

**ACRP Problem Statement: 16-02-01**

**Recommended Allocation: \$300,000**

***Assessing the Current Status and Underutilization of Existing Noise Abatement Procedures***

**ACRP Staff Comments**

The author's budget is insufficient for the proposed effort. Author estimates 2,000 hours of labor; at \$100/hr. loaded, that would be \$200,000; adding travel and other expenses would suggest a budget closer to \$250,000.

**TRB Aviation Committee Comments**

ENVIRONMENTAL IMPACTS OF AVIATION (AV030): Supported as a synthesis. Reviewers felt this was a needed project but questioned the budget (seems low).

**Review Panel Comments**

Recommended. Noise abatement procedures are airport-specific. As written, it is unclear who would use the research results and how it would be used. A lot of effort would be expended; not sure if results would be actionable. It would be better to focus on best practices versus enforcement. The selection of case study airports would need to be objective instead of focusing on those with many complaints.

## ***Assessing the current status and underutilization of existing noise abatement procedures.***

### **BACKGROUND**

Over the past 3 years, the initial phase of the FAA's NextGen program has been implemented at many airports across the country. Along with the FAA's ongoing Airspace Redesign project, the airspace flows in many major metropolitan areas have been dramatically altered.

Noise complaints have soared in communities that had not previously been exposed to excessive levels of noise. In New York City, a new NextGen route from LaGuardia airport replaced the tandem use of three noise abatement routes. Similar changes have disrupted communities in Phoenix, Minneapolis/St.Paul and Chicago.

Research is needed to assess whether air traffic controllers are using all noise mitigation options available to them in the official Standard Operating Procedures of their respective airports. In the case of LaGuardia Airport, for example, it is widely believed that the NextGen routes are run more often, even when there are no airspace conflicts that would preclude the use of a noise abatement route. Better utilization of existing noise abatement procedures would ease the growing tension between airports and surrounding communities. This could be achieved without changing existing policy or sacrificing efficiency, capacity or the implementation of precision navigation.

### **OBJECTIVE**

Existing noise abatement procedures are being underutilized at many major airports. Our objective is to assess the extent to which noise abatement can be restored within the existing Standard Operating Procedure (SOP) of these airports without sacrificing safety or operational efficiency.

### **PROPOSED TASKS**

Develop a baseline study of 3 airports that have experienced recent higher numbers of noise complaints. Within the framework of existing SOP's and wind safety guidelines, identify areas where controllers are underutilizing noise abatement routes. Identify potential airspace configurations which could be used in place of the configurations that are generating a higher number of noise complaints.

### **ESTIMATED FUNDING**

Labor would include extensive analysis of the existing SOP and Webtrak flight path information at each airport to determine where noise abatement procedures are being underutilized.

Other labor areas may consist of desktop analysis of data from noise monitors, field or phone interviews with controllers and analysis of Notice to Airmen (NOTAM) for each airport. The project may also require the use of consultants with knowledge of FAA rules regarding wind, visibility and separation minimums in the national airspace system. This project would not require a large degree of field work or raw data from the field.

<b>Task</b>	<b>Estimated Cost</b>
Travel to National Academy Conference (for 2 consultants)	\$1500
Consultancy fee and contract for 12 months of labor (desktop analysis and controller interviews)	\$30,000
12 months of labor = 2,000 hours	
Additional expense: Travel to Air Traffic Control facility for interview of controllers (two trips, for two consultants)	\$10,000
Printing & Shipping Expenses	\$500
<b>Total Estimated Project Cost</b>	<b>\$36,500</b>

\*\*\*Note: Travel costs could be kept at a minimum if the study airports were chosen from the same FAA metroplex. (Example: Philadelphia, LaGuardia and Newark)

#### **ESTIMATED RESEARCH DURATION**

Research should not exceed twelve months in duration as tasks can be conducted concurrently and without an excess of stakeholder interaction. Two interviews with controllers at each study airport would require coordination with the FAA, which may take some months. The other tasks do not require excessive coordination, outreach or time consuming field work.

#### **RELATED RESEARCH**

A July, 2011 report, *Benefit Cost Analysis of Runway 4L/22R RSA Compliance*, prepared by DY Consultants in association with Landrum & Brown for the Port Authority of New York and New Jersey, provided a detailed historical framework of airspace flows in the NY metroplex and was the initial catalyst for this problem statement.

Subsequent research led to the interim standard operating procedure for LaGuardia Airport, found online at this link: [http://nyartcc.org/wiki/index.php?title=Interim\\_LaGuardia\\_Procedural\\_Changes](http://nyartcc.org/wiki/index.php?title=Interim_LaGuardia_Procedural_Changes)

In general, there is a knowledge gap and scarcity of data on the airspace flows in the national airspace system. New research could help lessen the gap and demystify the issue.

#### **PROCESS USED TO DEVELOP THIS PROBLEM STATEMENT**

The problem statement was developed with independent study contributions from various members of the NY/NJ Port Authority Community Aviation Roundtable. At these roundtable meetings, several discussions were conducted with FAA staff members and airline industry representatives. It was implied that noise abatement procedures were being underutilized. The Community Aviation Roundtable was formed by Governor Andrew Cuomo and consists of stakeholders from across the NY/NJ region. Input was also sought from the newly-formed Our Skies National Coalition for airport noise pollution, which consists of community advocacy groups from Chicago, Minneapolis/St. Paul, Boston, New York City, Nassau County, Santa Monica, Southern California, Palo Alto, Newark, Seattle, Phoenix and Portland, Oregon. Additional input was sought from the Congressional Quiet Skies Caucus, which was founded by Rep. Steve Israel and Rep. Grace Meng.

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This problem statement has been submitted on March 10, 2015, by Brian F. Will, a New York based fisheries biologist and member of Queens Quiet Skies and the Port Authority of NY/NJ Community Aviation Roundtable. Writing contributions were provided by Janet McEaney, President of Queens Quiet skies and a member of Queens Community Board 11 and the PA-NY/NJ Community Aviation Roundtable. Queens Quiet Skies is a founding member of Our Skies National Coalition.

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