

CUNY CENTER for URBAN

ENVIRONMENTAL REFORM

September 30, 2013

U.S. Department of Transportation
Docket Operations
M-30 West Building Ground Floor, Room W12-140
1200 New Jersey Avenue SE.
Washington, DC 20590-0001.

RE: Comments on Draft Order 1050.1F Environmental Impact: Policies and Procedures
(Docket number FAA-2013-0685)

SUMMARY OF COMMENTS

The CUNY Center for Urban Environmental Reform (CUER) respectfully submits these comments in response to the Federal Register Notice, published on August 14, 2013, seeking comments on the FAA's proposed revisions to FAA Order 1050.1E.¹ The proposed revisions contained in draft Order 1050.1F would greatly expand the agency's ability to use categorical exclusions (CATEX)² to approve performance based navigation procedures (PBN) developed under the Next Generation Air Transportation System initiative (NextGen).³ Because the existing Order, as implemented by the FAA, is already insufficient to fully implement the FAA's

¹ FAA, Order 1050.1F Environmental Impact: Policies and Procedures, 78 Federal Register 157 (proposed August 14, 2013) available at <http://www.gpo.gov/fdsys/pkg/FR-2013-08-14/html/2013-19734.htm>.

² The Council on Environmental Quality, the agency charged with interpreting NEPA, defines a categorical exclusion as: "Categorical exclusion means a category of actions which do not individually or cumulatively have a significant effect on the human environment and which have been found to have no such effect in procedures adopted by a Federal agency in implementation of these regulations . . . Any procedures under this section shall provide for extraordinary circumstances in which a normally excluded action may have a significant environmental effect." 40 C.F.R. 1508.4.

³ Information about NextGen can be found at <http://www.faa.gov/nextgen/>.

obligations under the National Environmental Policy Act (NEPA), CUER strongly opposes these proposed revisions.

First, the proposed revisions to FAA Order 1050.1E, under guise complying with the FAA Modernization Act, will eviscerate the agency's consideration of environmental impacts before approving PBN procedures. Not only is such a result not mandated by the FAA Modernization Act, it is directly contrary to the clearly expressed intent of Congress. The plain language of Section 213 of the Act indicates that these technologies are to be approved through categorical exclusions *only* when those procedures, taken individually and cumulatively, improve the environmental profile of such activities along three dimensions: fuel consumption, carbon emissions **and** noise. Because the proposed Order language is far more expansive than the statutory provisions it purports to implement, this proposed Order should be withdrawn.

Second, this proposed rulemaking is premature. Before the FAA promulgates a rule purporting to create a categorical exclusion based on specific agency findings about fuel consumption, carbon emissions and noise on a per flight basis, the agency must first publically identify and solicit comments on the methodology by which it proposes to make these findings. These required findings are markedly different from the techniques FAA has been using to date to assess noise and other environmental impacts. Without knowing how the FAA intends to make these new calculations, the interested public is hampered in its ability to participate in this decisionmaking process. The per flight noise reduction requirement, in particular, is clearly intended to protect communities living near airports from the effects of noise focusing associated with converting conventional flight patterns into PBN procedures. Without knowing how the agency intends to conduct those calculations, those communities that are the clear intended beneficiaries of the statutory provision are unable to fully participate in this rulemaking. Therefore the FAA should withdraw these rules until such a time as it has developed techniques for measuring noise reduction on a per flight basis and has vetted those techniques through public comment.

Finally, not only do the FAA's proposed revisions violate the plain language of the FAA Modernization Act and the National Environmental Policy Act, they are also contrary to the FAA's own developing body of knowledge about the noise impacts associated with switching from conventional flights to area performance navigation (RNAV). The FAA's misuse of categorical exclusions in the New York metroplex has created significant and negative noise impacts for communities living under the flight path of the TNNIS FIVE RNAV. Rather than seeking to amend its rules to restrict environmental considerations even further, the FAA should be using the lessons learned from its experience with TNNIS FIVE to improve its environmental considerations and to align those procedures more closely with the clear statutory mandate in the FAA Modernization Act and the National Environmental Policy Act. In doing so, the FAA would fulfill the directive contained in Section 208 of the FAA Modernization Act that the

agency set specific quantitative goals for environmental impacts and measure “actual operational experience against those goals, taking into account noise pollution reduction concerns of affected communities to the extent practicable”

Because these proposed revisions to Order 1050.1E misinterpret the unambiguous statutory command that CATEXes be used only when RNAVs and other NextGen innovations improve the environmental profile of individual flights along three dimensions, and do not disturb the FAA’s pre-existing obligation to consider the cumulative impacts associated with these procedures that have a potentially significant effect on the human environment, these proposed rules should be withdrawn.

DISCUSSION

1. The FAA’s Proposed Order 1050.1F Violates the Language of Section 213

The relevant language of Section 213(c) of the FAA Modernization Act is:

Coordinated and Expedited Review-

(1) IN GENERAL- Navigation performance and area navigation procedures developed, certified, published, or implemented under this section shall be presumed to be covered by a categorical exclusion (as defined in Sec. 1508.4 of title 40, Code of Federal Regulations) under chapter 3 of FAA Order 1050.1E unless the Administrator determines that extraordinary circumstances exist with respect to the procedure..

2) NEXTGEN PROCEDURES-Any navigation performance or other performance based navigation procedure developed, certified, published, or implemented that, in the determination of the Administrator, would result in measurable reductions in fuel consumption, carbon dioxide emissions, and noise, on a per flight basis, as compared to aircraft operations that follow existing instrument flight rules procedures in the same airspace, shall be presumed to have no significant effect on the quality of the human environment and the Administrator shall issue and file a categorical exclusion for the new procedure.

The two subsections of Section 213 must be read together. Rather than creating two separate categorical exclusions, these sections together explain how the FAA is to treat the new performance navigation procedures. In Subsection 2, titled NEXTGEN PROCEDURES, Congress lays out a special evaluative standard that applies specifically to NextGen procedures.

Congress indicates that for those procedures that result in measurable environmental improvements along three separate axes, the agency is *to presume* that the PBN procedure has no significant impact on the environment. However, Subsection 2 must be read in conjunction with Subsection 1, which by its terms applies to PBN procedures “developed, certified, published, or implemented **under this section**” (emphasis added). Subsection 1 indicates that the presumption that PBN procedures are categorically excluded applies “**unless** the Administrator determines that extraordinary circumstances exist with respect to the procedure.” (emphasis added). Thus, the plain language of the Act clearly indicates that the presumption set out in Subsection 2 is limited by the ‘extraordinary circumstances’ caveat in Subsection 1. Indeed, Section 213(c)(1) explicitly incorporates the CEQ definition of a categorical exclusion (contained in Sec. 1508.4 of title 40, Code of Federal Regulations)⁴, which unambiguously includes a requirement that an agency consider extraordinary circumstances, even for actions ordinarily subject to categorical exclusions. The reference to the CEQ definition of categorical exclusion in Section 213(c)(1) indicates a Congressional intention that PBN procedures implemented under Section 213 conform to that definition.

Reading these two sections together, the Congressional message is clear: the FAA Modernization Act created a legal presumption of categorical exclusion, not a blanket exemption to NEPA as it has been interpreted and applied across the federal government for more than four decades. Under the express language of the Act, the FAA is to presume that any PBN procedure that results in reductions of fuel consumption, carbon dioxide emissions and noise on a per flight basis have no significant effect on the quality of the human environment unless the Administrator determines that extraordinary circumstances exist. The statute leaves intact the FAA’s duty to consider extraordinary circumstances, including cumulative impacts. By contrast, Section 5-6.5q and 5-6.5r of Draft Order 1050.1F would convert that statutory presumption into a blanket exemption.⁵ This it cannot do. Worse, the FAA Draft Order purports to apply that

⁴ See note 2 above.

⁵The relevant language of the Proposed Order is:

³ q. The following actions taken in accordance with section 213 of the *FAA Modernization and Reform Act of 2012*, irrespective of the altitude of such procedures, unless there is a determination that extraordinary circumstances exist:

(1) Area Navigation/Required Navigation Performance (RNAV/RNP) procedures proposed for core airports and any medium or small hub airports located within the same metroplex area considered appropriate by the Administrator; and

(2) RNP procedures proposed at 35 non-core airports selected by the Administrator. (ATO)

⁴ r. Any navigation performance or other performance based navigation procedure that, in the determination of the Administrator, would result in measurable reductions in fuel consumption, carbon dioxide emissions, and noise, on a per flight basis, as compared to aircraft operations that follow existing instrument flight rules procedures in the same airspace. This CATEX may be used irrespective of the altitude of such procedures. (ATO)

blanket exemption widely—including to activities like flights below 3000 feet over noise sensitive areas that had formerly been subject to environmental assessments as a matter of course. These kinds of activities were presumed to be ineligible for categorical exclusions because they pose the risk of individual or cumulative environmental impacts on the human environment. This Draft Order would therefore supersede long-standing agency practice of requiring an environmental assessment for flight operations below 3000 feet because of the significant environmental impacts of such activities.

While agencies are certainly free to revisit and even reverse long-standing decisions, they cannot do so in this conclusory fashion. The FAA offers no explanation or justification for this major change, it presents no rationale to justify treating activities formerly considered to have significant environmental impacts as though they now do not have any such impacts. By the FAA’s own definition, a categorical exclusion is limited to “actions that the FAA has found based on past experience with similar actions, do not normally require an EA or EIS because they do not individually or cumulatively have a significant effect on the human environment.” That is certainly not the case for flights operations below 3000 feet, which the FAA’s past experience have shown to have significant effects on the human environment. Instead of offering any reasons for this abrupt reverse-face, the agency implicitly suggests that such a dramatic change in agency approach is mandated by the statute. This is plainly incorrect. Nothing in the FAA Modernization Act suggests that Congress intended such a major expansion of categorical exclusions—to include actions known to have a significant effect on the human environment. Rather, Section 213(c) cited the CEQ definition of categorical exclusion with approval. What the plain language of Section 213(c)(2) unambiguously did was create a presumption that PBN procedures able to demonstrate a reduction in fuel consumption, carbon emissions, and noise on a per flight basis would be presumed to be subject to categorical exclusion. Section 213(c)(1) unambiguously indicated a congressional intent to leave in place the pre-existing edifice of law about when extraordinary circumstances render such an exclusion inappropriate.

Moreover, as the advisory committee tasked with evaluating how to implement Section 213(c) recognized, “often more than one change in procedures is proposed for air traffic actions, and most of those procedures will affect an entire air space, necessitating evaluation of procedures in combination.”⁶ The FAA’s reading of the statute, which would allow approval on an individual

This framing is intended to suggest that the agency is carrying out congressional directive. But, that is simply not the case.

⁶ RTCA, CatEx2: Recommendations for Implementing the Categorical Exclusion in Section 213(c)(3) of the FAA Modernization and Reform Act of 2012 at p. 13.

basis of multiple PBN procedures with no way of considering their cumulative or synergistic effects would eviscerate the National Environmental Policy Act, overruling its core component. Nothing in the statute suggests that congress intended such a result. To the contrary, Congress cited to the CEQ regulations in Section 213—indicating that the CATEX provision in 213(c)(2) was to be read in accordance with those regulations—which require that the agency consider extraordinary circumstances, including cumulative impacts.

The FAA Must Develop Per-Flight Noise Assessment Techniques BEFORE Promulgating Regulations to Implement Section 213

Section 213 of the FAA Modernization Act includes a congressional mandate to the agency to develop an alternative to the inadequate Day-Night-Average Sound Level technique (DNL). The CATEX described in Section 213(c)(2) cannot be approved based on DNL levels or extrapolations from DNL levels. DNL levels are yearly averages—they reveal no information about individual flights. The FAA has itself acknowledged that there is no technically approach to measure reductions in sound on a per flight basis with DNL.⁷

Moreover, DNL is itself a flawed and outdated measure as it does not capture noise intensity over shorter time periods—the days and weeks and months of noise exposure can vary widely within a single DNL. The FAA’s experience in New York with the TNNIS FOUR RNAV reveals that even if DNL levels remain constant (and this point is in dispute for that particular RNAV) the noise burden experienced by communities subject to overflight can change dramatically for the worse. Indeed the statutory requirement that the FAA certify that PBNs reduce noise on a per-flight basis reflects congressional recognition that yearly averages do not fully capture the noise impacts that are experienced by communities subject to overflight.

Greater flight precision is touted as one of the primary benefits associated with PBN procedures. In much of its NextGen literature, the FAA offers this greater precision as a way to reduce fuel consumption. The obvious, and undesirable, corollary of this benefit of reduced fuel consumption because of greater flight precision is a concentration and focusing of the noise associated with airplane overflight. Indeed, even before the passage of the FAA Modernization Act, the FAA acknowledged that noise focusing is a serious problem associated with PBN procedures, particularly RNAVs.⁸ By tying use of categorical exclusions not only to reduced fuel

⁷ Letter from FAA Administrator Huertas to Margaret Jenny (September 21, 2012).

⁸ See, FAA Memorandum: Guidance for Conducting Environmental Review of Proposed Performance Based Navigation (PBN) Flight Procedures (December 15, 2010) (highlighting the problem of noise focusing).

consumption but also to reduced noise on a per-flight basis, Congress directed the FAA to pay close attention to the impacts that NextGen will have on communities in flight paths.

The FAA does not pretend that it has solved the problem of how to assess noise on a per-flight basis. Instead, it seems poised to adopt the recommendation of the CatEx2 Task Group to ignore its clear statutory mandate and it instead employ the so-called “Net Noise Reduction Method” which compares the number of people who would experience a reduction in noise compared to the number of people who would experience an increase in noise.⁹ Given that the major noise impact of PBN procedures is noise focusing—concentrating increased levels of noise over smaller areas—this technique is virtually guaranteed to find a noise reduction if measured by the number of people exposed. Under this approach, certain communities could have their noise burdens increased to intolerable levels even as the agency announced that noise had been reduced. This concern is not merely hypothetical. It is precisely what happened to communities under the path of the TNNIS FOUR RNAV in Queens, New York. Their noise burden increased, even as the FAA used general data to decide that there was no noise impact associated with the switch to NextGen procedures.

Adopting the CatEx2 Task Force recommendation would read the statutory requirement of noise reduction (rather than re-assignment through noise focusing) out of the statute. This the agency cannot do. By the express language of Section 213, Congress shut the door on FAA attempts to substitute reductions in the “number of people exposed”¹⁰ for reductions in overall noise. Merely shifting the noise around and focusing it on ever-smaller, ever-more-burdened segments of the population is explicitly prohibited as a justification for categorical exclusions under Section 213. Thus, to the extent that the FAA intends to implement the recommendations from the CatEX2 Task Group, the agency will be in direct violation of the explicit language of the Statute.

Before it will be in a position to implement Section 213(c) of the FAA Modernization Act, the FAA must develop new, more appropriate metrics for assessing noise. The statutory language embodies an unambiguous congressional intent that the FAA not rely on DNL levels but instead develop alternative, more appropriate noise assessment techniques prior to granting categorical exclusions under this Section. The FAA currently has no such metrics, has no way of assessing whether PBN procedures reduce or increase noise on a per-flight basis. Therefore, this

⁹ RTCA, CatEx2: Recommendations for Implementing the Categorical Exclusion in Section 213(c)(3) of the FAA Modernization and Reform Act of 2012.

¹⁰ This is how the FAA currently touts the success of NextGen. FAA, NextGen Performance Scorecard, <http://www.faa.gov/nextgen/snapshots/nas/>. While reducing the number of people exposed to airplane noise is a good thing, the Act requires that the agency demonstrate actual reductions in noise as a precondition for issuing a CATEX laid out in Section 213(c)(2).

rulemaking is premature. The FAA must first develop such techniques for assessing existing noise on a per-flight basis, and for comparing existing per-flight noise to the per-flight noise associated with PBN procedures. Because attention to noise focusing is a vital part of this process, the FAA must vet those new noise assessment techniques through a public notice and comment period. Affected communities must have the opportunity to participate in the development of these assessment techniques and the opportunity to comment on their validity. Only then will the FAA be in a position to promulgate rules specifying how it intends to apply Section 213(c).

The FAA Must Implement Section 213 in Accordance with Section 208 of the FAA Modernization Act.

Section 208 of the FAA Modernization Act provides that the FAA's responsibilities in implementing NextGen include:

Establishing specific quantitative goals for the safety, capacity, efficiency, performance and environmental impacts of each phase of Next Generation Air Transportation System planning and development activities and measuring actual operational experience against those goals, taking into account noise pollution reduction concerns of affected communities to the extent practicable in establishing environmental goals.

Section 213 must be read in conjunction with Section 208. Considering the requirement that noise reduction be demonstrated on a per-flight basis, in conjunction with this directive that the FAA consider operational experience with regard to noise, a clear message emerges. Congress intended for the FAA Modernization Act to prompt the FAA to pay more attention to communities impacted by airplane noise.

The Draft Order contains no look-back provision; no way of using actual data from on the ground monitoring to assess the ongoing validity of an agency conclusion that a PBN procedure would produce noise reductions. This has been agency standard operating procedure to date, with a CATEX determination viewed as a one-off decision with no ongoing responsibility to monitor actual experience to see if the conclusion about no impact was correct. This section requires that the agency change this pattern. Congress clearly mandated that the FAA measure actual operational experience, particularly with regard to noise, and evaluate the NextGen goals in light of that operational experience. Because the Draft Order contains no such provisions, it fails to comply with the directions of Section 208.

We thank the FAA opportunity to comment on 1050.1F and look forward to its response.

Yours truly,

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