# Charlotte Airport Community Roundtable (ACR)

Gene Reindel, HMMH (Technical Consultant)

Pearlis Johnson, FAA

Andreese Davis, FAA

Amber Leathers, CLT

Mark Wiebke, CLT

Ted Kaplan, CLT

Dan Gardon, CLT

Kevin Hennessey, CLT

Cathy Schroeder, CSS

Melissa Treadaway, CLT

Stuart Hair, CLT (ex-officio)

Tracy Montross, American Airlines

Ed Gagnon, CSS, Inc. (Facilitator)

Reggie Davis, FAA

# Unapproved Summary Minutes: January 13, 2021

### Attendees

Kurt Wiesenberger, Chair, Charlotte Phillip Gussman, Vice Chair, City 1 Bobbi Almond, City 5 Sayle Brown, Cornelius Natalie Rutzell, County 2 Sherry Washington, County 4 Megan Walton, County 5 Mark Loflin, County 6 Bob Cameron, Davidson Sam Stowe, Gaston Bob Lemon, Huntersville Kim Hardee, Matthews Thelma Wright, Mecklenburg

### Call-in Participants: None

### **Summary Minutes**

- ✤ Meeting started at 6:00 PM
- Open the Meeting
  - > Wiesenberger: Welcome, everyone, and welcome to our newest member, Natalie Rutzell.
  - Rutzell: Thank you. I am really happy to be a part of this effort. I am passionate about this issue. I have been participating in this effort for over 5 years when the change occurred.
  - ➢ Wiesenberger: Glad to have you.
    - Approve Minutes: Loflin moved to approve. Washington seconded. All voted to approve.
  - Gagnon: Went through mechanics of WebEx. Participate on the phone or on WebEx. Handout went out yesterday in an email. Will forward to you, if needed. You can participate through chat, on the phone, or via WebEx using the raise the hand function to be recognized. We will try to keep the meeting to 90 minutes. All information will be saved, by recording and chat.
  - Gagnon: The meeting Agenda has several different components. We will get an FAA update on the Slate, review the implementation checklist, then go through some CLT updates and ACR Project Teams' updates.
  - Wiesenberger: *Request to Gagnon to remind ACR of Ground Rules*.
  - Gagnon: Thanks, Kurt. Ground Rules for discussion include: Healthy conversations. Focus discussion on the ultimate goal of the group. We want to be productive. We have a lot of content in the Agenda. Be brief but brilliant let's have healthy, productive, and effective dialogue.

### Receive Public Input

Wiesenberger: No public speakers. Dan, do you think our meetings are being well-communicated through the website? Similar to when we had in-person meetings? Gardon: I believe so. Especially in the last month or so as we have made attempts to recruit new members, we are also getting the ACR message out to the community better than in the prior months.

### Update on Moving Forward – Monitor, Engage, and Improve

- Monitor: Update on FAA Slate Evaluation Process Pearlis Johnson, Deputy Regional Administrator Southern Region, FAA
  - Johnson: Good evening, and Happy New Year. Since our last meeting, we have had several
    meetings internally and externally with the airport officials. Before I get into some of the
    details, I want to make you aware of federal survey results that were released today
    concerning environmental noise around airports. I will send the links to the survey to Dan and
    Stuart so you can read it yourself.
    - They are requesting public comments, and the deadline for comments is March 13, 2021. I have not read the full study. It looked at 20 airports around the country. Charlotte was not on the survey. Memphis, Miami, Savannah, and Atlanta were Southern Region airports that participated in the survey.
    - Business at hand for tonight We have had several meetings with stakeholders within the FAA and along with the airport, and we looked at our resources and the timing of several projects that we already have underway. We have looked at large projects, like the runway in Charlotte. Andreese is going to go through those options that you gave us and tell you how we are expecting to go forward.
  - Davis: *Sharing a PowerPoint*. Want to be brief and share where we are in the Charlotte ACR recommendations. The things that we have done thus far:
    - Formed FAA core team, which consists of leaders in upper management to help with decision-making. They are not necessarily technical, but they are the folks that can help us expedite decisions that need to be made, vetted, or possibly elevated. They help with the agency decisions for each recommendation.
    - Acquired the technical support. There are several variables with COVID and support that air traffic needs at the facility as they continue to rotate through.
    - We have attended ACR meetings since August and are here today. We met with airport authority in November where they shared lessons learned in areas around the airport that we should be concerned about.
    - Current strategy is to address the arrivals. *Listed the overall 6 recommendations*. To better use our time and resources efficiently and effectively, we decided to split the workload and address arrivals first. Recommendations 1, 2, 3 those are the arrival recommendations. There has been some work done to vet these recommendations and to provide a substantive response. I've listed (Slide 6) some of the things the FAA is considering to determine whether or not these things can be done and the timeline needed. Gauging feasibility is this possible, and how easy is it to get done? Variations of recommendations what else can we offer? Recommended grouping for example, should there be 1 or 2 recommendations done at the same time? Good example departure-related recommendations where there was recommendation to remove the 2-mile restriction and along with that request for departure headings. Should they be grouped together?
    - Environmental/NEPA implications. Anything we introduce into the NAS (National Airspace System), we perform appropriate level of NEPA analysis. Our actions are sometimes tedious and extensive. What are the implications of that action? Is there an EA or EIS likely to come out of this? Facility and operational implications those are air traffic impacts and how it affects operation. Potential industry and throughput effects. We are vetting, along with air traffic, these recommendations with industry as well as PBN (Performance Based Navigation) implications. I will pair that with Terminal procedure

implications. Also, traditional v. where we plan to go with NextGen. We look at the time necessary so that we have the proper resources for this project. Is it a 3/5/10 year project – we scope it out so proper funding and personnel can be allocated. Look at recommended priority - which fund should we hit first?

- Spring 2021 we are looking to provide a comprehensive response for those arrival recommendations.
- We'll provide quarterly updates to ACR with regards to where we are on this particular project.
- Johnson: I would like to say that COVID has had an impact. We are looking at our limited resources. The departures will take longer to get done. We want to move forward with the arrivals and CDAs we want to figure out how to do more of those right now. What are the barriers to doing those? High number of vectors of aircraft in the Charlotte community. Down the road, after the Fall, we will be able to put those departure routes into a larger study called Part 150, which will be ordered by the airport, and those procedures will tie in nicely.
- Wiesenberger: Thanks, Andreese. On the FAA core team, do you have any Charlotte FAA personnel? In the past, they were very helpful.
- Davis: Yes, CLT Air Traffic Manager and Bob Sz. He is on the core team and the matrix team. He is happy to be there anytime I call on him.
- Wiesenberger: On the considerations one was environmental talking about the effects does that include the effect of noise on the population?
- Davis: Yes, it definitely includes noise.
- Wiesenberger: Are the core considerations you are using for our recommendations the same that are used for other changes the FAA uses for procedures? For example, when NextGen was implemented, were those considerations also used?
- Davis: The vetting of procedures goes through it depends on what it is. Performance Based Navigation processes, NextGen procedures have to go through a base analysis review. It may be similar to the list that we have. What we have created, is a list that basically gives us a "one stop shop" so that everyone is on the same page. As we go forward, you can expect specifics under each of those headings. Although it may be similar, I cannot speak to specific variables of the review. If this is moved forward, there is a mitigation that is NextGen-related it would go through the Performance Based Navigation process.
- Wiesenberger: Thanks, and we look forward to updates.
- Gagnon: Any other questions for Andreese or Pearlis?
- Rutzell: My understanding is that when they do the Environmental Impact Study, it is only within the 2-mile radius of the airport. It doesn't extend to our impact. They will do a full noise evaluation, but it is a limited scope - doesn't include my neighborhood or your neighborhood.
- Gagnon: Andreese or Pearlis, any comment on what Natalie stated?
- Davis: I am not an environmental protection specialist, but I have done these projects for 10 years. Where the procedure overlays, depending on the altitude, there will be an analysis done. The noise impacts are part of our normal business. Whether it is a significant impact or not, that is a different thing. The noise analysis does cover wherever the procedure goes. How far, to your point Natalie, it does cover definitely the track. If an aircraft flies over a track today and that track moves to another community tomorrow, or if there is even just an overlay, there is a review done and that review will determine if we need to go a step further. So there is a basic review, a noise analysis, and other levels of review that we do.
- Rutzell: Thanks for that clarification. We reviewed the Environmental Impact Study for both the runway analysis and for the change of the current flight path; it was a limited scope of areas and did not include ours.

- Johnson: For the survey where they're asking for feedback, make those comments/recommendations. As Andreese says, we will do that automatically. But 50 miles away or 100 miles away, I don't think that will be the case. They're going to say that once you get down to 25, 45, 55 dBs - they are not going to be willing to do that. That is a good thing to recommend to the Federal Register Group in their survey.
- Wiesenberger: Realize that many of our recommendations for arrival procedures affect people up to 20 miles away from the airport. Please consider their needs and impacts.
- Gagnon: To clarify a couple timing points that Andreese made, the ACR is moving to a bimonthly schedule so it is January, March, May, etc. So, when you are referring to a Spring response on arrivals, were you talking about the March or May meeting? And also, the quarterly updates, if we end up having 5-6 meetings this year, if you all could provide updates at those meetings. Just seeking clarification.
- Davis: I can commit to Spring, so I would push to the latter end of Spring as far as a comprehensive response. We also committed to providing an update quarterly, so the March meeting we can give an update, and I can commit to having some type of comprehensive review completed by May.
- Gagnon: Anything else for FAA? *Nothing*.
  - Going back to handout: Page 3. We have shared this at previous meetings it's based on the decisioning flow that we have been working with on and off for about a year and a half. Based on what the FAA is conveying in terms of the Phases of review, it sounds like we are in Phase 1, focusing on arrivals, and would not move into Phase 2 until you all make that presentation in May and come up with some type of conclusions on arrival recommendations; is that correct?
- Davis: Yes. we are definitely in Phase 1. Phase 2 after the May meeting.
- Monitor: CLT Update Stuart Hair, Director of Economic & Community Affairs, CLT
  - Hair: We have Mark Wiebke on the call tonight, and he is the planning director for CLT airport. I may call on him. Amber provided a good update on where we are on the Environmental Assessment. Within the environmental world of the National Environmental Policy Act NEPA Environmental Impact Statement is the most intensive type of evaluation. EA is middle of the road study. Categorical Exclusion is the least intensive. The EA that we are doing is part of the major capacity enhancement project that we are doing. Comments have been received, and they are working on a draft of the EA document that should be available at target date of late Spring. Then we'll have another set of virtual public presentations. The final EA will follow sometime this summer. When we look at where we are on the EA and where the FAA is, we will have synergy in the late springtime. Once we complete the EA, we will look to start the intense update of our noise abatement that we call the Part 150. We'll do a major update based off of what was found in the EA and based on the recommendations that you all have put forward. We have started to develop a scope of work for the Part 150 and look to contract that with one of our firms in late Summer or early Fall.
  - Wiebke: The comment period closed up January 4. We are going through the comments and will be responding to those. Those comments and responses will be put on the website. The schedule that you identified is still on track. We have our meetings with our stakeholders – airlines, air traffic, and the airport's offices – to make sure that we have all stakeholders' inputs for the EA.
  - Rutzell: What is the EA assessing? Does this remove the 2-mile restriction?
  - Wiebke: This EA is a major capacity with 3 components: 4<sup>th</sup> parallel runway, expansion and development of terminal and concourses and ramps. That's what is being evaluated in this EA, and we call it the Major Capacity Environmental Assessment.
  - Hair: We will include the web address: <u>https://www.airportprojects.net/clt-capacity-ea/about</u>

- Rutzell: Do you know the radius or scope miles from the airport that this takes into account?
- Wiebke: There is an affected environment that we are looking at primarily the airport property boundaries. That is more for physical impacts. Noise contours will be looked at, but they will also be looked at in the Part 150 update that we will initiate when we have the FONSI Finding of No Significant Impact from the EA. We will start that process September-ish of 2021.
- Lemon: Did you get a fair amount of comments from the public?
- Leathers: For our virtual presentation this time around, we had over 1500 views of the video, which far exceeds any public meeting that we have ever had. Related to the comments, we got the similar amount of comments we received 26 comments. We are in the process of reviewing those. In terms of previous meetings, it is about the same amount as in the past.
- Hair: Kurt had asked about the 2 parts that make up a Part 150.
- Hennessey: Part 150 is a voluntary program that the airport entered into with support of FAA, basically to try to set up noise abatement procedures and land use controls around our airport to try to minimize noise impacts and intrusions. Obviously, you cannot get rid of noise impacts. Our last approved Part 150 is from 1997, so this is a good time for an update. I will tweak a write-up that we have and have Dan send it to you. After you review, please send questions directly, and I will be happy to talk you through it.
- Gardon: More airport updates: As everyone is aware this was an unusual year for many reasons at the airport. Operations: December activities down average of 44%. Year-to-date, we were down somewhere around 40% for the entire year. Existing initiatives: EA, already spoken about: budget changes not really a factor for next fiscal year; the aviation budget will be equal to 2021. Still doing some rezoning around the airport, just like we have been doing for the last 3-4 years now. Main thing is our operations numbers are still well down. This time in late 2019, we were at 1600 daily flights, now at 1000 a day.
- Gagnon: Let's go to page 16 in the handout to review complaint statistics.
- Gardon: This is a 4-page report it is basically year-end statistics for complaints. With the flights down and other factors of the past year including people working at home more often, complaint numbers are down about 30% in households and actual submitted complaints. Lots of external factors that may have led to the decrease in complaints throughout the region. Lots of information on these pages that may be of interest to the ACR. As you look through, you may see some zip code information that shouldn't be a surprise to anyone. In certain regions around Charlotte, we typically see many complaints. These areas were baked into the analyses that HMMH did for the Slate items. In general, the 6 Slate items were designed to alleviate some issues in the areas that you see.
- Gagnon: Any questions? *None*. Thank you for those updates.
- Engage: Updates from Project Teams: Community Engagement Project Team 2021 Work Plan Goals and Deliverables – Phil Gussman, Project Team Lead
  - Gagnon: On pages 5 and 6, you will see updates from the Project Teams that are Work Plans. Kurt requested and suggested (from an idea from Gene Reindel) that the teams develop an overall Work Plan for the year.
  - Gussman: Thanks to CLT for the updates on Operations and Complaints that will be good to see in future meetings. From the ACR Community Engagement Project Team (p. 5), we looked at what we could do with the expectation that we will have some good news to put out there this year, as well as finally taking advantage of what we hope to be a return to normalcy in terms of the media news cycle. Good to see that arrivals will be a focus.
    - In the Work Plan, the emphasis is to get out in front of media at a community level. We will create 3-4 documents that we will be asking our ACR members to help push out to their community members. If you have access to community newsletter, local paper, or

any media contacts, please let's push out these documents as we publish them this year. So much of our communication nowadays is happening at the community level – Nextdoor, Facebook, etc.

- Then we plan to do 2-3 major pushes to get into large media outlets. We will be creating documents and work with the different teams to ensure we speak in the same language. If we see a return to normalcy, we may have a town hall meeting probably have virtual portion. Notice the schedule at the bottom of page 5.
- Wiesenberger: Looks great. Looking forward to a progress report in March.
- Engage: Updates from Project Teams: Government Engagement Project Team 2021 Work Plan Goals and Deliverables – Bob Cameron, Project Team Lead
  - Gagnon: Page 6 in handout. Similar view from ACR Government Engagement Project Team (GEPT).
  - Cameron: One of the things that became apparent is that we would like to get support from the government representatives and staff members that we do engage. Asking for support is somewhat nebulous, so we need to figure out what support we need. As far as we know, there are no pending bills in front of the legislature that we could ask a representative to support. We need to do more work on that level. Sayle talked to the Mayor of Cornelius Mayor Washam, and due to the election cycle, etc. people will not be interested in this until after installations of the new representatives. In Work Plan, we have stated that we will have at least 4 meetings and develop a letter and send it to at least 20 relevant representatives to support our goals in Work Plan.
    - In light of the bi-monthly ACR meeting plan, for the March meeting, we will bring something concrete about what kind of support we'll ask of the representatives and work on developing the letter and dovetail with the community project team.
  - Wiesenberger: I recall in the past a City Council person attended a meeting. Any thought on inviting them to future meetings?
  - Cameron: I think we can do that with the letter that we will send out informing them of what we are about and when we meet. I'm not sure that if I were a representative and was just invited to something, that I would be all that interested without knowing beforehand what I was being invited to. Folks would be lost in our terminology, etc. We need to explain what we are doing and what we are about in order to not slow down our meetings. If anyone has an idea of how to better inform and get a definition of what support we need from government officials, please email me or the group.
  - Brown: That representative was Jeff Tarte he was a NC State Representative at the time.
  - Rutzell: We had Braxton Winston and Jeff Tarte. I sat in the meetings with Braxton. I also was at a City Council meeting with 3 representatives, and we expressed our concerns. We expressed that we wanted more engagement from the city regarding the airport because we felt there was a disconnect between what the airport was doing and their Agenda. Following those meetings, we invited them to attend to listen to what we are doing. I believe that Sara had recommended that we have a seat on the ACR for one of the representatives. Winston requested that we reach out to a certain committee Infrastructure, I think and have that be the point of contact for the ACR.
  - Gagnon: Thank you for that background, Natalie. If it would be beneficial, we have several of
    the comments from Braxton Winston in the Minutes from that meeting. I will be happy to pull
    that for your team, Bob. Any other comments or questions? *None*. Thanks for these Work
    Plans that we can look back on through the year.
- Improve: Update from Project Local Ops/Improvement Team Sherry Washington, Project Team Co-lead
  - Gagnon: Improvement aspect of the Agenda. New project team Local Operations/ Improvement Project Team (p. 7). Sherry and Kurt are co-leads.

- Washington: Our team was formed based off a survey that you responded to last year. Our sources are the survey and the North Flow v South Flow Decisioning Communications. As a result of that, we have come up with our purpose statement.
  - Identifying, implementing additional locally-controlled noise improvements associated with the Charlotte airport that would benefit individuals and organizations with a special focus on those with outdoor activities in the region.
- Washington: We are still seeking clarification regarding the results that we have on hand we may reach out to Gene to get clarification of some of the information. Still reviewing North v. South Flow Decisioning and survey results.
  - We will meet monthly until we get workflow in place, and from there we will take it down to bi-monthly.
- Wiesenberger: I think this is a great beginning. Looking forward to working on this with you.
  - Another idea: Regarding new member orientation there is an upcoming Symposium that may be an opportunity to learn what other airports are doing around locally controlled noise initiatives.
  - February 23-26 there is a virtual aviation and noise and emissions Symposium. Hosted by University of California, Davis, and it has been going on for 4 years. Cost is \$25. Several of us are participating, and we may be getting some additional ideas from that.
- Gagnon: Dan Gardon is the star of the Symposium. If anyone is interested in participating, \$25 is the early bird fee - expires tomorrow. I can expedite that for you if you get in touch with me. February 23-26, 11a-245p. It is virtual.
- Gardon: Ed, and his company CSS, is sponsoring this opportunity.

### Request/Address Additional Business

- > Note Written Updates on Motions/Requests for Support
  - Gagnon: Page 8 This is where we refresh all about what came out of the previous meeting ACR officer transition and some updates on that page. Page 9 is a scaled down version from what we normally see in terms of the Written Updates document. Some of the items that are typically here are instead part of the Agenda. Feel free to read that. As usual there is an update from Tracy on the vortex generators.
- Confirm 2021 Meeting Schedule (Bi-monthly from 6p-8p on 2<sup>nd</sup> Wednesdays: March 10, May 12, July 14, September 8, November 10)
- > New Business
  - Request for Feedback on FAA Survey
    - Gagnon: Pearlis Johnson talked about the survey that has been conducted and deadline of March 13 which is 3 days after our March meeting to get feedback on that. The link will be shared.
    - Hair: We will be sending some supplemental information to you all on the FAA study. Some of it will be from HMMH, and we'll send some official documents and links to the information. You all are the exact type of people that we want to review this information and provide commentary on it. One of the futures of the ACR is to be the experts of the impacts of noise in the Charlotte area.
  - Update on New Member Recruitment/Onboarding Approach & Updating ACR Charter (Mission/Guidelines Document) – Dan Gardon, Noise Abatement Specialist, CLT
    - Gardon: I am going to start with the 2<sup>nd</sup> point on the Agenda update on ACR Charter. The ACR has been running about 3<sup>1</sup>/<sub>2</sub> years. Under the existing Charter, the ACR has completed their goals. After looking at that mission statement and talking with Kurt, Phil and Ed, we decided we needed to make changes to Charter and to keep the group rolling and to add on to the responsibilities of the group. We are working on that internally. Will

have an updated Charter in a couple of months. I believe that the group as a whole will have to vote on the new Charter.

- The other item is new member recruitment. Natalie is representing County District 2, which is just south of the airport. We currently have openings for City 6 and York County. We have received 3 applicants for City District 6, which is near the SouthPark area. Will be reviewing those applications. At the next meeting, we will have at least one new member. We have 4 or 5 vacancies. That list of vacancies is listed on the website. If you know someone who may be interested, please let me know.
- Review MIT Study Results (Impact of Speed on Community Noise) Gene Reindel, Vice President, HMMH
  - Reindel: One of my very first meetings of the ACR, somebody brought up this MIT report that maybe aircraft speed had an effect on noise. The FAA provided a report to Congress on the research into the claim.
    - The purpose of the report is to present the summary findings. The report is available online, and the 3<sup>rd</sup> slide, it shows the link to that report.
  - Gagnon: FYI The email I sent out yesterday had the link to the full report, as well.
  - Reindel: On December 23, 2020 the FAA submitted a report to Congress summarizing the
    research conducted to meet requirements of FAA Reauthorization. The presentation will
    review the requirements from the FAA Reauthorization Act of 2018, specifically Section 179
    for which the report is in response and then focus on summarizing the report to Congress
    including aircraft noise sources, takeoff noise, approach noise, and the report conclusions. The
    report to Congress did not respond item by item, but it summarized the 5 requirements in the
    letters to Congressional representatives as presented here. They are:
    - 1 Review and evaluate existing studies and analyses of the relationship between jet aircraft approach and takeoff speeds and corresponding noise impacts on communities surrounding airports
    - 2 Determine whether a decrease in jet aircraft approach or takeoff speeds results in significant aircraft noise reductions
    - ◆ 3 Determine whether the jet aircraft approach or takeoff speed reduction necessary to achieve significant noise reduction jeopardizes aviation safety, or decreases the efficiency of the National Airspace System, including lowering airport capacity, increasing travel time, or increasing jet burn
    - 4 Determine the advisability of using jet aircraft approach or takeoff speeds as a noise mitigation technique
    - 5 Determine whether any metropolitan areas specifically identified in Section 189 (b)(2) of the Act would benefit without significant impact to aviation safety or the efficiency of the National Airspace System
    - The MIT report describes the major noise sources as Engine Noise and Airframe Noise. Engine noise includes the fan, which includes a number of blades inside, the core, which is where the combustion produces the thrust, and the jet, which includes the exhaust. Airframe noise sources include non-regular surfaces and are predominant when the aircraft is "dirty", which is a term used when airflow is over the components (slide 5) to generate noise.
    - The report stated that engine noise dominates during jet aircraft takeoffs due to the relatively high power settings and due to high velocity airflow and the speed of the aircraft. MIT evaluated 2 concepts:
      - 1 Changing the location of the start of acceleration and flap retraction
      - 2 Reducing the climb speed.

- MIT evaluated these 2 concepts with NASA's Aircraft Noise Prediction Program (ANOPP). The 1<sup>st</sup> concept through "close-in" and "distant" NADP profiles and the 2<sup>nd</sup> concept through modeling reduced climb speed to maintain the aircraft at the minimum safe airspeed with flaps up until 10,000 feet in altitude.
- The graphics on this slide show a typical departure procedure that shows the areas of the procedure that were affected by the MIT model evaluation such as the start of acceleration, noted as area 1 on the graphic and the constant speed climb segment area 2. The report stated only minimal noise reductions which would likely not be noticed in changes in the acceleration location and noted that climb speed has little effect since the airframe contributes so little to the noise experience on the ground during takeoff.
- The report stated that airframe noise sources are highly sensitive to aircraft speed, and speed is tightly coupled to the deployment of flaps, slats, and landing gear. At slower speeds, high-lift devices are deployed to reduce stall speed which increases airframe noise levels. MIT evaluated delayed deceleration approach (DDA) with ANOPP deceleration is delayed through the deployment of flaps later in flight, to allow the aircraft to operate at low thrust to reduce both airframe and engine noise.
- DDA concept reduced noise from engines and airframes 10 to 20 miles from touch down on the runway and reduced fuel burn due to reduced flight times and lower engine thrust settings. But, ideal deceleration profile varies by aircraft type, weight, and weather, and varying deceleration rates pose a challenge to air traffic controllers in terms of sequencing and spacing. So, with delayed deceleration approach, weight and weather impacts, profiles may have to be developed for different aircraft type and/or the profiles may need built-in adjustments for weight and weather. The report added that more research and analysis is required to address these potential implementation issues.
- The report concluded that 1- there is no noticeable noise benefit to reduce jet aircraft speeds during takeoff procedures, and 2- delaying the deceleration of the aircraft on approach could reduce noise between 4 to 8 dB when the aircraft is 10-25 miles from touch down, and 3- more work is required to validate the potential noise benefit and resolve implementation challenges.
- The purpose of this presentation was to provide a summary of the FAA study presented to Congress related to the assertion that noise reduction may be possible through speed control of the aircraft. I am happy to answer questions, but know that I am not the author.
- Gussman: I imagine on the changes on approach, some of those benefited would be achieved by continuous descent approach?
- Reindel: This approach was different. DDA is speed-controlled not continuous descent controlled. One is focused on speed, and the other is focused on continuous descent.
- Wiesenberger: I understand that more study is needed. Do we know when that will occur?
- Reindel: I am aware that the FAA has it on their research game plan. It is going to proceed, I believe, provided funding is there.
- Brown: Basically, I think the report is saying is the cleaner you keep the aircraft, at maybe a higher altitude like on a downward and on the base leg until final, as long as the flaps and landing gear are retracted, the noise will be reduced. Is that what they are saying?
- Reindel: Yes, delaying the deceleration (DDA) that means the aircraft can stay cleaner not be in a dirty state, but the benefit comes about 10-25 miles out.
- Brown: The proposition we put forward maintaining 6,000 feet before turning onto final approach would take you out maybe 30 miles, and it would be a clean configuration until you are turning on final, then you would be at an idle descent while you are dirtying up which I think would improve a lot of the noise. That is just an opinion.
- Gagnon: Any other questions? *None*.

• Any new business? *No*.

## ✤ Adjourn

- ➢ Wiesenberger: Do I have a motion to adjourn?
- > Loflin motioned to adjourn. Gussman seconded; all in favor.
- ➢ Meeting adjourned at 7:26 pm