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Baltimore/Washington International Thurgood Marshall Airport
Airport Noise Zone (ANZ) Update
Stakeholder Advisory Committee (SAC) Meeting #3

MEETING MINUTES

Wednesday, September 24, 2025, 6:00 PM – 8:00 PM

MAA Facilities
991 Corporate Boulevard
Linthicum Heights, MD 21090

Discussion Item	Notes	Presenter
Safety Briefing	The meeting was called to order by Mr. Bruce Rineer, Manager of the Office of Environmental Compliance and Sustainability, Noise Section at the Maryland Aviation Administration (MAA). Mr. Rineer began with a safety briefing, noting the nearest exits, the location of the automated external defibrillator (AED), and the locations of fire extinguishers. He explained that in the event of an emergency, participants should exit through the same doors they entered, assemble at the designated accountability site outside the building, and ensure that a head count was taken. He added that 911 should be called if necessary and that attendees should report any hazards they notice in the room.	Bruce Rineer
Welcome and Introductions	Following the safety briefing, Mr. Rineer welcomed participants to the third Stakeholder Advisory Committee (SAC) meeting for the BWI Marshall Airport Noise Zone (ANZ) Update. He explained that the SAC process is designed to ensure transparency, provide meaningful opportunities for input, and establish a shared understanding among stakeholders about the technical work and regulatory requirements guiding the ANZ update. He briefly reviewed the evening's agenda, noting that the meeting would cover a short recap of the second SAC meeting, presentation of the latest noise contour modeling and land use analysis, review of supplemental contours, discussion of the Noise Abatement Plan (NAP), and an overview of certification and next steps. He emphasized that questions and comments would be welcome throughout the discussion, and that the facilitator, Ms. Rhea Hanrahan with HMMH, would help maintain a productive and respectful flow of conversation.	Bruce Rineer

Mr. Rineer then invited introductions from attendees around the room. The SAC included representatives from MAA, leadership and staff from the Noise Program, the Federal Aviation Administration (FAA) Air Traffic Control Tower at BWI Marshall, consultants from HMMH and Assedo Consulting, airline industry representatives, local government staff, and elected officials' offices, as well as community representatives and members of the BWI Roundtable.

In closing the introductions, Mr. Rineer reiterated that SAC members play a crucial role as conduits of information, helping ensure that the technical findings and proposed measures are communicated outward to communities and organizations, while also bringing local perspectives and concerns back into the process.

SAC Meeting #2 Recap	Mr. Rineer provided a brief recap of SAC Meeting #2, emphasizing that the purpose of the ongoing update is to comply with the Code of Maryland Regulations (COMAR), which requires both the development of updated ANZ contours and a Noise Abatement Plan (NAP). He reminded members that the ANZ consists of noise contours representing areas exposed to aircraft noise at or above 65 DNL, while the NAP contains measures designed to mitigate and manage incompatible land uses within those contours. He described the technical steps that had already been completed, which included analyzing radar data for the base year (2025), the five-year forecast (2030), and the ten-year forecast (2035). These analyses considered operational counts, fleet mix, runway usage, flight tracks, and engine run-ups, as well as weather and terrain conditions. The data was processed through the FAA's AEDT model to generate noise contours. Mr. Rineer explained that the contours from each study year were overlaid to form the composite ANZ contour. He also noted that, based on SAC requests, supplemental scenarios had been developed, showing both a "build" and "no build" forecast for 2035, allowing for a comparison between future growth with and without planned runway projects. Finally, he reminded SAC members of their role: to review modeling assumptions, provide input on analysis results, examine the draft ANZ and NAP, and ensure information was shared with their constituencies. MAA, he stressed, would carefully consider SAC input, though the final responsibility for the ANZ update remained with the Administration. With this context established, Mr. Rineer transitioned to the next agenda item, handing the discussion to Ms. Sarah Yenson of HMMH to present the ANZ contours and land use analysis.	Bruce Rineer
ANZ Contours and Land Use	Ms. Sarah Yenson, Principal Consultant with HMMH, presented the updated ANZ contours and accompanying land use analysis. She began	Sarah Yenson

by reminding the group that ANZ is defined in COMAR and serves as the regulatory framework for managing and preventing incompatible land use around the airport. By definition, all land uses exposed to noise levels below 65 DNL are considered compatible, but once the threshold of 65 DNL or greater is reached, land use protections and planning considerations must be applied.

Ms. Yenson explained that the technical team developed three primary contour sets: the 2025 base year, the 2030 five-year forecast, and the 2035 ten-year forecast with a “full build” scenario that assumes an additional runway and runway extension identified in the airport’s long-term planning documents. Each contour captures annualized aircraft operations, taking into account fleet mix, runway use, flight tracks, weather, terrain, and ground noise sources. These three sets were then combined into the official 2025 ANZ composite contour, which represents the broadest extents of aircraft noise exposure over the planning horizon.

She first reviewed the 2025 base year contour, noting that it encompassed approximately 3,178 acres. Of this total, 65 percent fell on airport property, and 35 percent extended beyond the airport. The contour area included about 1,031 acres in the 65 DNL range, 89 acres in the 70 DNL range, and two acres in the 75 DNL range. An estimated 1,035 residents and 361 housing units were within the base year contour.

The 2030 five-year contour forecast reflected an increase in operations, projected at approximately 267,000 annually, yet the contour itself shrank slightly. Ms. Yenson explained that this counterintuitive result stemmed from changes in the aircraft fleet mix; airlines are shifting to quieter Stage 5 aircraft, particularly the Boeing 737 MAX series and Airbus NEO models, which significantly reduce the overall noise footprint despite increased activity. As a result, the total affected area decreased to approximately 2,866 acres, encompassing an estimated 1,011 residents and 347 housing units.

Moving to the 2035 ten-year full build forecast, Ms. Yenson noted that the introduction of a new runway and a runway extension shifted the shape and extent of the contours. The total area increased to about 3,100 acres, with an estimated 1,616 residents and 597 housing units captured. This scenario reflects anticipated long-term development capacity and ensures that the ANZ accounts for the greatest possible extent of noise exposure.

When combined, these three scenarios produced the 2025 ANZ composite contour, covering 3,802 acres. Approximately 63 percent of the contour is on airport property and 37 percent off airport, including an estimated 1,704 residents and 636 housing units. This composite contour, Ms. Yenson emphasized, forms the official ANZ boundary that will be incorporated into COMAR.

She then compared the 2025 ANZ to the existing 2020 ANZ, highlighting a decrease of approximately 1,742 acres, nearly 2,300 residents, and more than 900 housing units. The reduction is attributable to the accelerated adoption of quieter aircraft and updated operational forecasts following the COVID-19 recovery period. While the general shape of the contours remained similar, certain areas experienced shifts and reduction, resulting in fewer off-airport properties falling within the noise zone.

Ms. Yenson concluded by underscoring the importance of this analysis for land-use planning. The updated contours not only determine where protections apply but also serve as a planning tool for local jurisdictions, developers, and residents to understand both current and future noise exposure. She paused to invite questions, noting that the supplemental contour scenarios would be discussed next.

Supplemental Noise Contours

Sarah Yenson

Continuing her presentation, Ms. Yenson introduced the supplemental contour analyses, which were prepared in response to requests from the SAC. These scenarios examine the implications of a no-build condition for the 2035 forecast year, modeling future operations without the planned additional runway and runway extension. She explained that while COMAR requires that the official ANZ reflect full build conditions for long-range planning, the supplemental scenarios provide valuable insight into how noise exposure could differ if those infrastructure projects do not occur.

In the 2035 no-build contour, total operations remained consistent with the full build forecast at approximately 290,000 annually, but the contour area decreased to 2,690 acres, about 400 acres smaller than the full build scenario. The affected population also decreased, with an estimated 962 residents and 332 housing units within the noise exposure area. By contrast, the 2035 full build scenario captured 1,616 residents and 600 units. This difference, Ms. Yenson explained, was due to the way runway use changes the distribution of operations and reshapes the noise footprint.

She then presented the 2025 no-build composite contour, which overlays the base year and five-year forecasts with the ten-year no build condition. This composite totaled 3,198 acres, encompassing an estimated 1,704 residents and 367 housing units. Compared to the official 2025 ANZ composite contour, the no-build version is smaller and impacts an estimated 650 fewer people and 269 fewer housing units.

The comparison between the 2025 ANZ and the 2025 no-build composite contour showed clear differences. The full build scenario extended over more acreage, affecting additional parcels of land and households. Ms. Yenson noted that from a land use protection perspective, the ANZ contour provides broader safeguards by ensuring that areas potentially exposed to future growth are incorporated within the regulated zone.

Members of the committee asked questions about the apparent reduction in contour size over time, despite higher forecast operations. Ms. Yenson reiterated that the shift in fleet mix toward quieter Stage 5 aircraft is the dominant factor, resulting in shrinking contours even as traffic levels increase. She emphasized that the supplemental analyses confirmed this trend, showing continued decreases in both acreage and affected population. However, the differences between the build and no-build scenarios became most apparent in the ten-year horizon.

At this point, Ms. Hanrahan added that including the runway extension and parallel runway in the official ANZ is not intended to predict exact future noise levels, but rather to provide land use protection for the maximum reasonable extent of development. By codifying the full extent of planned airfield development into COMAR, the state ensures that local planning accounts for the greatest possible footprint of noise exposure, avoiding future conflicts should long-term projects proceed.

The discussion shifted briefly to current zoning activities in Anne Arundel County. Mr. Kevin Clarke confirmed that some residential development projects had been scaled back near the airport following input from aviation planners, though other developments remain just outside the ANZ boundary. He explained that while the MAA cannot regulate land use, staff regularly advise developers and encourage them to implement mitigation measures, such as acoustically rated windows, to protect future residents from noise caused by aircraft overflights.

Committee members expressed appreciation for the inclusion of the supplemental contours, noting that this was the first time such analyses had been presented. They agreed that the additional scenarios gave a clearer picture of how the ANZ might evolve under different planning conditions and would help inform both local governments and community stakeholders in their future discussions.

Noise Abatement Plan (NAP)

Bruce Rineer

Mr. Rineer resumed the presentation to review the NAP, explaining that BWI Marshall has maintained a robust set of noise abatement measures since the 1980s. The NAP works in tandem with the ANZ: while the ANZ defines the geographic extent of regulated noise exposure, the NAP outlines specific measures designed to reduce, manage, or mitigate incompatible land uses within those areas.

He reminded the committee that the goal of the NAP is to reduce incompatible land use inside the noise zone to the greatest extent possible while maintaining safe and efficient airport operations. The NAP covers two broad categories: operational measures, such as departure and arrival procedures and preferential runway use, and land use measures, which include zoning restrictions, real estate notifications, and assistance programs for affected properties.

Although the foundation of the NAP has remained consistent for decades, recent updates have been made. Voluntary departure and arrival procedures, for example, were formalized by the FAA through published waypoints, which improved compliance rates. Mr. Rineer noted that adherence to BWI's noise abatement procedures now reaches 95 to 99 percent, reflecting cooperation among airlines, FAA air traffic controllers, and the airport.

He then described the operational measures in detail. Departing aircraft are generally required to maintain a runway heading or fly straight out to a designated distance before making turns, ensuring that densely populated areas, such as Ferndale, Glen Burnie, Hanover, and Elkridge, are overflown at higher altitudes. Specific runways have corresponding procedures:

- Runway 10 departures fly straight for two (2) nautical miles (nm) before turning, a procedure recently formalized with the waypoint "JWALL."
- Runway 15L departures direct aircraft to maintain heading for 0.5 nm before turning.
- Runway 15R departures, a frequent point of concern, direct aircraft to fly either 0.7 nm or two (2) nm, depending on the procedure. The waypoint "WARYN" was added to ensure consistency, but this has concentrated noise over Severn neighborhoods, leading to ongoing review by the BWI Roundtable's Technical Committee.
- Runway 28 departures direct a three (3) nm straight-out segment, formalized with the waypoints "BOSLY" and "JLENN."
- Runway 33L departures are subject to restrictions on early turns, requiring aircraft to maintain a straight path until reaching a specified altitude.
- Runway 33R departures direct aircraft to maintain heading for one (1) nm before turning.

For arrival operations, procedures emphasize maintaining the aircraft at as high altitude as possible until close to the runway, with a target of 3,000 feet or higher until ten (10) nm out. These procedures help minimize impacts by encouraging continuous descents. The Interstate Visual 33L approach, which previously directed aircraft in on a low, direct path, has been discontinued and removed from the NAP due to its infrequent use.

Mr. Rineer also reviewed measures addressing ground-based noise. Restrictions on aircraft engine maintenance include that run-ups require prior permission, run-up locations are limited, and prohibitions of run-ups during overnight hours. Recently, the plan was updated to allow run-ups at the midfield cargo ramp, limited to Amazon's contract carriers, while removing the outdated run-up area at Runway 10.

The discussion then turned to land use and disclosure. Mr. Dan Woomer asked whether buyers are explicitly notified when purchasing property inside the 65 DNL contour. Mr. Rineer explained that Anne Arundel County requires a disclosure addendum, but the language is general and does not specify contour levels. Mr. Clarke pointed out that this can be misleading, since realtors may claim a property is "not in the noise zone" even when frequent overflights occur. He suggested that disclosures should be strengthened, and Ms. Gina Stewart agreed, asking if MAA could improve outreach to realtors. Mr. Rineer responded that other airports, such as Raleigh-Durham, have held realtor education programs, and MAA is considering similar efforts.

Ms. Stewart also asked whether pilots or airlines face consequences if they fail to follow procedures. Mr. Rineer explained that noise abatement measures are voluntary, and while MAA may raise concerns with the FAA or issue letters, there are no enforceable penalties associated with these measures. He emphasized that compliance remains very high, and the use of waypoints has increased consistency.

Committee members also raised questions about helicopter noise. Mr. Dana Plagmann of the FAA explained that most helicopter overflights are law enforcement, medevac, or military training flights between Baltimore and Washington. These flights often transit directly over the airport for safety but are not included in the ANZ contours unless they originate or land at BWI. While disruptive at times, these operations fall outside the regulatory framework of the ANZ.

In closing, Mr. Rineer summarized the most recent updates to the NAP, including the removal of the discontinued Interstate Visual procedure, the removal of the outdated Runway 10 run-up area, and the addition of the midfield cargo ramp run-up authorization. He also noted the addition of an annual reporting requirement and the continuation of the Residential Sound Insulation Program, which provides mitigation

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<tr><td></td><td>for homes and schools within the ANZ. While procedures remain voluntary, high compliance and continued monitoring have ensured that the program remains effective, striking a balance between operational needs and community impacts.</td><td></td></tr>
<tr><td>ANZ Certification</td><td>Mr. Royce Bassarab, representing the MAA Noise Program, outlined the process for certifying the updated ANZ and NAP. He explained that while the technical work of developing contours and reviewing abatement measures is complete, certification is the step that formally incorporates the new ANZ into state regulation under the Code of Maryland Regulations (COMAR).

Mr. Bassarab noted that the most recent BWI Marshall ANZ was certified in 2021, and the update now underway will replace that version. Once finalized, the 2025 ANZ and NAP will be written into COMAR through a structured regulatory process governed by the Maryland Administrative Procedure Act (APA).

The process begins with MAA drafting the updated ANZ and NAP as a regulatory package. This draft is submitted to the Maryland Aviation Commission (MAC), which is responsible for approving regulations before they are further advanced. After Commission review, the proposed regulation is published in the Maryland Register, triggering a public comment period and at least one public meeting.

Following the public comment process, MAA compiles all feedback, prepares responses, and presents them back to the MAC. Once the Commission approves the final document, the Executive Director of MAA formally certifies the ANZ and NAP, and they are officially incorporated into COMAR.

Mr. Bassarab emphasized that this process is critical because, once codified, the ANZ and NAP become enforceable planning tools. Local governments, developers, and property owners can then rely on the updated contours for land use decisions, ensuring consistency and predictability.

He also described the anticipated timeline. With technical work now complete and the SAC process nearing completion, the draft regulation will be presented to the MAC in November 2025. Publication in the Maryland Register is expected around January 2026, followed by a public meeting approximately two weeks later. The comment period will remain open for 30 days, allowing stakeholders to submit written feedback and participate in the public meeting. After comments are reviewed and addressed, MAA expects to return to the Commission in March for final approval, with formal certification projected for April 2026.

During the discussion, Ms. Suzzie Schuyler asked whether comments submitted during the public period would be visible to the public as</td><td>Royce Bassarab</td></tr>
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they are received. Mr. Bassarab clarified that comments are not posted live; instead, all comments are compiled and made available in the final documentation. He added that the 2020 ANZ update included a full appendix of submitted comments, and he expected a similar approach this time.

Ms. Stewart inquired about opportunities for submitting comments online for those unable to attend the public meeting. Mr. Bassarab confirmed that comments could be submitted electronically and emphasized that MAA intends to make the process as accessible as possible.

Mr. Woomer asked whether constituents would be able to see both the draft documents and the compiled comments. Mr. Bassarab confirmed that the draft ANZ and NAP will be publicly available online during the comment period, and that a final report, including a summary of comments and responses, will be published after certification.

In closing, Mr. Bassarab reiterated that certification of the ANZ is a state-driven process, distinct from the forthcoming federal Part 150 process that will follow in 2026. He noted that while the state process ensures the ANZ is legally incorporated into COMAR, the Part 150 process will provide opportunities for additional community involvement and will allow the FAA to consider potential changes to flight procedures.

With the certification framework and timeline outlined, Mr. Bassarab transitioned to the final presentation topic.

Schedule and Resources	Mr. Rineer provided an overview of the project schedule and the resources available to support stakeholders as the ANZ update moves into its final phases. He explained that the technical work of the study was complete, with the development of the noise contours, the review of land use conditions, and the status assessment of the NAP all presented to the SAC. The next steps would focus on regulatory certification and public engagement. The timeline began with the project kickoff in January 2025, followed by the first SAC meeting in April and the second in June. This third meeting in September marked the conclusion of the advisory committee's formal role in shaping the draft ANZ and NAP. Looking forward, the draft documents will be finalized and presented to the MAC in November 2025. If accepted, the package would then be published in the Maryland Register in January 2026. To ensure transparency and accessibility, Mr. Rineer highlighted several resources. The project team maintains a dedicated email address (MDOT-MAA-ANZ@assedollc.com) and phone line for inquiries, along with a project webpage on the Maryland Aviation	Bruce Rineer

Administration's site. The webpage houses the current ANZ materials, including prior reports, quarterly noise reports, and access to WebTrak. This online tool allows the public to view real-time and historical flight and noise data. Additional background on the ANZ process, as well as links to the BWI Roundtable, is also available.

He stressed that SAC members are encouraged to direct constituents to these resources, particularly once the draft ANZ and NAP are published in January. Providing clear avenues for the public to review, comment on, and stay informed about would be essential to maintaining trust and ensuring the certification process runs smoothly.

At the conclusion of his remarks, Mr. Rineer invited any final questions before opening the floor to general discussion.

Q&A and Open Discussion	Several questions and comments were raised during the discussion portion of the meeting:	Rhea Hanrahan

- Mr. Drew Roth and Mr. Woomer questioned why the contours appear to shrink even as operations increase. Ms. Yenson explained that the change is primarily due to the fleet mix, with quieter Stage 5 aircraft such as the Boeing 737 MAX and Airbus NEO replacing older, noisier models. Ms. Hanrahan confirmed that this trend reduces the overall noise footprint despite higher activity levels.

- Mr. Roth asked whether cargo fleets are expected to modernize at the same pace as passenger fleets. Ms. Hanrahan responded that cargo operations are projected to continue using older aircraft types, which remain louder. Unlike passenger airlines, cargo carriers are not expected to transition rapidly to newer, quieter models.

- Ms. Stewart asked about opportunities for public input once the draft ANZ and NAP are released. Mr. Bassarab confirmed that a 30-day public comment period will begin in January 2026, including an in-person public meeting. He added that comments may also be submitted online or by mail.

- Mr. Woomer suggested to have the contact information included in the announcement of the draft release, so constituents know who to reach with questions. Ms. Hanrahan agreed this would be valuable, and Mr. Rineer encouraged members to share project links and resources with their communities.

- Several participants noted that residents outside the 65 DNL contour still experience significant aircraft noise. Mr. Rineer acknowledged these concerns but emphasized that COMAR requires the ANZ to be defined at 65 DNL or greater. While supplemental data can show impacts beyond the zone, only the 65 DNL threshold is recognized for regulatory purposes.

Committee members closed the discussion by expressing appreciation for the detailed presentations and advanced materials. They agreed that while not all community concerns fall within the scope of the ANZ, the update provides a valuable planning framework and a stronger foundation for communication with the public.

Adjournment	As the discussion concluded, Mr. Rineer thanked the committee members for their active participation and thoughtful input throughout the evening. He emphasized that the questions and feedback offered by the SAC are a critical part of the ANZ update process, ensuring that both technical findings and community perspectives are carefully considered. Ms. Hanrahan reminded members that the next major milestone would be the release of the draft ANZ and NAP for public comment in early 2026. She encouraged participants to share the information broadly within their networks once the announcement is made and to direct interested stakeholders to the project webpage for updates and resources. Committee members expressed their appreciation to the MAA team and consultants for the clarity of the presentations and their responsiveness to community concerns. Several attendees noted the importance of continuing outreach as the process transitions into the public phase. With no further questions or comments, the meeting adjourned a little after 7:00 PM.	Bruce Rineer and Rhea Hanrahan