Charlotte Airport Community Roundtable (ACR)

Unapproved Summary Minutes: October 12, 2022

Attendees

Natalie Rutzell, County 2, Chair
Phillip Gussman, City 1, Vice Chair
Nakia Savage, City 3
Sherry Washington, County 4
Mark Loflin, County 6
Sayle Brown, Cornelius
Matt Hamilton, Davidson
Sam Stowe, Gaston
Thelma Wright, Mecklenburg
Charles Soussou, Pineville
Jacob Pollack, York

Gene Reindel, HMMH (Technical Consultant)
Pearlis Johnson, FAA
Lisa Favors, FAA
Stuart Hair, CLT (ex-officio)
Dan Gardon, CLT
Kevin Hennessey, CLT
Chris Poore, CLT
Michael Pilarski, CLT
Ted Kaplan, CLT
Tracy Montross, American Airlines
Ed Gagnon, CSS, Inc. (Facilitator)
Cathy Schroeder, CSS

Summary Minutes

- **Open the Meeting**
  - Meeting started at 6:15 PM
  - Rutzell: Welcome to the Airport Community Roundtable. Our mission is to provide the City of Charlotte Aviation Department (Airport) and the Federal Aviation Administration (FAA) with broad-based community input into airport-related noise impacts and to find, where possible, practical solutions and recommendations for the FAA to consider when determining aircraft operating procedures at Charlotte Douglas International Airport.
  - Gagnon: *Facilitated introductions of ACR members, CLT, FAA, AA, HMMH, and CSS.*
  - Wright: Do we have a quorum?
  - Gagnon: Yes, we have 10, and that is what we need.
  - Gagnon: *Went over handouts*. Included are agenda, meeting approach; we will receive some public input, we will go through our normal Monitor, Engage, Improve sections of our agenda. We will get a Noise 101 presentation from Gene Reindel before we go to Additional Business. Some of the mechanics of the meeting for remote participants: Utilize the chat - we do save the chat. Use the raise the hand function. Kevin Hennessey will monitor this. Stay muted until called on. State name when speaking.
  - Rutzell: Approve Minutes: Do I have a motion to approve the Minutes from July? *Wright made motion, then seconded by Loflin. Minutes are approved.*
  - Gagnon: Ground Rules: When working together we want to have healthy, productive, effective meetings. Keep our comments brief but brilliant. Effective in making noise improvement. Try to not make/take anything personal. Stay on task, stay on agenda.
- **Receive Public Input**
  - Gagnon: *Went over guidelines for public speakers: 3 Minutes. If more time is needed, it is up to ACR chair. ACR may or may not respond at time of meeting.*
  - Person #1 Name – Georgine Jeffries
  - *After Statement, ACR participants shared comments/questions:*
    - Rutzell: Are you aware that we have made some proposals regarding the departures and the approach to the FAA which are currently under review?
    - Jeffries: Yes. The change that I am aware of based on the Minutes - I did not check the summer Minutes – but the Minutes I checked prior to that was that you were requesting a higher elevation in an approach, not necessarily a route change.

- Rutzell: That is correct, and there is a rationale for our approach to the route change. We can touch base offline. We have been working on these proposals for over 5 years, so we have some good feedback to share with you. Thank you for coming and sharing with us.

❖ **Engage/Improve: Part 150 Noise Compatibility Study and TAC Meeting Update –** Dan Gardon Noise Abatement Specialist, CLT

- Gardon: Quick update of the progress of the TAC (Technical Advisory Committee) meeting associated with the Part 150. There is a more technical body meeting surrounding the Part 150, of which Natalie and Phil are representatives. A lot of the TAC meeting was information that the ACR has already received at the July meeting. The first meeting was 9/14/22. It was very similar to the overview by Landrum and Brown that we got in July. There was overview of terms and primary elements such as noise exposure maps and noise compatibility program. One thing to keep in mind is that many individuals at this TAC meeting are not aware of the Part 150 process, so just like you they are coming from the ground up. As a reminder, we will talk very briefly about these primary elements. The noise exposure map is the first portion of the Part 150. It is the description of noise levels for current and future conditions. There is a future model and a current model that you have seen an earlier example of; the 2nd major part of the Part 150 is the Noise Compatibility Program. These are the actual recommendations that come out of the Part 150 program. These are typically grouped into 3 categories – Noise Abatement, Land Use Mitigation, and Implementation Measures.
  - There were a few takeaways from the first meeting. It was basically an introduction meeting for the group:
    - Feedback on fleet mix for model inputs.
    - Review of roles/participation in future TAC meetings.
    - Confirmation on organization/groups to include – and ACR is included – in public meetings.
    - Approval of monitoring locations – As part of the Part 150 process to essentially confirm and review the model inputs, 24 short and long-term noise monitors were put in place around the airport. This was a term of 7 days, ending yesterday – Tuesday to Tuesday. There is not a lot to report on except it is a normal part of a Part 150 process.
    - Procedural questions from TAC members. A shout out to Phil who was a driving force of getting people engaged during this meeting.
  - Looking at the process map, we are in the data collection, forecast, and noise monitoring stage. We are heading toward a creation of the existing noise exposure maps.
  - This is about a 2-year process. You've seen this map before and here we are in October having just finished the noise monitoring and working toward noise exposure map - which we predict will be done sometime this month. Next meeting of the TAC in winter and yet to be determined.
- Gussman: When reviewing the Minutes of the TAC, it was highlighted that Natalie and I did most of the talking after the prepared statement. I think that we are representing the ACR well. One thing that I thought was important was - we use these models to predict where the noise is, who is impacted by it, etc. The Part 150 does have the short and long-term monitoring to verify those in our environment. So, it is not just a fancy algorithm. Soon that algorithm will be informed by the noise measuring taken in our own city. That made me feel better about the process to some degree. Natalie made some good comments about the 65 DNL. This was an early meeting. No one in the room was fully ready to go. Only the FAA knew what the Part 150 process was going to be like. Everyone here should feel comfortable about learning about the Part 150 to help Natalie and I ask the right questions.
- Rutzell: This will be approved by City Council. I think that gives us opportunity from our Government Engagement Project Team to give them the heads up that this is coming down the pipeline. We have a voice, and we will lobby for our cause. It does give us something to

go to Council with. The monitoring was interesting. We talked about if some of our homes could be used as monitoring locations. We also talked about the timeline and how will the departure proposals be incorporated.

- Gussman: We asked if we could get consideration beyond the 65 DNL.
- Wright: The 24 short and long-term monitors - where were they put in place?
- Gardon: In a number of locations, either adjacent to airport property or on airport property, some as far out as Steele Creek, some as far out as your neighborhood, Thelma. In general, within 3 to 4 miles north or south of the airport.
- Gussman: They did share a map of those.
- Gardon: I can share that map, as well. They shared a map of flights in the area, complaints in the area, and then correlated to what properties were available to determine locations.
- Wright: Mountain Island Lake, York County, and the person who spoke earlier - it sounds like those areas were not covered as part of the noise monitoring.
- Gardon: For the purposes of the Part 150, they were not. This monitoring is not an end-all/be-all; it's a confirmation of the modeling. One other item, several months ago the ACR requested data from Gene and HMMH regarding noise levels at your individual addresses. I have that information prepared and can send that out to you in the morning. That may answer some questions, such as DNL and N70 levels in your neighborhood.
- Gagnon: Any questions or comments?
- Montross: To add context to the bullet around fleet mix - the baseline that the consultant is using to evaluate current conditions in the fleet mix is actually a little different than normal time. We've talked before about the significant presence of regional operations. Usually, about 56% of our daily flights are regional jets. Because of ongoing issue of pilot shortage, we have reduced our regional operations significantly in Charlotte. Again, the baseline to be used to evaluate the current conditions around noise will have a higher percentage of mainline aircraft in that evaluation, and we will be working with the TAC and the consultant to give additional information around what we could expect once the pilot shortage is resolved or closer to being resolved in the years ahead. The current conditions that will be assessed will be different than normal because we have a reduction in our regional fleet.
- Pollack: Did I hear that a sound analysis has been done for every ACR member, and we will be getting that information?
- Gagnon: Yes, HMMH has conducted that for every ACR member, and Dan will send that out in the morning to the ACR membership.
- Pollack: Thanks, that will be great to receive. A follow-up for Tracy - when she talked about the changing fleet mix, it sounds like the baseline will include a heavier mix of larger planes, so would we expect that to result in a baseline that reflects more noise or less?
- Montross: That is my assumption as well – larger planes generate more noise. We will continue to talk to the consultant about how we find a baseline that reflects a more normal environment. We do believe that the issues we are facing now will change. We are always challenged in forecasting fleet mix that far out - 2028. In talking with the consultant this week to help them understand where we were in 2019, what is different today, and then finding some balance between what the normal operations are. I would expect the noise baseline is going to be higher given the difference in fleet mix.
- Pollack: The significance is if noise baseline is higher and is not adjusted, then it would presumably be more permissive in terms of allowing flight changes that lock in those louder noises.
- Montross: And that is what we need to better understand from the consultant. How are the alternatives going to take into account the difference in fleet mix today? We have a follow-up meeting in November, and we will talk more about this. It is one of our concerns - the baseline is not entirely accurate for normal operations; it is what we are experiencing today.

- Additional Related Comments from the Online Chat:
  - Soussou: Smaller planes will be noisier. Anyone who watches planes land near an airport would be able to tell smaller planes land and take off louder. https://airinsight.com/which-is-the-quietest-aircraft/
  - Reindel: The report linked above indicates that the regional jets are quieter than a Boeing 737. Tracy reported that they are currently using fewer regional jets, which means the quieter aircraft are operating less frequently now than typical.
  - Pollack: I don't know that smaller planes are in general louder; I think some of the larger planes may have more noise mitigation improvements built in. I've thought about the size difference and watching/listening, it's hard to say. I think the larger planes are in general louder. A lot of noise may depend on the throttle position and flaps/landing gear status of the aircraft, which produces drag. It is possible that pilots of the smaller planes may tend to come in faster from a distance.

❖ **Engage/Improve: Updates from Project Teams** – Ed Gagnon, ACR Facilitator

- Gagnon: *Reviewed handout document – pages 3-5; moved to pages 6-7 that relate to the Project Teams.*
  - As ACR members, you participated in a survey that was conducted after the July meeting. There were a couple of different purposes of this survey. First, to support Natalie and Phil as the ACR representatives on the TAC – to give them guidance in terms of topics to bring up with the TAC. Secondly, to get your input on Project Teams. Thirdly, about between-meeting communications.
  - First, Phil just mentioned that he wanted to make sure that we are asking the right questions, that you are getting the right answers. Page 6: Survey Example Topics - on the survey there were 7 different example topics listed that you wanted the TAC to consider – items that Natalie and Phil would ask the TAC group or consultant. What is in italics under Additional Topics of Interest are other points of guidance that the ACR members have provided to Natalie and Phil. If there are other things you want brought up to the TAC, reach out to Natalie and Phil to take that information forward.
  - Second, Project Teams: One person may be interested in chairing the Government Engagement Project Team. As we get involved in TAC and with everything being run through City Council for approval, it is very important for that Project Team to be active. We asked about the frequency of Project Team meetings. Most prefer meetings on the off months from the ACR meetings. Project Team meetings 8 times a year. In terms of remote v. in-person, majority prefer remote.
  - Third topic: Communications between meetings. Based on survey results, what you see here under ACR Newsletter header – you would like an ACR newsletter/email update between ACR meetings – 4 per year. So, between the ACR meetings, sending something formal to you all. Some of the content that would be most important to you is Part 150 updates. Tied for 2nd were 3 different items – Project Team Updates, key measures document updates from CLT that Dan puts together, as well as other links to noise-related news releases and other information from the FAA. Then, you see in the 3rd sub-bullet, there are other updates and reminders of things to include. We plan to have Project Team meetings several times per year and then come out with quarterly newsletters as well.
  - Page 7, in terms of next steps for Project Teams, we are going to reach out to members who have shown interest in particular Project Teams. Make sure that those folks are getting the schedules and calendar invites. Convene these upcoming meetings for each team, confirm each group's focus, and determine a reasonable expectation for the time commitment and activities of Project Team members.
- Gussman: Biggest thing we want to add is this is the way we can stay engaged. This is the way we can do more on-the-ground work than just sitting around this table deciding the big things. Deciding the little things on these Project Teams can have as much impact as talking to FAA, etc. We really want to see engagement on this front - hop on a call, email us. I encourage everyone to get on to these in November. It is how we can get more done.

- **Monitor: CLT Updates on Existing Initiatives and Operations –** Stuart Hair, Director of Commercial and Community Engagement, CLT
  - Hair: Two big updates to share with ACR. We have big construction milestones that are occurring with the Airport Capital Program. Upstairs roadway/departures level roadway was closed; 2 lanes reopened Monday night. There are multiple Capital program milestones happening. When you think of your engagement of your airport, not just with noise issues but with other issues, we welcome your feedback as to how this is affecting your communities. We know that your engagement is broader than with just noise. We know that the Capital Program is affecting the community.
    - Also, on the South side of airport, construction is happening along Yorkmont Road, West Boulevard – that is putting in a new connector between the southern ends of the runways. North end taxiway project going fast and furiously right now. We recently closed the airport overlook and a section of Old Dowd Road. A temporary overlook will open up shortly. Multiple big construction projects that are ongoing, and we wanted to acknowledge for you.
    - Point Two: The other one is similar. We are about to reach a milestone with the next Capital endeavors. We anticipate submitting a Letter of Intent to the FAA shortly, requesting funding around the airport improvement program for the 4th parallel runway and associated other infrastructure. Essentially, we are asking for the FAA to help fund about half of that project. The formal submittal of that should happen the next few weeks. We will get some certainty around the funding of that runway. We all know that the new runway will dramatically change flight procedures around CLT. When we think about the work you all have been involved in around noise for the last years, I think the biggest single change is adding a new runway. Closing the cross runway was a huge change. Adding the new runway, that will dramatically change noise, and we anticipate that our partners at the FAA will make changes. There is a lot with that project and want you all to be aware.
  - Hennessey: Anything besides noise, please come to us. We can direct you appropriately. We want to be aware of as many issues as possible.
  - Wright: Is it normal for the FAA to pay a portion of the cost of a new runway?
  - Hair: The FAA has an established program called the Airport Improvement Program - AIP. It does allow Federal Participation grants toward major construction projects. AIP is a standard program that airports participate in. When we think about getting grants from the FAA, that is one where there are a lot of connectors with us and the FAA. So, yes.
  - Hamilton: Regarding the 4th parallel runway and the flight paths that will be affected due to that, do you have an idea of when those flight paths will be established?
  - Hair: No. There have been preliminary conversations of how they might be used, and part of those conversations went into modeling around whether we truly need the 4th parallel runway. There has been some preliminary design that has been sketched out over how that runway might be used, but there has been no formal design of those procedures. That happens next, once we proceed with the new runway.
  - Pollack: Is it still a question that the 4th runway will be built?
  - Hair: We do have approval to build it. Now, we have to find the funding to build it. No, it is not a question that it will happen. It just has to follow the process.
  - Gardon: Key Measures document. Unfortunately, you do not have this in your handout, but I will send it out tomorrow. It has been approximately 1 year since we started looking at key measures in this format. Basically, we are looking at statistics in 2019 comparing in 2022 and then looking at year over year changes.
    - Number of operations per day: We are not quite at pre-Covid levels - we are at 1350 daily average operations. We are slowly creeping back to those pre-Covid numbers.

- Next is important talking point – percentage of North v. South flow. This seems to change year over year without a lot of rationale, but we are approaching in 2022 close to a 50/50 split between north and south flow operations.
- New section: Here at CLT we have a Noise abatement procedure: Aircraft turning to the south must fly runway heading for 2 miles before turning to the east or west. This is commonly referred to as the 2-mile restriction. We received a request to monitor the number of flights that violate that restriction or do not violate it. Approximately 20-30 flights violate that restriction average daily; we'll edit this figure before sending out the file tomorrow – calculation issue. Larger story to tell. We receive data from every plane that departs or lands this airport on my flight tracking software. We can use this to see how many flights go over specific areas, what times, what altitudes, etc. We can set filters, so graphic I'm showing is October 6 – we had 1453 jets utilizing the airport. Green lines indicating departures to both north and south, and red lines indicating arrivals. This gets a bit complicated to look at and in the case of violations, we have a filter that filters out any aircraft that turns earlier than 2 miles. So, for the day of 10/6/22, there were 30 flights that the system detects as violations. It looks like clear violations that could have been weather, but there could have been false negatives or false positives. If this data is helpful and the ACR would like, we can add this to the Key Measures document. As usual it does need context.

- Wright: On the earlier key measures, the increase in the cargo flights was almost double. I would think they would be noisier, and that would be a concern to me. And on the violations, what can we do to respond or call attention to those?
- Gardon: On Cargo, this 4.8 number in 2019 represents about half of the year since we received the ability to track the Cargo flights mid-2019. This number is not accurate. We are really closer to 14 to 15 cargo flights daily. A lot of these are in the overnight hours, and they can be rather noisy. There has been an increase in cargo since COVID. Many airports have seen that. In terms of the violations of the 2-mile, that is somewhat more of a difficult question to answer. We run those numbers of violations to address complaints. So, if I receive complaints from the Berewick area about planes turning early, I will run that report that I just showed you to see flights that have turned early. I will also look into weather at the time, look at what other aircraft are in the air at that time. If there is nothing I can determine, I will reach out to the tower to share/ask. This would be a good question for Bob Z, because this is more of a local ATC issue.
- Gagnon: When Local Operations Project Team meets - this is a good place to address this topic of the 2-mile restriction. This has come up with that team before. Thanks for the great updates. Dan, can you talk about the calendar that went out to the ACR, and the NADP research that you have done?
- Gardon: An ACR calendar was made that has a list of all ACR events – Project Team, TAC, ACR Meetings. That was added to the website. We're in the process of cleaning the website a bit to help with finding things easier. Calendar is currently up-to-date to January 2023.
  - The other item is NADP-2, which was requested by the ACR several years ago. It is essentially a noise abatement procedure used to alleviate noise further away from the airport. The request was made to send a request to all airlines operating out of CLT to use this procedure to alleviate noise in the region. We did receive an updated response in August of this year from all 5 of our primary carriers - Delta, JetBlue, United, American and Southwest - all of them are close to 100% NADP-2 usage. Many of these airlines have this written in their SOPs. Very good news.
- Pollack: Are those procedures available? I don't know if I have seen those.
- Gardon: I can send you a copy. It dictates thrust on departure.
- Reindel: Back in 1980s, the FAA put out an advisory circular stating that there would be 2 noise abatement departure profiles that could be used at any airport - so that pilots did not have to learn different procedures for different airports. NADP-1 is known as "close-in" and NADP-2 is "distant." Really isn't a *big* difference, but it's enough that you will notice the

difference. The "close-in" tries to take off with more thrust at the very beginning and cut back near the end of the runway – so you haven't gained a lot of altitude yet, and you are cutting back, and then you reapply power downstream a bit – a few more thousand feet in altitude; you're not climbing as fast, and then you reapply power. NADP-2 is similar except for the cutback is later in the process - you get a bit higher before reducing power. It depends where you want the noise reduction to occur. I would suggest, in Charlotte, given the size of the airport and where the communities are, NADP-2 is probably best. In addition, it has been determined that NADP-2 is a fuel savings to the air carrier. Win-win for cost of fuel, and noise on the ground.

- Pollack: Is there a similar policy/procedure for arrivals?
- Reindel: There is not.
- Gardon: One quick background point for some of the newer members of ACR. In 2018 or perhaps early 2019, HMMH did a study of the number of residents that would be positively affected by use of NADP-1 compared to NADP-2. We found that NADP-2 usage is much better for the general community.

❖ **Monitor: Update on Status of Recommendations** – Pearlis Johnson, Deputy Regional Administrator (Southern Region), FAA

- Johnson: Happy to be here in person. Recap: This group sent us 6 recommendations - 3 arrivals and 3 departures. Tonight, I will give an update on what we call Recommendation 3a, which is raising the altitudes on flights coming in. The departures will be a part of the Part 150. Regarding Recommendation 3a, we are still in process of evaluating that option. We are looking at impacts that it is having on other flights coming in and out of here and the work to be done in the future here – new runway flight procedures. It may at some point be that we want to look at all these procedures at the same time. That is probably going to happen down the road. If we see that it is going to impact every procedure that we have, it's probably best to look at all the flights. We are still in the process of evaluating that and trying to decide "does it make sense to wait?" We probably can do it, but we don't want to do it and then have to undo it once we put the new runway in.
- Brown: Are you talking about arrivals and departures?
- Johnson: Yes, but 3a is about arrivals only.
- Gussman: To clarify, we are likely to re-examine everything that we have already gotten – in light of the new runway. I think we all understood that. Are you saying we might hold where we are now and do that more comprehensive, or are they still figuring that out?
- Johnson: We are trying to figure that out. We need to look at this airspace and see what these changes will bring to us. We have to do that all around the airport. We want to do it the right way the first time if we can and look at all the impacts, too.
- Pollack: Raising the altitudes – the effect of that would push back the distance on the base legs, is that correct?
- Gagnon: Gene, that may be for you. How much, if any, are the base legs pushed down by raising the altitudes?
- Reindel: We did evaluate that some. We really don't know the effect it will have until they actually do it. Just because you raise the downwind doesn't mean that you do need to extend the downwind tracks to turn base to final. I think it is a good assumption to assume that the downwind legs would be extended further, but our analysis did not show that it would have that much of an impact. FAA is evaluating the question: "Would it extend the downwinds further?" The answer is 'not necessarily,' it is just when you can sequence them into the arrival stream. They have to get down lower, so you cannot turn them as early as you can now because they would not be as low. 'It depends' is the right answer.
- Gagnon: Any other questions/comments for Pearlis? *None.*
- Johnson: If this group wanted to give us any insight on any optimized descents into the airport – your recommendations – we would be happy to entertain that.
- Gagnon: We will talk about that in additional business.

- **Receive Noise 101 Overview** – Gene Reindel, Vice President HMMH
  - Gardon: Several months ago, the recommendation from the ACR to have Gene give a Noise 101 session, which is basically an overview of how noise is calculated, what goes into the AEDT modeling software that we talked about with the Part 150. He had given this presentation in the infancy of this group - it has been at least 3 years since then. Unfortunately, Gene could not be here in person today, so we have a recorded version; to watch the presentation:
    - Go to https://www.cltairport.com/community/noise/airport-community-roundtable/acr-douments/
    - Click on the "**Aircraft Noise 101 video**" link.
  - Gagnon: Anything you want to add Gene? *No.* Do any ACR members' have questions?
  - Wright: On the last slide, what is the difference between Schultz curve and National curve?
  - Reindel: Yes, there were 2 curves, the one on the left is the traditional, known as the Schultz curve – it has been used since the 1970s to assimilate the percent of people highly annoyed with specific DNL levels based on transportation noise sources - not just aircraft noise used to determine Schultz curve. It was all modes of transportation. Then – on the right – essentially the updated Schultz curve that resulted from the FAA's recent Neighborhood Environmental Survey (NES) that they did. They surveyed 20 airports around the country looking at those populations highly annoyed in different aircraft DNL environments that they live in. It was stated in the presentation that there are more people highly annoyed at lower levels of DNL today than back in the 1970s. Things have changed in those decades. Basically, what was shown in the Neighborhood Environmental Survey as was shown in the Schultz curve, was that you can relate annoyance to a transportation noise source, and specifically an aircraft noise to DNL. Doesn't mean you are not annoyed under 65 DNL, because the NES survey did show that over 40% of the population is highly annoyed with DNL levels well below 65 DNL.
  - Pollack: The 65 DNL - annoyance - what's the basis for drawing the line at 65 DNL?
  - Reindel: There is about a 30-year debate. My belief is it was all about economics in the 1980s as to what could be accomplished in terms of mitigating those structures/parcels within certain contour levels, and some other research, such as Schultz curve. A lot of factors went into determining the 65 DNL. What was economically feasible to address at the time? There is a big difference between annoyance and land use compatibility. Land use compatibility is also working with local jurisdictions since it is up to them to also not build in those DNL contours that are not compatible - the 65 DNL is currently that threshold.
  - Pollack: I was wondering about the slide that had sound profiles for different eras of aircraft, and I saw there were charts with distances. If that chart is available, I would be interested in getting information on common aircraft around sound and different distances in different throttle positions. Is it possible to get this type of data?
  - Reindel: What was shown there, we call those footprints. As Kate described, it is about one aircraft landing and one taking off, and it is showing what the arrival noise is and what the departure noise is on a standard arrival and departure in and out of an airport. The model has in it the ability to change thrust settings and those sorts of things, but what those sound exposure levels (SEL contours) showed was what a typical arrival and departure emits in terms of noise on the ground a certain distance from the airport.
  - Pollack: Is it measured directly below the aircraft on the ground - the sound that they are hearing on the ground below the aircraft?
  - Reindel: Yes, it is the noise on the ground, and you have to be careful there, too, because this is a standard model, so it is the noise above the ground at the airport elevation, assuming flat ground – so also, changes with hills/mountains/lakes and things like that. We were assuming flat ground with those footprints.
  - Gussman: Thanks, Gene. I think it speaks to all that we have covered and done. I'm thrilled that it is going to go up on the website.

- Reindel: Now you can request that the new members listen to this.

❖ **Request/Address Additional Business - Unfinished Business:** ***Written Updates, Request/Motions from Prior Meeting***

- Gagnon: Requests and motions that you all on the ACR made at last meeting. You wanted FAA to provide a softcopy format of July presentation - Dan sent that. Dan provided the update on NADP-1 and NADP-2. I had sent you, based on input from HMMH, some tools to measure noise levels. And then getting support in scheduling Project Team Meetings, we had a conversation about that today. Dan got the calendar in the hands of all the Project Team leaders so that we could move forward with that.
  - Page 9. Note written updates on Motions/Requests - really none from July meeting. If there was one, it was covered under Airline-related Updates. Dan gave us the updates of his inquiries with the carriers and their utilization of NADP-2.

❖ **Request/Address Additional Business - Unfinished Business:** ***Discuss Whether to Pursue Alternatives to ACR Recommendation #1*** *- Greater Use of Continuous Descent Approaches*

- Gagnon: Page 10. Question for the ACR – Pearlis brought this up earlier regarding Recommendation #1. The question for ACR members that came out of our Agenda Planning Call is: Do you want to pursue alternatives to Recommendation #1? We don't want to get into the technical details of it or alternatives to it today.
  - As a reminder, Recommendation #1 as submitted to the FAA was a recommendation that focused on continuous descent approaches. You had recommended to the FAA to examine other methods of implementing continuous descent approaches as part of the approach in their arrival to the airport.
  - More background: This recommendation was submitted to the FAA; the FAA came back and said that CDAs are not a viable option; the ACR provided a response to the FAA and offered some clarification on what you all shared was the real intent of that recommendation, in terms of when you were requesting approaches like continuous descent approaches, and you all offered a series of questions back to the FAA. Then the FAA responded back to your questions and said they were "…committed to a renewed effort to explore possible amendments to existing instrument flight procedures that would meet the ACR's intent during night operations, during midnight shift hours or times of low traffic." The FAA shared this commitment to go back and look for alternatives. Eventually, the FAA came back and noted that they did not have a good option for Recommendation 1a - which Pearlis alluded to earlier - and requested that the ACR consider whether you want to look for other alternatives to accomplish the same task - to get planes coming down with less thrust, higher altitude, using something akin to optimized profile descent or some type of continuous descent methodology.
  - We don't want to analyze this or get additional ideas now, but is this something you want to pursue – to investigate potential alternatives to Recommendation #1 and, if so, potentially discuss between meetings and put on agenda for January? Members, any particular thoughts or comments?
- Brown: I think the objective of all of this was to have a lower power setting and starting the approach further out. The extreme would be to have all approaches into Charlotte be instrument approaches. I don't want to have to go to that extreme. The continuous descent approach was an attempt to do something like that. The biggest problem that I see right now is that – it could be controller technique. It could be that the controllers cut it short, keep them a little higher than 3,500' - and that is for efficiency, and I get that - efficiency and safety are the most important objectives of the FAA. If they could keep them a little bit higher, but extend the downwind before they turn to base and not cut the corner to send them direct to final approach. I think that is what people are complaining about. I think it is controller technique. That is why I suggested having a tower controller or tower chief here in our meetings. We don't have to go to a straight CDA, maybe find some way that we can alter the controller techniques and not have to go through the whole process.

- Pollack: I agree with what was said, and I think it is something the ACR should focus on. I think this would bring the most relief to make the approaches more tolerable. I think to come up with alternatives it would help to have the FAA's help. We need to know what the problem with the original proposal was. In order for us to come up with alternatives, we need FAA to help us understand their constraints so we're not creating ideas in the dark.
- Gagnon: I am hearing that this would be something you would like to do.
- Wright: To clarify, the picture is the step-down approach - what we are currently doing. It's helpful to have input from others that are experts, like Sayle who has flight experience. In filling our vacancies, it would be good to have folks with expertise in flights, etc.
- Gardon: That step-down drawing (Page 10) is not to scale.
- Rutzell: I think everyone in here is in favor of pursuing this. Does anyone have any concerns that this would interrupt the current review of raising the altitudes? We have already been told that it's a possibility that they would not look at any plans until the runway occurs.
- Brown: In the meantime, it could be a temporary fix or trial period. I'm sure that there would be training involved.
- Johnson: There would be training involved. We can ask.
- Gagnon: In my debrief with Natalie and Phil, we will talk about this in the morning.

❖ **Request/Address Additional Business - New Business**

- Rutzell: I think it might be good for our members to take a closer review of the current Part 150, to get ourselves familiar with what is currently in it. At the next meeting, have a discussion to get feedback - What do you like about it, what questions do you have, what should be in it? And then alternatively, to look at another airport - whether it is Fort Worth, DC, Dulles - to give us a point of reference or a benchmark, or to generate some ideas. What are others doing in their Part 150? It would be extra work for everybody, but I think it would be worth it.
- Gussman: It would be helpful to get that feedback to us to take to the TAC.
- Rutzell: The next question is how we get the current Part 150. Dan, is it on the website?
- Gardon: I think it is on the website; if not, I have it readily available. I think it is about 400 pages - a lot is maps, figures, indexes. There are portions that are more readable. A lot is about the "new" runway, which has been built for many years now. In terms of content and time needed for this, a couple of hours over 3 months would be a reasonable expectation.
- Rutzell: I think there is guidance on the FAA website about what is in a Part 150. We might want to cross-reference that as well.
- Pollack: Request for future meetings: In terms of the future runway and that project, it would be helpful to understand what will be included in that project. One thing to be included, if it isn't already, is making sure that the airport is making improvements to relieve the apron constraints that affect the way planes move around the tarmac. Put in additional taxiways to help planes get to and from terminal to runways.
- Gagnon: Helpful to understand, based on construction of the tarmac and how that relates to the flow on the ground. Thank you. Any other new business? *None*.

❖ **Adjourn**

- Loflin motioned to adjourn. Wright seconded, all in favor.
- Next meeting: January 11, 2023
- Meeting adjourned at 8:10 p.m.