

Charlotte Airport Community Roundtable (ACR)

Unapproved Summary Minutes: August 21, 2019

Attendees

Sara Nomellini, County 2, Chair
Kurt Wiesenberger, At Large, Vice Chair
Phil Gussman, City 1
Darren Crosby, City 2
Loren Schofield, City 3
Priscilla Johnson, City 4
Bobbi Almond, City 5
Sam Blair, City 6
Alan Sauber, City 7
Sherry Washington, County 4
John Garrett, County 5
Mark Loflin, County 6
Sayle Brown, Cornelius
Bob Cameron, Davidson

Bob Lemon, Huntersville
Walter Ballard, Lincoln
Thelma Wright, Mecklenburg
Theresa Brunner, Pineville
Kevin Vesely, York
Sean Muckenfuss, York Central
Gene Reindel, HMMH (Technical Consultant)
Bob Mentzer, HMMH
Stuart Hair, City of Charlotte (ex-officio)
Dan Gardon, CLT
Kevin Hennessey, CLT
Tracy Montross, AA
Ed Gagnon, CSS, Inc. (Facilitator)
Cathy Schroeder, CSS, Inc.

Call-in Participants: None

Summary Minutes

- ❖ Meeting started at 6:00 PM
- ❖ **Open the Meeting:** Nomellini called the meeting to order.
 - Approve Minutes: Wiesenberger moved to approve. Lemon seconded. All voted to approve.
 - Introduce New Members: Priscilla Johnson, representing City 4. Darren Crosby, serving City 2. Walter Ballard in the Denver area, representing Lincoln Co.
 - Gagnon: Ground Rules describe how we will be with each other and others, not only in this meeting, but in all communications. Listen first, be respectful – Goal is to have healthy conversations, be productive, effective.
 - FAA employees not here tonight. They did give a written update that we will discuss.
 - Review Meeting Packet Information by Gagnon
 - Noted cover sheet, agenda, minutes, letter from AA. Document with all the Slides. ACR analysis from HMMH. Complaints statistics, article from Kurt Wiesenberger re: airplane noise. Went through the packet. Noted the HMMH key on tables in front of members - same as last month.
- ❖ **Receive Public Input**
 - There were no speakers for the meeting.
 - Gagnon went over for the new members the process when we have speakers. Also talked about the new website with all the ACR files/presentations/information.
- ❖ **Review FAA Submittal Work Schedule**
 - Gagnon: Submitting a Slate of recommendations to the FAA. Included in that submittal process, there was going to be a full year of analysis of 8 different recommendations that you were considering so that you are confident that these were what you wanted to submit. So, we created a work schedule. CLT needed to extend out a month. Now, looking at a January date for submittal. Four phases: 1st phase: Develop Draft Submittal Document – CLT has begun drafting some information based on samples provided by HMMH. 2nd phase: Analyze and Prioritize Potential Recommendations. We are in the heart of that right now. Gene will be talking about Altitude-based Turns today. 3rd phase: Gain Community Input – having community

meetings – and 4th phase is when the Slate submittal occurs. Sharing this every month as a refresher; all end dates pushed out a month.

- Gagnon: *Reviewed the Slate of recommendations*. June – Modify use of Departure Profiles – NADP-2 was the preference; July – Continuous Descent Approach; both of these were positively received by the ACR. Today, HMMH will analyze Altitude-based Turns.

❖ Analyze/Uncover

➤ Update on NADP-2 Recommendation – CLT Staff

- Gardon: Currently we are investigating the best way to recommend the use of NADP-2 and get the support we need here at the airport. We have been in contact with Metropolitan Airports Commission in Minneapolis. One of the oldest running noise commissions in the country. They have recommended noise abatement departure profiles. We want to see how they handle the recommendation. They had previously incorporated this into the Part 150 (1980s), and more recently agreed to continue its use. It is somewhat of a lengthy process, and we have been reviewing documents that they have used to recommend this to their operators.
- Wiesenberger: The airport in Minneapolis reflects Charlotte in a similar way?
- Gardon: Their use of NADP does. They utilize the distant departure and, in that regard, yes.

➤ Update on EA and Scheduling of EA-related Community Meetings

- Representative from planning department on the CLT Environmental Assessment - Mark Wiebke: Been here for 31 years; been Planning Director at Charlotte for a little over a year and a half.
 - Update: About 3 years ago we went out to do an environmental impact statement for airport projects. In February, the FAA rescinded the EIS and allowed us to start to perform an Environmental Assessment. Part of the reason is during the analysis of the EIS we found we did not need a 12K runway. The only thing that we needed was a 10K runway which would fit within the confines of the airport property, and the impacts to the surrounding neighborhoods and the environment was less impactful with the 10K runway. This allowed us to relocate West Blvd. to current roadways. *Noted information on Slides:* Good news is the contract was awarded by City Council. We had a kickoff meeting Monday with the consultant – Landrum & Brown. We have a schedule that is approximately 15 months long, starting in early September. First thing is we will have our public community meetings, hopefully starting the week of October 14th. Just like we did with EIS, we will have meetings on North and South ends. Proposing West Meck and Olympic High School for those meetings. We are looking at having a draft EA in 9 months (June to July 1). Then submit to FAA, and they have about 3 months to review. We will have public hearings. What will come out of that will be a final determination by the FAA. We hope to get that about September 2020. *Noted the area on map to be evaluated.* Any questions?
- Johnson: Will this affect the Steele Creek area? Specifically asking about Irwin Road?
- Wiebke and others: Affected by noise but not by other.
- Schofield: Is the map area North and East of 485?
- Wiebke: Everything is East of 485. And North of Byrum and West Blvd.
- Wright: What is the line at the bottom, the purple at the bottom of the screen?
- Lauren Scott: Area of potential effects. Based on the 65 DNL. Shopton Road.
- Cameron: Is noise other than the 65 DNL envelope a consideration that the EPA will be looking at during the EA process?
- Wiebke: No, we will be evaluating noise.
- Cameron: How will the public find out about the hearings?
- Wiebke: They are public meetings, and we will get notices out. Week of October 14th will begin those meetings.
- Hair: We will get those dates sent out to you all once scheduled.
- Scott: It will be in the airport quarterly and monthly mailers. We have about 100,000 addresses that we will send to. Same notification that we used for the EIS. It will be on our city calendar.
- Member: What is the determination that the FAA will be making?

- Wiebke: Whether there is any significant impact to the environment within the purple boundary.
- Member: There will be none.
- Vesely: Is there any particular pattern that those 4 runways are going to follow? For instance, 2 arrivals; 2 departures?
- Wiebke: The new runway will be a departure runway.
- Vesely: That would make 36L also a departure?
- Wiebke: No that would be arrivals.
- Lauren Scott (Project manager of this EA): The 2nd public meeting is going to show all the alternatives and that will include the runway usages. It will be an open house style meeting with boards up, etc. The first meeting is just an update on what has happened since converted from EIS to EA, why, etc. The third meeting is required and is a hearing.
- Wiebke: Public hearing does not happen until month 10.
- Brown: Have they projected what the increased traffic will be with the addition of the runway?
- Scott: With the EIS we did do a forecast, and that was approved by the FAA.
- Brown: Do they have a percentage of increase of traffic? It is going to create more volume because you have more capacity.
- Scott: The way the forecast is done, and it follows FAA regulations, it does not take into account any of our facilities.
- Brown: (Asked to put up Slide) So the new runway is going to be primarily a departure runway, right? (yes) In VFR conditions they could use all three of those runways if they needed to.
- Wiebke: Well there are different things that have to happen. There is separation of runways and how air traffic has to control that. You cannot depart airplanes at the same time because of not enough separation.
- Brown: It is going to enable CLT to increase the volume.
- Wiebke: We are building to the demand of the airlines. That is what is forecast. It tells us what to expect. We are trying to match the demand.
- Brown: I understand that, and there's nothing wrong with that. What we are doing with our noise evaluations – we are trying to compare how many repetitions does it take before people get upset with the noise levels. So, with the increased volume we will have to adjust our thinking about what will be acceptable and unacceptable as far as noise levels. Is that correct, Ed?
- Gagnon: I don't know that you will need to readjust what you consider to be comfort/concern/no go, to use Bob Cameron's terminology. If there is increase in volume, that will affect what percentage of areas are affected more than others.
- Sauber: The runway will happen. ACR is concerned with more volume - more arrivals, more departures. Doesn't matter what runway is used for what, with the exception of if you're in that dotted line. Generally speaking, this only has adverse impact to the noise committee relative to what we have been meeting on.
- Wiebke: Noise contours will be developed out of the EA.
- Crosby: Will the new runway be significantly away from the other runways so they can be used at the same time for arrivals and departures?
- Wiebke: New runway is for departures. It could be used for arrivals if the other one was shut down. Cannot have 4 arrival streams. The FAA won't allow it. They are too close. You can have 3, just like you do today. Design of the patterns has not started.
- Scott: The design will be part of what the FAA does during the EA study. When we evaluate how to use the runway, the FAA has to look at potential procedures.
- Garrett: When will the actual design of traffic routes be done? Is that separate from the EA?
- Scott: That is up to the FAA.
- Wiebke: I think it is. We can follow-up and find that out. Until the EA is approved and determined by the FAA, they will do some preliminary work, but there is nothing concrete.
- Wiesenberger: Is it fair to say that – with 3 runways today and going to 4 – a 33% increase in capacity and traffic with a fourth runway? Roughly.

- Scott: It depends on how the runway system is used.
 - Sauber: Kurt, I would think it would be max that at any one time, but it is not going to be a steady-state of a third more.
 - Wiebke: What it will allow by putting that 4th parallel runway in is as soon as one lands, they can depart one. Now they have to have gaps.
 - Johnson: What is the estimated time of completion of the project?
 - Wiebke: Actually 6 years from today.
 - Gagnon: So, 2025?
 - Wiebke: Probably. Like I said, we just had our kickoff meeting, so you will begin to see information from our website.
- **Recommended Grid Extension for Slate Analysis – Gene Reindel, Vice President HMMH**
- Gagnon: *Handout passed around before Gene’s presentation. Reminded of what the ACR is looking for in the HMMH analysis.*
 - Reindel: Proposed expanded Analysis grid. We talked about this last month. We noticed that with arrivals and where they do their turn for their final approach, it could be below the grid. Proposed new grid that goes further North and south. Take a look at those. We have plenty of time to see if we need to expand. We could go further or not as far. We looked at where the turns before final are, and this represents that.
 - Cameron: Can you point out some points of interest?
 - Gardon: This extended grid goes 30 miles North and 30 miles South - all of Rock Hill, Davidson, Cornelius. I think Catawba County is represented in top left corner of grid. This encompassed our longest finals.
 - Gagnon: *Was able to expand grid view on his computer. Named some towns or areas.*
 - Reindel: To the East and West looks like 20 miles out. Was 10 miles. We tried to expand the grids so it showed the tracks over the grid. We overlaid some tracks over the grid. I don’t expect the questions on Slide 6 to be answered today. I want you to be able to look at the information and the maps and see if we went to the extent that we need to. Quite frankly, that is a lot of dots that we will have to do analysis on so if we could shorten it, it would be better. The computer time to do these analyses is going to be quite extensive. We will not use this on the preliminary analysis that we are doing now to try to determine the Slate, but once you come up with the measures you want us to do, we will do the analysis with the extended grid to get the full accounting, etc.
 - Muckenfuss: Do you have any idea of how this might make a difference? Bringing it 2 miles in (from 30 miles to 28 miles, for example), would that make a significant difference?
 - Reindel: I will introduce Bob Mentzer. Bob is here tonight because I will not be here next month, and he will present. Bob, do you have an answer to the significance of miles that we might shrink the extended grid?
 - Mentzer: I think a 5 mile reduction would be better option than just a couple of miles - depends on grid space distance.
 - Reindel: Somewhere between 2 and 5 miles would be substantial.
- **Slate Recommendation Analysis – Altitude-based Turns – Gene Reindel, Vice President HMMH**
- Reindel: (Slide 8) We have taken the full year of data (2018), and we determined the distance along each runway centerline where each plane reached altitudes of 2K, 3K and 4K. We delayed the turn or moved that turn up until that specific altitude. What we were expecting was that airplanes reach altitudes at varying distances, and we would get more dispersion as to where the aircraft made that turn. We modified the tracks to turn at those distances (2K, 3K, 4K) rather than what they do today. We put them back in the model for each of those scenarios to come up with the analysis. We took the data from every single flight track that was captured on the monitoring system here at the airport. We are modeling every single operation of 2018 but with these modified altitudes. Then we compared to the baseline of 2018.
 - First thing we looked at is the number of overflights. With 2K Altitude-based Turns, this shows where the overflights are. Using the key, the different colors show # of flights over each grid. The darker the colors, the more the # of flights. And the table shows number of grid points and population at each grid point. The further out you get, the more dispersion. It was not surprising.

- Reindel: Slide 10 - This time we looked at southbound and northbound – had previously just looked at southbound. There are 2 and 4 nautical mile restrictions in place. On the South departures, they are not supposed to start their turn before the 2 nautical mile line, and they are supposed to begin their turn no later than the 4 nautical mile line. No restriction to the north, but they currently turn pretty much at the end of the runway, and they cannot deviate from their initial turn until they get past the 2 nautical mile marker to the north. These are close approximations of 2 and 4 nautical miles on the screen. What if those restrictions were modified or removed? What would that do for the Altitude-based Turns? Of note, to the north, basically the turns are happening later at 2K, and that is because now they are essentially turning right at the end of the runway instead of having that 2 mile restriction. Increased dispersion happens by turning them a little bit sooner. Dispersion isn't quite as increased on the East as the West.
- Garrett: Remind us of the 2 and 4 nautical mile requirement.
- Reindel: 2 nautical mile came from an agreement through a court settlement to avoid turning too soon into a neighborhood. 4 Nautical mile is to provide for the FAA to use the runways more effectively, not delay the turn any more than they have to.
- Hennessey: 2 mile is a part of our noise abatement procedures. Inside the 2 mile is where all the significant impacts – 65 DNL – are located.
- Wright: On the modified, these are all departures. It looks like the bottom half there is not much dispersion, but on the top half it seems there is a lot more.
- Reindel: Actually, the dispersion is not all that different if you look North to South, and it wouldn't be because it is aircraft dependent. We are not showing change yet. We are just showing the operations.
- Reindel: (Slide 12) This is showing the difference of change per grid point. The clear is no change, the greenish is negative so fewer operations in those grid points now. And the red colors show areas of increased number of overflights. Remember I said if you go south, they would turn earlier, and here you see the effect of that. You are getting your increased dispersion.
- Muckenfuss: In the north, looks like you have dark/cool areas right next to increase. Is that a great decrease right next to an increase?
- Reindel: Yes, you have very narrow tracks here right at the end of the runway.
- Gagnon: For the newer members, can you highlight the area of Mountain Island Lake and other higher affected areas. These are the areas most affected by Metroplex, which is why they are outlined.
- Reindel: Now getting into noise. Three things that we look at for noise. 1- Lmax – maximum sound level for all operations of 2018. It is a single flight that caused it, but who knows what flight caused it. This has not been one of the most productive ways of looking at how things have changed and where things have gone, because it could be a single event that caused the Lmax. Next, we look at number of noise events above 70 dB. This is called the N70. And the last is day night average sound level (DNL). This is a 24-hour cumulative metric that is used for land use planning.
- Ballard: How do you determine the actual sound level, calculate the Lmax?
- Reindel: Using the FAA aviation and environmental design tool. Flying all the operations through the FAA's noise model.
- Ballard: Is there any thought to comparing measurements to what you are saying it should be? Because I am up in Denver, and I am getting decibel readings of 77, which is pretty loud.
- Reindel: Yes, you could do measurements. Over the years the FAA model has become very close to the measurements. When you do measurements, you get really good agreements. You can only measure the current, not the future. So, the only way to do this comparison is through the model. The noise levels being reported here are what you are experiencing.
- Ballard: And I am well above your grid.
- Reindel: Slide 14 shows maximum sound levels computed between baseline and modified at 2K. Getting more maximum sound levels up higher on the grid. Similar down lower. Pushed some sound levels to the north. Slide 15 – 36% of people would experience reduced noise levels with 2K Altitude-based Turns, and 14% would experience increased noise levels.
 - The better feel for the change will be # of events above 70 dB. Slide 18 - The yellows and reds are increased noises, and the greens and blues are decreased. In Steele Creek, some areas are getting

increases and others are getting decreases. Getting a decrease in the SouthPark area but increase a little more south. In the north, it is the opposite. You are getting your decreases closer in to the airport and increases further out because now they are turning well before 2K feet currently. Summary: Almost 50% of the population would experience fewer events above 70 dB, and 26% would experience more events above 70 dB with 2K feet Altitude-based Turns. I think this has been most beneficial to this group in looking at how changes materialize.

- Gardon: Do you have an estimate as to how much of that 25.6% experiencing more noise events above 70 would be in the North with all the red?
- Reindel: I do not have an estimate, but we have talked about that at HMMH quite a bit. I think it is important to look at the grid and not the percent change. Percent change is important, but say that you decided to implement a 2K foot Altitude-based Turns. I don't want to direct you there, but for example, you may say it is not worth doing to the north, but we get real benefit to the south. At that point we could look at the difference in the change.
- Nomellini: Population count is based on what census?
- Reindel: 2010.
- Muckenfuss: Based on data, because the procedures are different today, seems like the change in the North is what it is like now in the south. If the North was operating like they are in the South now, then you wouldn't see the percentage of change. They are turning right off the end of the runway. This procedure makes the North and the South more similar than they are today.
- Reindel: That's correct.
- Sauber: You don't have the 2-mile barrier in the north. Gene, what is that boundary in the south?
- Gardon: 485.
- Reindel: The last that we did for 2K Altitude-based Turns is DNL. Baseline vs. modified – minimal effect to the south, a little bit more to the North because of the 2-mile restriction to the south. They can turn right away to the North now. Slide 21 where things changed in DNL (1-5 dB change).
- Reindel: Slides 22 and 23: Summarize and observations. I have already gone through these with the Slides. They are more for you to have for reminders.
- Reindel: 3K foot Altitude-based Turns. We have further delayed the turns. Now the aircraft have to reach 3K feet before they can initiate their turn.
- Wiesenberger: For time's sake, would it be smart to go on to 4K?
- Reindel: I think there are enough differences between 3 and 4. I will focus more on the number above 70, because I think it tells a better story.
- Blair: What is the most common of these Altitude-based Turns at other airports?
- Reindel: It is usually closer in to the airport, so 2K feet is something you may see elsewhere. 500 feet is most common. That is kind of what is being done to the North now. You can't turn before 500 feet. To the North they are probably turning between 500 and 1000 feet.
- Blair: So, if we found that we got the most relief at 4K feet, would that even be something we could consider?
- Reindel: I think I am getting ready to show you that would be very difficult.
- Crosby: Can we have PDFs of these?
- Gardon: Sure.
- Reindel: Slide 25 - Basically you get more of a delayed turn, so noise is moved. We put in the landmarks, and Southwest Middle School looks like the center of the turn happens here - much further North before they turn. Aircraft need more time to climb to 3K feet. With the 3K foot turns, most of the turns are happening outside of the 4 nautical mile restriction. FAA waiver says that they are already supposed to have initiated their turn. Just going to 3K feet, you would have to work out something with the FAA to modify the waiver. This decreases capacity because before this aircraft turns, they cannot depart another from the airport - because of separation from the 2 parallel runways.
 - Slide 27: 25% would experience fewer operations with 3K turns; 28% would experience more operations. A little less than what we got with 2K turns.

- Lmax: Increase in noise levels are pushed to the North mostly.
- Slide 32: Number above is most important. Get a more concentrated north/south corridor. You don't get the push out to the east or west. Turning earlier now, so more of a change at 3K feet.
- Sauber: Moving from 2 to 3, I see a significant difference, so I am assuming a similar pattern going to 4. This has to affect arrivals, I would think.
- Reindel: We looked at that previously; we didn't look at it here. You didn't get the conflict you might think you'd get. You could still clear the arrivals even at 4K feet.
 - Slide 33: Here are your areas of change. 70% of population would experience fewer events. Only 26% would experience more events above 70. More dramatic change. I don't think that the dispersion is greater than what we thought. I think we had more dispersion at 2K. I don't think we are getting a greater dispersion benefit at 3K. DNL is going to have some effect - *noted area of change with DNL Slide 36.*
- Reindel: At 4K, things are being pushed out to the South clearly past the restrictions – we'd have to work with the FAA, waivers, etc. Clearly will have differences with Lmax. Mostly North and South now with 4K.
 - # of events above 70 dB: Pushing things into the North/South corridor. Lot fewer events in the SouthPark area as well as the western part of the Steele Creek area. You are pushing them lower in the Steele Creek area.
 - Note: observations on Slides 52 and 53. On Slide 55, you have the comparisons side-by-side.
- Nomellini: My concern, especially being in the Southwest, is that this is based on 2010 populations – predating a lot of newer developments. I don't feel the population numbers are representative of the effect that people will feel.
- Gardon: Baseline was 2010 census, and we got extra data from the State. It is as good of an estimate as possible. It is definitely possible that some areas are not counted.
- Reindel: That is a good point to keep in mind that we have new development, but we have the data we have.
- Nomellini: Lots of growth, so your percentages are not accurate - especially in the Steele Creek area.
- Garrett: Which chart would I look at for the end result of dispersion?
- Reindel: I think the N70 – on the actual plots, not the difference plots. For instance: Slides 17, 32 and 47. This is where you are getting a better story for dispersion. Look at the plots, and see where you are getting greater dispersion. You could also look at # of operations, but I think this tells a better story.
- Muckenfuss: The Altitude-based turn at 2K is the only thing that could happen without changing the variance with the FAA?
- Reindel: Yes. You could do something with 3K because some of them did turn before the restriction.
- Vesely: Clarification about population: Did you count South Carolina?
- Gardon: That's correct.
- Brown: What if you did 2,500 feet? Would that fit all we are trying to do?
- Sauber: Along those lines, we are dealing with a balloon here. Where we are pushing it in one way and squeezing out another. I think we have to have that compromise. When you get to 3K and above, it may counterbalance what we are trying to do. I don't want to leave here in a worse situation than I am.
- Reindel: I like the analogy of a balloon. Realistically we have a certain amount of noise energy that this airport is going to produce. That is what we are trying to do – find out where that sweet spot is. I am not sure 2,500 is going to get us there. Let's look at 2K – it is about as good as you are going to get.
- Crosby: Could they be different North or South?
- Reindel: Yes.
- Crosby: Could they be different by runway?
- Reindel: Probably not, but we could check. That's a question for the FAA.
- Nomellini: I think the FAA has said that you could do that - have different turn altitudes per runway.

- Reindel: We have to get that 15 degree separation. That is how that 4 nautical miles came in. They have to have that 15 degree separation by then. You're right; we could do things differently East and West. Any other discussion?
- Reindel: Note summary. Slide 62. I would venture to guess that the 2k Altitude-based turn would be implementable without much issue. I think you have an uphill battle trying to implement the 3K or 4K. Doesn't mean you shouldn't consider it.
- Gagnon: Gene needs our feedback. Referring to the handout passed out earlier - *reminder of Guiding Principles. Starting to talk about a poll regarding what Gene has presented today – Altitude-based Turns being on the Slate.*
- Nomellini: We should evaluate each of the 3 different altitudes separately.
- Gagnon: Regarding the analysis of North v. South, are there obvious conclusions or opinions? Any thoughts on North v. South before we take a poll?
- Brown: As to the North, I would not change. There seems to be plenty of dispersion there, unless somebody lives right under the departure path near the end of the runway.
- Wiesenberger: For clarification, is the 2-mile restriction on the table for change?
- Gagnon: We are going to have another Slate recommendation that HMMH will analyze where that is taken out, so you will evaluate it.
- Nomellini: The reason we are interested in that in the South and Southwest is - if they turn like they do in the North - it should avoid Berewick and south.
- Wiesenberger: And to Sayle's point, creates dispersion.
- Reindel: I do believe the airport said we could evaluate getting rid of the restriction. So, we expect that by removing that restriction we are going to see the same to the South as we see to the North now. Including evaluating the removal of 2-mile restriction, we are going to be looking at divergent headings. We want to evaluate everything on its own. Then we will bring it all back and see where to go from there. Just because you might vote for Altitude-based turn does not mean that the other recommendations are off the table.
- Garrett: Does removing the 2-mile restriction provide the most dispersion? Does that maximize dispersion, or is there some other way to maximize dispersion on departures?
- Reindel: We will not know until we do the analysis. My instinct is that you will get a little bit more dispersion at 2K as opposed to 500 feet. But don't know until we do the analysis.
- Wright: On the departure profile NADP-2, does that affect Altitude-based Turns?
- Montross: That's my question too, Thelma. As you pursue the potential agreement that MSP (Minneapolis) has in place, what is the impact on NADP-2?
- Reindel: It depends on where the cutback is. NADP-2 involves a thrust cutback after departure to reduce the noise level and also reduces its ability to climb. At 2K, I am not sure it's going to have cutback much by then. At 3K, it certainly would have cut back. NADP will have an effect on the turns. However, the cumulative difference may not be that great because a lot of the aircraft are already flying NADP-2, so it has been somewhat factored in.
- Gagnon: Based on the latest points, let's do a quick poll of the group. Just to give HMMH some guidance. Let's start with Altitude-based Turns to the North: 5 different options.
- Nomellini: I think there should be an option to abstain. I don't want to vote for the North because I don't want to vote for an area that I am not affected.
- Gagnon: 8 members North affected; 10 members South affected. Polling results:

	Departures North of Airport	Departures South of Airport
Utilize 2000' Altitude for Turns	0	8
Utilize 3000' Altitude for Turns	0	2
Utilize 4000' Altitude for Turns	0	0
Unsure	3	0
Do not utilize Altitude-based Turns	5	0

- Summary: To the north, you are leaning towards uncertain or doing nothing. Not a real strong support for doing Altitude-based Turns to the North. And to the South, you would prefer to look at 2K Altitude-based Turns. Is that the guidance you would like to give to Gene?
- Nomellini: 2K does not help those of us that voted 3K.
- Gagnon: Gene, can you analyze 2K and 3K just to the South?
- Reindel: We can do more analysis around 2K and 3K, not just limit it.
- Schofield: What about 2,500? I see more overall benefit at 3K in terms of positive reduction. That's why I'm leaning towards the 3K.
- Brown: Altitude is important but different headings is also important for dispersion.
- Gagnon: Can you, Gene, with your technical expertise, pick a sweet spot in that 2K-3K range?
- Reindel: I don't know if there is a sweet spot. It's good to know that 2K is more preferred except by those closest to the airport. But is 2,500 a better option? Again the 4 nautical mile restriction waiver that the FAA has would have to be modified to do something other than 2K. Doesn't mean it's off the table, but we would have to have those discussions with the FAA to see what it would take and if it's even feasible.
- Loflin: Clarification: When people are saying it's not helping their neighborhood, are we not saying there is a degree of change?
- Reindel: We did see some increased dispersion at 2K compared to what is happening today. Depends on where you live in that area.
- Nomellini: If those total flights are over unpopulated areas, it doesn't matter. I'm not sure if the population is being accurately depicted because of the explosive growth in my area.
- Vesely: Areas have grown in lots of places, such as to the South.
- Reindel: We do have estimated population per grid. Maybe we look at those 3 identified areas and look at population in that area. Are we dispersing it to somewhere we don't have population? Let me think about a better way to incorporate population.

❖ Request/Address Additional Business

➤ Unfinished Business

▪ **Highlighting Handouts in Packet**

- Gagnon: Passing out a **Noise Improvement Matrix**. This was initiated by Kurt and updated - blue font is updated. Please review – it is a strategic framework for different activities of this group.
- Gagnon: Dan compiled **Complaint Packet**.
 - ◆ Gardon: This is a new format. It does not compare stats to last year. Overall complaints are down. This doesn't mean much. Total complaints are up. This is additional information.
 - ◆ Schofield: What about 28278, my area?
 - ◆ Gardon: 55 submitted 18K complaints. I can tell you that the majority of those 18K were from under 10 households. Out of the 227 distinct addresses, roughly 180 submit one complaint. That leaves roughly 36,180 complaints from about 25 people.
- Gagnon: Note handout with updates on **Requests/Motions**.

▪ **Written updates on Motions/Requests for Support**

- Gagnon: If you remember at the last meeting for the **Reauthorization Bill** update, you asked Dan for some information on what percentage of CLT planes are Stage 3. There is a graphic here.
 - ◆ Gardon: We will revisit this in 6 months. Slow process. I don't expect much change. Fleet changes don't happen very often.
 - ◆ Reindel: These are certified Stages. Even though most of these are Stage 4, some of them are Stage 5 but certified as 4 because that is how they were certified when built.
- Gagnon: Update from Bob Szymkiewicz on CAATT Waypoint Move ("**Raising Altitudes**" Motion). Spoke with Bob yesterday. Officially Phase 1 is not over. Phase 2 begins when design meeting scheduled – meeting hopefully in Charlotte in October or November.

- ◆ Vesely: Do you have a handout on those waypoints on where they are now and where they will be moved?
- ◆ Gagnon: I don't have it handy, but I can get information for you.
- ◆ Brown: They are not moving the waypoints. They are just raising the altitudes. EPAYE basically at Hwy 51 – EPAYE is the southern one. CAATT – both on East side. Roughly 5 miles from the airport. 36R. It is downwind on the East side.
- Gagnon: **Voluntary Curfew:** Handout from American Airlines.
 - ◆ Montross: Some context on the schedule - how it exists today. There are 50 airports that depart their first flights to Charlotte before 6am. Some of them are redeyes. There are also other airports that depart their city closer to 5am so that they can arrive before 6am. That is part of the demand that we are responding to. Currently, we have 4 scheduled arrivals between midnight and 6am. Weather is obviously a factor. Only one departure scheduled before 6 am. I will keep you posted on our schedule. We do spend time talking about scheduling and how it affects residents and communities.
 - ◆ Muckenfuss: Will the airlines continue to add flights to meet demand?
 - ◆ Montross: I cannot project, but there are West Coast flights that want to make East coast connections and arrive before 6a. I also want to keep in perspective the regional airports that – their communities are impacted by noise, too – they are departing before 6a for connections here also. This letter was not easy to write; we are responding to the demand of our business. Thanks for your understanding.
- **Requests for Support – Update on Overall Communications Strategy and Near-term Actions**
 - Hair: Introducing Melissa Treadaway. New public affairs manager for the aviation department – started on Monday. We got her from the police department. Primarily going to be involved with our community programs and assisting various community programs that we have.
- **ACR Member Survey Results and Next Steps**
 - Gagnon: Last item: One page summary of member survey; on the back is Community Engagement Project Team Launch. Note Slide 15 of ACR PowerPoint for survey results.
 - Nomellini: The intent was to test out the Community Engagement Team first. There was a lot of interest there, and Kurt was one of the volunteers. When the other teams come together, there will be a framework to copy. They are sort of the guinea pigs. Kurt has the names of the volunteers and will reach out to that group in the hopes that someone will volunteer to chair that group.
 - Gagnon: We will start with the community engagement group as we will have community meetings in the near-term. Kurt will soon e-mail those who noted interest through the survey, and if anyone else wants to be on that group, please reach out to Kurt.
- New Business
 - Montross: Update on FAA reauthorizations: There are 80 reports due to Congress by the end of the year as a result of FAA reauthorization. One of those reports includes their update on community engagement – where there would be a regional ombudsman that will eventually support the ACR. Congress appropriated 2 million dollars to support these regional councils. That's in Section 176 of the reauthorization, so there may be some changes in how the FAA engages the roundtables.
- ❖ Adjourn
 - Member motioned to adjourn. Member seconded, all in favor.
 - Meeting adjourned at 8:12 PM.