DC METROPLEX BWI COMMUNITY ROUNDTABLE WORKING GROUP PUBLIC MEETING

Twenty-third meeting of the DC Metroplex BWI Community Roundtable Working Group

Tuesday, October 15, 2019, 7:04 PM – 9:20 PM MDOT MAA Offices, Assembly Rooms A/B 991 Corporate Boulevard Linthicum, MD 21090

MEETING MINUTES

REGULAR PARTICIPANTS

Roundtable Member	District / Organization	Attended	Roundtable Member	District /Organization	Attended
Drew Roth, Chair*	District 12	✓	Dan Klosterman*	District 32	✓
Sarah Lacey, Vice Chair*	Anne Arundel County Council, District 1	✓	Marcus Parker, Sr	Alternate for Dan Klosterman, District 32	
Ellen Moss	Alternate for Sarah Lacey, District 1		Daniel Woomer*	District 32	
Deborah Jung*	Howard County Council, District 4	✓	Austin Holley*	District 33	√
Debbie Macdonald*	District 9	✓	Nancy Higgs*	District 33	✓
Jesse Chancellor*	District 9	√	Brent Girard	Office of Senator Chris Van Hollen	√
Howard Johnson*	District 12	✓	Ramond Robinson*	Office of Anne Arundel County Executive Steuart Pittman	
Barbara Deckert	Alternate for Drew Roth and Howard Johnson, District 12	✓	Kimberly Pruim*	Office of Howard County Executive Calvin Ball	√
Paul Verchinski	District 13	✓	Nancy Surosky*	Office of Baltimore County Executive Johnny Olszewski	
George Lowe*	District 13		Paul Shank, Chief Engineer	MDOT MAA	✓
Susan Defibaugh*	District 13		Robin Bowie, Director, Office of Environmental Services	MDOT MAA	√
Mary Reese*	District 30	√	Darline Terrell-Tyson, Deputy Director, Office of Environmental Services	MDOT MAA	✓
Evan Reese*	District 30	✓	Paige Kroner	Mid Atlantic Regional Representative, NBAA	
Paul Harrell*	District 32		Kyle Evans	General Aviation Representative, CP Management LLC	√
Richard Campbell	Alternate for Paul Harrell, District 32		David Richardson	Southwest Airlines	✓

Roundtable Member	District / Organization	Attended	Roundtable Member	District /Organization	Attended
Ron Pusloskie*	Alternate for Paul Harrell, District 32	✓			

^{*}Voting members

ADDITIONAL PARTICIPANTS

Maryland Department of Transportation (MDOT) Maryland Aviation Administration (MAA)

Trey Hanna, Assistant for Legislative and Special Projects Jonathan Dean, Communications Manager Bruce Rineer, Manager, Noise Section Karen Harrell, Noise Program Roberta Walker, Administrative Assistant

Industry Representative

Captain Gary McMullin, Southwest Airlines

Contractor Support

Adam Scholten, HMMH
Kurt Hellauer, HMMH
Royce Bassarab, HNTB
A.J. Durham, Straughan Environmental
Eileen Sien, ADCI

MEETING MATERIALS

Participants received the following materials in advance:

- Meeting Agenda for October 15, 2019

Handouts at the meeting:

- Meeting Agenda for October 15, 2019
- Draft Meeting Minutes V1 from July 9, 2019
- MDOT MAA/Roundtable Technical Committee Presentation Titled: "First Look: Proposed BWI Marshall Flight Procedure Changes Developed by Roundtable Technical Committee" dated October 15, 2019

Presentations at the meeting:

- Meeting Agenda for October 15, 2019
- Draft Meeting Minutes V1 from July 9, 2019
- MDOT MAA/Roundtable Technical Committee Presentation Titled: "First Look: Proposed BWI Marshall Flight Procedure Changes Developed by Roundtable Technical Committee" dated October 15, 2019

1. WELCOME AND INTRODUCTIONS

Introduction & Member Roll Call

Mr. Drew Roth (Chair) opened the meeting at 7:04 pm and welcomed attendees. Mr. Roth began the member roll call. Roundtable members introduced themselves and stated the district or office they represent.

Review and Approve Meeting Agenda

Mr. Roth stated it was time to approve the meeting agenda. Ms. Sarah Lacey (Vice Chair) moved to approve the agenda. Mr. Evan Reese seconded. All were in favor. The agenda for tonight's meeting was approved.

Review and Approve Meeting Minutes from July 9, 2019 Meeting

Mr. Roth asked if Roundtable members had questions or issues concerning the minutes from the July 9, 2019 meeting. Ms. Lacey moved to approve the July 9, 2019 meeting minutes. Mr. Howard Johnson seconded. All were in favor. The July 9, 2019 meeting minutes are approved.

2. ROUNDTABLE CHAIR COMMENTS

Introduction of the Technical Committee Presentation

Mr. Roth announced that the Roundtable Technical Committee would present proposed flight path changes developed in concert with the MDOT MAA, HMMH, and representatives from Industry. Mr. Roth stated that a year ago, FAA presented an initial proposed set of changes to only departures to alleviate impacts caused by NextGen. The Roundtable gave the FAA the okay for those initial proposed set of changes, while recognizing that these changes alone were insufficient to address all the impacts caused by NextGen. Mr. Roth explained that the Roundtable Technical Committee developed a set of flight path changes to arrivals to complement changes the FAA proposed to departures.

Mr. Roth explained that tonight's presentation would not contain a full analysis and noise modeling of the proposed flight path changes to arrivals. He noted the full modeling and analysis are planned for November. Mr. Roth explained that once complete, the Roundtable will vote on whether to accept the Roundtable Technical Committee's proposed flight path changes to arrivals and send them to FAA. Mr. Roth stated that the Roundtable would like FAA to take the full set of Roundtable proposals and the FAA proposals previously presented and put them into their Performance Based Navigation (PBN) working group process prior to the beginning of the next PBN cycle anticipated to begin in January 2020.

Mr. Roth turned over the meeting to the Roundtable Technical Committee Chair, Mr. Reese.

3. PRESENTATION OF TECHNICAL COMMITTEE PROPOSAL (FIRST LOOK)

Mr. Reese began the presentation by introducing himself and the other members of the Roundtable Technical Committee: Mr. Jesse Chancellor, Mr. Paul Harrell, and Mr. Austin Holley. He noted the Technical Committee met monthly with the MDOT MAA, HMMH, and representatives from Southwest

Airlines starting in April 2019 to develop the proposed procedure changes in tonight's presentation and provide expertise to ensure viability of the proposed flight path changes.

Mr. Reese stated he and Mr. Adam Scholten of HMMH would be presenting, and the purpose of the presentation was to convey a high-level summary of the proposed procedure changes. He stated that the proposed changes were not intended to fix all NextGen impacts and noted the Technical Committee was on a very limited schedule to get proposed changes to FAA before the next PBN cycle. Mr. Reese reiterated that the Technical Committee's proposed changes were built upon FAA's proposed changes presented by the FAA during the Roundtable meeting on April 24, 2018. Mr. Reese noted that the Technical Committee's suggested changes would require a vote, and then be sent to the FAA. Once the FAA received the suggestions, additional changes may or may not be made by FAA.

Mr. Reese then discussed the timeline that led to the Technical Committee's proposed flight path changes to arrivals (Slides 6-7). The timeline spans from March 2015, beginning with the implementation of the DC Metroplex at BWI Marshall Airport, through present day.

Mr. Scholten presented historical and FAA-proposed flight tracks (Slides 8-21) for BWI Marshall. The slides contained mapping of arrival and departure flight tracks for three distinct time periods:

- **Pre-Metroplex:** February 9, 2012 to May 2, 2012 (84 days)
- Post-Metroplex: February 2, 2017 to April 26, 2017 (84 days)
- **Post-Metroplex with FAA proposed/simulated changes:** February 2, 2017 to April 26, 2017 (84 days), modified to reflect FAA's proposed April 24, 2018 procedure changes

Mr. Scholten explained each slide contained two maps, side-by-side, showing all arrival and departure flight tracks for two of the three time periods. The maps showed arrival flight tracks in purple and departure flight tracks in green. The flight tracks were overlaid on a road map with Maryland Congressional Districts delineated and labels for town names.

Slide 10 showed the Pre-Metroplex map and the Post-Metroplex map. Slide 11 displayed the Post-Metroplex map next to the Post-Metroplex map with FAA proposed/simulated changes. Following these two slides, Slides 12 and 13 displayed the same information on a different scale, showing communities further away from the BWI Marshall Airport.

Mr. Scholten explained Slides 14-17 displayed arrival and departure flight tracks for predominant East Flow aircraft traffic. East Flow includes arrivals on Runways 10, 15L, and 15R; and departures from Runways 10, 15L, and 15R. Mr. Scholten noted the FAA's proposed/simulated changes are anticipated to shift departures from Runway 15R further to the south, closer to where they were pre-Metroplex and also split the two departure paths into two streams over Columbia by modifying the TERPZ departure procedure, and establishing the new LINSE departure procedure.

Mr. Scholten explained Slides 18-21 displayed arrival and departure flight tracks for predominant West Flow aircraft traffic. West Flow includes arrivals and departures on Runways 33L, 33R, and 28. He noted the FAA proposed/simulated changes were anticipated to shift flight paths primarily for Runway 28

further south and concentrate departure flight paths from Runways 33L and 33R. Mr. Scholten noted that Runways 33L and 33R see less traffic than Runway 28.

After describing the maps, Mr. Scholten stated that the big change between the Post-Metroplex (current) flight paths and the Post-Metroplex with FAA proposed/simulated changes is that the flight paths would be shifted south. The flight paths would remain concentrated, although shifted closer to where they were historically, specifically for departures from Runways 15R and 15L, and then for westbound departures from Runway 28. Mr. Scholten reiterated that the Technical Committee used the FAA's proposed/simulated changes as a starting point for the Technical Committee's proposed changes to arrivals.

Mr. Reese stated that FAA addressed only departures and did not address arrivals at all. He stated that 70% to 75% of all traffic at BWI Marshall Airport is on West Flow arrivals. Mr. Reese then presented the goals of the Technical Committee in developing procedure changes (Slide 23):

"The goal of the Roundtable Technical Committee was to develop solutions to address the following issues resulting from the implementation of NextGen at BWI Marshall, and related Performance Based Navigation (PBN) procedures:

- Concentrated flight paths associated with existing FAA published and proposed NextGen arrival and departure procedures
- Extended periods of level flight by arrival aircraft at low altitudes and low altitude approaches
- Changes to lateral flight paths of arrivals and departures to relocate flight paths to historical locations or locations with the potential to reduce community noise exposure"

Mr. Reese stated that an additional goal was the development of procedural changes that would be supported by MDOT MAA and Industry.

Mr. Paul Shank of the MDOT MAA stated that the support of all affected parties (the Roundtable, MDOT MAA, and Industry) was extremely important. He noted the FAA made a commitment to consider proposals supported by all parties. Mr. Shank explained that the FAA conducts PBN working groups to test procedural changes, and MDOT MAA would be part of the working group that reviews the Technical Committee's proposed procedural changes. Mr. Reese explained that the Technical Committee wanted to create more procedural changes, but time was a limiting factor. He noted these proposed procedural changes need to be shared with FAA prior to January 2020, so they can be incorporated into the next PBN review cycle.

Mr. Reese stated that the anticipated benefits of the Technical Committee's proposed procedural changes (Slides 23-24) include higher aircraft altitudes on arrivals where possible, higher aircraft altitudes on approach during good and bad weather conditions leveraging Continuous Descent Approaches (CDA), better distributions of approach operations, and the relocation of some flight path locations. He noted the hope is for the procedures that incorporate CDA's is to eliminate most of the low altitudes associated with visual approaches, as visual approaches allow pilots to descend as they see fit, which can lead to aircraft at lower altitudes and increased noise.

Mr. Scholten presented Slides 26-29, which display examples of traditional descent profile, known as step-down/conventional descent, a CDA profile, and an example of the anticipated noise reduction benefits of the CDA in comparison to a traditional descent profile. Mr. Scholten presented modeled noise level of a 737-700 aircraft in Sound Exposure Level (SEL) and created SEL contours. He explained the total area of the resulting CDA profile SEL noise contours are smaller than the noise contours of the traditional descent profile.

Mr. Reese reiterated that the noise analysis of the Technical Committees procedural changes is incomplete. Results of that noise analysis will be presented to the Roundtable at the November 2019 meeting; the goal of that meeting is for the Roundtable to agree on the Technical Committee's proposed procedural changes. Mr. Reese continued that, if an agreement is reached, then the Roundtable will forward the agreed upon proposed procedural changes to FAA for inclusion into the PBN working group. Mr. Reese encouraged everyone to review the presentation online at the MDOT MAA website and to reach out to him with any questions.

*Note: The presentation of proposed procedure changes developed by the Roundtable Technical Committee from the October 15, 2019 Roundtable meeting can be found at:

https://maacommunityrelations.com/ media/client/anznoiseupdate/2019/101519/101519 Presentatio

n.pdf

Mr. Scholten presented Slides 35-39, which displayed a map of the Post-Metroplex Existing/Published 2017 flight tracks alongside a map with the proposed flight tracks that would result from the Technical Committee's proposed procedural changes for RAVNN Runway 33L arrivals and approaches (Slide 35) and the existing and proposed aircraft minimum altitudes (Slide 36). Mr. Scholten explained that an arrival is a published routing that gets aircraft from high altitude airspace into the terminal environment and places the aircraft in a position where they can make a landing, but it does not necessarily align them with the runway. Alternately, an approach procedure takes an aircraft from the end of an arrival procedure and provides guidance to a runway for landing. Mr. Scholten noted Slide 37 displays the existing and proposed approach and arrival procedures overlaid on a map with Census population density color coded by population.

Following Mr. Scholten's discussion on Slides 35-39, Ms. Nancy Higgs was concerned that the Technical Committee's proposed procedural changes would cause more aircraft traffic in her community of Arden on the Severn. Her community is under the navigational point SPLAT. Mr. Reese explained that the procedure would hopefully send some of the aircraft currently going to SPLAT to other navigational points, specifically the points HAXAK and GRAFE. He also reiterated that aircraft going to SPLAT would be at a higher altitude under the Technical Committee's proposed procedures. Ms. Higgs stated that past noise monitoring at her home and at a neighbor's home showed average altitudes of 2,500 feet to 2,000 feet over 18 months. She thanked the Technical Committee for their work and for ensuring higher altitudes were part of the proposed procedures.

Mr. Shank pointed out that at the navigational point JETNA, aircraft have been as low as 3,113 feet, but the Technical Committee's proposed procedures would make the minimum altitude 5,000 feet. He also noted with the Technical Committee's proposals the aircraft would be in a near flight idle continuous

descent, meaning arrival aircraft would not have gear and flaps deployed, which leads to increased airframe noise.

Mr. Kyle Evans, General Aviation Representative to the Roundtable, asked for the distance between the waypoints and the approach on the runway. Mr. Scholten replied the closest would be a mile-and-a-half. Mr. Evans responded not all aircraft would be capable of making an approach at that short a distance and that it takes hundreds of thousands of dollars to get aircraft approved to fly these types of procedures. Captain Gary McMullin of Southwest Airlines stated that he agreed, but that aircraft lacking the appropriate equipment could continue to fly the existing published approach procedures.

Ms. Higgs asked if the Technical Committee's proposed procedural changes would address late night aircraft and cargo aircraft. Mr. Scholten replied that the procedures were designed to be used 24 hours a day, but that aircraft would need to be certified to be able to use the Required Navigation Performance (RNP) technology to fly the procedures. He explained that most aircraft at BWI Marshall are certified for this purpose, but there are a few exceptions such as legacy MD88 aircraft. Mr. Reese stated 30-year-old 737s (such as the 737-400) and some contract carriers for military and cargo may not be certified; however, every new jet from American and Southwest Airlines are equipped with the technology to fly the proposed procedures.

Mr. Chancellor began the discussion for Slides 41-45 that present the ANTHM and TRISH Runway 10 arrivals and approaches. He stated that on days when the airport is in East Flow operations, Howard County gets the same amount of departures as on West Flow days and also is subjected to arrivals. He explained this creates a continuous noise environment. Mr. Chancellor stated that the goal for changes to Runway 10 arrivals was to move flights closer to the airport, better separate departures from arrivals, increase altitudes, and incorporate CDA's. Mr. Scholten described the increase in altitudes (Slide 42) of both arrivals and departures. Mr. Chancellor stated that the Technical Committee wants to avoid negatively impacting communities that did not experience aircraft noise prior to NextGen and was a major factor in developing the proposal for Runway 10 arrivals. Mr. Reese commented that CDAs in addition to potentially reducing noise would also save Industry money and fuel.

Mr. Scholten moved on to Slides 47-49 presenting proposed procedure changes for Runway 15R RNP approaches. Mr. Scholten explained Runway 15R is not used often, however, the Technical Committee proposed publishing procedural changes that would increase altitudes during approach. Mr. Scholten concluded by noting that there were no proposed changes from the Technical Committee to Runway 15R RNP approaches that would shift aircraft flight paths laterally, and that the Technical Committee's changes only dealt with changes to aircraft vertical profiles.

Mr. Reese discussed the next steps for the Technical Committee and the Roundtable. He explained at the November meeting, HMMH would complete a full noise analysis for the proposed procedural changes and the Technical Committee would present the analysis to the Roundtable. Mr. Reese noted following the presentation, the Roundtable will vote to submit the Technical Committee's proposed procedural changes to FAA or to make changes and reanalyze. The December Roundtable meeting would be held only if necessary, to resolve any concerns or present any new analysis. Mr. Reese stated that the goal was to have a final submittal package to FAA with the Technical Committee's proposed

procedural changes by the end of 2019 for consideration at the PBN working group. Mr. Roth agreed that ideally there would not be a need for the December meeting, and that having Roundtable approval in November would minimize the risk of successfully getting proposed procedural changes through the FAA approval process.

Mr. Paul Verchinski asked if the MDOT MAA, Industry, and the Roundtable had come to an agreement on the proposed changes to Runway 28 departures, which were part of the procedures proposed by FAA and presented in April of 2018. Mr. Reese stated that everything presented by FAA in April 2018 was included in the Technical Committee's procedural changes assumptions. Mr. Reese stated he was unsure if FAA had additional updates to make on Runway 28 departure procedures, but the Technical Committee would not be making any changes due to time constraints. Mr. Shank stated that FAA worked with MDOT MAA when developing the changes to Runway 28 departures and their feedback was reflected. Mr. Roth summed up the response by saying the Technical Committee did not make any modifications to FAA's proposals.

Ms. Lacey asked Mr. Reese about the presentation intended for the November meeting. Ms. Lacey stated that, after the Roundtable approves the Technical Committee's proposed procedural changes, she would like to go to the Anne Arundel County Council and sponsor a resolution to support the Roundtable's position. Ms. Lacey stated that certain questions would need to be answered prior to this action, such as:

- 1. Was the noise impact calculated from current population data and current land development?
- 2. Will we be able to compare the cumulative noise impact expected?
- 3. What metrics will be used to compare changes in noise impact?

Ms. Lacey does not think the Council would want to approve a plan that could ultimately impact more people.

Mr. Reese stated that the Technical Committee used pre-NextGen flight tracks as a boundary for the new procedures. Mr. Reese stated that the biggest change for the Technical Committee was getting aircraft higher for longer and flying at reduced power settings. Mr. Roth stated that the analysis at the November meeting would be the same type of analysis that was done and presented at the December 2018 meeting. Mr. Scholten stated that the December 2018 presentation was on the website, and Ms. Lacey said she would review it. Ms. Lacey offered to coordinate any future information requests with the Anne Arundel County government.

After a brief discussion on providing data outside of what was in the December 2018 analysis, Mr. Shank asked that requests for additional analysis from members of the Roundtable be sent to Ms. Robin Bowie, MDOT MAA Director of the Office of Environmental Services. Requests would most likely not be in by the November meeting, but could be addressed afterward.

Ms. Deborah Jung asked what would happen if the FAA makes the Technical Committee's proposed procedural changes with no improved outcomes. Mr. Reese did not have an answer and stated that although he has been hard on FAA in past meetings, he was optimistic due to recent conversations

between the FAA and Mr. Shank. Mr. Reese continued that the Roundtable made progress early on by standing firm against the FAA and requesting they fix the problems they caused by implementing NextGen. Mr. Reese noted he feels this approach got the Roundtable to a place with the FAA where they opened up the conversation and offered to accept a proposal that was agreed upon by the Roundtable, MDOT MAA, and Industry. Mr. Reese stated this Roundtable has gone further than any other Roundtable in the country from his perspective in making progress with the FAA. Mr. Roth concluded by noting that any remaining problems not addressed by this proposal would continue to receive the Roundtable's attention moving forward.

Ms. Jung stated that Howard County won a motion in the lawsuit against the FAA, and the case will be heard. Mr. Reese was happy to hear the lawsuit would be moving forward. No date had been set for oral argument as of October 15th.

Ms. Barbara Deckert asked for an approximate implementation date for the departures package. Mr. Roth replied that, from FAA's perspective, the departure package and the Technical Committee's proposed procedural changes were all one package and would go to the PBN working group together.

Ms. Higgs stated that she was impressed and hopeful that the work of the Technical Committee will provide relief. Mr. Reese stated that it has been a great process and that MDOT MAA was lucky to have a contractor like HMMH and a predominant carrier like Southwest Airlines willing to represent Industry and support the process.

Ms. Debbie Macdonald asked how success will be measured. Mr. Reese stated that it would take six months at the earliest to review data after the FAA implements any changes, and that any changes would likely be two to three years away. Ms. Macdonald replied that it would be important to communicate incremental steps and look for feedback as well as figure out how to measure changes in noise. Mr. Reese replied that the only way to gain feedback is to continue to make noise complaints and ask to have noise monitors at your property. Mr. Roth agreed it would be good to validate models by having noise monitors in appropriate places, and having measured noise levels before and after the proposed changes are implemented. Ms. Macdonald asked how to get better noise monitoring. Mr. Roth stated it was a state legislature issue because the state provides funding for the noise monitors.

Ms. Reese encouraged everyone to request a noise monitor in the meantime and asked the MDOT MAA about the possibility of making a cohesive effort to get collection points, both now and again after FAA implements changes. Mr. Reese stated that he sees an opportunity to pick points and do a two-year study on the pre and post-implementation noise levels. Mr. Roth proposed they make a plan, possibly at the January Roundtable meeting, for noise monitor placement and study.

Deliverables:

 MDOT MAA and HMMH to present full noise analysis of Roundtable Technical Committee proposals at November meeting

5. PUBLIC COMMENT

Mr. Roth moved on to public comment.

Ms. Julie McQuil of Ellicott City thanked everyone for their hard work to date. She stated the airplane noise in her neighborhood from departures is horrible. She was in attendance to represent several people in her neighborhood and wanted to say the noise needs to be reduced.

Ms. Sharon Cosgray of Clarksville thanked everyone and said she was unaware so much work had been done. She stated that there is a noise issue, as well as a mental health issue. She stated that the noise is constant and she wears ear plugs inside her home, which is stressful.

Mr. Mark Peterson of Elkridge stated there were 17 screaming takeoffs that morning between 6:07 AM and 7:00 AM. Lately, he observed planes all over the place, both vertically and horizontally, and asked if it had to do with the runway work. Mr. Peterson believes the differences in altitudes were thousands of feet and varied in horizontal placement by a half-mile. He wondered why there was so much variability. Mr. Scholten believed the variability was due to Runway 10 closures, causing Runway 33L departures to be vectored by air traffic control. Mr. Roth stated that the runway work is scheduled to be complete in mid-November.

Mr. Peterson observed the greatest number of variations before dawn, and asked if MDOT MAA could limit the work schedule to 7:00 am to 7:00 pm. Mr. Shank stated that the contractors have the flexibility to work multiple shifts in a day to finish more quickly. Mr. Peterson commented on the fact that MDOT MAA Administrator, Mr. Ricky Smith, has not yet attended any meetings. Mr. Roth replied that, because of the productive work of the Technical Committee, he had not attempted to schedule Mr. Smith since spring.

Ms. Laura Donovan of Glen Burnie asked how high altitudes would be above MD State Route 295 and Interstate 95, and if helicopters could fly under them. Ms. Donovan stated that her home still had four broken windows, her hearing is getting worse, and she has permanent ringing in her ears (tinnitus). She asked if the helicopter impacts were an MDOT MAA issue or an FAA issue. She asked if there was an acceptable substitute for a noise monitor because the wait time for testing is long.

Mr. Roth asked Mr. Shank who controlled flight procedures for helicopters. Mr. Shank identified the FAA. Mr. Roth asked if the helicopters were affected by NextGen. Ms. Donovan continued that helicopter traffic started in 2009 and has gotten worse over the years. She stated that relocating neighborhoods may be a solution. She also stated that the types of helicopters (medical) and the size of helicopters (now larger) have changed and now other communities are beginning to be affected. Mr. Shank apologized to Ms. Donovan and stated that the MDOT MAA previously met with FAA and asked them to raise overflight altitudes for helicopters. He stated that an analysis was done for her property. Ms. Donovan will speak with Mr. Royce Bassarab of HNTB to revisit the analysis.

Ms. Kim Saydjari of Clarksville thanked the Roundtable and said she wished she knew about these efforts sooner. She stated the she found out about it through the Nextdoor app. She asked how the Roundtable could let more people know about these efforts, and what non-Roundtable member citizens can do to make progress on issues with the FAA.

Ms. Jung mentioned the Roundtable Communications Committee, and as part of that, she reported on the Roundtable to her colleagues on the County Council. She stated that the work of the Roundtable was at an odd juncture and she was uncertain of what would happen after November. She promised she would continue to communicate using Nextdoor.

Ms. Saydjari asked what else could be done besides using the internet and social media to let people know about the Roundtable and their work. Ms. Higgs agreed and stated that most people in Howard and Anne Arundel County had no idea a Roundtable existed. Ms. Mary Reese stated that the Roundtable has no budget for mailings or marketing. Ms. Reese stated there are many factors working against bringing people together on this issue, but the Roundtable is trying and has made progress. Mr. Roth stated the outreach he has done through his community group, the Greater Elkridge Community Association (GECA), and through multiple Facebook groups. He noted that the County Council persons and County Executive in Howard County periodically send communication about the Roundtable to their constituents. Ms. Kimberly Pruim from the Howard County Executive Office stated that she is open to exploring ways to continue to spread information about the Roundtable and offered to talk offline.

Ms. Ann Cowles of Brookville stated that she has owned her own business for over 40 years and she was very unhappy due to the air traffic. She says that the quantity of the air traffic is a real problem for her and she does not think that will change. Although she is happy about the higher altitudes, the amount of air traffic is the problem. Ms. Cowles stated the air traffic interrupted the service at the cemetery during her mother's funeral. She stated that the amount of air traffic has an environmental impact and proposed higher airline fees to compensate for environmental impacts.

Ms. Cindy Cisneros of Columbia explained she purchased her house in 2013. She is married with two small children, and the plane noise causes her two year old son to panic and cry. She stated she is fighting for her family and her children. She uses the AirNoise.io app and the number of noise complaints that she made from her property increased from 657 complaints made in April to 2,133 complaints made in September.

Mr. Kenneth Phillips of Columbia note he observes 150 flights a day over his house at over 75 decibels. He noticed departures that typically passed over his home at 6,000 feet dropped to 4,000 feet and wanted to know why. He has seen some flights as low as 3,800 feet. He stated he had logs from the AirNoise.io system that show the change. His concern is that raising the flights back to where they were would not provide an improvement. Mr. Phillips also asked if there had been any comparisons between real-world noise sources and NextGen noise. Mr. Roth replied that it was ongoing and referred back to the noise monitor discussion. Mr. Phillips stated his concern that using Day Night Average (DNL) sound levels and decibel (dB) readings as a measure of noise were outdated and based on arbitrary standards. Mr. Roth stated that many people also share this concern.

Mr. Phillips stated that he took the data from the 150 flights over his house in January and integrated the noise over time; the noise energy from those flights over his house—10 miles from BWI Marshall Airport—was twice as much as the noise from US Highway 29, located 1,000 feet from his house and carrying 109,000 cars a day. He stated that FAA essentially created a highway in the sky over his home at

the noise equivalent of over 200,000 cars, and it happened over night. Mr. Phillips believes the aircraft noise is worse than car noise because noise from aircraft generally is not reflected or dispersed before impacting homes.

Mr. Phillips asked if the Roundtable or anyone in the community was looking into the impacts of ultrafine particles. Mr. Roth said the Roundtable was not, but there have been reports of concerns about ultrafine particles under the approach paths in Columbia and Anne Arundel County. Ms. Reese encouraged Mr. Phillips to read the report on ultrafine particles done for LaGuardia Airport (LGA). Mr. Phillips suggested grant money be given to researchers at the University of Maryland or Johns Hopkins to study ultrafine particles.

Dr. Clarence Lam, Maryland Senator for District 12 of Harper's Choice stated he shares the concerns of many Howard County residents and has been impacted by increased noise volume. He stated that legislation is under consideration to quantify the health impacts of ultrafine particles from aircraft on local communities. Mr. Phillips asked that FAA not fund the studies. Dr. Lam stated that, if they are able to get the funding, it will come out of the state budget. He also stated that the study needs the support from the public to have some quantifiable health data to present to FAA.

Mr. Brent Girard of Senator Van Hollen's Office stated that Senator Van Hollen wrote to the FAA in 2017 to ask about particulate matter with regard to NextGen. The Environmental Protection Agency (EPA) previously stated that it would implement new standards next year, but it is unclear how or when. Senator Van Hollen, as part of the FAA Reauthorization Act, added as part of an amendment to look at possible alternatives to the DNL standard for noise. Mr. Girard stated the report was being compiled and he would update the Roundtable at the next meeting.

Mr. Michael Bahr of Harmans Woods noted he is most concerned about the air traffic from Runway 28. He stated that aircraft coming off Runway 28 are making a sharp left turn and flying over Harman Woods at a low altitude of between 1,500 feet and 1,800 feet. He stated that the next plane off the runway flies three or four miles, loops around, then comes back north. Mr. Bahr stated that the current shut down of Runway 10 is making it worse. Mr. Bahr also reiterated that not everyone has access or uses social media and the internet. He believes the only effective way to inform people is by mail or home drop-offs.

Mr. Andy Prodigal of Hanover stated that he shared everyone's concerns. He is located five miles from the airport. He thanked the members of the Roundtable and asked that attention be paid to departures from Runway 28. He confirmed Mr. Bahr's description of planes taking off and making a sharp turn. Mr. Roth stated that the FAA procedural changes addressed the sharp turn. Mr. Prodigal believes the conditions are horrendous. He has lived in his home for 25 years and the last five years have been insane.

Ms. Patricia Vain of East Columbia noted she is concerned about the late-night flights. Mr. Roth replied that they are Amazon cargo planes. Mr. Roth stated that flight times were not going to be addressed under the current proposed procedural changes, but he agreed it is a problem and it may be an issue the Roundtable takes up after the proposed procedural changes are submitted to FAA.

Deliverables:

• Mr. Bassarab to follow up with Ms. Donovan regarding prior MDOT MAA helicopter analysis

Ms. Lacey stated she would like members of the Technical Committee to speak at the Anne Arundel County Council work session on November 12th and December 2nd. She would be able to introduce a resolution summarizing the Roundtable's progress. Ms. Lacey asked that members be present at the December 10th Anne Arundel County Council Meeting to answer any questions. Following that meeting, the Anne Arundel County Council would have a public hearing and vote on the resolution.

Ms. Donovan stated that she fears if she moves, that flight paths could change, putting her right back where she started. She asked if there was some way to ensure things would not change again. No response was given.

6. PLANNING FOR NEXT MEETING

The next meeting is scheduled for November 19, 2019. Mr. Roth asked if there was a motion to adjourn. Mr. Reese motioned to adjourn. Mr. Chancellor seconded. All were in favor. The meeting adjourned at 9:20 pm.