr>
<td>Measured Noise Levels</td>
<td>New York (JFK)</td>
<td>Measured single event</td>
<td>Active</td>
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<tr>
<td></td>
<td>John Wayne (SNA)</td>
<td>Measured single event</td>
<td>Active</td>
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<td></td>
<td>Long Beach (LGB)</td>
<td>Measured single event</td>
<td>Active</td>
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<tr>
<td></td>
<td>Montgomery Field (MYF)</td>
<td>Measured single event</td>
<td>Active</td>
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<tr>
<td></td>
<td>Santa Monica (SMO)</td>
<td>Measured single event</td>
<td>Active</td>
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<tr>
<td></td>
<td>Teterboro (TEB)</td>
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Post-ANCA Airport Initiatives

- Part 161 initiatives are studies of last resort - perhaps a dozen airports have pursued
  - Some abandoned, some disapproved by FAA, some resulted in purely voluntary agreements
  - Since 1991, FAA has approved only two new restrictions
    - Naples Stage 2 ban and Van Nuys Stage 2 phaseout
  - Two most legitimate “failed” efforts were at Burbank (curfew) and LAX (formal nighttime preferential runway use program)
    - Both multi-million dollar efforts ($7M at BUR, $3M at LAX) resulted in FAA acceptance of the applications as “complete,” but disapproval of the proposed restrictions based on failure to meet statutory conditions
- All other formal use restrictions currently in place in the U.S. were “grandfathered” under ANCA and Part 161.
Opportunities for Naples

- Publicize NBAA Noise Abatement Program, ‘Quiet Flying Is Good Business’

- Review/publicize recommended noise abatement flight profiles (e.g., NBAA ‘High Density’ NADP)

- Work with FAA to raise 2000’ Initial Departure Altitude Restriction

- Master Plan Update
Discussion