Charlotte Airport Community Roundtable (ACR)

Unapproved Summary Minutes: January 16, 2019

Attendees

Bob Cameron, Davidson
Thelma Wright, Mecklenburg
Ben Miley, Mint Hill
Ed Gagnon, CSS, Inc. (Facilitator)
Cathy Schroeder, CSS, Inc.
Gene Reindel, HMMH (Technical Consultant)
Stuart Hair, City of Charlotte (ex-officio)
Dan Gardon, CLT
Brent Cagle, CLT
Kevin Hennessey, CLT

Summary Minutes

- Meeting started at 6:00 PM
- Open the Meeting
 - > Approve Minutes: Sayle Brown moved to approve. Bobbi Almond seconded. All motioned to approve.
 - Public Input: None and no update.
 - Review Ground Rules (Gagnon): At request of John Garrett, added Slide that lets public know their role in the meeting and when they can speak.
 - > Review Meeting Packet Information (Gagnon): Cover Sheet, Agenda, Meeting Minutes.
 - Complaint statistics are in there but only formally presented every six months. Will be reviewed this meeting. *Reviewed what else is in packet*.

✤ Analyze/Uncover

- > Semi-annual Review of Complaint Statistics Dan J. Gardon, Noise Abatement Specialist, CLT
 - Gardon: Last time we spoke of this was May. This presentation offers totals for the year. Complaint totals are much lower in 2018 than 2017 (from 146k to 27k).
 - When we are flying north, not as many complaints from South Park, Mooresville/Mountain Island Lake and Steele Creek etc. Major reduction is from this.
 - Distinct households fairly on track from last year about 12% down. Three major areas that we see complaints from: South Park, Mountain Island Lake and Steele Creek.
 - Total 27,351 complaints from 579 residents (1 resident submitted 7% of the total; 25 residents account for 88% of all complaints). Vast majority (2/3rd) of all complainants issued just one complaint for the entire year. We understand that in 2017 the numbers were widely inflated; 2018 is exactly what we expected to see.
 - Wiesenberger: Why is a cumulative representation helpful?
 - Gardon: Makes sure that all who complain once a year are counted.
 - Wiesenberger: Other comment: majority of people complain only once. But their motivation still exists, so that they are not complaining because it is not helping. I have made a complaint and got a response letter from airport. Is there another way of tabulating this that would be more representative?

- Gardon: Going door-to-door is not possible. Most people, if you ask, "are disturbed by airplane noise?" Folks will say Yes.
- Cox: There are ways to frame the question so as not leaning toward a particular answer. It can be a statistically, random, valid sample of hotspot areas. Might be better energy spent doing that than continuing with this exercise.
- Nomellini: How do you use the data?
- Gardon: Lets us know where problem areas are located.
- Cagle: Information goes to the FAA when they are doing environmental processes. It also is a way for
 us to understand if there has been a change in operating procedures that we weren't aware of. And
 sometimes it is a way for us to notice noise complaints. The best example I can give is when the FAA
 started turning West earlier over Berewick, and we all of a sudden started receiving a lot of complaints
 from Berewick. What they do not do is make a cause and effect. It helps us see if there is some kind of
 FAA change that we were not aware of.
- Schofield: It would be good to have prior year knowledge to compare to and see if there's some measure of progress. I cannot tell if the complaints are better or worse than 2017.
- Gardon: It is about the same. I can provide the hard data.
- Cagle: Some of the areas have more people in them from year to year. A person who complains once or more is not more or less bothered. We don't try to draw those types of conclusions. Just numbers. The FAA would say, based on their survey, people outside of the 65 DNL are less impacted.
- Gardon: We have had residents complain more than 1600 times a day. We have 1600 flights a day, so the most that would go over a house would be generally 400, so at some point the numbers become meaningless.
- Gagnon: If I can summarize. We call this with clients trying to gauge the voice of the customer. 3 ways to measure: One is a reactive statistic, which is what this is. Basically used because something has changed that needs to be made aware of. Second, like Brian pointed out, if you wanted to get a sense of the community sentiment on airplane noise, then you would need a scientific, proactive evaluation. The third thing is to look at drivers of concern, such as internal operational measures. If frequency is generally what is causing complaints, then the airport would monitor the frequency over certain areas. The complaints statistics have benefit and cost, but if the focus is on something that has changed and needs to be addressed, or which communities are most affected, that is great. If we are looking at complaint stats to gauge overall community sentiment, then we need to go in a different direction in terms of research. Some of this is being addressed by HMMH with their new analyses.

> Approach to 2019 ACR Activities (Concurrent Identification of Local/National Actions)

- Gagnon: FAA not here tonight because of shutdown. They apologized. They are dealing with labor constraints.
- Gagnon: After last meeting in our debriefs, we talked about being intentional about the ACR's approach in 2019. What is our focus in 2019? Talked about having concurrent tracks on what we are doing. Basically, on a monthly basis what can the ACR do that can have a local impact, without having to be submitted to the FAA? Monthly, review more locally controlled initiatives and then identify recommendations for change.
 - At the same time, we discussed that over the first 3 months of the calendar year, get the ACR to finalize the slate of recommendations to be presented to the national FAA. Starting in April have HMMH analyze those individually and collectively. Here are analysis points:
 - Viability Feasibility (Technically/technologically, airspace, throughput, emissions, etc.)
 - Benefit Noise Benefits (# events above a threshold)
 - Scale Population Affected
 - Then for the rest of the year, have HMMH present back to the group for evaluation. Thoughts on this approach?

- Garrett: So, you want to come up with a slate of recommendations instead of individually. What is the advantage of that?
- Cagle: The FAA has asked for that. But we don't have to do that. FAA because of workload, they would rather see a slate of items instead of working on one thing for a while then finding it conflicts with another recommendation. If there are related things, they can review in tandem.
- Gagnon: For example, some proposals have been weaved into other proposals. Proposals may conflict, such as Sayle Brown's July proposal on departure heading may conflict with the proposal on Divergent Departure Headings. We could not do both of those actions.
- Wright: I like the idea of local and national initiatives. Is the request database that we have currently going to be mapped into these columns?
- Gagnon: Yes. We have started to cross-reference the database into the Matrix. Assuming we have time, we are going to go through part of the Matrix and see if we can identify local initiatives based on using the strategic framework. Other comments?
- Schofield: Yes, I like the idea; it gives target dates and hopefully that will compel action. I sense that we churn a lot of ideas, but we don't have a compelling nature. This seems to push us more in that direction.
- Cagle: Certain things can be run separately such as sending letters. The FAA is asking for a "complete package."
- Wiesenberger: I would like to make a similar recommendation. For locally controlled initiatives, it would be helpful to have some sort of metric that by a certain time we have identified some locally controlled initiatives that would be worth pursuing.
- Gagnon: Would it work for everyone to set as an initial goal that by the end of March we will have the first 3 locally controlled initiatives identified?
- Wiesenberger: (After Nomellini comment) Let's have a quarterly deadline to identify locally controlled initiatives, without having to identify a specific number of initiatives.
- Request for Analysis Gene Reindel, Vice President HMMH (Altitude-based Turns Additional analysis to assess effects of Altitude-based Turns)
 - Reindel: We have given lots of analysis; should help you in determining the slate. *Summarized what he is presenting tonight. See Slide 2 of HMMH Slideshow.*
 - Slides 4-7: *Current motions that are chronological. What the motion is, date of motion, ACR status and HMMH status. Lots of information. Status of ACR requests.* Please look over the requests/motions before next meeting. Too much to go over now. Let me know if you are in agreement.
 - Slow the departure speed have an update. The noise coming off of the airframes at slower speeds may be enough reduction to provide lower noise levels on departure. People are looking at that. Boeing manufacture has run their models to see if they are getting the same results. I will keep you updated on that.
 - Schofield: When we say "updated in another motion," does that mean that I can ignore this line item because the subsequent motion is all encompassing?
 - Reindel: Yes, if it says updated in another motion then it is that other motion. It wasn't clear sometimes because I was not clear which motion was taking precedence. Ed/I can clear that up.
 - Miley: With everything you're working on, is there a budget constraint or workload challenge?
 - Reindel: Only so much that we can do in a short period of time a month. It is the workload. Labor intensive. Noise models take a lot of computer time.
 - Sauber: Is there a way to determine if something will have an impact or affect us positively in terms of the 3 areas of most noise? It may help us to understand what is being accomplished and to see as a group if this is going to affect us positively.
 - Reindel: We can look at that.

- Reindel: Altitude-based turns: more analysis. FAA asked about seasonal. Recommend that we do a
 year of data instead of just a single day. Just a single day now. We would modify the whole year.
 When it is hot out, planes climb slower. So now the green is how it was done on that single day and
 the red is modified with 2500 feet MSL altitude-based turn. Folks at HMMH that can make algorithms
 for these tracks to show the whole year.
 - Slide 10 Noise analysis comparison. The dots represent the noise levels 70 dB and greater. Baseline and modified by the 2500 feet altitude-based turns. You can see that the dots move down a bit. When the turns are delayed, the noise moves. The goal was to see if we could get increased dispersion - basically just moving the sound level down south.
- Garrett: Please remind of the landmarks.
- Hair: Reminded of landmarks, and they are included in the legend.
- Cox: Are we doing this to increase dispersion? I don't recall saying that. The group can dispute.
- Reindel: I think we did. Sara had brought in the idea of doing different headings or having them turn at different locations to spread the noise a bit.
- Cox: I agree with you there; I'm talking about the 2500' part to create dispersion. I thought this went back to the request from my area to gain greater altitude, meaning less noise.
- Brown: Dispersion would come from different airplanes arriving at same altitudes at different times. That is why we went with 3000 and 3500. Am I interpreting that right?
- Reindel: Yes, that's my understanding.
- Blair: Is there an altitude where they turn now or 2 miles out?
- Reindel: It's really location based. As soon as they get far enough to turn, they turn there.
- Blair: So larger planes would go wider?
- Reindel: Yes.
- Wright: Baseline and modified: It looks like smaller footprint of yellow on modified. What does that mean? And it looks like a green dotted line near the "Mecklenburg County" that is not there in the modified. What is that?
- Reindel: You are right. Those are the northern most points so you are not going to get the turn as soon. It has a greater effect on the turns to the east than the turns to the west. You're right. It does look like the footprint is smaller because as you go further on the flightpath before turning you get the benefit of being higher before turning. Therefore, the noise is less and more far out.
- Nomellini: Struggling with the scale of these. How much work would it be to break up the Slides so we can zoom in?
- Reindel: We can zoom in. I think you need to see the whole operation first. Slide 11: Area of change in noise levels. Yellows and red, noise levels have gone up and greens where the levels have gone down.
- Blair: So, they are still over my house. So, they would be further south when they turn, and they would be higher?
- Reindel: They would be further south before they turn which implies that they are further south and higher when they turn.
- Wiesenberger: So, this is a relative change from today of how many feet of altitude?
- Reindel: Not that much. 500 feet.
- Wiesenberger: Looks like there are lots of green dots over populated areas.
- Reindel: Yes, because you're getting higher before the turns, but you'll eventually go over the same areas.
- Cameron: York County- Why is it worse over there than on the previous Slide? Same thing up in Gaston County. Why is it worse?

- Reindel: We would have to analyze that a little more. I would have to look at the data more. Yellow dots are 70 dB or greater on Slide 10. On Slide 11, the numbers are different; the colors represent different things change in Lmax on this slide.
- Reindel: Slide 12: Number of events above 70 dB. What is important is that the further out the colors show that there are less events above 70 dB. I know that the actual number of events is important. I was just trying to get you familiar with these types of plots. People to south will get more operations. Slide 13: Different colors represent a range of events. People to the south would be getting more operations.
- Sauber: Help me understand Slide 13 where the red is, to center of red and East? What part of Charlotte is that going over?
- Hair: Quail Hollow Middle School is #4.
- Cagle: Quail Hollow Middle School would get more events over 70 dB than it does today.
- Nomellini: What it doesn't tell you and I think we need to know is are they going from one event to 2 or 1 to 300?
- Reindel: The darkest green is a change between 25 and 75 fewer events a day. The darkest red is a change of 75 more events a day.
- Cagle: The math on this is net zero. There is no scenario that creates a smaller number of events over 70 dB.
- Reindel: The reason you are getting more events because the aircraft is closer and the reason for less events is the aircraft is further away.
- Cagle: You may still have the same number of aircraft going by you. That number does not change.
- Reindel: Did the same things for 3000' and 3500' and showed the results. How the flight tracks had changed:
 - Areas of difference on Slides 16, 17, 18 and 19 (3000'). Slides 22, 23, 24 and 25 (3500'). I think it was good that we went out to 3500' because you can see that there are fewer events out to the east. You are getting more dispersion because the geographic area is greater.
 - The yellow represents less events. Altitude-based turns would be noticeable.
- Cox: Months ago, we looked at a lot of data that the airport provided. We framed it as pre and post NextGen. There were some departure paths that were charted. Somewhere between 2500 and 3500 looks more like the pre NextGen paths that were in place in this community for decades. Just making that observation.
- Garrett: Going back to Slide 21. Flights that go straight south and the ones that go east, there seems to be a wedge that gets virtually no traffic. Then Slide 23, the red is because they are not getting any operations at all now. What I am trying to be clear on is that actually represents the most dispersion across the entire southeast quadrant. Is that accurate?
- Reindel: Yes. Slide 21: The red is filling in that wedge.
- Cagle: To your point, Brian, I'm not sure if it would be exactly how it was. I think it would put more
 aircraft on how it was, but I don't think it would reduce the number of aircraft over, for example, your
 house than pre Metroplex. I think it creates more dispersion by filling in the wedge by everything that
 came out of the wedge. Before, generally speaking, everything was in the wedge, and this would help
 balance that out into the wedge, but it would not be like before.
- Reindel: It is a different procedure so it would not be the same as before.
- Sauber: So there would be the same number of planes at the same altitude but reduce the exact pinpoint of a rail going one after the other over a particular area?
- Reindel: Yes.
- Blair: Slide 21. This is what we see. I am near Quail Hollow Middle. We see plane after plane after plane.

- Cagle: It might be good to do the actual numbers (graphics) within 1 mile, 2 miles, etc. of different points that are laterally in a line showing aircraft pre and post in certain places.
- Reindel: We could do that; would want to do that on the annual data instead of the daily. We could show number of aircraft that flew that area and average altitude.
- Nomellini: And when you do that you should overlay the altitude also as that makes a difference.
- Reindel: Yes. Could also show in that area the number of aircraft that flew this area and average altitude of the area.
- Blair: So, the bigger planes would be the last to turn generally?
- Reindel: Likely, but not if it is empty. If a large aircraft goes out relatively empty, it will be one of the first to turn.
- Blair: Is this a feasible option in the grand scheme of things?
- Cagle: This is my opinion based on what Mark (FAA) has said. This would have a drastic impact. This is what FAA has said. If they do not know when a plane is going to turn, they cannot send the next plane. The other plane's waiting to take off will sit and cause a delay. But, I do think if the point of it is to create more dispersion or get the departure path more like how it used to be, there are ways to do those things without doing altitude-based turns. Gene and I were trying to have the goal of filling in the wedge - how to turn the wedge more into a box. Altitudinal was one way. But I think there are other ways to do that, and they are more feasible for the FAA. Is the goal more dispersion or more like how it used to be?
- Miley: I think it depends on where we live. The change we'll make will be incremental; I think we are getting caught up in the analysis. Where do we want to push the noise?
- Wiesenberger: If the throughput is a limiting situation on altitude-based turns, can there not be a combination of a waypoint and/or altitude-based point that could give a better guarantee to the controllers that the plane is going to turn by this point?
- Reindel: Yes, that makes sense. My suggestion is that if we can agree that what we see at 3500' turn, for example, is more like what we want to see, we provide that to the FAA. Ask if they could evaluate procedures and bring us back something to look at. Also, (Adam agrees) the delay is going to be greater than it is going out. We could look at the time difference (today v. future). The turn area is larger, but not a huge change. They still know where the turn is going to be. Does what we have done help, or does it impose a big delay? The FAA needs to look at this.
- Cagle: When the throughput capacity of the airfield goes down, it does not mean that the number of flights go down. It just makes the day longer. Today, operation starts at (generally) 530a through about 11-ish, depending on the weather.
- Brown: There are not constant operations all day long. It will not extend the day but there are peaks and valleys. But it will extend the operations during the day. It will affect the last bank.
- Cagle: It would have some impact on first and last banks. Number of flights will not go down.
- Reindel: One suggestion about using the new procedure would be to use it just for certain times. That would create even more dispersion.
- Brown: That's a great idea.
- Gardon: Think that would be easy to write that procedure, from a technical standpoint. That would be real easy from a procedure writing standpoint.
- Reindel: It would.
- Cox: For a long, long time the departures turned further out. Do we have any more questions on this item?
- Reindel: Altitude-based turns conclusions on Slide 30. Moving the noise further south at 3500. Shift departure turns to the south before turning. Decrease noise levels over areas close to the airport and increase noise further from the airport by delaying turns. Increase dispersion for turns to the west and southeast as altitude is increased. Increased dispersion with increased aircraft turn altitudes is expected.

- Negative effects could be not knowing where the aircraft will make the turn. I don't think it is as wide a swath as even I was thinking. Would need to be evaluated. The greater the increase in aircraft turn altitudes, the greater the uncertainty where they may turn and may negatively affect capacity. Cold weather vs. hot will have an effect.
- Next steps: Quantifiably assess effect of altitude-based turns on airport capacity and throughput work with FAA on that; conduct additional modeling of altitude-based turns with a complete year of operations data.
- Cagle: Are we asking for it to look as much as possible as before? We need to know what we are being asked. We need clarity.
- Nomellini: Our neighborhood, we would say go back to the way it was, but our understanding we can't go back to the way it was so we say "let's share it."
- Cagle: The FAA does not like to move noise; they want dispersion. The FAA will say they cannot make it exactly like it was. That operating procedure is no longer valid and could not be replicated. They could comment on whether they could craft operating procedures to approximate how it used to be.
- Nomellini: I don't think it needs to be either/or the intent was to get dispersion. If the FAA is
 willing to address making things similar and maybe something for them to analyze when we put our
 slate forward.
- Reindel: When you presented multiple RNAVs, it is a safety issue for the FAA; that may still be a viable issue. We feel like the altitude-based turns might do what it is that you are after.
- Nomellini: Whoever is under the RNAV points is hit and miss.
- Cagle: I think that leads into another item the divergent headings trying for more dispersion. The beauty of more dispersion is that some aircraft may turn earlier. More dispersion and environmental fuel burn, etc., yes, but some aircraft may turn less; we might talk about that 2-mile restriction. Maybe it could be a wash on the environmental concerns.
- Sauber: Does any of this departure have any impact on approaches particularly from the south and the east?
- Reindel: It is not increasing or decreasing those.
- Miley: Can we have a show of hands to have it go back to the way it was?
- Cox: We may be quibbling over semantics. Let's look at the annual view, and it might make us decide which way we want to go. Does that sound reasonable?
- Wright: I cannot see the legend. It needs to be bigger.
- Reindel: The legend is the same on all the maps. We can make a copy of that separately.
- Garrett: Do we think this can be one of the slate? Are we over analyzing?
- Cameron: I agree but we need the annual view.
- Brown: 3500' or all altitudes?
- Reindel: Let's start with 3500' because it is greater dispersion.
- Cagle: What about being the average. Should it be 3000 or 3500? From what I remember Mark saying, the higher the altitude the more concern the FAA has.
- Garrett: We're going with the one with the most dispersion 3500' or all altitudes?
- Members: 3500'.
- Wiesenberger: Can you and your team come up with any recommendation for maximizing the capacity and throughput with altitude-based turns and something else?
- Reindel: Probably not, but we can certainly work with the FAA at that point. FAA has ability to use a program for free whereas it would be costly for us.
- Request/Address Additional Business (45-50)
 - Request/Motion Databases

• Gagnon: See the request/motion databases in handout. They are being put on CLT website. We'll work to make it more clear how different items on databases relate to each other.

> ACR Motion Discussion - Voluntary Curfew Request - CLT Staff

- Cagle: I propose that we draft a letter for the ACR to review. Not a letter asking for voluntary curfew but asking airlines to be cognizant of negative impacts to the community associated with nighttime operations to take that into consideration. Voluntary curfew is unenforceable. What would the times be? I think that airlines that want to operate at night will, regardless of our ask.
- Brown: Can the airport impose fees?
- Cagle: No. Only grandfathered airports (pre-ANCA Airport Noise and Capacity Act) can do that. Mandatory curfew has not been done.
- Nomellini: Why do you think that your letter would be more effective?
- Cameron: A letter asking them to be cognizant implies they had no idea about the effect. Your letter would do no good. I think a voluntary curfew would be appreciated and register with the community.
- Cagle: What would the proposed voluntary curfew hours be?
- Cameron: Scheduled operations between 11p and 6a. I would expect to get no positive response for that, but possibly we would get a response a year from now from American that states "we tried ABC."
- Cagle: Do they know that there is an ACR looking at this here in Charlotte? I don't know if that is true.
- Cameron: Usually a representative of AA at ACR.
- Cagle: Do the executives know that, too? I don't know.
- Schofield: I think the ask is reasonable. Ask with a timeframe, and see where it takes us.
- Cagle: I will need to speak to the city manager about it. If AA wants to add operations after 11, the city would not discourage that.
- Nomellini: We understand that. We as an entity want to register this request, understanding the limitations.
- Cagle: We CLT will draft a letter.
- Gardon: About 2 months ago, I did a study about nighttime noise with Charlotte operations. We found that the hours of 1a-4a would give us the biggest bang for the buck without interrupting scheduled airline service. I believe that instituting a program that states 1a-4a, we would get the least amount of pushback and greatest probability of success.
- Cagle: We will take a pass at a draft. Scheduled service is based on demand. If the demand is there, they will fly. This may help the other aircraft the general aviation, the military, which is not the lion's share of the operations.

Additional Business

- > ACR Strategic Benchmarking Update Kurt Wiesenberger, ACR Member
 - Wiesenberger: We added a column to the Strategic Framework local control suggested by Brian. We made some minor changes to incorporate requests and recommendations that exist on other tables. I had asked for folks to email me additional recommendations, changes, etc. Did not get a lot but added them in where they did. Purpose is to start using this document in a strategic way to look at these causes in a more structured way and to fill in the blanks.
 - Gagnon: (goes over Page 1) How can we utilize this tool to see how we can better understand what can or is being done locally? *Walked through the columns on handout*.
 - Hair: Loud aircraft has low/no local control. We don't control who flies what.
 - Gagnon: Column F: AA is modifying 283 aircraft with vortex generators quiet technology. We are trying to identify ideas to later analyze. Other considerations relating to this noise cause?

- Reindel: I believe there is an existing initiative. Congress has phased out all Stage 2 aircraft. The loudest aircraft are no longer flying. The vortex generators are great, but I think phasing out the next loudest aircraft is better.
- Reindel: The vortex generators do reduce noise but where it reduces it is a limited time in space. Only at a certain speed where it generates the noise.
- Wiesenberger: Phasing out Stages 2/3 aircraft, adding Stage 5 aircraft. We have no local control over this.
- Gagnon: What is the timing on Stage 3 aircraft being phased and Stage 5 phased in?
- Reindel: No timing for phase out of Stage 3. It's in a bill for them to consider phase out. If they determine to phase out, they would determine when that would occur. For Stage 5, it is in existence already for a certain size of aircraft. Any of those aircraft coming off the line today meet Stage 5.
- Cagle: A local initiative would be to send a letter to our federal elected representatives asking them to consider inclusion in the next reauthorization bill to include the provision for phase out of Stage 3.
- Reindel: I would say you would want to support what they are doing now, and you would like to see that they go forward with the phase out of Stage 3 ASAP.
- Sauber: The question is where and how to send the letter.
- Cagle: On the local side, we send a letter. Ask Dana Fenton, city's intergovernmental affairs representative to ask city council to make that a part of legislative agenda.
- Sauber: We don't have the resources to do it. If we lean on the city and make it a part of their agenda, it compels them to do it.
- Gagnon: Does ACR need help from CLT to draft a letter?
- Cagle: There was a letter circulating from a lot of cities with long list of things for Congress to consider. More funding for FAA, more staffing. We can all agree that would be good. We should look at all of those things and wrap them up in one big letter and take it to City Council for consideration on legislative agenda.
- Nomellini: Do you need me to find that letter?
- Cagle: We still have that. Let's look at incorporating that in.
- Wiesenberger: Related to this, on page 4 we have another category called People, Organizations. Some of what we talked about may fall into that.
- Gagnon: Back to page 1. Next cause is inadequate residential insulation or abatement especially in the contour. How do you consider that as a high impact level of noise, or not high?
- Garrett: Not really a cause.
- Wiesenberger: Terminology is not really a cause but can be a solution. Inadequate leads to greater noise.
- Gagnon: Viewing this through the lens of that resident, this may cause a negative perception of noise.
- Wright: I would say it is Medium Impact. We are just outside the contour but are impacted.
- Schofield: Family building codes: They have more insulation, they are more tolerant of greater noise levels. If you look at industrial corridors for multi-family developments, that is a relative impact in our analysis.
- Cagle: Federal guidelines weigh into this. Houses built after a certain date, we cannot insulate or sound mitigate beyond what they have because of building codes. After the energy crisis, building code has houses built for better noise mitigation. All the homes that we can sound mitigate, we have. Some have declined.
- Hennessey: There are about 15 people that could potentially qualify right now. 13 of them have been able to qualify since 1990. *Pointed out display of current contours*.
- Cagle: The issue might be is the threshold the right threshold? Is the line in the right place?
- Gardon: Threshold is federal guideline. Nothing much can change. No local control over that.

- Brown: Are the new homes (near Amazon) that are being built being insulated to the 65 DNL?
- Cagle: None of them are inside the 65 DNL; contour has shrunk. 2015 contour is smaller than the 1990 one. Reason is because of the phase out of engines. Now are starting to go back up again.
- Schofield: Going back to the document, 1996 DNL is referenced, yet we are looking at the 2015.
- Cagle: The reason we have never gone back to city council is because it will affect fewer houses.
- Hennessey: If your house is built after 1980, you don't qualify. So, there will be complaints with new building.
- Cagle: They don't meet the federal definition of significant impact, so the City can't force developers to tell buyers about the airplane noise.
- Gagnon: Thanks, Kurt: In going through the items I hope you can see how we can systematically start working through the Strategic Framework. We can learn from each other and benefit. In terms of the 3rd item, if you have ideas relating to noise monitoring, please send to Kurt.
- Nomellini: Sheet is very comprehensive. Can we break down the document in chunks?
- Schofield: Tonight, we talked about some of these things. This document helps us keep track.
- Gagnon: We can focus on that last item on p. 1 and address the timing section at the top of p. 2 at next meeting.
- > Alternating Downwind Rails (Motion) John Garrett has asked that we defer this item until the next meeting.
- New Business
 - > Determine How Current EIS Addresses Divergent Departure Headings CLT Staff
 - Cagle: I believe that I said last time that the EIS was in the no build scenario. That was incorrect. EIS is looking at divergent headings on existing runway **plus** the new parallel runway.
 - Gagnon: We had asked Gene to do some analysis on divergent departure headings but asked him to
 pause to see if it was being covered by the current EIS. Based on what Brent said, any thoughts on
 how much to continue to do analysis on divergent departure headings as a part of the potential
 solutions? Gene had done some additional analysis last month with altitude-based turns and divergent
 departure headings.
 - Cameron: As I recall it was promising.
 - Nomellini: I don't know why we would stop. I am not connecting the dots on the new runway and where we are now.
 - Gagnon: Based on what Brent says, it does not sound like the EIS would benefit us relating to divergent departure analysis, but there was a decision to pause to see if somehow that EIS could give us answers, but since it sounds like it won't – Gene, is this something HMMH could continue to analyze?
 - Reindel (*Nodded*).
 - > CLT ACR April Meeting (Discussion/decision on potential reschedule deferred until next meeting)
 - > Other Discussion
 - Garrett: Question for Brent. When can we see flight traffic patterns assuming the 4 parallel runways?
 - Cagle: I will have to check. The FAA as part of all environmental processes has public input and public meetings. Whenever we have those, I'll bring the dates.
 - Hair: Dates have not been set. Their timeline 6 months ago was to have them in March. I'd be surprised if that happens. I will let you know as soon as possible,
 - Cagle: We will take it to the community to get as many as possible to participate. The first round was well-attended.
- Adjourn
 - > Blair motioned to adjourn. Schofield seconded. All in favor.
 - Meeting adjourned at 8:16 pm