

DC METROPLEX BWI COMMUNITY ROUNDTABLE WORKING GROUP PUBLIC MEETING

Fifty-Seventh Meeting of the DC Metroplex BWI Community Roundtable Working Group

Tuesday, June 24th, 2025, from 7:05 p.m. – 10:00 p.m.

Meeting held virtually via Microsoft Teams

MEETING MINUTES

Regular Participants:

Roundtable Member	District/Organization	Attended	Roundtable Member	District/Organization	Attended
Suzzie Schuyler*	District 1 Anne Arundel County Council	X	Sam Snead*	Office of Anne Arundel County Executive Steuart Pittman	
Debra Jung*	District 4, Howard County Council	X	Clarence Dickenson III*	Office of Howard County Executive Calvin Ball	
Debbie Macdonald*	District 9	X ONLINE	Brent Girard	Office of Senator Chris Van Hollen	X ONLINE
Jesse Chancellor*	District 9	X	Stephen Jones	FAA Regional Deputy Administrator	
Howard Johnson Chair*	District 12	X	Paul Shank, Chief Engineer	MAA	
Drew Roth*	District 12	X	Darline Terrell-Tyson, Director, Office of Environmental Compliance and Sustainability	MAA	X
Paul Verchinski*	Alternate District 13	X ONLINE	Bruce Rineer	MAA	X
Evan Reese*	District 30	X	Karen Harrell	MAA	X
Rob Shepard*	District 31	X ONLINE	Kevin Clarke	MAA	X
William Pierson*	District 32		Royce Bassarab	MAA/HNTB	X
Daniel Woomeer* Co-Chair*	District 32	X ONLINE	Greg Voos	Mid Atlantic Regional Representative, NBAA	
Michael Huddleston*	District 32	X ONLINE	Kyle Evans	General Aviation Representative, CP Management LLC	
David Nibeck	Alternate – District 32		David Richardson	Southwest Airlines	
Marcus Parker, Sr	Alternate – District 32		Steve Alterman	President, Air Cargo Association	
Kimberly Franklin*	District 33		Trey Turner	Commercial Carriers Rep.	
Libby Lewandowski*	District 33	X			
Christopher Burk*	District 44b	X			

*Voting Member

Other Named Attendees:

Brett Healy, ADCI (Meeting Minute Taker)
Sarah Yenson, HMMH
Rhea Hanrahan, HMMH
Gary McMullin, HMMH/MAA Noise Consultant
Ben Thielen, FAA Community Rep.
Curby Fowler, FAA

INTRODUCTION AND ROLL CALL:

Introduction:

The meeting commenced at 7:05 p.m. with a general briefing delivered by Mr. Bruce Rineer. He reviewed the exits and evacuation routes. He stated that an AED and a fire extinguisher were in the hallway in case of any medical emergencies, and bathrooms were in the hallway. Mr. Rineer said evacuation, if necessary, should occur through the entrance door and that participants should gather in the front parking lot for roll call.

Mr. Rineer said online participants should log off and log back in to address technical difficulties and recommended only having the Teams application open for the meeting duration.

Roll Call:

The Roundtable Chair, Mr. Howard Johnson, conducted roll call and quorum was met.

Approve Agenda:

Mr. Johnson asked if there were any amendments to the agenda; there were none. Mr. Dan Woomer motioned to approve the meeting agenda; Mr. Evan Reese seconded. All voted in favor and the motion passed.

Review and Approve April 8, 2025 Meeting Minutes:

Mr. Johnson then moved on to the approval of the April 8, 2025 meeting minutes. Mr. Woomer made a motion to approve the April meeting minutes. Ms. Suzzie Schuyler seconded. All were in favor, and the motion passed.

Introduction of New MAA Executive Director, Ms. Shannetta Griffin:

Mr. Johnson introduced the new Executive Director (CEO) of the MAA, Ms. Shannetta Griffin. Prior to becoming the CEO, Ms. Griffin was the Federal Aviation Administration's (FAA's) Associate Administrator of Airports from 2021 to 2025. In this role, she administered national airport safety standards, planning, engineering, federal compliance, and financial assistance programs to provide complex solutions for more than 3,000 public use airports across the country. She was also an Airport Executive at the Indianapolis and Columbus airports where she managed engineering, construction, and airport environment operations. Mr. Johnson said he believes that Ms. Griffin is an excellent choice for the position.

Ms. Griffin addressed the group, saying she was honored to be present for her first Roundtable meeting. She stated that the work performed to date to evaluate the flight paths is a true testament of partnership between the MAA, the Roundtable, and the FAA, and she is happy she will be able to hear the results of the report with this group. Ms. Griffin noted that aircraft noise is an economic reality of the airport, community, state, and region, and she is proud to see that BWI is a gateway to the world regarding noise issues. Ms. Griffin said the work is not done; currently, the MAA and its partners are working to complete the Airport Noise Zone (ANZ) study required by the state and next year will undertake an FAA Part 150 Noise Study. She said she hopes these studies will result in further positive collaboration with local communities. Ms. Griffin emphasized such collaboration could lead to expanded initiatives and creative ways to better the communities. She asserted that the ANZ study gives community members the ability to influence land use and zoning and to drive economic growth and job creation in their communities. Ms. Griffin concluded by saying she looks forward to working collaboratively and transparently with the Roundtable to provide value to the BWI and Martin State neighbors and thanked Mr. Johnson for the opportunity to speak.

MAA UPDATE:

Mr. Johnson thanked Mr. Paul Shank and his team for their work and for working with the Technical Committee on the presentation. Mr. Johnson explained that the MAA presented their findings to the Technical Committee ahead of the meeting and incorporated the committee's suggestions into the presentation. He added that the presentation represents the MAA's understanding of the flight paths and changes resulting from the new procedures.

Mr. Johnson invited Mr. Rineer to give the MAA presentation. Mr. Rineer introduced Mr. Royce Bassarab, who is a consultant embedded with the MAA's noise team, and said because of its technical content, Mr. Bassarab will lead the presentation. Mr. Rineer asked attendees to hold questions until the end of the presentation.

Mr. Bassarab recognized some members of the MAA's technical consultant team who assisted with the report. These contributors included Mr. Gary McMullin, a retired Southwest pilot and industry consultant with a deep understanding of flight procedures and their effects on noise, and Ms. Rhea Hanrahan and Ms. Sarah Yenson, consultants with HMMH (a noise and environmental consultant to the MAA) who have been involved with this project for several years.

Mr. Bassarab said the purpose of the presentation was to walk the Roundtable and members of the public through the new flight procedures that were published in 2024 after being in development for several years. He reviewed the agenda, which included an introduction, the departure and arrival procedures, and a noise analysis of the procedures. Mr. Bassarab reviewed the goals of the meeting, commenting that some attendees may be seeing this information for the first time. The goals included providing a brief history of Performance-Based Navigation (PBN) procedures at BWI, discussing how the airport operates, understanding the FAA's initial changes and why they were made, reviewing whether the changes made met the FAA's and the Roundtable's goals, and understanding the changes in noise due to the new procedures.

Introduction:

Mr. Bassarab provided a simple description of PBN procedures, saying they were like GPS in the sky. In 2013, the FAA completed an environmental review of the *Optimization of Airports and Procedures in the Metroplex for the DC Metropolitan area* (the DC OAPM), which included changes to BWI, Dulles International Airport (IAD), and Washington Reagan Airport (DCA); these changes were implemented between 2014 and 2016. This implementation concentrated flight tracks that had been distributed over a large area into more condensed tracks, which led to an increase in complaints and complainants relating to airport noise. Mr. Bassarab said this caused the MAA to ask the FAA to assist in developing solutions to the noise issues. In response, the FAA asked the MAA to form a community roundtable so that affected community members could develop and present a unified position to the FAA. This Roundtable first met in March 2017.

In 2017, the FAA presented several procedure changes to the Roundtable to address the noise concerns. Mr. Bassarab stated that the Roundtable membership at the time was generally accepting of the changes but wanted additional changes to further address the issues. To further this aim, the Roundtable's Technical Committee developed additional arrival procedures and submitted them to the FAA in early 2020. The FAA reviewed and modified the Roundtable's proposed procedures at their PBN Working Group meetings between 2020 and 2024 and published new departure procedures in July 2024, followed by new arrival procedures in September 2024.

Mr. Bassarab then reviewed how BWI operates. He identified the airport's primary commercial service runways, Runway 10/28, oriented east-west, and Runway 15R/33L, oriented to the northwest-southeast. Most commercial operations at BWI use these two runways. The airport has a third runway, Runway 15L/33R, which is shorter and serves smaller propeller and business aircraft.

Mr. Bassarab then reviewed how the runways are used, saying that the airport uses either east flow or west flow depending on wind direction and weather conditions. BWI operates in west flow, where aircraft depart in the westward direction, 65 to 70 percent of the time. This flow direction uses Runway 28 for departures and Runway 33L for arrivals, while east flow uses Runway 10 for arrivals and Runway 15R for departures. Mr. Bassarab showed flight tracks for each flow direction, as well as an animation illustrating the two flow directions. He noted that about 67 percent of the airport's departures eventually are westbound departures, regardless of which flow direction is in use.

Mr. Bassarab continued, saying the departure procedures provide defined paths to connect the departure runway to an aircraft's planned flight route. The main departure procedures for BWI are the TERPZ, LINSE, and FOXHL procedures to the west (67 percent), followed by southbound departures via CONLE and FIXIT (17 percent), and northeast departures via DUKPN (16 percent).

Mr. Bassarab provided similar information for arrivals. Arrivals from the west come in on the ANTHM Standard Terminal Arrival Route (STAR) and make up about 23 percent of all arrivals. Arrivals from the north use the TRISH procedure (17 percent), and arrivals from the southeast use the MIIDY procedure (3 percent). Arrivals from the southwest represent 57 percent of arrivals and use the RAVNN arrival procedure. He added that each arrival procedure has a defined approach procedure to each runway.

Departures:

Mr. Bassarab began the discussion of the departure procedures by reminding the group that when the PBN procedures were first implemented at BWI, the MAA asked the FAA to make changes to address the noise. In response, the FAA proposed changes to the procedures that mimicked the flight paths and dispersion of the procedures as they existed prior to the initial implementation of the PBN procedures. Mr. Bassarab showed a map with departure flight tracks from the fourth quarter of 2023 before the procedure implementation (shown in black), and from the fourth quarter of 2024 after the procedure implementation (shown in blue).

Mr. Bassarab said he would first focus primarily on westbound departures, pointing to two areas circled on the map, and then on minor changes to south- and northeast-bound departures. He called attention to the packet provided to the group and a map of the westbound departure procedures on the screen. He pointed out several yellow dots on the map, saying the dots were waypoints, or three-dimensional GPS navigation points, that defined the procedures. Mr. Bassarab said that the map on the screen and the maps in the packet referenced the waypoints to specific points on the ground so that people can better understand where the changes occurred. As an example, Mr. Bassarab said that the FLACO waypoint was in Columbia, near Dobbin Road and Snowden River Parkway. He noted that all procedures have similar maps, which were all included in the packet.

Mr. Bassarab then defined the problem statement that the Roundtable and the FAA wanted to address. He displayed a slide with departures from Runway 28 from 2013, prior to NextGen implementation (shown in a rust color), and from 2023, after NextGen PBN implementation between 2014 and 2016 (shown in black). He pointed out that after NextGen implementation, track dispersion was consolidated into a single black departure path that extends from the runway to the WONCE and TERPZ waypoints before splitting into three paths. Mr. Bassarab stated this concentration led to an increase in noise for those underneath the post-implementation flight track.

Mr. Bassarab continued, saying when the MAA asked the FAA to intervene, they requested that the FAA return to the flight paths and dispersion provided by the pre-NextGen flight tracks to the greatest extent possible. He then showed the procedures implemented in 2024 (blue) compared to the 2023 procedures (black). Mr. Bassarab pointed out that the black TERPZ SEVEN procedure was shifted southward and split into three procedures: TERPZ EIGHT, FOXHL ONE, and LINSE ONE. He then said one intent of this presentation was to determine if the 2024 changes accomplished the goal of returning to pre-NextGen flight paths. Mr. Bassarab showed a slide with the 2013 flight tracks and the 2024 flight tracks and observed that the two track sets have “pretty good agreement.” Mr. Bassarab said the MAA also reviewed altitude changes between 2023 and 2024 and said the altitude increases occurred at points where aircraft were already high off the ground, but such increases were still helpful. He said the new procedures resulted in increases of about 600 feet at WONCE and AADDY, and he reminded the group that Runway 10/28 is used between 65 and 70 percent of the time.

Mr. Bassarab showed departures from Runway 15R from 2013 and 2023, saying the remaining 30 to 35 percent of the time, aircraft depart from Runway 15R. He reiterated that since most of BWI’s departures are headed to the west, this and the previous procedures are used most often. Mr. Bassarab stated that the MAA had asked the FAA for a full reversion to the 2013 pre-PBN flight paths, but the FAA has been

clear that they cannot and will not return to that level of dispersion due to changes in technology. He said the goal is now to use new technology to mimic old procedures as best possible.

Mr. Bassarab returned to the Runway 15R departures and showed the 2023 and 2024 procedures. He stated that Runway 15R departures use the same procedures as Runway 28. He also noted that the FAA incorporated the MAA's voluntary noise abatement program directives in the new procedures. Nearly 40 years ago, the MAA worked with industry partners to define minimum distances that should be flown prior to initiating any turns, which the FAA proceduralized by creating new waypoints to identify those minimum distances. Mr. Bassarab stated the flight track data shows that most aircraft now fly to the new WARYN waypoint before beginning any turns, which means they are higher off the ground by about 200 feet. As a result, the turn to the west shifted southward. He then compared the 2013 and 2024 procedures before discussing altitude changes. Mr. Bassarab said a significant increase in altitude occurred at BOBYJ (about 2,000 feet), and smaller increases occurred at WONCE, TERPZ, and AADDY (about 500 feet).

Mr. Bassarab then showed a slide for Runway 10, saying it is rarely used for departure operations, but it does have a westward departure route. He stated it was modified to add the JWALL waypoint as part of codifying BWI's noise abatement departure procedures. Mr. Bassarab showed flight tracks from 2023 and 2024, saying that the gray tracks from 2023 show that most flights turned prior to JWALL, but now most of the flights turn at or after the waypoint. He noted that this increases altitude along the turn.

Mr. Bassarab said the MAA also reviewed the procedure use for westbound departures. He noted in 2018, when the MAA and the Roundtable reviewed the FAA's proposed procedures, they did a detailed analysis of the procedure use distribution for departures. Historically, 83 percent of the westbound departures used the northern TERPZ route and 17 percent used the southern route. The 2018 analysis of the procedures proposed at that time indicated that 75 percent of westbound departures would use the northern TERPZ route and 25 percent would use the southern LINSE procedure. Mr. Bassarab said the 2024 data show 79 percent of westbound departures using the TERPZ and FOXHL procedures and 21 percent using the southern LINSE route, which generally agrees with the predictions.

Mr. Bassarab transitioned to the southern procedures, first showing the waypoints orientation slide and then the southbound departures from 2023 (black) and 2024 (blue). He stated that the only major change was relocating the STABL waypoint about 1.5 miles east (shown in yellow), which only affects departures from Runways 33L and 28. Mr. Bassarab pointed out that both before and after the procedure changes, many departures are vectored off the procedure before rejoining it later; this number remained approximately the same. Regarding altitude, Mr. Bassarab said no substantial changes were observed and noted that altitude decreased slightly at SUGGS. He said the altitude at SUGGS is restricted to "at or below 7,000 feet" and so increases there were not possible.

Mr. Bassarab then showed the orientation slide for the northeast departures, pointing out that BOSLY is used for Runway 28 departures, JWALL for Runway 10 departures, and DUKPN and ARWEN used for both. He showed the northeast departures from 2023, saying that the two procedures, SWANN THREE and PALEO THREE, were the last two conventional (non-PBN) procedures at BWI. In 2013, the FAA did not intend to make changes to the procedures, but in 2018, they decided that area navigation (RNAV) procedures would be appropriate. Mr. Bassarab displayed the 2023 (black) and 2024 (blue) tracks to illustrate the resulting changes. He reiterated that these are for northeast departures, which make up

only 17 percent of departure operations, and said departures from Runways 28 and 33L/R fly farther south to ARWEN and Runway 15L/R departures fly southeast to DUKPN before departing to the east or northeast. Altitude changes were minor, with altitudes at DUKPN and ARWEN increasing by about 500 feet and 250 feet at BOSLY.

Arrivals:

Mr. Bassarab next discussed the changes to arrival procedures. As with the departures, the FAA responded to the MAA's request for changes by providing some proposed procedure. The Roundtable believed the arrival procedures needed further changes beyond what the FAA proposed, so the Roundtable's Technical Committee worked with the MAA and its consultants to develop arrival procedures that more comprehensively addressed their concerns. The MAA submitted these changes to the FAA for review and consideration in 2020, and the FAA modified and published updated procedures in September 2024.

Mr. Bassarab showed a slide with a summary of the arrival procedures. He said this presentation focused on arrivals to Runway 33L, specifically the RAVNN arrival, and to Runway 10. Mr. Bassarab displayed the RAVNN orientation slide, followed by the RAVNN flight tracks from 2023, and said 67 percent of BWI arrivals come from the southwest and use this procedure. He then displayed the 2023 (black) and 2024 (green) flight tracks overlaid with the proposed procedures (blue), and listed the Technical Committee's three requests for the RAVNN arrival: (1) relocate the RAVNN waypoint to the northwest over areas with lower population density, (2) develop a new procedure to connect RAVNN directly to the runway, and (3) develop a continuous descent approach (CDA) from RAVNN to SPLAT to the runway. Mr. Bassarab commented that the RAVNN/SPLAT segment is the most highly used segment of the procedure.

Mr. Bassarab next provided three versions of the RAVNN arrival to Runway 33L and the runway's approach procedures, one for 2023, one for 2024, and one comparing the flight tracks for the two years. He then discussed how the FAA responded to the Roundtable's requests. First, the FAA moved the RAVNN waypoint to the west, but not to the Roundtable's proposed location. The FAA added a new waypoint, SEED, at the proposed RAVNN location and included it in the arrival procedure. Mr. Bassarab pointed out that the area where the flight tracks are concentrated has moved to the west in 2024 compared to in 2023. He also highlighted altitude changes, saying all waypoints saw a "modest increase" in altitude, with the largest gain of about 650 feet at KOOLZ.

For the last request, the FAA developed a Required Navigation Performance (RNP) procedure to enable a CDA from RAVNN to SPLAT to the runway. Mr. Bassarab noted that aircraft need to have specific types of flight computers to use RNP procedures, so utilization of the new procedure is limited. He showed an altitude graph of the RNP procedure and said the procedure allowed aircraft to descend using low or idle power. Mr. Bassarab then compared the 2023 (black) tracks to the 2024 (green) tracks and showed an altitude graph for the 2023 flight tracks. He highlighted the "level-offs," shown as intermediate horizontal lines, saying the lines were what the new RNP procedure intended to remove, since at these level-offs, the aircraft changed power settings, which leads to noise. Mr. Bassarab then showed an altitude graph of the 2024 tracks. He pointed out that while some level-offs still exist, the overall number has been reduced compared to 2023, and the overall altitude graph shows a continuous descent.

Mr. Bassarab next discussed arrivals to Runway 10 and showed the orientation slide, followed by the 2023 flight tracks. He noted most of the changes occurred near the DEDLE waypoint, northeast of the Columbia town center, and commented that the changes were less apparent than for other procedures. Mr. Bassarab said the figure showed an RNP procedure from the north, through the STARZ and STRPS waypoints to Runway 10; this RNP procedure has been used for several years. He said the Roundtable asked the FAA to move this procedure closer to the airport. Mr. Bassarab also noted that a second RNP procedure exists to the south.

Mr. Bassarab provided a map of all Runway 10 arrivals for 2023 (black) and 2024 (green). He told the group that air traffic control (ATC) has to sequence arriving aircraft for the runway, which requires merging aircraft streams coming from both the north and the south. As a result, arriving aircraft have to continue on the procedure until instructed by ATC to turn towards the runway. Mr. Bassarab stated the Technical Committee's goal was to shift the concentration of aircraft turning towards the runway closer to the airport. Mr. Bassarab displayed a slide showing the new and old RNP procedures and altitude profiles, pointing out the procedure shifted eastward toward the runway and now results in a more continuous descent. He noted the STARZ and STRPS waypoints were relocated slightly, which reduced the level-offs at 4,000 feet.

Procedure Analysis Conclusions:

Mr. Bassarab first noted that the MAA waited three to six months after procedure implementation to ensure that ATC and pilots were familiar with the procedures before undertaking any analysis. He said overall, the MAA thought that the procedure changes achieved the goal of mimicking the pre-NextGen dispersion and flight paths around the airport, particularly with the TERPZ, LINSE, and FOXHL westbound departure procedures, and said the procedure use rates are consistent with the FAA's predictions. Mr. Bassarab said that adding waypoints to codify BWI's noise abatement procedures has resulted in notable altitude increases, particularly at BOBYJ and WARYN (Runway 15R) and JWALL (Runway 10).

For arrival procedures, Mr. Bassarab said the FAA's changes successfully implemented the Roundtable's requests to relocate the Runway 10 RNP procedure and the changes for the RAVNN arrivals to Runway 33L were consistent with the Roundtable's proposed procedure. He commented that the FAA also implemented the Roundtable's proposal to increase altitudes for arriving aircraft but noted this was not discussed in the presentation.

Mr. Reese stated that he and most of the Technical Committee agree that the procedures do not fully mimic the pre-NextGen dispersion, saying he thinks the new procedures achieve about 4 percent of the desired dispersion. He said the MAA's conclusion is misleading, and he thought Mr. McMullin would agree. He asserted the Technical Committee achieved what they could in the available time, saying the work was very good and achieved a lot, but it is not the desired full reversion.

Noise Analysis:

Mr. Bassarab said when the Technical Committee developed their initial proposal, the FAA requested that they model the operations and noise levels for those new procedures. For this analysis, procedures and noise levels from the fourth quarter of 2023 were compared to procedures and noise levels for the new procedures in the fourth quarter of 2024. Mr. Bassarab said the noise analysis shows Day-Night

Average Sound Level (DNL) contours for 55 decibels (dB) and greater, compares changes in DNL, and looks at the number of events above 55 dB and 65 dB (NA55, NA65).

Mr. Bassarab displayed a map of the analysis completed for the Roundtable's original proposed procedures, which included contours for the existing 2018-2019 operations and the simulated proposed procedures developed by the Technical Committee. Ms. Debra Jung interjected, asking Mr. Bassarab to define DNL. Mr. Bassarab said DNL is the Day-Night Average Sound Level, a metric that averages noise over a 24-hour period and includes a penalty for nighttime noise (10 p.m. to 7 a.m.). He noted that DNL is not something that can be heard, which is why the MAA included the NA metrics, which provide a more intuitive way of quantifying noise. Mr. Bassarab stated, however, that the FAA requires the use of DNL for noise analyses and that 65 DNL is the threshold for significant noise impact.

Mr. Bassarab returned to the contour map, saying for the 2018-2019 analysis, the 65-dB contours are nearly identical for the existing and proposed procedures. He said changes are more observable at lower levels like 55 dB, pointing out shifts in the contours over Howard County and Severn. He next displayed a map indicating the change in DNL between the 2018-2019 flight tracks and the operations proposed at that time. Red dots indicated an increase in DNL at a census block centroid, while blue dots represented a decrease; darker shades indicated a larger change. Mr. Bassarab highlighted the shifts in noise to the west and south due to the proposed changes.

Mr. Bassarab continued, saying one of the purposes of the analysis was to see how the predictions from 2019 compared to data from the implementation of the new procedures. He showed a comparison of 2023 (gold) and 2024 (purple) DNL contours, again commenting that changes at the 65-dB level are small. He pointed to the 55-dB contour and said the changes to the TERPZ departure shifted the western lobe farther south. Similarly, the Runway 15R departure turn lobe shrank and shifted southward due to moving the location of the turn farther south. Mr. Bassarab then showed a map focused on the western contour lobe, which included the two contours and the departure flight tracks for 2023 (gray) and 2024 (blue) to help illustrate how the flight tracks correspond to the contours. He pointed out the southward TERPZ departure shift, which reduced the 55 dB DNL contour north of Columbia.

Mr. Bassarab showed a similar figure for Runway 15R departures and pointed out how the relocated turn to the northwest shifted the 55-dB contour lobe southward. An attendee asked if any noise monitors were located in that area. Mr. Bassarab said the information shown on the slides comes from modeled, not recorded, data. He said the MAA has 24 noise monitoring terminals across the community, but the data from those monitors cannot be used to develop contours for the entire affected region. Mr. Bassarab noted that the FAA requires the use of the Aviation Environmental Design Tool (AEDT), which can accurately model aircraft noise using actual flight and weather data, to develop these contours and is what was used for this analysis. He reemphasized that the noise monitors cannot provide that level of detail for the whole region and thus cannot be used to generate contours.

Mr. Bassarab then showed a map showing the change in DNL for the 2024 operations, followed by a side-by-side comparison of change in DNL for 2024 operations and the simulated operations for the Roundtable's proposed procedures. He said a perfect match was not expected; instead, the intent was to validate similar patterns between the figures. Mr. Bassarab observed that the figures showed similar patterns over Howard County and Severn; however, the changes south of the airport did not materialize

as expected, and Mr. Bassarab remarked that the MAA would have to conduct further investigation to understand that.

Finally, Mr. Bassarab discussed the NA analysis. He reminded the group that this analysis counts the number of times an aircraft noise level exceeds a specified threshold. The first map showed results for the number of events above 55 dB for 2023. Each colored dot represented a census block group, which equated to about 1,200 people. For each block, the noise was modeled and noise events exceeding the specified threshold were counted. Mr. Bassarab emphasized that the map does not include indications of how much or how long an event exceeded the threshold. He also explained the color coding: blue represented 11-25 events, light green 26-30 events, dark green 76-125 events, yellow 126-200 events, and orange represented more than 200 events.

Mr. Bassarab then toggled between the 2023 and 2024 NA55 slides to illustrate the changes in the number of events above 55 dB that occurred due to the 2024 procedure implementation. Mr. Roth asked if the analysis normalized the number of events by a given number of operations. Mr. Bassarab said the dataset was not normalized and that the analysis used the number of events for an average day for the fourth quarter of 2023 and 2024. Mr. Bassarab also showed the same analysis for NA65 for 2023 and 2024 and said that the pattern seen for NA55 also holds for the 65-dB threshold.

Conclusion and Questions:

Mr. Bassarab concluded his presentation, saying this is a high-level noise analysis and does not delve into the specific changes attributed to individual procedures. Mr. Rineer thanked Mr. Bassarab and opened the floor for questions.

Mr. Jesse Chancellor echoed Mr. Reese's earlier comment, saying that the Technical Committee did what they could to return to pre-NextGen conditions given the technological and procedural limitations of the air traffic control system. He said that the FAA's technology is rigid, which can be efficient but can also have the potential to cause harm. Mr. Chancellor stated that the MAA has strongly supported the Roundtable's efforts and that the MAA and Roundtable have had a working relationship with the FAA, noting that not many other groups have that experience.

Mr. Chancellor continued, asserting that procedure changes are not enough to solve BWI's noise problem. The Roundtable's intent has always been to return to a state where the benefits of the airport outweigh its issues. He acknowledged these benefits are real and valuable to the state and communities, but said those benefits need to be weighed against the impacts on surrounding communities. He repeated that the solution is not incremental change through modifying flight paths or procedures as that only provides small benefits; instead, Mr. Chancellor stressed that meaningful change would come from a continued comprehensive partnership with the FAA and MAA to continue to redesign the airspace to make it compatible with communities' needs.

Ms. Jung directly addressed the meeting attendees, saying she and others have been part of the Roundtable for many years and none of them are happy with the outcome of the procedure changes. She commented that she lives in the part of Howard County that is newly affected by the southward shift of noise, saying she abstained from the Roundtable vote to approve the FAA's procedures since she believes it is unfair for any community to have noise shifted to them as part of a solution. Ms. Jung emphasized that she too is significantly affected by aircraft noise.

Ms. Jung recognized the Technical Committee's and the MAA's considerable efforts to encourage the FAA to comprehensively address the noise issues, but said the current efforts were not as successful as they had hoped. She said she is encouraged by tonight's attendance and appreciates that so many people are motivated to show their support. Ms. Jung told the public attendees that the Roundtable members empathize with them and have similar experiences as they do. She said the presentation represents several years of work on the noise issues, and she is frustrated that the results did not accomplish what the group intended. She concluded by saying that the Roundtable will continue to represent the concerns of the communities around the airport since the members share the communities' concerns.

Mr. Johnson reminded the group that if anyone had questions about the presentation, they should ask them during this time.

Mr. Reese said he agreed with Ms. Jung and Mr. Chancellor's statements, and thanked Ms. Griffin for attending, saying she is the first MAA Executive Director to attend a Roundtable meeting. He acknowledged that these changes represent a very small step in the right direction and the work thus far does not include an overarching solution. He stated the Roundtable had three months to define the problem, followed by six months to develop a solution, even though the usual timeline for this process, when followed by the FAA, takes three to four years to complete. Mr. Reese said the FAA gave the Roundtable and MAA the opportunity to submit procedure changes, albeit within a short timeline, which allowed the Roundtable and MAA to make some small, quick changes and to prove that community groups could work with the FAA and its process to modify the airspace.

Mr. Reese said the current airspace and process were designed in the 1950s for older, slower aircraft and have not been updated since. He stated that many existing procedures were intended for those aircraft and said until the FAA redesigns the entire national airspace for modern jet aircraft, communities are stuck with partial solutions such as the recent procedure changes at BWI. Mr. Reese continued, saying the Roundtable got what they could from the FAA. He noted that the group has always known the FAA's process is iterative and asserted that the Roundtable will continue to pursue whatever changes they can to improve the noise situation for everyone. Mr. Reese added that he wanted to provide context for this work, saying the Roundtable has been working towards changes for seven years and the FAA's process cannot be sped up. He stated the process is intentionally lengthy to ensure that safety is not compromised.

Mr. McMullin agreed, saying the FAA and the aviation industry prioritize safety first and foremost. He stated that if any changes or modifications within the aviation system negatively affect the safety of the system, they will not be implemented. He emphasized that safety overrules all else. Mr. McMullin said that the FAA follows a known set of rules when developing flight procedures, and the constraints imposed by these rules and the airspace configurations limit the changes that can be made. He stated that the DC Metroplex airspace is very complicated, and the FAA must work within this complicated space when designing new procedures.

Mr. McMullin continued, saying in addition to considering the surrounding airspace when developing or modifying flight procedures, aircraft and pilots using these procedures must also be able to fly them safely. He stated that these factors, as well as noise, were considered while the new procedures were developed and the FAA and MAA worked together to mitigate as many issues as possible. Mr. McMullin

said out of the hundreds of airports he has worked for, he has not seen the FAA work with a group as well as they did with the MAA and the Roundtable.

Although the controllers from the Potomac TRACON and Washington Center worked with the MAA and the Technical Committee to mitigate the issues that arose, Mr. McMullin said ATC equipment presents a challenge. He reiterated that the procedure design rules limit what can be done and that the FAA does try to address issues, but addressing all issues is impossible. Mr. McMullin said he wished more could have been done but noted that certain issues, including the RAVNN arrival, were addressed. He stated that now the RAVNN arrival can be flown with engines at idle all the way to 1,000 feet above the ground (AGL). He said he experienced this himself when he flew in today.

Mr. McMullin said the implementation of these CDAs was a big part of what the Roundtable wanted to accomplish. Previously, controllers would clear aircraft to level off at 2,000 to 2,500 feet AGL, which requires power changes to accomplish. Mr. McMullin said these level-offs are represented as the horizontal lines in the graphs in the MAA's presentation, but due to some of the new procedures, these level-offs have been reduced greatly. Mr. McMullin said he enjoyed working on these changes since all stakeholders were working collaboratively, but he recalled that if any changes were anticipated to affect safety, the FAA did not consider them. He also noted that some of the early PBN procedures did result in safety issues and lessons have been learned from that.

Mr. Christopher Burk asked if the nighttime penalties were increasing and how they could be raised further. Mr. Rineer said that the nighttime penalty refers to a decibel weighting applied to the event's noise level, not to a payment or fine levied on that operation. He explained that noise levels associated with operations occurring between 10 p.m. and 7 a.m. are increased by 10 dB. Mr. Rineer said BWI does not and cannot limit its hours of operation per federal law. He said the only disincentive for nighttime operations is this 10-dB weighting and reiterated that it is not a monetary penalty.

Ms. Rhea Hanrahan further clarified that the 10-dB weighting is added to the sound level that actually occurred or was modeled. For daytime operations, the noise energy calculated for an aircraft operation is included in the noise contours. However, since noise has been shown to affect human development more at night, the noise energy for a nighttime operation is increased by a factor of 10 to capture the obtrusiveness of nighttime noise. Ms. Hanrahan said this weighting has been used by the FAA to account for the greater impact of nighttime noise since the 1960s and mentioned that the FAA has been reviewing the 10-dB weighting as part of their Noise Policy Review. However, she noted that as far as MAA and COMAR are concerned, only the existing law, which specifies the 65-dB DNL contour as the threshold for land use compatibility, is relevant. She summarized, saying the penalty is a calculated weighted average for nighttime noise.

Mr. Reese noted the weighting applies to the noise analysis and is not relevant to airport operations. He clarified that the penalty does not prevent operations from occurring at night, saying only quiet or restricted hours would do this. He further noted that the Roundtable had previously discussed quiet hours at BWI. Ms. Jung asked if DCA had quiet hours. Mr. Reese said many airports do, and Mr. Rineer stated that DCA does not have quiet hours. Ms. Griffin said BWI's terminals do not stay open all night, but aircraft can fly in and out of the airport at any hour.

Ms. Jung said she was confused as she thought DCA had quiet hours. Ms. Griffin said DCA's airport and buildings close at night, but aircraft are still allowed to fly. She explained that the airlines determine flight schedules, so if DCA's last flight is scheduled at 11 p.m., no more operations occur after that, barring extraneous circumstances such as flight diversions or delays. Ms. Jung stated BWI operates 24 hours a day, saying she has flights over her house at night. Ms. Griffin said BWI is not open to the flying public around the clock and that the flights Ms. Jung mentioned are cargo operations that typically operate at night. Ms. Jung said those are still flights and should be considered as such.

Mr. Reese remarked that all operations should be included, not just those during the hours when the terminal is open. He clarified, saying operations occur over 24 hours but that the terminal is not open around the clock. He stated that some airports, such as LAX, have quiet hours where no operations are allowed. He said BWI could and has considered quiet hours, but it is very difficult, though not impossible, to get FAA approval for them.

Mr. Mark Peterson asked about the BOBYJ waypoint, saying that in the presentation, it appeared to be west of Interstate 95 (I-95). He noted that the Merritt Business Park is west of I-95, while the Meadowridge Business Park is east of I-95, and remarked that on the maps, BOBYJ appears in the Meadowridge Cemetery. Mr. Bassarab said it is possible that BOBYJ is incorrectly located on the map but said that he has the coordinates for that waypoint and can review the location at the end of the meeting. Mr. Peterson said if BOBYJ is within Meadowridge Park, he knows where it is, but cannot tell from the map.

Mr. Edward Flood asked if the WARYN intersection was new. Mr. Bassarab said it is, and that as part of prior Part 150 studies, the MAA developed voluntary noise abatement departure procedures that had aircraft fly runway heading to a defined distance from the airport before starting any turns. Prior to the 2024 procedures, the areas where turns could begin were defined through distance measuring equipment (DME), which provided a general idea of where to turn, but GPS enables these turn points to be precisely defined as a single point in space. WARYN and other waypoints are these points. Mr. Rineer said the FAA procedures now include the MAA's noise abatement procedures through the addition of WARYN and other waypoints.

Mr. Flood stated that the addition of WARYN has resulted in aircraft turning over Quarterfield Farms, saying he has lived there since 1991 and did not have any complaints until July 2024. He commented that the overflight altitudes appear to vary between 1,800 and 2,200 feet and wondered first if noise would be significantly reduced if flights were at 3,500 feet, and if so, why the planes cannot fly higher over his location.

Mr. Steve Daddario agreed, saying Mr. Flood was "absolutely right," and claimed noise levels used to be less due to steeper climb angles. Mr. Daddario then asserted that the problem is that airplanes are larger and engines are larger and louder, even with new technology. He then asked at what point does noise become too harmful to those on the ground to justify the economic benefits of routing flights over an area. He stated that aircraft noise has been increasing over time and wanted to know the FAA's threshold for harm. He added that to many attendees, the number of aircraft has increased exponentially, but also noted that they recognize that increase is a necessary part of growth.

Ms. Hanrahan responded, saying the FAA considers 65 dB DNL to be the threshold at which homes, churches, schools, and similar are incompatible land uses with aircraft noise. She continued, saying the MAA has done noise studies since the 1970s and redoes them every five years per COMAR. These studies inform land use protections that inform zoning codes to limit or eliminate incompatible land uses within the 65 DNL contour. Ms. Hanrahan stated that the MAA is currently undergoing an update to its ANZ study and plans to conduct a Part 150 study next year. She said the Part 150 study will provide access to federal funds for home sound insulation, but qualified that the homes need to fall within the 65 DNL contour.

Mr. Chancellor stated that the issue is complicated due to the many ways of describing noise and observed that the FAA's responses and the technical team's input do not align with homeowners' experiences with noise. He said the 65 DNL threshold has been the standard for qualifying for mitigations, but he asserted that following the implementation of NextGen, DNL became meaningless to describe citizens' lived experiences with noise. Mr. Chancellor said what the Roundtable has done, and what the FAA is slowly starting to do, is to look at how noise actually affects people near the airport. He opined that DNL is inaccurate for that purpose and said the FAA, as part of their Noise Policy Review, may consider changing or supplementing DNL as the metric for assessing noise.

Mr. Chancellor continued, asserting that the impacts of aviation on the community must be weighed against its economic factors. He said the Roundtable and Howard and Anne Arundel counties have a contract with their own noise consultant, Vianair, to conduct independent noise modeling and analyses. The Roundtable asked Vianair to conduct a similar analysis of before and after the implementation of the new procedures using NA as the primary metric, since the Roundtable believes this metric better captures the on-the-ground experience. Mr. Chancellor defined the NA metric as the number of events above a certain decibel level that a person on the ground would experience. He then said these reports are available on the MAA's website and some of the information is comparable to what the MAA just presented. He said the reports include tracking the number of nighttime operations and other metrics to discern whether the Roundtable's goals are being met.

Mr. Chancellor also noted that such analyses and level of detail were not available at the formation of the Roundtable. He said the Roundtable will work with the MAA to use these metrics and data to determine what changes could be made. Mr. Chancellor suggested that changes could be made, but only once the FAA adjusts the metric used for noise mitigation, stating the level of noise relief and mitigation that people want will not be possible until that adjustment is made. Mr. Daddario continued to press his original question of what level of operations would be too much. Mr. Rineer said they needed to move to the next items in the agenda.

Mr. Roth stated that the FAA says that 65 dB DNL is not livable, commenting that he thinks many of the attendees live in Severn where the westbound departure turn was moved. He reminded the group that DNL is an average over a 24-hour period, which means on average, most people would have overflights 30 percent of the time. This 30 percent is averaged with the 70 percent of the time when no flights occur, so the resulting DNL does not represent the noise level experienced when an overflight does occur. Mr. Roth then said unlivable conditions for 30 percent of the time is unacceptable and stated that changing this situation is one of the conditions that community members need to work towards. Mr.

Roth continued, asserting that indoor insulation measures are insufficient since noise is still a problem outside.

Mr. Woomer said when the 65 DNL threshold was mandated, computing power was limited, so a simple metric was chosen to facilitate quantitative analysis. Now that more complex data processing is possible, the Roundtable has recommended to the FAA the use of other noise metrics in addition to DNL. These recommendations are set out in a paper available on the Roundtable's website. Mr. Woomer said DNL provides a starting point, but other noise metrics can now be leveraged in the analyses.

A member of the public stated that he lives near Severna Park and the golf course. He thanked the Roundtable for their work and said he experienced a small difference from the changes to Runway 33L procedures. This member of the public noted that flights often cross the SPLAT waypoint and asked why they cannot fly along the Interstate 97 corridor. Mr. McMullin said this procedure is an RNP approach, and it is designed so that pilots can safely turn, line up with the runway, and level the wings with enough time to land safely. He said the MAA worked with the FAA to update the criteria for RNP approaches to move the turn point as close as possible to the airport and still allow pilots to use the autopilot. Mr. McMullin said the FAA's technology does not allow controllers to safely sequence all arriving traffic, so the procedure could be used during busy times. He stated that Potomac TRACON uses this approach whenever possible, mentioning it can be used late at night or early in the morning, but it is very difficult to use during busy periods.

Mr. Reese added that instrument landing system (ILS) approaches are still the "gold standard" for approach procedures, saying most approaches flown into any airport are ILS procedures, while RNP procedures are still comparatively new. He said ILS procedures are straight-in approaches and do not have turns, whereas RNP procedures can be designed with turns. Mr. Reese said not all aircraft have the equipment to fly RNP approaches, so any aircraft that are not equipped for RNP will fly the ILS procedures instead, which is why the flight tracks show aircraft that do not make the turn. He observed that these straight-in tracks will remain as long as there are aircraft that are not RNP-equipped.

Mr. McMullin agreed with Mr. Reese and stated that SPLAT and GRAFE were carefully and deliberately located to conform to both ATC and procedure design criteria to allow aircraft to fly to the waypoints and continue on the approach. The MAA and FAA collaborated to keep the aircraft as high as possible in the new procedures. Mr. McMullin said prior to the procedure changes, the aircraft would fly a stepdown, or "dive and drive", altitude profile to the old SPLAT waypoint, but now the procedure is designed to allow the engines to remain at idle throughout the entire descent. He reiterated that sometimes this approach cannot be issued for safety reasons, and the stepdown procedure has to be used.

Mr. Ted Sakellariou asked if the use of the procedure is mandatory or simply recommended, saying it is clear which airlines are using it. He commented that Southwest uses it frequently, but Spirit does not. Mr. Reese replied that usage depends on the aircraft's equipment, which depends on the carrier. He said the major carriers (Delta, United, Southwest, and American) are more likely to have the RNP equipment, but budget carriers do not. Mr. McMullin said he and Southwest worked hard to train Southwest and other airlines' pilots to fly RNP approaches, commenting that the next hurdle is providing air traffic controllers with better tools to sequence aircraft safely.

A member of the public asked the MAA what the public should do following this meeting, noting it often seems like no progress is made. Mr. Chancellor requested that people give Ms. Griffin a chance to digest this information before she responds. Mr. Roth remarked that he attended a Howard County Citizens Association meeting, where one of the guests was the new Congressional District 3 Representative, Ms. Sarah Elfreth. He asked her if she had considered joining the Quiet Skies Caucus in Congress, which works to make reforms for the policies that govern air traffic, and suggested people make the same request of their representatives. Ms. Jung and Mr. Reese agreed. Mr. Reese stated that the best outcome would be for the FAA to review and implement many of these changes, which will require involvement and support from representatives, senators, and other elected officials, which in turn will come from pressure from their constituents.

Mr. Reese said the Roundtable is open to any ideas for the next steps, saying the Roundtable started as a group of people defining the problem of the highways in the sky and thus essentially defined the problems associated with airport metroplexes for all other roundtables. Mr. Reese continued, saying increased and changing Roundtable membership is also important. He said the material can be challenging, but other members will help new members become experts.

Ms. Libby Lewandowski asked for the name of the caucus that Mr. Roth asked Representative Elfreth to join; Mr. Roth said it was the Quiet Skies Caucus.

Ms. Jung asked for a status update on the FAA's noise study and wanted to know if any opportunities exist for the Roundtable to provide input. Ms. Griffin said the study was part of the 2024 FAA Reauthorization Bill, which states that the FAA has five years to complete the study, and she did not know when it would be available to the public. She said the FAA was working on it when she left, but some of the environmental components have been removed or slowed down.

A member of the public said she attended a Roundtable meeting two or three years ago and at the time was told the noise would increase, and she confirmed that it has. She said she is conflicted as she likes the location of her house but not the noise level. This attendee asked if there are any mechanisms in place so she could avoid a similar situation of increasing noise when purchasing another home.

Ms. Jung commiserated, saying she has similar thoughts. She wondered how much the airport would grow and referred to Mr. Daddario's point, asking at what point will the public health impacts be considered against the economic impacts of the airport. Ms. Jung said a study on health impacts due to aircraft noise was conducted three to four years ago by Dr. Zafar Zafari. She said this study is available on the MAA's website. Dr. Zafari's study used several health metrics to develop an estimate of total costs associated with health effects due to aircraft noise and compared this cost against the economic impact of the airport. Ms. Jung asserted that the study clearly indicated that the cost of airport expansion was outweighed by the costs associated with the resulting impacts on public health. She said this conclusion must be considered and included if plans to expand the airport or increase operations become a reality.

Ms. Jung speculated on possible areas with less airplane noise where people could move. Mr. Reese commented that the noise contours are available on the MAA's website, so people can use those to select areas outside of the contours. Mr. Rineer said the MAA will conduct individual noise studies, so people can proactively request noise studies ahead of relocation.

A member of the public said he understands no perfect solution to this problem exists and recognized the MAA's efforts to reduce the noise effects. He said some groups of people will inevitably end up being affected by noise but suggested that perhaps the burden could be shared more equitably.

Mr. Flood repeated his question about the effects of altitude on DNL. Mr. McMullin thanked him for bringing up his question again and provided some background on the WARYN intersection. He said WARYN is associated with the noise abatement procedures that BWI has in place and is the point where aircraft can begin their turn when following those procedures. He said this location was originally defined as a distance from a navigational aid located on the airport and was measured using DME. During the development of the new procedures, the MAA and FAA investigated several different locations of where to begin the right hand turn to the west. Each of the new turn locations showed no improvement with noise, so WARYN was created at the exact location of the original pre-Metroplex DME turn.

Mr. McMullin then discussed cockpit technology and pilot workload. Before the widespread adoption of flight computers, pilots used DME to follow noise abatement procedures, which, due to its accuracy and variation in human response times, led to inconsistency of where aircraft turned. Mr. McMullin said the combination of flight computers and GPS waypoints makes it simpler and safer for pilots to comply with these procedures, especially during takeoffs, when workload is often heaviest. Mr. McMullin reiterated that the DME distances specified in the noise abatement procedures are still followed since they are inherently included by using waypoints like WARYN.

Mr. McMullin also stated that the altitude restrictions at WARYN required that the FAA issue a waiver to allow a nonstandard, steeper climb gradient on the segment approaching WARYN. He said if a waypoint moves one mile farther along a flight path, the altitude at that waypoint increases by 300 feet on an approach procedure and 500 feet on a departure. Thus, moving WARYN one mile farther would increase altitude at that point by 500 feet. He said airplanes cannot climb any faster than they do now due to weight.

Mr. Flood followed up, saying that data from the last ANZ study showed that generally, annual traffic levels were higher between 2000 and 2019 than in 2024, and observed that despite the higher levels of traffic, he did not experience noise problems until 2024. He said he did not understand how the noise levels are now suddenly so high if the only difference is the cockpit technology. Mr. McMullin agreed, saying he does not understand the changes either. He noted that the increase may not be due to flight path changes, since often the flight paths are the same during times of less and greater noise, and said the circumstances resulting in changes in noise are not always clear. He mentioned "visual noise", where perceived noise levels are influenced by seeing in addition to hearing the aircraft. Mr. Reese remarked that at one of the early meetings, the FAA said that noise levels could be bad in the area near WARYN.

Mr. Rineer said the new procedures have reduced or stopped the early turns, which has led to an altitude increase at BOBYJ because of the extra distance flown before aircraft begin that turn. He remarked that prior to these new procedures, departing flights were often noncompliant with the noise abatement procedures since they turned too soon. Mr. McMullin then mentioned the relationship between aircraft speed and turn radius, saying aircraft speed increases with distance from the airport, and as speed increases, the turn radius increases. Variations in speed lead to different turn radiuses, which results in a spread in flight tracks through and after the turn. Mr. McMullin also remarked that

turns are also affected by aircraft type, saying that smaller aircraft can fly tighter turns than larger aircraft.

Mr. Flood mentioned that in 2005, BWI had about 300,000 flights, while in 2024, there were about 260,000, and said the flight volume now is greater than what he previously observed. He said he thought the flight volume was also an issue in addition to noise. Mr. Flood said he knew there were different flight procedures prior to 2013, and he understands that the FAA will not return to pre-NextGen procedures. He said he thought flights used to overfly commercially zoned land. He reiterated that he does not understand how noise has increased despite all these changes and fewer flights.

Mr. Johnson read a comment from the online chat room regarding DNL. Mr. Roth explained that DNL is based on a logarithmic scale, not a linear one. He stated that if noise levels are halved, DNL decreases by 6 dB, not by half. Mr. Rineer provided an analogy, saying if a running vacuum produces 75 dB and a second vacuum is then turned on, the noise level is not 150 dB. Instead, it only increases by one or two dB. Ms. Griffin added this is why the FAA's noise policy review is evaluating other metrics and methods to assess noise.

A member of the public asked how complaints provided to the MAA are addressed. He said he looked at the complaint data on the MAA's website and in May 2025, the city of Severn had 4,520 complaints, which is more than any other area for that month. He said it appears this area is problematic due to the westbound turn off Runway 15R and mentioned that several attendees were at this meeting because of it. He wondered if the complaints are being reviewed and addressed and if citizens should continue to file complaints. He noted that the MAA appears to consider the new procedures a success and asked the Roundtable members if they consider the departure turn problematic.

A member of the public asked if the FAA and MAA considered mirroring the arrival procedure to allow flights to climb higher before turning. Mr. McMullin said that due to airspace constraints from nearby airports, that suggestion could not be implemented. He remarked that interactions and restrictions associated with the airports, military bases, and government buildings and entities in the area created a very complicated airspace. He also noted it would lengthen the flight path, which would create additional noise. Mr. McMullin mentioned that a similar suggestion was tried at Logan Airport in Boston, but it did not work well. He emphasized that the Roundtable and other entities have looked at every option to improve the procedures and said he too is frustrated that more cannot be done.

Mr. Rineer added that the MAA plans to conduct a Part 150 study next year. As part of that study, the MAA and FAA will look at all the procedures again to determine if further improvements can be made.

Mr. Reese said the MAA does log and track complaints from all areas for the public record. He said the MAA and the Roundtable used the complaint data when developing the proposed procedures, but when the complaints are spread out over seven to eight years, the issues are not consistent. He also noted that in the late 2010s, the number of complaints dropped since people recognized that the MAA was working to improve the situation.

Ms. Jung encouraged people to continue complaining, but not just to the MAA. She recommended they complain to their county council members, county executives, and state delegates and senators. She said that, as an elected official, she cares about the complaints she receives. Ms. Jung strongly urged the attendees to contact their congressional representatives, since they have the best access to the FAA.

She reiterated that citizens should continue to submit complaints to the MAA as well as contacting all the representatives she just mentioned. Ms. Jung encouraged people to contact their representatives during the FAA Reauthorization period, since the Roundtable and local representatives will have the most influence then.

Mr. Reese added that none of Maryland's congressional representatives sit on transportation committees or any committees working with the FAA, which is where they would best represent the Roundtable and communities around BWI. Ms. Jung noted that Anne Arundel and Howard Counties are two large counties, with about a million people affected by noise. She said people should raise this issue with anyone willing to listen, observing that BWI is in Anne Arundel County and currently several candidates are running for Anne Arundel County Executive. Ms. Jung asserted that the County Executive should have a say in what happens at BWI. A member of the public asked the Roundtable to request that elected officials attend the Roundtable meetings, saying the Roundtable is the body that receives public complaints. Several Roundtable members stated that they have invited these officials, who in turn send their representatives to the meetings.

Mr. Rineer noted that no immediate solution exists and that implementing changes takes years of work. He said the MAA understands there is a noise problem and reassured everyone that the MAA does take the complaints seriously. He stated they have an overall understanding of the major noise pain points, and the MAA uses this data as part of their studies to identify possible solutions. Mr. Rineer emphasized that the MAA will not know what and where the issues are unless people continue to submit complaints. He reiterated that identifying and implementing solutions takes years.

Mr. Reese said submitting complaints provides a dataset for the MAA to work with and compare against. Ms. Jung said the complaint volume is immaterial and that all complaints should be submitted and do help. She again urged attendees to complain to their local elected officials, especially as elections approach. She suggested that people specifically ask candidates and officials what they will do about airplane noise.

Mr. Johnson remarked that the Quiet Skies Caucus is only in the House of Representatives. Ms. Jung wondered if Senator Van Hollen could start a similar group in the Senate. Mr. Rineer said Maryland's representatives do engage with the Roundtable, pointing out that Mr. Brent Girard from Senator Van Hollen's office routinely attends Roundtable meetings. Mr. Rineer also mentioned that a state delegate was at this meeting. He reiterated that elected officials and the MAA do care, but change takes time.

Mr. Chancellor said he knows people are skeptical about whether complaints and interactions with officials will lead to real change but pointed out their efforts already have led to changes. Mr. Chancellor said those efforts led to state funding for the Zafari health studies Ms. Jung mentioned earlier. That study raised awareness of the health impacts of aircraft noise on the population, and Mr. Chancellor noted that after the study was completed, the Maryland legislature passed legislation that reformed the Maryland Aviation Commission (MAC). He reminded the group that the legislation added four new members from Anne Arundel and Howard counties to represent the local communities and their interests. He said the MAC is the policy-making arm of the airport, it is part of the state executive branch, and its members are state employees.

Mr. Chancellor asserted that elected officials are trying to balance the same factors the Roundtable is trying to address, specifically the airport's economic benefits and its effects on people on the ground. He emphasized that these officials will not know the extent of the problems unless members of the public talk to them. He reminded the group that the last time citizens spoke up, the result was the SB152 legislation that changed the membership and responsibilities of the MAC. Mr. Chancellor said now the MAC's responsibilities include community health and impacts that result from changes at the airport in addition to its initial responsibilities of economic development and aviation safety. He said his update on the MAC activities will cover how health issues are included in airport policymaking, noting that these activities arose directly from public involvement. Mr. Chancellor assured the group that he understands their skepticism, reiterating that change can take years and reminding the group that the benefits and drawbacks of the airport have to be weighed against each other.

Ms. Schuyler reminded the group that Howard and Anne Arundel County Councils contributed money to fund the Vianair analysis, which shows they do care about these concerns.

Mr. Roth said he has been a member of the Roundtable since its inception, and he is currently the Technical Committee chair. He said during his tenure, progress has been made at the county level. Initially, the Roundtable persuaded Howard County to sue the airport. Although they lost the suit, the issue was raised and made a point. He said this led to funds for independent noise analyses, which allowed the Roundtable to ask and get answers to their own questions.

One of Mr. Roth's questions that was addressed in Vianair's analysis was how the noise levels compared to DNL when operations were split out by east and west flows. Mr. Roth said this analysis validated his thinking on why people say their noise levels are higher than what the DNL contours indicate. He stated that answers to these questions and the ability to get independent assessments are why funding for Vianair should continue. He said Vianair's work corroborated what the MAA presented today, and it identified the same benefits and shortfalls of the new procedures. Mr. Roth stated that the funding for Vianair should move from the county level to the state level. He also suggested that county and state-level governments need to ensure that the planning and execution processes for new airport infrastructure occur in an open, public, transparent process so that the public fully understands the effects of the planned changes and so all stakeholders and citizens can participate in an open and public discussion of the impacts on surrounding communities. Mr. Roth emphasized that asking these questions and being engaged at all levels of government is extremely valuable.

MAC UPDATE:

Mr. Chancellor provided an update on the MAC activities. He said the MAC has been working on a framework for guiding policymaking activities, which will include community health issues and impacts in addition to economic benefits and other concerns. Progress on this framework stalled when Mr. Ricky Smith, the former Director of the MAA, left. Mr. Chancellor mentioned that Ms. Griffin attended the last MAC meeting and said once she familiarizes herself with the work to date, the MAC will revisit this effort with a goal of completing the framework by October 1, 2026. Mr. Chancellor said this date is significant as it is the three-year anniversary of the SB152 legislation that expanded the MAC's role. He remarked that he hopes that on this anniversary, the MAC will have a tool that allows people to understand the positive and negative effects a project or policy might have on all areas of the airport. He concluded by

saying he is looking forward to working with Ms. Griffin and encouraged the group to attend the next MAC meeting and to continue to engage in these issues.

COMMITTEE REPORTS:

The Communications and Legislative Committees had no updates.

Technical Committee:

Mr. Roth summarized the Technical Committee's activities from the last quarter. He said the committee defined the scope of work for the next phase of the Vianair contract, which was reviewed and accepted by the Howard County contract manager and Vianair. Vianair will complete pre- and post-implementation comparisons for two additional quarters and will also perform an analysis for the Runway 10/28 closure in April 2025. They will also continue to provide the monthly and annual reports.

Mr. Johnson commented that the Technical Committee has now reviewed several types of noise metrics and analyses and now knows what to request. He said several metrics, including DNL and NA, are included in the Vianair work, which can be found on the MAA's website. Mr. Chancellor remarked that Vianair's reports exclusively focus on noise and the more focused scope of the reports makes it easy to see where the noise occurs.

PUBLIC COMMENT:

Mr. Johnson thanked the attendees, saying the meeting had a great turnout. He reiterated that public input does matter and said the Roundtable and the MAA will try to provide detailed answers and information to people as best possible. Mr. Johnson reminded everyone that the MAA offers individual noise studies and will provide as many as they can. He said these studies are important for capturing people's lived experiences.

Mr. Rineer reminded the group that this is a public comment period. He said questions could be submitted to the MAA, and they would be addressed after the meeting.

Mr. Ted Sakellariou:

Mr. Sakellariou, representing a group from District 31 in Severn, said he believes many of those present were affected by the east flow departures changes. He complimented the data provided by the MAA, saying the data makes it clear that Severn has a noise problem during east flow. He said the problem is not new but is now more apparent to those farther south of the airport since the aircraft are flying faster and thus are louder when making the westbound turn. Mr. Sakellariou asked if the number of complaints changed between 2023 and 2024 and whether that number is used to measure the success of the procedure changes.

Mr. Rineer reported that complaints decreased between 2023 and 2024. Mr. Roth recalled that, following the initial implementation of NextGen, a considerable number of complaints resulted from residents living inside the westward turn south of the airport. Mr. Rineer mentioned that residents in the Queenstown and Elmhurst areas have a history of complaints, though the number has dropped due in part to soundproofing and the latest procedure changes. He said 2019 had the most complaints, likely because of changes to flight procedures and the release of the Airnoise.io button. Mr. Rineer said in

2019, MAA received around 600,000 complaints but only about 120,000 in 2024. He acknowledged that is still a considerable number of complaints but observed that around 80 percent of those complaints come from the same 10 complainants. Mr. Rineer said the MAA tries to separate habitual complainants from those with specific concerns and issues, since specific complaints help the MAA identify areas of interest. As an example, he said people in Catonsville, who do not normally experience a lot of noise, routinely complain when the airport is in east flow and Runway 15R is in use. Mr. Rineer noted that the MAA tracks such patterns to identify those specific issues and possible solutions.

Mr. Rineer reassured Mr. Sakellariou that the issue in Severn will be reviewed, telling the group that the MAA consistently works to improve the procedures to “be better” but said changes have to occur as part of the Part 150 and ANZ studies, which take time to identify and implement. Mr. Reese said if anyone would like to represent their district on the Roundtable, they should reach out to their state senators. He encouraged attendees to get involved with the Roundtable, saying there are seats that need to be filled and that they need help and ideas.

Mr. Bassarab reminded the Roundtable that the departure procedures were implemented on July 11, 2024. He also said the MAA responds to all complaints so that complainants know they were received. He stated the number of complaints is less important than the number of complainants, saying that a complainant submitting 200 complaints in a day is as important as someone submitting one complaint, and the MAA needs both of those data points. Mr. Bassarab remarked that complaints against the new departure procedures did not begin until September, and said other factors were involved. He observed that increased complaints may result from multiple factors, saying a spike in complaints also occurred during the Runway 10/28 closure in April and May 2025.

Mr. Sakellariou thanked the MAA for providing advance notification of the runway closure. He then mentioned that in May 2025, the airport was in east flow 50 percent of the time and suggested the airport use west flow whenever possible to reduce complaints. Mr. Reese pointed out that most of the complaints from Severn result from the use of west flow. He also noted that BWI operates in west flow about 70 percent of the time. Mr. Bassarab said the airport has a long-standing position that they prefer to use west flow whenever possible and will only use east flow when wind and weather require it. He said too that the MAA has pushed for nonresidential and nonpublic zoning for land under the west flow flight paths, but counties are responsible for zoning decisions.

Mr. McMullin explained how the airport determines when to switch flow configurations. He said all aircraft have a 10-knot maximum tailwind component, so when winds approach that limit, the airport changes the arrival runway. He noted that the switches occur for safety reasons and said pilots do not get to choose their runways.

Ms. Jung commented that a decrease in complaints over time does not indicate that people are no longer bothered, just that people no longer find it worthwhile to complain. She reminded everyone again to continue to file complaints. Mr. Sakellariou said he has seen an increase in complaints and questions regarding the changes on social media and within his HOA.

Mr. Mark Peterson:

Mr. Peterson read a statement from Sean Duffey, the new Secretary of Transportation, calling for the use of new technology, including artificial intelligence (AI) in aviation. He questioned the effectiveness of

AI, asking if the technology will be capable of recognizing foreign objects on the runway. Mr. Peterson asserted that the current administration will oust people with scientific understanding of aviation and will attempt to adopt new technology to improve aviation but will do it cheaply. He predicted that the future would include pieces of airplanes falling from the sky because of AI and said the idea of GPS controlling takeoffs and landings would have been laughable 40 years ago.

Mr. McMullin asserted that GPS is a huge safety blessing, and it has saved countless lives. He said aviation safety has improved due to technological creativity and the work of engineers and pilots, reiterating that GPS has saved thousands of lives. Mr. Peterson said GPS also enabled the reduction of separation distances between departures, resulting in more planes in less time. Mr. McMullin unequivocally disagreed, stating that separation distances have not decreased on approach or departure over the 25 years he has been flying. Mr. McMullin repeated that the MAA and the Roundtable considered all possible solutions and said that Mr. Jim Allerdice at Vianair assisted in reviewing the options.

Mr. Edward Flood:

Mr. Flood asserted that noise pollution is not considered as a variable in economic impact studies of the airport. He said money talks, noting that reports say that BWI contributes \$11 billion to the Maryland economy. He suggested that anyone affected by airport noise should not have to pay taxes or at least get a tax break, saying the only way to see change is to internalize the problem. Mr. Flood stated that until the cost is internalized, citizens will not have adequate leverage to cause change. He said since change takes time, these tax breaks should be retroactive.

Mr. Reese said he really likes the idea and suggested Mr. Flood propose it to his state senator. Mr. Flood said from an economic perspective, the public needs some leverage to use when interacting with the MAA or the FAA. He said it is challenging to show that noise levels lead to depreciation in home values, but when the market differentiates, homeowners will be negatively affected. Mr. Rineer commented that Anne Arundel County provides a tax break for people living in the 70 DNL contour and said Mr. Flood's suggestion could be implemented by lowering that threshold. Mr. Flood repeated that the costs of noise need to be internalized so that governments are incentivized to promptly address the noise issues. He said he appreciates the data and technical information from the MAA and emphasized that tax breaks would give those affected an economic stake related to the noise issues rather than just fear or concern.

Mr. Michael Nemo:

Mr. Michael Nemo said he had a portable noise study conducted at his house in April 2025 and wanted to know when he would receive the report. He also asked if the results would include measured data, saying he would like to know the recorded noise levels as the overflights were very loud. Mr. Brett Healy, who had set up the noise monitoring equipment, said the study had been completed. Mr. Bassarab said the noise report would include both DNL and NA, and he would contact Mr. Nemo tomorrow about the report. Mr. Nemo said he looked forward to seeing the report.

Mr. Sakellariou mentioned he has seen other portable noise study reports on the MAA's website and asked if all reports are available online. Mr. Rineer confirmed that all reports are posted, though the exact addresses and personal information are redacted.

Mr. Nemo commented that, like many others, he has lived in his house for more than 30 years and the noise has never been this bad. He said the noise may push him to move even though he likes his neighborhood.

Mr. Chancellor requested attendees sign up for the Roundtable's mailing list if they have not already done so, as he would like to keep everyone up to date on these issues.

Mr. Doug Baldrige:

Mr. Doug Baldrige said he has only lived in his neighborhood for about 20 years but has noticed the noise increasing each year. He said changes are needed to the Runway 15R departure route since as soon as the aircraft take off, they circle west. He stated that the area near WARYN appears to be the cause of the noise.

Mr. Rineer said that, in the interest of time, any questions received via chat will be reviewed and answered after the meeting.

Planning For Next Meeting:

Mr. Dan Woormer suggested August 26, 2025 or September 30, 2025 for the next meeting. The group discussed possible conflicts, and Mr. Chancellor suggested they schedule a meeting and reschedule it if needed. The group agreed on August 26, 2025 for the next meeting.

Meeting Closeout:

Mr. Reese made a motion to adjourn the Roundtable meeting. Ms. Jung seconded. All were in favor and the motion passed. The meeting was adjourned at 10:00 p.m.