Martin State Airport
Airport Noise Zone (ANZ) Update
Stakeholder Advisory Committee (SAC) Meeting #2

MEETING MINUTES

Thursday, June 26, 2025, 6:00 PM – 8:00 PM

Martin State Airport
701 Wilson Point Road, Hangar 5
Baltimore, MD 21220

Discussion Item	Notes	Presenter
Safety Briefing	Mr. Bruce Rineer opened the meeting with a brief safety overview specific to the Hangar 5 meeting space at Martin State Airport. He identified the location of the Automated External Defibrillator (AED), which was stationed down the hallway near Room 527, as well as a fire extinguisher located along the same corridor. In the event of an emergency, Mr. Rineer instructed attendees to exit the building promptly and proceed directly to the designated accountability area, located in front of the hangar. Mr. Rineer encouraged participants to remain alert to any safety concerns during the meeting and to report any issues they observed. He noted that the evening's meeting would not have a formal facilitator, but that Ms. Rhea Hanrahan from the project team would be available to step in and help guide the discussion if necessary.	Bruce Rineer
Welcome and Introductions	Following the safety briefing, Mr. Rineer welcomed everyone and thanked both returning and new SAC members for their time and continued participation in the Martin State Airport - Airport Noise Zone (ANZ) Update process. He provided a brief refresher on the project's purpose, explaining that the SAC plays a critical role in ensuring that noise modeling and policy recommendations are informed not only by technical data but also by the lived experiences of residents and stakeholders in the surrounding communities. Mr. Rineer emphasized that the update process involves reviewing current noise exposure levels, developing future-year forecasts, and aligning those findings with land use compatibility goals. He reiterated	Bruce Rineer

	that the SAC's feedback would directly inform the revised ANZ, the Noise Abatement Plan (NAP), and future regulatory documents. He noted that this work is required under Maryland State law and governed by the Code of Maryland Regulations (COMAR). Each SAC member and project team participant then introduced themselves by name and affiliation.	
SAC Meeting #1 Recap	Mr. Tyler White provided a recap of the first SAC meeting held in April. He began with the project timeline and pointing out where the process currently stood. He explained that the focus of SAC Meeting #2 would be on understanding the model inputs, but he first wanted to review the foundational context from the April session. Mr. White reminded the group that the ANZ update is required every five years and is designed to evaluate how aircraft noise impacts surrounding communities using the Day-Night Average Sound Level (DNL) thresholds of 65, 70, and 75 decibels. He noted that noise contours are not just lines on a map; they are used to guide compatible land use planning and to ensure that State and local policies are aligned with aviation noise exposure levels. The work is governed by COMAR, which provides a structured process for assessing existing noise impacts, projecting future impacts, and considering strategies for mitigation. However, Mr. White reminded everyone that the ANZ process cannot address all aviation concerns, it does not influence air traffic control decisions, cannot restrict federal airspace, and cannot change existing development. He also displayed the 2020 ANZ composite contour, showing how the majority of noise exposure remained within airport boundaries. Mr. White closed the recap by underscoring the role of the SAC moving forward, stating that future meetings would focus on draft contours and documentation, and that feedback from the committee would be essential to ensure the updated contours accurately reflect on-the-ground conditions.	Tyler White
ANZ Noise Modeling Process	Mr. White then led a detailed presentation on the ANZ noise modeling process. He explained that the team is using the Federal Aviation Administration's (FAA) Aviation Environmental Design Tool (AEDT) to simulate how aircraft noise propagates from Martin State Airport under typical operating scenarios. The model is designed to integrate real-world radar data, flight paths, aircraft types, topography, and atmospheric conditions to calculate how noise travels over the surrounding communities. Mr. White emphasized that the AEDT model supports both current and forecast conditions. For the base year of 2025, the team used 2024 radar data and scaled it forward using FAA forecasts. For future years,	Tyler White

2030 and 2035, AEDT includes expected changes in operations and aircraft fleet mix. He explained that while the contours produced by the model reflect average daily noise exposure, they are still sensitive to several variables, including time of day, runway direction, and types of aircraft.

The model includes all types of operations, fixed-wing aircraft, helicopters, and military flights, and although military operations are not available in the ANOMS data for security purposes, they are included in the study and the project team received detailed information from the MDANG. Mr. White displayed diagrams showing how different types of aircraft are assigned specific track types within the model, such as circuit patterns for training flights or straight-in approaches for larger aircraft.

Several SAC members asked clarifying questions throughout the presentation. Mr. White explained that fixed-wing general aviation and on-demand air taxi flights are categorized separately within the model and that while Martin State Airport does not host commercial airline service, charter flights are included when they occur. When asked about the impact of tree removal near the north end of the runway, Mr. White stated that while it might slightly shift takeoff or landing points, it would not significantly change aircraft routing or noise exposure. He reiterated that runway use is primarily driven by wind conditions, not obstacles or changes in runway length.

Mr. Matthew Algiers inquired about the frequency of charter flights, and Mr. White responded that there had been five in the past year. He explained that the model differentiates between daytime and nighttime operations, with nighttime modeled as a separate component to accurately assess DNL values during noise-sensitive hours.

Mr. White also addressed the challenge of modeling military aircraft, noting that security protocols prevent radar access for flights. In those cases, the team relied on best-available data and conservative estimates to fill in the gaps, including discussions with the Maryland Air National Guard. Terrain, elevation, and long-term weather patterns are also taken into account in the model to produce the most accurate results possible.

Mr. James Hock raised concerns about how noise might carry across Middle River, pointing out that water surfaces can reflect noise in ways that land does not. Mr. White acknowledged that difference and

confirmed that the model accounts for those acoustic properties. Another SAC member asked why the noise of arrival aircraft appeared more concentrated on the north side. Mr. White said that aircraft like the A-10 historically followed arrival paths that produced more noise in that area, a pattern that would be accounted for in the 2025 modeling scenarios.

Noise Model Inputs	Mr. White continued into Noise Model Inputs, walking through the radar-based modeling approach being used for Martin State Airport. He explained that the team was using an in-house preprocessor tool to feed actual radar tracks into the model, rather than relying solely on representative tracks. This allowed them to more accurately capture how aircraft were flying, including the dispersion in flight paths and variations from one track to another. He pointed to a heat map on the screen, showing how fixed-wing arrival and departure paths appeared, noting areas of heavier density with warmer colors.	Tyler White

Mr. Hock asked for clarification on whether each radar track represented a single aircraft operation, particularly for touch-and-go activity. Mr. White confirmed that each track was counted individually, even for training circuits. He said the team would be modeling each occurrence and that the touch-and-go operations would be accounted for in the model accordingly. As he advanced to the next slide, he showed the tracks associated with touch-and-go operations and explained how these would be used to generate model input tracks, each associated with a specific number of aircraft operations.

He moved into helicopter traffic, explaining that model tracks for helicopters were developed by drawing centerlines through the densest radar returns. Each helipad had its own arrival and departure track, reflecting actual flows observed in the data. Mr. Hock commented that it seemed like most helicopter routes passed over Wilson Point and Hawthorne and asked whether the model would reflect that imbalance. Mr. White confirmed that the radar data supported the observation and said the model would include weighted allocations, meaning that routes experiencing more traffic, such as those over Wilson Point, would be modeled with proportionally more activity.

He then displayed the helicopter training circuit track, followed by the military tracks. The military flight paths included both straight-in and straight-out patterns, and an overhead break pattern was also being added, which would resemble a circuit track but with an extended leg. These paths would be used to model A-10s, C-130s, and other military aircraft based on historical data.

Mr. White then described how operational forecasts were derived. The model's baseline year was 2025, but since full 2025 data was not yet available, the team had used 2024 radar data and scaled it using the FAA's Terminal Area Forecast (TAF). This method allowed them to estimate total operations by category, air carrier, air taxi, general aviation, and military, and that breakdown would inform the fleet mix, runway utilization, and overall activity assumptions.

At this point, Mr. Rineer interjected to mention that engine run-up operations were performed during the monitoring period by Grandview Aviation, which has since ceased operations at the airport. He said those run-ups should be included in both the base and future-year models. Mr. White agreed and noted where the run-up locations were mapped. Mr. Rineer added that the team had originally planned to define a run-up area with Grandview's input, but the operator left before that could happen. He suggested modeling run-up activity in front of the hangar where those operations had previously taken place. Mr. White said he would make sure that was captured.

Mr. White continued, stating that for the base year 2025, the project team would model approximately 89,000 operations, or approximately 245 average daily operations. That number would increase in future years to approximately 95,000 by 2035. He displayed the modeled runway use data for both the base and future years. For arrivals and patterns, Runway 33 (west flow) would be used 54 percent of the time and Runway 15 (east flow) would be used 46 percent of the time. For departures, Runway 33 would account for 56 percent of departures and Runway 15 would account for the other 44 percent. These figures were derived directly from radar data and would be used for all future-year scenarios.

Mr. Jim Merritt mentioned a previous statement from Mr. Harold Fowler suggesting that when trees were cleared from the north end of the runway, the operation split would become more balanced, closer to 50/50, and asked if that was accurate. Mr. Kevin Clarke responded that he did not believe it would significantly affect operational patterns. He said that while removing the trees could increase the usable runway length from 7,000 to 8,000 feet, it would not alter air traffic control practices or pilot preferences, which were still largely dictated by wind and operational efficiency. The main change, Mr. Clarke said, would be that aircraft could take off or land slightly farther north, which could help them achieve greater altitude earlier, possibly benefiting areas like Long Beach Estates by reducing low-altitude overflights.

Returning to the presentation, Mr. White gave a more detailed look at the fleet mix, starting with the 2025 base year. He described the air carrier category as including larger commercial aircraft, such as 737s, but emphasized that these would only appear as charters at Martin State, not as regular service. Air taxis, he said, were small business jets flown on-demand. General aviation encompassed everything else that wasn't military or commercial, such as corporate jets, private pilots, and helicopters, among others.

Mr. Hock asked for clarification on what was included in the general aviation count, specifically whether it included general aviation jets or only small propeller planes. Mr. White said the 89,000 operations included all aircraft types. The team clarified that general aviation included both jets and propeller aircraft that weren't classified as air carriers or military. He said the air carrier category included aircraft like chartered Southwest or Delta flights, while air taxis were things like privately chartered Embraer jets. Ms. Hanrahan added that their modeling included every type of aircraft that flew in or out of Martin State Airport in 2024, with exact aircraft type data.

Ms. Kim Fry expressed concern upon hearing the mention of 737s, asking whether Martin State currently had contracts with any air carriers. Mr. Rineer responded that Martin State Airport is not a Part-139 airport like BWI and was therefore not certified for scheduled commercial service. Any commercial flights were charters and were extremely rare. Ms. Hanrahan confirmed there were five air carrier operations in 2024. A 737 had landed at Martin State recently, but it was a chartered flight, possibly for a sports team, which was an infrequent occurrence, and the airport is not designed to support commercial service. When someone asked for a charter count, Mr. Rineer confirmed again that there were five air carrier operations in 2024.

Mr. White transitioned into the runway utilization breakdown by aircraft category and time of day. He showed the data split into day and night operations, including circuits. Ms. Hanrahan noted that this section had been emailed out in advance due to the detailed data tables. Mr. Rineer pointed out that runway use is influenced by wind, not just runway length or nearby obstacles. Ms. Hanrahan emphasized that runway utilization was broken down not just overall, but by category, day arrivals, night circuits, and so on, to ensure that DNL values accurately reflected how and when aircraft were operating. She reminded the group that "night" in the model was defined as 10 PM to 7 AM.

Mr. White continued through additional charts for air taxis, general aviation, and military aircraft, stating that for military aircraft, radar data wasn't available due to safety restrictions, so modeling assumptions had to be applied. He then discussed other model inputs like long-term weather averages and terrain.

When he got to the 2030 model assumptions, Mr. White noted that operations were projected to increase slightly and that the only change to tracks would be the inclusion of a runway shift. Mr. Merritt asked why military aircraft were still included in 2030 modeling if A-10s had left and there were no future plans for fixed-wing military operations. Ms. Hanrahan explained that although the base wouldn't host fixed-wing units, military aircraft might still operate at the airport. Mr. White gave the number as 1,700 operations. Mr. Clarke added that although the A-10s had left, there was still some effort underway to bring new aircraft in, and that military presence at Martin State Airport wasn't necessarily over.

The discussion then shifted toward noise propagation over water and whether the model captured how sound might carry across Middle River. Mr. Hock raised the concern, arguing that trees and land absorb sound, but water reflects it, potentially increasing impacts on communities across the river. Ms. Hanrahan confirmed that the modeling software accounts for over-water reflection and said noise is still modeled over a wide geographical area. She emphasized, however, that 65 dB DNL contours, the focus of the regulatory analysis, typically do not extend far from the airport property at Martin State.

Mr. Hock requested that the model include points across the river so that actual noise levels could be compared now and in the future. Ms. Hanrahan agreed this was possible and said they could place model points wherever needed. Mr. Merritt said having those numbers would be useful in future SAC meetings to track change over time. He asked to pull up the map showing noise contours and pointed out that the northern lobe seemed to extend farther than the southern one, which seemed odd given the population on the south end. Ms. Hanrahan acknowledged that the contours would not be perfectly symmetrical and said that runway use and aircraft mix dictated the contour shape.

ANZ Land Use Inventory	Mr. Rineer introduced the topic of land use by explaining that the ANZ Land Use Inventory is a key element of the update process. The goal of this component, he said, is to assess how current land use and zoning aligns with projected noise exposure contours and to identify any instances of incompatible development. Mr. Rineer emphasized that this work is intended to inform future policy guidance and collaboration with Baltimore County to prevent land use conflicts near Martin State Airport.	Bruce Rineer

Mr. White elaborated that the modeling and analysis help determine whether current development patterns are consistent with the FAA's guidelines on land use compatibility in noise-impacted areas. He noted that Martin State is the second-busiest general aviation airport in Maryland, with a runway capable of handling more than 40 operations per hour. While the airport has not experienced significant development pressure to date, the land use inventory helps ensure that future growth is planned in a way that avoids placing sensitive uses, like residences or schools, too close to high-noise areas.

Mr. Rineer added that while the modeling data provides the technical foundation, the real aim of the land use inventory is to work with local partners to minimize future conflicts. He said that in past cases, coordination with planning agencies have helped prevent the introduction of incompatible new uses. He concluded that the inventory is not just a regulatory task, but a planning tool meant to benefit the long-term relationship between the airport and its surrounding communities.

Noise Abatement Plan (NAP)

Mr. Rineer then transitioned into a discussion of the NAP, noting that while the plan is voluntary, it plays a significant role in promoting noise-conscious flying behaviors. He explained that the current NAP, updated in 2020, includes recommended procedures for different types of aircraft. These include altitude minimums and turn restrictions aimed at minimizing overflight noise in nearby communities.

Bruce Rineer

He detailed several of the plan's key guidelines: fixed-wing aircraft are encouraged to reach 1,000 feet before initiating any turns; turbine-powered aircraft are asked to reach 1,500 feet; helicopters should maintain a minimum of 500 feet when departing or arriving; and aircraft on arrival should remain at the highest possible altitude until initiating final approach. Instrument Flight Rules (IFR) traffic, he noted, follows published procedures that are less flexible but still within the scope of the plan's recommendations.

During the discussion, several SAC members raised questions about the effectiveness and enforceability of these procedures. One participant asked whether Visual Flight Rules (VFR) arrivals could fly at higher altitudes to further reduce noise. Mr. Rineer responded that this is something they could evaluate further, especially by studying pilot behavior and approach starting points.

Mr. Merritt asked whether aircraft could be required to use the full runway length for takeoffs to avoid steep climbs over water. Mr. Clarke responded that this is already being addressed through the design of a new parallel taxiway, which will allow aircraft to stage from the very

end of the runway. He noted that this change should help reduce the low-altitude noise footprint over communities like Long Beach Estates.

Another participant inquired whether the runway extension would lead to increased traffic. Mr. Clarke clarified that the purpose of the extension was to improve operational efficiency and safety, not to increase airport capacity. He emphasized that any significant increase in operations would require separate planning and likely another round of environmental review.

Further questions touched on aircraft noise characteristics. Mr. Merritt asked if twin-engine aircraft were louder than single-engine planes, to which the team acknowledged, noting they typically have more power and climb performance. Another member asked whether piston aircraft were louder than modern jets. Mr. Rineer said that in many cases, older piston aircraft can be louder due to outdated technology.

Responding to questions about oversight, Mr. Rineer confirmed that all aircraft undergo routine FAA inspections and that any safety violations are flagged. He added that flight schools operating at Martin State are limited to three aircraft in the traffic pattern at a time and that touch-and-go landings are not permitted between 10:00 PM and 6:00 AM unless explicitly approved by airport operations.

Mr. Merritt proposed adjusting the allowed start time for operations from 6:00 AM to 7:00 AM to reduce early-morning noise impacts. Ms. Fry followed up by asking when the control tower opens. Mr. Rineer responded that the tower opens at 6:00 AM.

The conversation briefly turned to the new community college aviation maintenance program planned for the airport. While this program would bring more people into aviation-related training, it is unlikely to have a meaningful impact on flight operations or noise levels.

Schedule and Resources	As the presentation concluded, Mr. Rineer turned the discussion to planning the next SAC meeting. He explained that the project team would be compiling and analyzing the modeling outputs in the coming months, with the goal of presenting draft contours and documentation for review in the fall. In preparation, Mr. Rineer asked attendees to begin thinking about their availability in September and October so the team could begin coordinating a date for SAC Meeting #3.	Bruce Rineer

Ms. Elsa Arias used the opportunity to ask SAC members to share any standing meeting dates or known conflicts that might interfere with scheduling. She emphasized the team's desire to avoid overlaps with regularly scheduled community meetings. Mr. Rineer clarified that the team was particularly looking at dates in September.

Ms. Hanrahan added that members could send their availability or conflicts by email if they did not have that information on hand during the meeting. Mr. Hock responded that the second Thursday of each month was reserved for his association's general meetings and would be the only time that would consistently conflict. He added that his group does not meet during July or August, which opened more scheduling flexibility in the summer months.

Mr. Rineer confirmed this, asking whether it was the first or second Thursday, and Mr. Hock reiterated it was the second. Another attendee added that the first Tuesday of the month would also pose a conflict for their group. Mr. Rineer repeated these two restrictions to the group, no meetings on the first Tuesday or the second Thursday of the month, to ensure the planning team would avoid those windows when proposing dates.

Ms. Hanrahan reminded the group that all SAC members would receive follow-up emails, including meeting materials and a summary of the discussion would be posted on the website, and encouraged anyone with additional scheduling notes to reach out directly. Mr. Rineer closed the topic by thanking everyone for their input and reaffirming the team's commitment to maintaining open communication as they transitioned into the next phase of work.

Q&A and Open Discussion	At the conclusion of the formal meeting, the floor was opened for additional questions.	Rhea Hanrahan

- Mr. Merritt asked whether the public workshop would be separate from SAC Meeting #3. Bruce Rineer confirmed that the public workshop would be a separate event from the third SAC meeting. The SAC meeting would be held with committee members, while the public workshop would be open to the broader community for feedback.

- Ms. Fry and Mr. Merritt engaged in a discussion about identifying the most noise-sensitive areas in the community using the heat map from the presentation. Mr. Rineer encouraged members to use tools like Google Maps to define sensitive zones, which could help in developing preferred flight patterns that minimize impacts on areas like Bowley's Quarters and Wilson Point.

- Mr. Merritt referenced Long Beach Estates as a particularly sensitive area based on the flight pattern screenshots he previously shared. Mr. Rineer acknowledged the point and used the heat map to help visually locate the area. Ms. Fry

supported the identification and said the map was a helpful visual tool.

- Mr. Hock and Mr. Merritt commented on the use of flight paths over less populated areas like parks or waterways to reduce community impact. Mr. Rineer agreed that redirecting patterns over low-density areas could help reduce complaints and suggested that the team could work with flight schools to explore alternate routing. Mr. Merritt also pointed out the potential benefit of utilizing waterways to reduce overflight impacts.

- Mr. Hock raised concerns about helicopters flying over Wilson Point. Mr. Joseph Ireton responded that the community generally understands the presence of helicopters and accepts them as necessary. Mr. Jeff Kyger added that law enforcement helicopters prioritize emergency responses and do not tend to raise complaints, except for specific operations like mosquito spraying, which can fly low. Mr. Brandon Branham said that pilots are encouraged to avoid neighborhoods whenever possible, but emergency situations sometimes require direct and fast routes. Mr. Ireton agreed, adding that police and medical flights are necessary operations. Mr. Rineer mentioned that most complaints about police helicopters tend to relate to return flights rather than outbound emergency runs.

- Mr. Rineer clarified that there is no longer an active helicopter training school at Martin State, so helicopter pattern traffic is now limited. Ms. Hanrahan added that the modeling still includes some helicopter pattern activity to ensure the full range of operations is accounted for.

- Ms. Fry asked whether the “500 MSL” label for helicopters indicated a required departure altitude. Mr. Ireton responded that while helicopters aim to reach a pattern altitude, they are not designed to climb vertically and must depart forward. A 500-foot altitude is a general target, but it is not always feasible.

- Ms. Fry asked whether helicopters could fly lower than fixed-wing aircraft to maintain separation. Mr. Ireton replied that helicopters sometimes do fly patterns but not often, and that separation is maintained for safety reasons.

- Ms. Marsha Ayres asked if helicopter activity occurred on weekends and late at night. Mr. Ireton answered that training is required but rarely happens after 10 PM and is generally minimal. Ms. Ayres followed up by asking whether helicopters fly over the water and return that way. Mr. Ireton confirmed that the State Police generally avoid flying over Wilson Point, instead turning over the water after takeoff and following river paths.

- Mr. Merritt asked about the rare times helicopters do fly over neighborhoods like Bowley's Quarters. Mr. Ireton clarified that this only happens during bad weather when they must follow instrument approach paths.

- Mr. Hock asked why the flight school had not attended the meeting, despite prior commitments to engage with the community. Mr. Rineer said he wasn't sure of Mr. Fowler's current efforts to involve the schools. The team noted that flight schools had been invited several times, including for the previous meeting, and only one representative showed up in the past. He proposed setting up a separate conversation outside of SAC meetings to discuss concerns and feedback directly. Mr. Merritt supported this idea, noting that a respectful, collaborative approach would likely be more effective than confrontational complaints.

- Mr. Kyger said he had been sent to the meeting with a question from his community regarding a planned charging station at the airport for electric aircraft. Mr. Clarke confirmed that a company called Beta was establishing an electric aircraft charging network along the East Coast, and a station was planned for Martin State. It would be similar to a Tesla charging station and would be located far enough from neighborhoods to avoid disturbance.

- Mr. Kyger asked whether the charging station would generate noise due to cooling fans. Mr. Clarke said the charging station itself would be quiet and wouldn't involve loud cooling fans like those found in industrial battery storage systems.

- Mr. Hock asked where the electricity would come from and raised concerns about the noise produced by fans used to cool battery storage facilities. Mr. Clarke clarified that the airport's

	project did not include such large-scale battery storage. However, he acknowledged that companies were exploring nearby properties, including at Martin State, for potential battery storage projects, which would be governed by local permitting and not part of the current aviation study. • Mr. Rineer added that if flight schools begin transitioning to electric aircraft, the airport would need the infrastructure to support that shift, which could reduce noise levels significantly. • Mr. Hock expressed concern about lithium-ion battery fires, explaining that once ignited, they're difficult to extinguish and that local fire departments are monitoring these risks closely. Mr. Clarke acknowledged the concern and said it was an important data point for airport planning, though again unrelated to aircraft noise modeling.	
Adjournment	With all scheduled topics covered and no further questions, Mr. Rineer thanked the SAC members for their continued involvement and thoughtful engagement. He reiterated that the SAC's feedback is a vital part of the process and expressed appreciation for the evening's discussion. Mr. Rineer confirmed that the next SAC meeting would be scheduled once the modeling results were compiled and encouraged attendees to keep an eye out for draft materials in the coming months. The meeting concluded shortly after 8:00 PM.	Rhea Hanrahan