Statement of Frank Miller
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Before the House of Representatives Subcommittee on Aviation
"Aviation Noise: Measuring Progress in Addressing Community Concerns"
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Thank you, Chairman Larsen and Ranking Member Graves, for inviting me to participate in today's hearing. I am Frank Miller, Executive Director of the Hollywood Burbank Airport in Southern California. I appreciate this opportunity to speak with you about the efforts, progress, and remaining challenges in addressing community concerns related to aviation noise.

National Perspective

As Congress considers the topic of aviation noise, I believe it is critical that Congress takes into account two factors, particularly when considering any potential next steps. First, airports across the country have a wide range of experiences related to aircraft noise. Over the past four decades, the aviation community – including airports, the FAA, and aircraft operators – have made great investment and strides to reduce the impact of aircraft noise through a variety of means, including quieter aircraft, improved flight procedures, acoustic treatment of residential and other noise-sensitive structures, and land use initiatives. As a result, many U.S. airports have reduced or eliminated controversy over aircraft noise in their communities. However, in other communities, despite very similar efforts, aircraft noise remains a subject of significant controversy and creates ongoing challenges for airports. This varying experience underscores that there is no guaranteed "one-size-fits-all" way to address the problem of aircraft noise across the country.

Second, it is critical to bear in mind that the aviation industry has been particularly hard hit from the COVID-19 pandemic and resulting economic crisis. Even as travel begins to return to pre-pandemic levels, other shocks - such as escalating oil prices, supply chain challenges, and labor shortages - create uncertainty as to when the industry will achieve a level of economic stability. This is a particularly sensitive time for airports, which are striving to be good neighbors and provide world-class facilities and services, while working to recover from historically low levels of revenue and continued uncertainty about the course of recovery. Airports are also working to balance all aspects of sustainability, equity, and environmental issues beyond noise, such as air quality emissions, as just one example. Any discussion about national noise policy needs to reflect these challenges, as well as the limited ability of airports to absorb new costs.

I would note that community concerns related to aircraft noise most often are directed to the airport. However, airports do not have authority over the FAA. Moreover, pursuant to the Airport Noise and

Capacity Act (ANCA) enacted over 30 years ago, federal law bars airports from imposing new noise controls on aircraft operators. While each airport crafts community engagement programs that are appropriate for its individual facility and community situation, I think it is fair to say that all airports invest significant resources in terms of both staff time and money. I will share some specific Hollywood Burbank Airport examples.

I am sure Congress is also interested in the airport perspective on the FAA's Neighborhood Environmental Survey (NES), which was released in January 2021. Airport staff who work with concerned communities, as I and my staff do, are not surprised by the findings that many communities are more sensitive to aircraft noise today than they were nearly 50 years ago when the national noise policy based on the 65 Day/Night Sound Average Level (DNL) was first established. Generally airports find that the FAA's historic approach to aircraft noise issues has served the industry well. By relying primarily on the 65 DNL standard as a threshold of compatibility, FAA policy has provided an easily applicable standard to serve as a guide for responding to aircraft noise concerns, and has provided a degree of flexibility to allow for State and local governments to set a different threshold of compatibility. This affords reliable clarity, which, in turn, has helped the industry make enormous strides towards reducing, and in some places eliminating, community concerns about aircraft noise and towards providing meaningful noise mitigation to the residents most affected by aircraft noise.

That said, airports acknowledge that many people have questioned whether the 65 DNL threshold accurately reflects the limit of non-compatible and/or significant noise impacts, and whether the Schultz Curve accurately reflects current aircraft noise exposure effects on communities near U.S. airports. Accordingly, I applaud the FAA for undertaking the NES and beginning the process of examining and updating U.S. aircraft noise policy as necessary to reflect current concerns and potential effects on people.

The airport community believes that any new aircraft noise policy should be based on a clearly defined set of goals that have been identified based on objective, empirical factors. While the NES is an important first step to providing relevant information, it is only the first step and should be backed by additional data. Airports support the ongoing, and future, efforts by the FAA to develop the empirical data needed to inform any changes to aircraft noise policy.

In response to the FAA's Federal Register notice announcing the release of the NES, Airports Council International – North America (ACI-NA), the trade association for airports, provided the following comments on further research that is needed in order to inform any policy revisions. I include them here as items that Congress may want to consider, as congressional funding would be key to this research.

1. General Comments on Further Research

The NES suggests that the historic understanding of the levels at which aircraft noise becomes "highly annoying" is no longer consistent with current perceptions of aircraft noise. In the past, the 65 DNL standard focused on areas relatively close to airports where noise impacts were the greatest, so that was a reasonable guide for aircraft noise policy. Because the NES suggests that the area in which people are "highly annoyed" is much greater than previously assumed, the NES raises the more fundamental question of whether the goal of aircraft noise policy should be to reduce the number of

people who are "highly annoyed" by aircraft noise, or to address specific, and objectively measurable, impacts, such as health impacts, education impacts, sleep disruption, or other environmental impacts of aircraft overflights, as currently being studied by FAA. If the goal is to reduce levels of "high annoyance," the FAA should conduct research to develop a better understanding of what causes someone to become "highly annoyed," how to more uniformly quantify that "annoyance," and how to measure success in reducing levels of "high annoyance," particularly given the subjective nature of "annoyance." If the goal is to address other more specific impacts, the FAA should conduct research to define acceptable levels of such impacts.

It is imperative that the FAA define the goal of its aircraft noise policy in order to appropriately direct further research and frame solutions that are appropriate to actual societal problems. This is critical because any change in the FAA's noise significance and compatibility threshold will affect a suite of different financial, legal and policy areas including:

- Aircraft Noise Liability
- Airport Development (Planning and NEPA)
- Benefit-Cost Analysis Guidance
- Airspace Use and Changes, Including NextGen, PBN and Metroplex Changes
- Land Use Compatibility
- Sound Insulation Programs
- Community Engagement
- Relationships (including rents and charges) with Airlines and Other Users
- Economic Impacts
- Part 150 Program
- Land and Easement Acquisition
- Noise Monitoring
- Airport Noise Management Costs

Although it is premature to formulate or advocate any specific proposals, I urge Congress and the FAA to adopt the following high-level principles to guide analysis of the NES and consideration of any aircraft noise policy changes:

- **Science-based**: Any changes to federal policy on aircraft noise must be based on the latest science. Results from the underlying FAA research projects should be made public in a usable form.

- **Stakeholder engagement and transparency**: Any changes in aircraft noise policy must be preceded by a robust stakeholder engagement effort by the FAA, with meaningful dialogue and opportunities for input from airports. The FAA must clearly communicate the policy development process, any changes in policy, and the justification for the changes to all stakeholders.

- **Roles and responsibilities:** The FAA must take ownership of its role regarding the regulation of aircraft noise, and must clearly communicate its role to the public and stakeholders.

- **Funding:** Airport funding is already extremely constrained, and airports should not be mandated to pay more for noise abatement and mitigation, regardless of the outcome from the policy discussions, without an adequate funding source.

- **Effective:** Aircraft noise policy must address identifiable problems and provide cost-effective solutions to those problems.

- **Clear standards:** Any new aircraft noise policy should be accompanied by clear guidance and standards for evaluating aircraft noise impacts in all applicable regulatory contexts, such as Part 150, NEPA, new air traffic procedures, and AIP funding. This should include clear thresholds for evaluation, specific guidance on the use of alternative noise metrics, and clarity on the kinds of impacts that merit consideration.

- **Forward Looking:** Any new aircraft noise policy should be forward looking, minimize disruption, and not attempt to revise or undo Records of Decision or other FAA approvals that have been issued based on current policy. Likewise, any new aircraft noise policy should minimize the need to revise, amend, or reconsider studies or projects ongoing at the time the new policy is issued. Airports and the Federal government have made considerable investments of time and treasury, and a change in aircraft noise policy should not jeopardize that investment by affecting the validity of already completed, or ongoing review and approval processes.

2. Specific Areas of Further Research

ACI-NA noted that Chapter 8 of the NES concludes by stating "[f]urther research is underway by the project team to examine historical trends in aircraft noise annoyance data, including comparisons to other recent research." I appreciate that updates on the research in important areas such as Children's Learning, Health and Human Impacts Research, and Economic Impacts are provided through the REDAC process. It would be helpful, however, if the FAA could identify milestones in the studies and make some level of interim information available. Airports would also benefit from the non-auditory health effects of noise being conveyed in a way that is understandable by the public[1].

In addition, airports recommend that the FAA conduct the following research, and make that research available to stakeholders, as it considers changes to aircraft noise policy:

a. While "annoyance" appears to be correlated to DNL, the FAA should further research whether there is a more precise cause of such annoyance, such as the frequency of overflights, changes in flight patterns, the loudness of individual overflights, or some other acoustic factor(s).

b. Similarly, the FAA should further research the extent to which non-acoustic factors – such as demographic and socio-economic factors, vehicular and other non-aircraft noise, recent airport or aviation-related controversies, air emissions, and aviation incidents – may play a role in levels of annoyance, as suggested by recent research.[2]

[1] See ACRP Research Road maps at: https://public.tableau.com/profile/hmmh1#!/vizhome/ACRPResearchRoadmapAirportEnvironmental/ACRPAirportEnvironmentalResearchRoadmap

[2] E.g., Diana Sánchez, Jack Naumann, Nicole Porter, & Andy Knowles *Current Issues in Aviation Noise Management: A*

c. The FAA notes in the Federal Register that aircraft noise generally results in higher levels of annoyance than other sources, including ground transportation. Further research is appropriate to understand why that it is, and why people indicate high levels of annoyance with aircraft noise that is far quieter than many other sources of noise that people accept and, in some cases, choose.

d. The feasibility of phasing out noisier aircraft and accelerating introduction of quieter engines and airframes.

e. Further integrating consideration of noise impacts into the design and implementation of flight procedures and routes that are not limited to just geographic location (performance, speed, climb and descent rates, etc.).

f. The FAA noted in its February 22, 2021 presentation on the NES that "noticeable" flight event characteristic, (*i.e*., the number of events having a maximum sound level at or above 50 dB, NA50Lmax), demonstrated marginal significance and should be investigated further because of the high correlation of NA50Lmax with DNL. ACI-NA believes that research regarding the specific kinds of noise events that cause higher levels of annoyance will yield important information to guide future policy development. The FAA should similarly consider using other "supplemental metrics" to better understand the specific causes of annoyance and associated health impacts.

g. Although the FAA reaffirmed the use of DNL in its 2020 Report to Congress,[3] experience shows that many complaints arise from anomalous, notably disruptive single events and that supplemental metrics can provide a useful way to focus understanding on the nature, or causes, of complaints or annoyance. To that end, the FAA should examine the appropriate role of additional/supplemental noise and operations metrics in NEPA, Part 150, and related guidance and orders before implementing any change(s) to aircraft noise policy. Further, to the degree that supplemental metrics are adopted, the FAA should provide clear guidance on what these metrics would be used for, criteria for using these supplemental metrics, how the use of multiple metrics would work together, and relationships to annoyance and potential health impacts.

h. Additional research should include determination of quantifiable impacts of aircraft noise – such as health impacts, sleep disturbance, education impacts, life expectancy, and property values – that is necessary to put the "annoyance" data in context and also to identify critical environmental impacts that new policies can (and should) address. I understand that the FAA is currently pursuing a number of research projects related to aircraft noise, several of which have been underway for a number of years. Airports would like to understand whether there are ways in which the studies could be accelerated with increased funding or other methods. The acceleration of ongoing studies relates to our request to understand the road map to

Non-Acoustic Factors Perspective, The 22nd International Congress on Sound and Vibration (July 2015; C. Asensio, L. Gasco, & G. de Arcas, *A Review of Non-Acoustic Measures to Handle Community Response to Noise Around Airports* Current Pollution Rep. (June 2017).

[3] FAA, *Report to Congress*, *FAA Reauthorization Act of 2018 (Pub. L. 115-254) Section 188 and Sec. 173* (April 14, 2020.

updating policy. As pieces of research similar to the NES are released, airports will be required to manage continued uncertainty while waiting for policy updates.

i. Research on the change in both noise and operational metrics correlated to the change in annoyance to aid in better understanding the significance of a change.

j. In the NES, the FAA stated that "Recent academic research and internal assessments have raised questions about the benefits of sound insulation relative to the costs." Airports would like to learn more about the internal assessments that the FAA has conducted and the conclusions reached in those assessments. Further research on the cost-benefit of noise mitigation measures may also help inform future aircraft noise policy.

k. Airports recognize the likelihood of including benefit-cost analyses as a means to aid in deciding appropriate policy decisions. Accordingly, airports recommend the FAA conduct research defining an appropriate cost effectiveness methodology that is consistently applied in aiding decision-making related to policy. Airports also recommend the findings be documented and coordinated with stakeholders and results be made available to the members.

l. The Airport Cooperative Research Program has undertaken several research projects, including an Environmental Research Road Map[4]. Airports request that the FAA's research portfolio include the following noise items identified in that road map:

    a. Assessing Community Annoyance of Noise from Unmanned Aerial Systems
    b. Best Practices for Effective Sound Insulation
    c. Best Practices for Stakeholder Engagement and Assessment and Reporting on Multiple Noise Metrics – Airports particularly are interested in learning if the dataset from the NES would provide new areas of knowledge related to noise metrics.

m. As noted in the Federal Register notice, the FAA has continually developed its high-fidelity modeling capabilities. As AEDT becomes more and more complex, it becomes more of a "black-box" to community members. Research on the soft skills of how to explain the model and make public its results would be helpful to airports.

As the aviation system recovers from the downturn caused by the pandemic, the FAA should conduct research to understand shifting community perspectives and reactions to aircraft noise during the next several years resulting from potential lifestyle changes (e.g., working and learning from home) and psychological effects resulting from stay-at-home orders, limited human interaction, etc.

The last item that I would like to note is that new entrants are on the horizon. There are a number of groups working on new vehicles ranging from smaller delivery drones up to five- or six- passenger light electric vehicles (eVTOL) that would compete with taxi-like services. Based on the lessons learned and experience with community concerns related to aviation noise, now is the time that Congress should be considering and setting policy related to the community acceptance issues that the new entrants may encounter.

[4] http://www.trb.org/ACRP/researchroadmaps.aspx

Hollywood Burbank Airport Community Outreach

Turning from the national perspective to the specific experiences I have had as Executive Director at Hollywood Burbank Airport in addressing community concerns related to aircraft noise, I would like to highlight recent outreach efforts and measures that will be initiated in the near future.

In 2018, Hollywood Burbank Airport held two nighttime public meetings in Burbank where community members provided comments relative to their own personal experiences with aircraft noise and the Southern California (SoCal) Metroplex flight path changes in March of 2017.

In response to community concerns voiced in these earlier meetings over SoCal Metroplex and the FAA's implementation of its *Next Generation Air Transportation System*, the Hollywood Burbank Airport and Van Nuys Airport convened the Southern San Fernando Valley Airplane Noise Task Force (Task Force) to investigate the issues that were previously raised. The Task Force consisted of a set of eight voting members from the cities of Burbank, Glendale, Pasadena, and Los Angeles. The Task Force also included five non-voting members representing the offices of Senator Feinstein, former Senator Harris, Congressman Schiff, Congressman Sherman, and Congressman Cárdenas. Staff from the FAA, the Burbank-Glendale-Pasadena Airport Authority, and Los Angeles World Airports attended the Task Force's meetings as technical advisors.

The Task Force conducted seven meetings over an eight-month period. At the final meeting, which lasted more than eight hours on May 6 and May 7, 2020, the Task Force successfully completed its objective of developing a set of recommendations to address community noise issues related to aircraft operations from Hollywood Burbank Airport and Van Nuys Airport. Most of the recommendations were directed to the FAA, but Hollywood Burbank Airport is moving forward on items that are specific to it.

Most significantly, after a few more months of recovery from the COVID-19 pandemic, Hollywood Burbank Airport will conduct a new Part 150 Noise Compatibility Study. The study will:

- Measure current and future aircraft noise levels and their associated effects on the surrounding communities.
- Outline actions that will reduce or minimize aircraft noise over sensitive areas.
- Establish land use guidelines to address compatibility between the airport and its surrounding communities.
- Identify areas where aircraft noise is present and encourages land uses that are compatible.
- Develop a comprehensive Noise Compatibility Program for the airport.

In conjunction with the Part 150 Study, Hollywood Burbank Airport will convene a Citizen's Advisory Committee to help the community stakeholders understand the process and the final analysis. It is currently anticipated that the Committee will include Burbank, Glendale, Pasadena, and Los Angeles residents nominated by their local government officials. The Committee will function until the Part 150 Study has been completed and submitted to the FAA, which is estimated to take approximately eight months.

Hollywood Burbank Airport will respectfully request that Congress provide additional funding for the FAA's Part 150 program to support Airport Improvement Program (AIP) grant awards that help with noise mitigation for non-compatible land uses and sound insulation.

In an ongoing effort to address the impact of aircraft noise, Hollywood Burbank Airport continues to monitor noise complaints reported by residents in the surrounding communities. To provide nighttime noise relief through a voluntary curfew, Hollywood Burbank Airport has a standing request to all commercial airlines that they refrain from scheduling departures or arrivals between 10 p.m. and 6:59 a.m. Additionally, Hollywood Burbank Airport utilizes WebTrak, a community-facing platform that provides flight information to the public and track noise inquiries. Community members can submit a noise inquiry through WebTrak or contact the toll-free 24-hour Noise Concerns Hotline. Hollywood Burbank Airport also publishes a Quarterly Noise Monitoring Report on its' website that documents the noise impact boundary of the airport as defined by federal law.

Finally, one thing has not changed during the pandemic: airports continue to face substantial infrastructure needs. As travelers begin to return to U.S. airports, inadequate airport infrastructure that fails to meet the growing needs of local businesses and tourists puts in jeopardy the economic recovery of American cities, states, and regions. In addition to creating jobs, new investments in airports can be valuable tools in helping local communities attract air service, which increases competition and leads to lower airfares for passengers. Airports need additional resources to build the terminals, gates, checkpoints, and ramp areas necessary to attract new air carriers and entice existing ones to expand service. The traveling public gets more choices and lower airfares when airports can build the facilities that provide more airline options and more service alternatives.

In March 2021, ACI-NA released an updated infrastructure needs report detailing the more than $115 billion in infrastructure needs across the national airport system over the next five years. Because this survey was conducted during the pandemic last summer, it does not fully account for all of the new public health-related infrastructure upgrades airports need to make, such as future HVAC improvements to provide airports the ability to keep up with developing air quality technology, additional space for physical distancing near gates, and touchless technology to assist passengers. Coupled with a current debt burden of nearly $90 billion from past projects, the report clearly shows that airports are falling further behind in efforts to upgrade facilities and improve the overall experience for passengers.

Airports greatly appreciate the $20 billion in airport-infrastructure funding included in the bipartisan infrastructure bill. This one-time infusion of capital will help jumpstart new projects around the country. Given the $115 billion in infrastructure needs across the system, though, Congress must find new ways to ensure continuity in funding more of these much-needed improvement projects once the new federal funding has been exhausted.

As leading economic engines in their communities, airports are an integral part of the overall travel and tourism industry. ACI-NA and our member airports will continue to work together with our government and industry partners to weather this current crisis so we can get Americans and international passengers traveling again through an aviation system that is stronger, safer, more secure, and more resilient than ever.

Thank you for this opportunity today.