



LAX Community Noise Roundtable

Work Program Item C3

FAA's Consideration of CatEx 2

September 10, 2014



INTRODUCTION

- **On February 14, 2012, President Obama signed into law the “FAA Modernization and Reform Act of 2012,” which was primarily focused on authorizing FAA appropriations for fiscal years 2011 through 2014**
- **Like most bills, the FAA Modernization and Reform Act contained loosely-related provisions including one that has become known as the “CatEx 2” provision**
- **The Congressional intent of this provision was to speed up the environmental reviews of new Performance Based Navigation (PBN) procedures that demonstrated neutral or positive noise and air emissions benefits on a “per flight basis”**



INTRODUCTION

- **The CatEx 2 provision provided no guidance on how FAA was to implement this new type of Categorical Exclusion within the existing regulations and guidance documents that assess noise exposure on a cumulative or annual-average basis (i.e., DNL or CNEL)**
- **After trying and failing to find a way forward on its own, FAA asked for help from the Radio Technical Commission for Aeronautics (RTCA)**
- **RTCA established a CatEx 2 Task Group composed of a broad range of interests to conduct research and recommend a possible solution**

Work Program Item C3 – CatEx 2 Implementation



CATEX2 TASK GROUP MEMBERS

Dan Allen, **Federal Express**

Fred Bankert, **MITRE**

Andy Cebula, **RTCA**

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Mel Davis, **NATCA**

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Dan McGregor, **The Boeing Company**

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Bill Sears, **FAA (Observer)**

Ken Shapero, **GE Aviation**

Scott Tatro, **LAWA**

Emily Tranter, **N.O.I.S.E.**

Travis Vallin, **aviation**

***Nancy Young, A4A**

***Co-Chairs**



CATEX DEFINITION

- **The National Environmental Policy Act (NEPA) provides for the use of a Categorical Exclusion or CatEx when a proposed action will not cause a significant impact to the environment**
- **FAA’s guidance for implementing NEPA, FAA Orders 1050.1E and 5050.4B, list a number of actions that may be Categorically Excluded from detailed environmental review (i.e., an EA or EIS)**
- **Although FAA’s CatExes for airspace/procedure changes typically have some form of internal documentation, there is no requirement for public outreach**
- **As a result, actions that receive a CatEx may be implemented with little or no public notice or input**



CONCEPT

- **The concept behind a CatEx is to avoid spending time and money on exhaustive environmental analyses that are unnecessary given the nature of a proposed action**
- **For example, developing a GPS approach procedure that directly matches a current published instrument approach procedure in both location over the ground and altitudes/speed restrictions will cause no new environmental impacts. Therefore, a CatEx is appropriate for this example**
- **However, a new Performance Based Navigation (PBN) approach that places new flight tracks over noise sensitive areas may require further environmental analysis in the form of an Environmental Assessment or Environmental Impact Statement**



CATEX2 TASK GROUP ACTIONS

- **Determined and reached consensus agreement on the scope of the task that guided the process of deliberations and subsequent outcome of Task Group recommendation**
- **Reviewed Congressional language and associated reports and met with key Congressional staff, considered the intent of the CatEx 2 language and what it was designed to achieve**
- **Developed baseline, high-level understanding of NEPA and FAA noise modeling and assessment**
- **Reviewed FAA analysis work on implementation of the CatEx 2 language**



CATEX2 TASK GROUP ACTIONS

- **Evaluated other possible approaches to implementing “per flight” noise measurement techniques to implement CatEx 2 provision**
- **Developed a unanimous recommendation: the “Net Noise Reduction Method” or NNR Method**



NNR METHOD

- **Step 1. Determine noise-sensitive “area of concern”, Day/Night Average Sound Level (DNL) 45 decibels (dB) and above:**
 - **FAA Order 1050.1E calls for noise screening to evaluate changes in DNL down to DNL 45 dB**
 - **FAA also suggests DNL 45 dB is lower limit of FAA noise models/tools computational reliability**
- **Step 2. Determine change in number of people exposed to noise in DNL bands on an average per-flight basis, by Detailed Grid Computations, comparing an existing procedure to proposed a procedure at noise-exposed locations**
 - **Uses DNL as metric (i.e., consistent with FAA policy), to construct a “procedure-specific DNL” (reflecting noise from particular procedures)**



NET NOISE REDUCTION METHOD

- Application of Steps 1 and 2 would fill in this table:

	Number of people exposed to DNL Level with new PBN procedure versus existing procedure		
DNL Level	Number of People Exposed under New Procedure INCREASES	Number of People Exposed under New Procedure DECREASES	Number of People Exposed under New Procedure UNCHANGED
>65			
60-65			
45-60			
Total			



NET NOISE REDUCTION METHOD

- **Step 3. If net number of people exposed to noise overall decreases and number of people in the DNL 65 dB contour band decreases (or does not increase), the PBN procedure qualifies for CatEx 2**
 - If the **net number of people** exposed to noise overall decreases, but **the number of people in the DNL 65 dB contour** increases, FAA should consider also whether the increase in noise exposure in the DNL 65 dB contour has a “significant impact”
 - “Significant impact” is considered to be a 1.5 dB noise increase or greater in the DNL 65 dB contour



OTHER KEY TASK GROUP FINDINGS

- **The FAA's existing noise screening tools can be used to implement the NNR Method**
- **The NNR Method can be applied to a single procedure or multiple procedures**
- **Undertaking the analysis to support CatEx 2 may take more time than the analysis to support other Categorical Exclusions**
 - **The analysis to support other Categorical Exclusions averages approximately 2 months**
 - **The analysis to support a CatEx 2 could take, on average, approximately 3-4 months – much less time than a typical EA (18 months)**
- **Stakeholder coordination is important**



THE FAA IS SEEKING PUBLIC INPUT ON THE NNR METHOD

- On August 19, 2014, the FAA published a notice in the Federal Register seeking public input on the NNR Method and alternate methods developed by FAA
- FAA also used the NNR methodology to test a “noise change” and “population-weighted noise change” approach
- The noise change and population-weighted noise change approaches are similar to the NNR method, but focus on changes in noise level rather than changes in numbers of people exposed
- FAA’s results using the alternate methods were similar to the Task Group results, but more fully explained the changes in DNL



THE FAA IS SEEKING PUBLIC INPUT ON THE NNR METHOD

- **The FAA is seeking input to these specific questions:**
 - **1) The extent to which FAA should rely on the NNR Method to determine measurable reductions in noise on a per flight basis**
 - **2) The appropriateness of determining that there is a measurable reduction in noise if people receiving a noise decrease outnumber the people receiving an increase, but the noise decrease is small compared to the noise increase**
 - **3) Different approaches to a net noise reduction methodology (i.e., population change, noise change, population weighted noise change), and whether the selection of one approach over another is preferred and increases public understanding**



THE FAA IS SEEKING PUBLIC INPUT ON THE NNR METHOD

- **The FAA is seeking input to these specific questions:**
 - **4) The extent to which a mix of noise increases and decreases could support a determination of measurable noise reduction, especially when reductions at lower noise levels outweigh increases at higher noise levels, and whether an alternative approach that would require reductions in all three noise exposure bands to support use of the CatEx should be used**
 - **5) Whether a significant noise impact threshold test should be used; and if so, if it should be used only when there is a net increase in people exposed to noise at DNL 65 dB and above, or if it should be used when there is any increase in the number of people exposed to noise at DNL 65 dB and above – even if there is a net population benefit at that level**



POSSIBLE AREAS OF CONCERNS FOR THE LAX ROUNDTABLE

- Use of the CatEx2 provision, may result in some PBN changes being adopted without public input even though some noise sensitive uses may experience increased noise exposure
- The NNR method could result in the shifting of noise from one community to another, which is contrary to the Roundtable's By-Laws, which state that the Roundtable will "...recommend courses of action to LAWA, the FAA, or other responsible entity that could reduce noise over affected communities without shifting noise from one community to another."
- As proposed, an exceedance of the 65 CNEL impact threshold could occur using the NNR Method, but a CatEx still could be granted as long as the total change in population is neutral or shows a decrease



HOW TO SUBMIT YOUR COMMENTS TO FAA

- **Submit comments identified by “Docket Number FAA-2014-0510” using one of the following methods:**
 - **Online using The Federal eRulemaking Portal at:
<http://www.regulations.gov>**
 - **By mail to Docket Operations, M-30; US Department of Transportation, 1200 New Jersey Avenue SE, Room W12-140, West Building Ground Floor, Washington, DC 20590-0001**
 - **By FAX to Docket Operations at 202-493-2251**
- **The deadline for submitting comments is September 18, 2014**



IN SUMMARY

- **CatEx2 is intended to expedite the environmental approval of PBN procedures**
- **Legislation was unclear on assessing noise and air emissions reductions on a “per flight basis”**
- **The NNR Method received unanimous support from diverse interest groups on the CatEx2 Task Group**
- **The FAA is considering the NNR Method and alternative methods for implementing the CatEx2 provision and seeking public comment on it**



IN SUMMARY

- **The adoption of the NNR Method and use of the CatEx2 provision could result in:**
 - **shifts in noise from one noise sensitive area to the other;**
 - **exposure of noise sensitive uses to 65 CNEL and greater without mitigation; and**
 - **no opportunity for public input on the proposed changes/effects**
- **The public comment window closes on September 18, 2014**



RESOURCES

- The Federal Register notice is available at:
<http://www.gpo.gov/fdsys/pkg/FR-2014-08-19/pdf/2014-19691.pdf>



Questions?