



COMMENT to FAA Advanced Aviation Advisory Committee (AAAC)

August 15, 2023

Submitted to Gary Kolb, Advanced Aviation Advisory Committee Manager, Federal Aviation Administration, U.S. Department of Transportation, at gary.kolb@faa.gov

In response to the [August 8, 2023 Federal Register Notice](#), the AICA is submitting this written statement to the committee. The AICA includes 70+ groups across the country working to protect communities from harmful levels of aviation noise and pollution.

The community's expectation for the AAAC is to provide advice on key drone and AAM integration issues by helping to identify challenges and priorities and address the real and potential negative environmental impacts of AAM on communities. AAAC advice cannot focus solely on or be over-weighted by the advancement of the aviation industry despite the \$10B investment to date¹. FAA Kevin Walsh's testimony to the House Committee on Transportation, March 17, 2022, "The FAA's core mission...[is to provide the safest and most efficient aerospace system in the world. This mission also] includes addressing the environmental impacts of [aviation, such as climate change, local air quality, and] noise." An Advanced Air Mobility environment must work for all, and the AAAC should support this.

The FAA and, therefore, the AAAC have not adequately included community voices in the recommendations and implementation processes of new aviation technology. We are not included as primary stakeholders for advanced air mobility, and we have no representation on your committee. The FAA is ignoring its "sins of the past", a phrase used recently by an FAA employee during a public webinar on the FAA's Noise Policy Review. Those "past sins" include ignoring the need to have community stakeholders who are equal in number and voice to industry stakeholders on advisory committees and the FAA's lack of community participation, engagement, and dialog **prior to** new procedure and technology implementation. It appears that the FAA learned little from its failed implementation of the NextGen program which has sacrificed communities across the country, along with residents' health and quality of life. AICA wants to help ensure a better outcome for the implementation of advanced air mobility into our national air space.

The AAAC Charter states "The advice, recommendations, and taskings relate to improving the efficiency and safety of integrating advanced aviation technologies, ..., while equipping and enabling communities to inform how UAS, AAM, and other technologies **may operate in ways that are least impactful to those communities.**" Yet, the AAAC is expected to achieve this objective without a community voice on its committee, a voice that represents communities that will be negatively impacted by advanced air mobility.

To fulfill its Charter, our request to the AAAC begins with:

1. **Require at least one Community member to serve as a Community Advocate Representative on the FAA AAAC.** Such Community member must not be affiliated with, receive funds from, or provide services to the FAA, the aviation industry, or aviation industry consultants.

To ensure that the AAAC is populated with all needed experts to fulfill its objectives, we also request the AAAC to:

¹Source: SMG Consulting AAM Reality Index (last accessed 11/10/22)

2. **Create a community subcommittee of Special Government Employees members who are appointed solely for their individual expertise as laypersons exposed to or expected to be exposed to advanced air mobility noise, pollution, lack of privacy, nuisance, fears, and safety concerns.** This subcommittee should be charged with advising the full AAAC on “how UAS, AAM, and other technologies may operate in ways that are least impactful to those communities.” for the AAAC to fulfill this objective from its Charter.

Along with these two AAAC membership requests, we also encourage the AAAC to do the following:

3. **The presentation “Task Group #15 Community Engagement Lessons Learned/Best Practices Recommendations” at the AAAC April 26, 2023 meeting shows potential but lacks specifics for accountability.** For example, will “Community groups and organizations” be stakeholders versus “stakeholders to be considered”. It is unclear if non-aviation industry stakeholders will have timely engagement—before decisions are made and while changes can still be made to communications and programs, and if adequate information will be provided on noise and environmental impacts to those who will be affected.
4. **Community groups/organizations must be key stakeholders in all high-level activities of the AAM Integrated Master Schedule,** not only after Phase 5: “Post-implementation”.² The messaging to include the community does match the plan. This is the written message: “The FAA encourages communities to get involved now in these early phases, and to stay engaged”³ and “Public engagement and education through involvement of all stakeholders will be necessary to ensure that communities understand the benefits and impacts of AAM operations, and to address any concerns they may have.”⁴ However, the Integrated Master Schedule document shows “Community/Stakeholder Engagement”⁵ as a combined line item that starts at the beginning of the schedule. In fact, industry stakeholder engagement starts at the beginning, not the Community engagement. The Community engagement is only at the end of the schedule, after procedure development, evaluation, and implementation according to the “Detailed List of Activities in the Integrated Master Schedule Version 1.0”⁶.
5. **Innovate 28 (I28) should require that “collecting data” include environmental impacts, the type of AAM uses, and community engagement reports.** There should be monitoring reports for counts of AAM events using Lmax bands in 5dB increments between 45 dB and 80 dB. The T-Above metric needs to be reported as well to capture the duration of AAM “hovering” events. Reports on community engagement activities should include the type of outreach, number and type of attendees, timing relative to the decision-making process, level of transparency, feedback on whether information shared reflects the laymen’s experience of noise and visual pollution impacts. Information on the type of AAM uses should include the number and percentage of operations for transporting non-medical passengers, medical personnel and patients, goods, etc. Given that AAM is an emerging aviation ecosystem, detailed data is needed for I28 implementations to inform advanced regulations and to create a cost & benefits profile.

²Advanced Air Mobility (AAM) Implementation Plan, Version 1.0/July 2023, p 30
<https://www.faa.gov/sites/faa.gov/files/AAM-I28-Implementation-Plan.pdf>

³Ibid. p 4

⁴Ibid. p 4

⁵Ibid. p 29

⁶Ibid.

6. **Abandon the community engagement model of “Decide, announce, defend”⁷** and instead practice “...meaningful dialogue to address negative impacts of past FAA actions and of future FAA actions before decisions are made.”⁸ “Formal research on airport public involvement, research on other transportation modes, and research on other institutions that deal with the public all confirm that the “we vs. they” or “decide, announce, defend” approach has failed and must transition to strengthened two-way communications to have a better chance for long-term success.⁹
7. **The evaluation and decision making for environmental impacts, including AAM, should relate to and represent the layperson’s lived experience** by using the metric of N-Above in Lmax bands, some reasonable threshold(s) for significant impacts, some ambient noise consideration, and should include total noise and visual impacts. Pursuant to 49 U.S. Code (U.S.C.) 44715, the FAA has the responsibility to “protect the public health and welfare from aircraft noise.” Total impacts (noise and visual) should include ALL current aviation impacts from:
 - multiple airports/helipads/drone launching & landing pads
 - multiple vehicle types (including new AAM),
 - multiple flight paths - procedure or vector, and
 - multiple specialized vehicle operations (e.g., hovering).
8. **Do not use the NextGen implementation as a best practice model for AAM** because NextGen excluded the community as a key stakeholder in all FAA processes and assessments. The community engagement was flawed. “The FAA is taking a holistic approach to the efforts required for AAM implementation. The I28 leadership team in the NextGen organization (ANG) established iTeams comprised of representatives across FAA lines of business (LOBs) to bring together expertise in different areas associated with AAM implementation and foster collaboration in the planning and execution of required activities. The iTeams represent the major workstreams associated with AAM implementation, including Certification, Airspace and Air Traffic Management, Infrastructure, Environment, Hazardous Materials Safety, and Community Engagement.”¹⁰ In addition, the current DNL and thresholds for decision making do not reflect the laymen’s experience of NextGen impacts, and will not either for AAM impacts.
9. **Create a “Questions & Answers” task force in 2023, with adequate representation of potentially impacted communities** to identify and answer the public’s AAM concerns for public communications. AAM can fundamentally alter the character of neighborhoods, cities, states, and the nation, impacting the quality of life for all. Public rejection will be a barrier to AAM implementation.
10. **Do not use the inadequate FAA’s 2016 Community Involvement Manual (CIM) for AAM Community Engagement.** “The FAA’s Community Involvement Manual provides flexible guidance and best practices applicable to all FAA actions and will be leveraged for AAM operations and I28.”¹¹ The CIM has not delivered on its assertions “we are accountable to the American Public,” “commitment to inform and involve the public and to give meaningful consideration to

⁷Jackson, Margaret Campbell. *Public Involvement in Transportation: Collaborating with the Customers* *TR New*, Number 220, May-June 2002, p. 3.

⁸Community Engagement and Disengagement, ANE Symposium, May 2022

⁹Aircraft Noise: A Toolkit for Managing Community Expectations (2009), National Academies, ACRP Report 15

¹⁰Ibid, p 15

¹¹Ibid. pg 27

community concerns and views as the FAA makes aviation decisions that affect them”.¹² The NextGen community engagement underperformed and efforts over the last few years 2020-2022 has continued this underperformance. A survey to community groups on whether FAA Community Engagement for local topics has improved, reported 31% No Improvement, 28% Worse, 28% Improvement, and 13% No Engagement/Unknown¹³. The AAM Implementation Plan states “It is important that the public understand how these new aircraft operations will impact their communities.”¹⁴ The public does not want understanding; it expects meaningful dialogue to address negative impacts of past FAA actions and of future FAA actions before decisions are made. The iTeams represent the major workstreams associated with AAM implementation including Community Engagement¹⁵ and therefore Community Engagement should be updated and evolve to reflect the emerging aviation landscape.

11. **Address the issues reported by respondents to the survey “Scorecard on FAA Community Engagement”¹⁶** (presented at the ANE Symposium 2023) that are relevant to AAM.
- Overweighting of aviation efficiency and underweighting of environmental Impacts.
 - Community engagement is constrained because FAA’s interpretations are limited to the DNL 65 threshold for Significant Impact.
 - Communities are not co-equal with other key external stakeholders - not represented, underrepresented, or questionably represented.
 - Current community engagement policies and processes restrict problem solving and instead the focus is on the outcome of “understanding and acceptance”.
 - Deficient Collaboration such as a presentation without dialogue, shared information on impacts that is not understandable and misleading, and not notified and engaged up front.
 - Some communities are excluded: not all roundtables are engaged, some communities do not have roundtables, and some roundtables restrict membership based on criteria that have nothing to do with aircraft impacts.
 - Need to build trust: check the box mindset, over focus on process versus outcomes, and actions, research and presentations do not adequately address and/or represent community concerns.

Respectfully Submitted,

Darlene Yaplee and Cindy L. Christiansen, PhD, Co-founders
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¹²FAA Community Involvement manual, 2016 p II

¹³FAA Community Engagement Scorecard – Is the FAA’s Community Engagement Improving?, ANE Symposium, May 2023

¹⁴Advanced Air Mobility (AAM) Implementation Plan, Version 1.0/July 2023, p 27
<https://www.faa.gov/sites/faa.gov/files/AAM-I28-Implementation-Plan.pdf>

¹⁵Ibid. p 15

¹⁶Community Engagement and DISEngagement, ANE Symposium, May 2022