UC DAVIS 2017 AVIATION SYMPOSIUM Seeking Solutions to NextGen Impacts

Report to the Community Noise Roundtable and LAX Area Advisory Committee

by Danna Cope

Presentations Reviewed:

NextGen Advisory Committee (NAC) Recommendations on Community Outreach

Based on a presentation by Nancy Young, VP Environmental Affairs, Airlines for America (A4A)

U.S. Civil Aircraft Noise Annoyance Survey

Based on a presentation by Sean Doyle, FAA

FAA Air Traffic Organization (ATO) Enhanced Community Involvement

Based on a presentation by Julie Marks, Community Involvement Manager for Airspace Projects, ATO, FAA; and Mark Alexander Director of Airspace Services, ATO, FAA

Metroplex and PBN Implementation: Lessons Learned

Based on a presentation by Mark Alexander, Director, Airspace Services, ATO, FAA

NextGen Advisory Committee (NAC) Recommendations on Community Outreach

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Noise Impacts: History and Potential Problems

- The number of U.S. residents exposed to significant aircraft noise fell 95% from 1975-2015 (while enplanements rose 287%)
- New noise standards, aircraft, and enhanced procedures promise more noise savings
- NextGen and new Air Traffic Control (ATC) procedures can shift what areas are exposed to noise; and Performance Based Navigation (PBN) procedures can "focus" noise over certain areas

Specific Recommendations of the PBN Blueprint Community Outreach Report: FAA Should:

- Form a specialized outreach team of professionals trained to engage in local community outreach
- Develop standard and Local Community Outreach Toolkits
- Develop ongoing and scalable Community Outreach Programs in collaboration with local airports
- Disseminate this report as well as the original Blueprint for Success to Implementing PBN to airport operators, airlines, and other stakeholders
- Incorporate the best practices outlined in the report for 1) preparation; 2) education; 3) engagement; 4) advocacy; and 5) post-implementation steps in PBN-related community engagement

Additional Observations about the Report:

- o Meaningful community engagement and Input are critical, BUT
- Designing procedures is not a "negotiation" (communities cannot expect to win arguments by bargaining impact areas)
- ATC procedures are highly technical and safety is paramount
- Procedures may be local to an area; but are part of the National Airspace
 System (aircraft cannot fly through many different procedure areas)
- The strong record of overall noise exposure reduction and commitment to further advances should be taken into account
- NextGen is critically important to the U.S.:
 - Replacement of the 1940s-era radar system is a necessary and critical infrastructure project
 - Expected results are benefits to: safety, the U.S. economy, competiveness, airports, airlines, communities, emissions reduction, and even noise abatement procedures

U.S. Civil Aircraft Noise Annoyance Survey

Based on a presentation by Sean Doyle, FAA

The goal is to collect new scientific evidence on the relationship between aircraft noise exposure and its effects on communities around airports

FAA currently uses Day Night Level (DNL) 65 dB for the value to define significant noise and as:

- The basis of the National Environmental Policy Act (NEPA) significant impact criteria
- Threshold below which all land uses are deemed compatible

The survey results will:

- Update the scientific backing for the definition of significant noise exposure from civil aviation noise (currently accepted U.S. noise exposure-annoyance is based on survey data collected in the 1970s)
- Determine if there has been a significant change in perception of noise (possibly due to increase in frequency of aircraft operations; new, quieter aircraft available, but older models still in use; or a decrease in route dispersion)

Airport Selection

 A total of 20 airports were selected; they representing people exposed to DNL levels of 65, 60, and 55 dB

Survey Results will be available by the end of the year

- FAA will coordinate with other federal agencies (e.g., the Federal Interagency Committee on Aviation Noise (FICAN) regarding the survey results
- A public review and comment process will occur prior to making any policy determinations

Research on Potential Policy Implications

- NEPA significant impact criteria review
 - Will develop options for possible noise significance criteria and compare their application under alternative noise-response relationships
 - o Also will review considerations for land use compatibility
- Sound Insulation Efficiency
 - Will evaluate how effective standard sound insulation treatments would be for a range of alternative eligibility criteria
 - Will consider alternative mitigation options other than standard sound insulation treatments

FAA Air Traffic Organization (ATO) Enhanced Community Involvement

Based on a presentation by Julie Marks, Community Involvement Manager for Airspace Projects, ATO, FAA; and Mark Alexander Director of Airspace Services, ATO, FAA

Ongoing culture change regarding community involvement

- A comprehensive and strategic approach to community involvement efforts was central to 2016 being a transformational year
- ATO efforts around community involvement have focused on:
 - Organizational enhancements
 - Updated and enhanced policies
 - o Development of internal guidance
 - Operationalizing enhanced community involvement

Strategies and Techniques for Operationalizing ATO Enhanced Community Involvement

- Public meetings (public workshops)
- Targeted meetings (advisory committees, roundtables)
- Internet and technology tools
- Social and traditional media

Recent Best Practices for Operationalizing ATO Enhanced Community Involvement

- Enhanced partnerships with airport and industry stakeholders
- Increased engagement with local officials and the public
- Public workshops and webinars; more opportunities for citizens to engage with experts and provide input
- Visualizations allowing the public to understand locations and their homes relative to changes
- Videos to help explain more complex procedures and address areas of public concern
- Interactive noise maps to correlate existing and projected noise levels with geographic locations

Community Involvement Moving Forward

- Compilation and review of community involvement
- Development of community involvement practitioner resources, including:
 - A desk guide for individuals coordinating PBN-related community involvement
 - o An FAA community involvement toolkit
 - Training opportunities and resources
- An update to FAA Air Traffic Order 7400.2: *Procedures for Handling Airspace Matters*, to include enhanced community involvement

Metroplex and PBM Implementation: Lessons Learned

Based on a presentation by Mark Alexander, Director, Airspace Services, ATO, FAA

Ronald Reagan Washington National Airport (DCA)

- October 2015 the DCA Roundtable was established
- December 2015 the LAZIR B was chosen as the preferred alternative by the Roundtable
- September 2016 prior to implementation, public meetings were held in Virginia; Washington, DC; and Maryland
- January 2017 the LAZIR B implementation was officially withdrawn primarily based on feedback from communities around the airport

Cleveland/Detroit Metroplex

- Worked with airports, local cities, and elected officials to distribute information and gather public responses
- Based on feedback, procedures were modified to more closely follow existing flight paths

Southern California Metroplex

 Modified eight procedures and created a new STAR to be utilized at LAX for the midnight operations following review of public comments

MY PERSONAL COMMENTS

The emphasis in many FAA reports seems to be on air traffic safety, not community safety.

There is an implication that the noise impacted communities should just have faith in FAA due to FAA's "strong record of overall noise exposure reduction and commitment to further advances."

Overall, I felt this was less informative than other UC Davis symposiums I have attended. There were changes in presentation length, and there were no concurrent sessions. Some of the changes worked. One problem may have been that the long-time coordinator, Donna Reid, retired five months prior to the 2017 Symposium. Her expertise and extensive contacts may not have been available for the finishing touches and agenda.

I strongly feel that the UC Davis symposium is exceedingly worthwhile and that members of the Noise Roundtable and Area Advisory Committees should continue to be funded to attend future meetings. Donna's replacement, Sandra Hall, is eager to learn and will grow into the job.