Charlotte Airport Community Roundtable

October 14, 2020 Meeting

Handouts

- Meeting Agenda
- FAA Slate Review/Implementation Checklist
- Government and Community Engagement Project Teams
  - HMMH Research on Roundtable Elected Official Engagement
  - Recent Article
- Summary of CLT Appearance at the LAX Roundtable
- Noise Improvement Idea Generation Survey Results
- Listing of Requests for Analysis and Motions from August
- Written Updates Document
  - North v. South Flow Decisioning - September 2019 FAA Response
  - North v. South Flow Decisioning - December 2019 FAA Response to ACR Follow-up Questions

CLT Airport Community Roundtable

Meeting Agenda – 10/14/20, 6p-730p (v2)

1) **Open the Meeting (10 Mins.)**
   a) Call Meeting to Order – Sara Nomellini, ACR Chair
      i) Welcome New Member
   b) Describe Meeting Approach – Ed Gagnon, Facilitator
      i) WebEx Process, Confirm WebEx/Phone Functionality with Members
         (1) Use of "Raise the Hand" Function; Stating Name when Speaking
         (2) Structure of Meeting Handout Document; Screen Sharing
      ii) Review Ground Rules
   c) Approve Minutes from August – Sara Nomellini, ACR Chair
   d) Receive Public Input, if applicable
2) **Update on Moving Forward – Engage, Monitor, and Improve**
   a) **Monitor:** FAA Progress **(15-20 Mins.)**
      i) **Share FAA Slate Review/Implementation Checklist** – Ed Gagnon, Facilitator
      ii) **Update on FAA Slate Evaluation Process –** Pearlis Johnson, FAA
   b) **Engage:** Government Engagement and Community Engagement **(10-15 Mins.)**
   c) **Improve:** Identify and Address Additional Noise Improvement Opportunities **(20-25 Mins.)**
      i) Update on CLT appearance at the LAX Roundtable
      ii) Review Noise Improvement Idea Generation Survey Results; Form Team
3) **Request/Address Additional Business (10 Mins.)**
   a) Unfinished Business
      i) Note **Written Updates** on Motions/Requests for Support
   b) New Business
      i) Meeting Scheduling
         (1) Next Meeting: **December 9**
         (2) Plan for 2021 Meetings
            (a) Scheduled Monthly (2nd Wednesdays at 6p)
            (b) Plan to cancel January meeting, hold first 2021 meeting on **February 10**
4) **Adjourn**

Charlotte Douglas International Airport

Airport Community Roundtable

CLT ACR FAA Slate Review/Implementation Checklist – as of 9-4-20

CLT ACR Slate was submitted on July 9, 2020	Sequence				
	1	2	3	4	5
☐ 11 - National FAA: Phase 1 - Preliminary Activities - Initial Review and Baseline Analysis Report (BAR) - (May take 30 days+)					
☐ 12 - Phase 2 - Design Activities - Generate a single PBN procedure and/or route or a set of PBN procedures and/or routes that meet project objectives - (May take 12 months+)					
☐ 13 - IF there are triggers in the area under the proposed procedure, perform noise screening/analysis to help assess the impacts					
☐ 14 - Phase 3 - Development and Operational Preparations - Develop procedures and/or routes and complete all pre-operational items necessary to implement the procedures and/or routes - (May take 6 months+) **					
☐ 15 - Phase 4 - Implementation - Implement the procedures and/or routes as designed					
☐ 16 - Phase 5 - Post-Implementation - Ensure that the new or amended procedures and/or routes perform as expected and meet the mission statement finalized during the Design Activities phase					

** Step 14 Update from FAA on 3/9/20: *The FAA approval process is still the same, however the duration for Step 14 is really indefinite and will be based on many different variables, including workload at the time, complexity of the submittals, and the prioritization process.*

CLT Airport Community Roundtable

HMMH Research on Roundtable Elected Official Engagement

9/15/20

This email responds to the final ACR request that HMMH was to address prior to the October meeting - survey of how other roundtables engage with elected officials. HMMH is involved with the following airport roundtable forums:

-Oakland Airport/Community Noise Management Forum -Fort Lauderdale/Hollywood International Airport Noise Abatement Committee -San Diego International Airport Noise Advisory Committee -LAX (Los Angeles International Airport) Community Noise Roundtable -San Francisco International Airport/Community Roundtable -DC Metroplex BWI Community Roundtable -Massport Community Advisory Committee (Boston Logan International Airport) -South San Fernando Valley Airplane Noise Task Force

Elected officials are members of the above forums with the exception of Fort Lauderdale, Massport, Los Angeles and San Diego. As members of the forums, the interactions are direct. So the remainder of this email will describe the four exceptions.

For Massport members of the MCAC are appointed by the head of each community (e.g., mayor, town manager) and it is expected that the appointed member is to have a direct line to the head of their communities for regular interactions.

For San Diego members of ANAC include seven non-voting members appointed by the Airport Authority President/CEO that may include elected officials. The other members are community representatives (7 inside the 65 CNEL and 4 outside the 65 CNEL) and seven business representatives. For these non-voting positions, the elected official typically designates a person to represent the elected official rather than attend in person and it is expected that the designee will report directly to the elected official.

For Los Angeles members of the Roundtable include local community representatives, Los Angeles World Airports as the operator of LAX, the FAA and airline industry representatives. A city, county, state or federal jurisdiction can participate in the Roundtable by submitting a letter of interest/intent to the Chair of the Roundtable. The jurisdiction is then a member of the Roundtable. Elected officials that are not formal members occasionally attend the meetings and are announced at the beginning of the meeting.

Lastly for Fort Lauderdale members of ANAC do not include elected officials and does not have much involvement from elected officials. When an elected official, usually a staffer, attends an ANAC meeting they are announced at the beginning of the meeting. There is little to no interaction with elected officials beyond occasional attendance at meetings by staffers.

I trust this is good information, but likely not what the ACR was hoping in that there is no recommended or industry practice to interact with elected officials when they are not members of the roundtable. However, it is relatively common practice among roundtables to write letters to their elected representatives when they seek their help promoting potential fixes to noise issues or addressing noise problems that have recently surfaced.

Eugene M. Reindel
Vice President, HMMH

Benchmarking call with LAX Community Noise Roundtable
Sept. 16, 2020

Highlights:

- The LAX Noise Roundtable has been operating for 20+ years, has some 35 members, and Denny Schneider is the Chairman.
- LAX operates some 2,000 flights/day, 126 million passengers/yr. and its geographic footprint is much smaller than CLT (600 acres) and has no room for expansion.
- There are over 15 regional airports within 50 miles of LAX
- Robust history of initiatives and inter-airport relationships
- Meeting participants included representatives from the FAA, LAX operations, United Airlines, and a U.S. House of Reps. representative.
- They have a very robust website LAWA.org/Noise Management
- Currently focused on low altitude downwind flights and night-time flight noise
- Gene Reindel of HMMH, acts as the facilitator for meetings.
- HMMH Noise News published quarterly for LAX Noise Roundtable
- Actively involved with Quiet Skies network of over 50 other airport noise roundtables https://nqsc.org/Organizations.html
- Concern with long term health effects from excessive noise and emissions https://anesymposium.aqrc.ucdavis.edu/2020-program

Government Engagement:

They are very active in terms of government engagement and have involved several US Senators and House of Reps members in their efforts to manage noise. They have asked government officials to join the Federal Quiet Skies Caucus. They have also been successful in getting local jurisdictions (city governments) to support their efforts.

Suggestions for ACR government engagement efforts

- Lots of publicity is essential
- At one point they collected 200,00 voter signatures to only endorse candidates who supported noise management and not airport expansion
- They participate in ARSAC, Alliance for Regional … a network of airports sharing issues and resources. LAX Wide area committee.
- Work with Quiet Skies
- San Francisco roundtable has an excellent relationship with government leadership
- UC Davis is leader in publishing the environmental impact of airport noise
- Schedule meetings in person with government officials - Bring data and “BE POLITELY PERSISTENT”
- Work with individual city governments and the metropolitan Mayor and City Council. (see US Conference of Mayors resolution)

CLT Airport Community Roundtable

Noise Improvement Matrix

2020 Idea Generation Member Survey

Improvement Process Flow

The following diagram illustrates the general process we'll go through to build on the ideas generated by ACR members through the survey.

Survey Responses

1) **For Departures, what are ways to reduce or eliminate unnecessary engine run-ups?** *NOTE: In aviation, run-up, or runup, is the series of last-minute checks performed by pilots on an aircraft prior to take-off. Run-ups are also sometimes performed by aircraft mechanics, either at a gate in between flights, to test engines and diagnose engine problems.*
   a) In the 3+ years of the CLT ACR, I have never heard mention of run-ups being a problem. As a former pilot and maintenance officer, I don't ever recall encountering an "unnecessary" run-up being done, and I certainly don't want the ACR to start dictating maintenance procedures. This may be a problem at other airports, but let's not create a new crisis where none exists at CLT.
   b) Provide sound walls and/or earthen barriers in the jet wash path behind planes at runup areas to redirect noise.
   c) For maintenance, designate a spot on airport furthest away from population and restrict certain time of day possibly. For departures, pilots must match and stabilize the engines at a lower thrust setting for approx 5 sec prior to applying takeoff thrust. [if you classify that as a run up]. That is so both or all engines are creating the equal amount of thrust at takeoff setting. (Pretty much required.)
   d) I don't know what this has to do with noise and seemingly would only affect those close to airport. There are definitely more departures now in Pawtuckett area which is close to 485 and about 3 miles from airport.
   e) Airliners need to alleviate last minute checks where it could negatively impact our neighbors. They need to incorporate these necessary steps within a standard of operating procedures where these things could be reviewed before they depart from any area.
   f) Install hydraulic lift panels at the end of each runway which deflects thrust and noise up. Panel system could be designed to engage through a weight or metal detection system and disengage or lower after a certain amount of time. Edges of the panel could be designed further to disperse noise.
   g) My personal experience in flying as a passenger in a commercial aircraft leaves me curious about why this question comes up as I do not recall any experience in a commercial jet that involves an engine run-up with passengers aboard. Aside from noticing a runup as a passenger, I can't imagine the noise from a runup would disturb people in the community because of the brevity of the runup. The only community noise that I have experienced is on days when an east or southeast wind carries the sound over the Catawba River which I hear because my house is on the Catawba river. I have no way of knowing that this is coming from a live aircraft or one in the maintenance hangar, but always the duration is brief. Maybe I'm not getting something here.
   h) Perform run ups in remote locations with noise barriers.

2) What are ways to increase adherence to noise procedures by pilots, air traffic controllers, and others?

a) Required procedures are just that, and if they're being violated, there are remedies. Controllers are the key here, as they are with any ACR "recommendations" that fall short of regulatory formality. Local FAA Management is charged with that oversight, and if it fails, we need to bring that to Local FAA Management's upper management attention. Are there examples of procedures NOT being adhered to?

b) A Plan would have to be Standardized across the board not just by municipality/city/airport. Run-up looked at more intentionally not just random or on demand. Impose fines perhaps? In addition - implement noise reduction procedures on the ground as well as take off and landings, such as reduced thrust take off, displaced landing thresholds, and continuous decent approach which is one of the key items in our slate to the FAA. I know Southwest has much different procedures that are noise producing than other major carriers, as an example.

c) Monitor FAA for issues in unexplained go-arounds, low flying craft, and repetitive overflights to determine if practices, policies or procedures can be improved. Demand accountability from FAA Management for the actions of the those responsible who are not in compliance.

d) Follow the described departure and arrival procedures and don't cut corners for quicker arrival and departure flight paths. For arrival, maintain 6,000 feet prior to turning on final. (Most important of all suggestions submitted to FAA).

e) Checklist that is signed off and then audited on periodic basis as some ACR members have done. More automated way to monitor adherence.

f) A representative from FAA and all airlines would need to include us before making any possible changes so we are on one accord where we can inform the public. This should be done as a form of courtesy where our neighbors are not impacted negatively based on their decisions.

g) (1) Require mandatory noise mitigation training for all ATP pilots. 2. Require air traffic controllers to direct inbound traffic to runways which are best suited for the type and weight of aircraft. Utilizing best length runway should allow the pilot to not engage thrust reversers. 3. Fully implement the CDA and require air traffic controllers and pilots to utilize the new system. 4. Fine airlines for violation of noise mitigation procedures when said procedures do not interfere with the safety of the aircraft operation.

h) I'm not sure how to coerce pilots, controllers, and others to increase their adherence to noise abatement procedures, as the best way to solve a problem is for those causing the problem to actually "buy" into the problem. There are so many variables any given day for following procedures with weather being one of the main culprits, but perhaps starting with a person of influence over pilots and over controllers causing the problem to meet with pilots and controllers regularly and often to air some of the issues and question them about how to deal with those issues.

i) Publish noise levels, altitude and noise violation data publicly.

3) **What are ways to increase or improve the noise monitoring network and metrics beyond Dba thresholds?** *This could include virtual noise monitoring and/or physical monitoring at noise sensitive locations.*

a) Physical monitoring at noise sensitive locations is a good idea, given that the sensing equipment could be calibrated and accurately sampled.

b) Clearly Virtual noise monitoring is key and again should be standardized, taking into account time of day/night. Another key item is managing land use around airports, specifically in the area of the rails.....using light industrial and open space/ land conservancy are a few things that could be and should be considered. Residential must be moved outside those areas in my view albeit multifamily as an exception, hotel class A office etc. Perhaps operating restriction for AM and PM hours i.e. curfews.

c) Jets should be plotted by altitude and frequency over a specific position all along the rails. Clearly show demarcation points (e.g. roads, towns, buildings) in a zoomable (legible) fashion that fall below the rails on the expanded maps; Dba levels recorded should be field checked and verified against assumed levels generated by current HMMH models to determine if the data generated is in fact valid. Show all altitude based data based on actual altitudes from ground to sync with FAA information. Record data on Civilian complaints plotted and weighed by TOTAL number of those individuals who have submitted since inception and the specific location and not just how many complaints were received over X. I find that I can generate scores of daily LEGITIMATE noise complaints but to what end? My opinion is that diminishing complains by concerned citizens are greatly impacted by lack of any action. Current low levels of flights, and higher level of other public concerns have also negatively impacted recent logs.

d) Have airport install noise sensitive equipment at certain locations around airport to be monitored and record time, aircraft tail #, altitude, and Dba above a certain prescribed limit set by the airport. Have fines set for violators that trigger the set limits.

e) In the past equipment was sent out but when my home was monitored it only showed 1 day over 65DB. Everyday noise is not present. For example, 10/2, it was quiet this morning and no noise during day. But when walking in Robert L Smith park 9/27, all type of planes were departing and one jet was so loud that a walker just stopped to look at it.

f) They can improve these issues by constantly reviewing the number of complaints and act more expeditiously to upgrade the concerns. Someone should be on their staff that carefully monitor the noise levels with departure and flight arrivals.

g) (1) Install noise monitors at varying distances along the glide slope during approach. 2. Install noise monitors at departure vector locations at varying distances from the airport. 3. Install noise monitors at the down wind turn locations.

h) If there is a technology to actually measure the Dba virtually and transmit that info in real time to a central location that would be the best type of monitoring. I would suggest the monitoring stations be placed in strategic government-related locations, such as fire stations, and the equipment be placed on the rooftop no higher than 25 feet within a three mile radius of the airport approximately along projected flight paths both for commercial aircraft. Since flight tracking technology is available with smartphone apps the information from the monitoring stations could be corroborated with that information and violations of Dba levels could be tracked, maybe? Just a pie in the sky thought.

i) Establish physical noise monitoring stations at critical locations in the city and publish data.

4) For Community Engagement Project Team

What are ways to increase citizen awareness of CLT noise management efforts?

a) Create a Communications project team so charged.

b) Certainly awareness made available thru various means of media in any city such as city website, parks and rec information. An electronic board created specifically for citizen awareness and involvement. In Charlotte I learn lots from the "Charlotte Agenda" that come daily to my phone has varied and diverse information about CLT. It could and should be referenced at each Charlotte city council meeting. Many more I am sure. The airlines years ago created via The Congress a bill of rights for passengers, perhaps a bill of rights for noise pollution?

c) Awareness of Noise efforts are all but non existent on the Southern border beyond the Charlotte Metro area. There is no public announcements or discussions on the major network television and radio markets that also have CLT as a client. I see no PUBLIC discussions with leaders of affected areas like the Rock Hill Council, York County Council, Piedmont Medical Trail. All areas beyond Charlotte City should have more public outreach by Charlotte Airport beyond just the efforts of this committee. The Media should be blitzed with proactive Public Service Announcements via TV and social media presence. Entrances to Public open spaces and venues in all locations under the rails (e.g. the Medical Trail in SC along the Catawba river; Public Schools; Parks) should be provided posters, flyers or other communication to those who live, work and play in the path of the noise so they know why they experience the noise and who to contact to effect change.

d) If violators are habitual and are held responsible with fines, publish the info and put public pressure on them to conform. I don't know if airport will go along with it but you need to have some horsepower behind it.

e) Articles in Charlotte Observer that are still read and perhaps inserts in the Water Bill.

f) Since everything has changed due to COVID19, I would think a news brief in the local periodicals of some sort would be applicable to getting the information out. We can also post information on our website and possibly print a flyer as an insert in the newspaper.

g) (1) Make citizens aware through social media and media announcements. 2. Direct mail to addresses subject to noise. Provide mailers when new procedures are planning to be implemented. Direct and encourage citizens in the mailers to the new website to provide comments. 3. Create website dedicated to improving CLT noise mitigation efforts. Provide in website a method for citizens to complain or offer suggestions.

h) Coordination with city government websites and other places the public looks for info about the community, such as social media sites like Nextdoor and others. Any local online news outlet would work.

i) Enhance the CLT website to expand noise awareness. Use the LAWA.org/Noise website as a model. Lots of publicity is essential - Press releases in media and newspapers.

5) For Government Engagement Project Team

What are ways to increase CLT's and the City's initiatives to proactively reduce noise?

a) Once Covid-able, get the Government Engagement Project Team to start contacting representatives and staffs of local governments. Only local government pressure, enabled by awareness, is liable to get any "proactive" results.

b) Creating a Standard for noise pollution in the region in general if not already in place. Promotion of electric vehicles both city and airport....I know airlines are moving in this direction. Night lighting that produces less buzzing.....when you take in all that lights up our surroundings at night it does hum.....

c) Work with major TV and Radio, News and Public Service teams to bring awareness to those impacted. Reach out to Parks, Recreation and Schools in that fall below rails introduced by MetroPlex to provide awareness as to who is the change agent (FAA) and who they should reach out to to impact change from the FAA. (Public Officials.)

d) Be careful, the more you advertise the noise situation the more the public will become hearing sensitive to it. However, lightly inform the public of the actions being taken to improve the situation VIA friendly media. You will never eliminate the noise pollution unless you remove the airport all together.

e) I think the priority is low unless there are medical or environmental demonstrations of the effect of noise. I am not optimistic. Perhaps the new airplanes will make a difference.

f) We should meet to address any concerns, then act swiftly to resolve the situations. Hold everyone accountable and let's meet to make some type of resolution where it benefits all parties.

g) (1) Require planning department to take aircraft noise in consideration when approving new subdivisions. Allowing new subdivisions to be built under existing glide slopes or departure corridor vectors is not responsible. One example is the new subdivision located at the North East intersection of Interstate 85 and 485 West of Charlotte. 2. Identify noise corridors and decrease residential densities. 3. Change the building code to require any new or approved subdivision under construction in a noise corridor to have better sound proofing. Increasing insulation, installing better sound proof windows and doors are a few examples.

h) If the City of Charlotte is going to sponsor a committee to study ways of reducing noise and since noise is perceived by many people to be a problem, then find out the scope of the most intense noise problems that are unavoidable and zone those areas for industrial or office use where buildings could be constructed with noise abatement materials. I believe zoning is the best and most opportune way to begin to solve this problem, since taking away the ears that perceive the noise from the source as much as possible will advance the City's noise reduction efforts.

i) Work with individual city governments and the metropolitan Mayor and City Council. Schedule meetings in person with government officials - Bring data and "BE POLITELY PERSISTENT" Encourage Mayor to join US Conference of Mayors resolution on airport noise.

6) Please feel free to share any other noise improvement ideas you have for consideration by the ACR.

a) We might look at what our friends across the pond in the EU have implemented? i.e. England, Germany, France specifically. I hope some of these help.....

b) Airlines should aggressively pursue the use of low noise aircraft and take advantage of fleet changes and decisions during this downturn in travel. Airlines could and should try to flex flight frequency. Spread out flights throughout the day and or hour to reduce the lengths of repetitive frequency periods off business hours. Increased frequency should only pair with background noise levels generated. (e.g. during rush hours were high traffic or other surrounding noise is greater, more flights would be palatable to the populace.) Airlines should avoid night flights to minimize sleep disruptions. Airlines should also adopt congestion pricing to help create incentive to spread the flights. Just as the ground transportation industry has introduced and implemented congestion pricing to reduce congestion, so too should the airline industry.

c) (1) Departure vectors should be directed out of CLT to follow one of the interstate corridors.

d) I have no other suggestions to share at this time. My tenure on this committee has been one year and I have not interacted enough yet with others on the committee to generate additional ideas.

e) ACR should work with other Airport noise groups and National Quiet Skies Coalition. Lobby US House members and Senators to join the Federal Quiet Skies Caucus.

Charlotte Douglas International Airport

Airport Community Roundtable

Analysis/Support Requests and Motions from the August 2020 Meeting

Motion on Meeting Scheduling for 2020-21

ACR Approved Modified Schedule

The ACR voted on the following Motion: *To meet on October 14 and December 9, 2020. To schedule 2021 monthly meetings with the intent to cancel if unneeded.*

The ACR passed this Motion via a roll call vote with 11 in favor, 1 opposed, and 1 abstaining. By passing this Motion, the ACR in effect canceled the September 9 and November 11, 2020 meetings.

Request for Action

North v. South Flow Decision-making (CSS/CLT)

Reiterated from the July meeting, the ACR would like an update on the North v. South Flow Decisioning information received from the FAA. CSS/CLT will work with ACR Member Muckenfuss to provide information at the October meeting.

FAA Intending to Share Update and Seek Clarification from ACR (FAA/ACR)

The FAA noted that it plans to meet with its working team within the next 2 weeks and then send questions to the ACR as follow-up to the Submittal Document. The ACR may address prior to and/or at its October meeting.

Sharing List of Accomplishments (CSS)

The ACR and AA requested to receive a Microsoft Word version of the List of Accomplishments. CSS will distribute that document.

Identifying Approaches to Engaging Elected Officials (HMMH)

HMMH offered to investigate and share how roundtables effectively engage elected officials, and HMMH will provide results to the ACR prior to and/or at its October meeting.

Conducting Benchmarking Efforts with Other Roundtables (CLT/CSS/ACR)

To help in the identification of additional ideas and approaches for improving the noise situation in the community, the ACR wants to initiate a benchmarking process. The ACR thought it was a particularly good time to reach out to others, having just completed Submittal of Recommendations to the FAA. The following are key next steps:

- CSS will provide a short survey to ACR members to identify those who are interested in making benchmarking calls to other roundtables.
- CLT will provide an updated list of existing roundtables that are somewhat comparable to the ACR and/or handle the sort of noise situations the ACR is trying to address.
- The Chair/Vice Chair will then engage ACR benchmarking volunteers to reach out to other ACRs.

CLT Airport Community Roundtable

Updates on Requests/Motions – 10/14/20 ACR Meeting

CLT Operational Update

Update on Current State of CLT Operations, Traffic Volume, Revenue

Dan J. Gardon, Noise Abatement Specialist, CLT on October 13

UPDATED LATER 10/13: *TSA throughput was 61% of 2019 but up 2.9% from August 2020. Departures for all airlines was 33.5% of 2019 and down 2.4% from August. Normal seasonality with leisure travel decreasing after summer until the winter holidays. Parking revenue was 73.9% of 2019 and up 6.0% from August. Overall, our recovery is slow and steady, and we are expecting holiday travel to be much closer to normal levels.*

Community Engagement/Communications Updates

ACR Government Engagement Project Team Update

Bob Cameron, Project Team Chair on October 5

The Government Engagement Project Team has finalized its basic PowerPoint briefing deck, subject to individual tailoring to the specific audience. We have also compiled a listing of local and state government officials and are populating it with assigning Team members who will coordinate contacts with individual representatives and staff. At the October ACR meeting, we will also be soliciting participation by other ACR members who may be better contacts for specific briefings. As North Carolina enters Phase 3 and hopefully moves toward whatever openings follow that, we will be making contact and hoping to begin actual in-person meetings with officials.

ACR Community Engagement Project Team Update – ACR Members

Phillip Gussman, ACR and Community Engagement Project Team Member on October 13

The community engagement team has continued to develop contacts and prepared for broader community outreach as we work through these unprecedented times. I expect we will stand by until post election season at this point.

Requests for Support – Communication Plan Development – CLT Staff

Dan J. Gardon, Noise Abatement Specialist, CLT on October 13

No update since August on the CLT Communication plan. To refresh: Consultant has delivered the concept. We are creating images and information to use with the concept. Target is a full deployment of it in 1st Qtr 2021.

FAA-Related Items

Understanding of Internal FAA Review Process relating to CAATT/EPAYE Raising Altitude Motion

John Carraher, Office of the ASO Regional Administrator - Senior Advisor, FAA on March 9

We can arrange to have someone at the April or May ACR meetings to discuss the process for the CAATT/EPAYE Raising the Altitude motion with the understanding that the ACR would like to better understand the process while they finalize the rest of the slate.

Request of FAA for Tower Orders (FOIA)

Dan J. Gardon, Noise Abatement Specialist, CLT on October 13

No update on Request for Tower Orders.

North v. South Flow Decision-making

Within the Handout for the October 2020 meeting are (1) The September 2019 FAA responses to ACR questions about how it's decided whether the airport will be in North Flow or South Flow and (2) The December 2019 FAA responses to 8 ACR follow-up questions.

Airlines-related Updates

Update on NADP-2 Recommendation

Dan J. Gardon, Noise Abatement Specialist, CLT on October 13

No update at this time on NADP-2.

American Airlines Retrofit of Airbus Aircraft with Vortex Generators

Tracy Montross, American Airlines Regional Director of Government Affairs as of October 7

We have modified 204 of 283 aircraft with VGs. The due date for completion of the EO is 01Mar2022.

Voluntary Restraint Program (Scheduling of Flights at Night)

Dan J. Gardon, Noise Abatement Specialist, CLT on August 10

No update on Voluntary Restraint Program.

Additional Updates

EA Process

Dan J. Gardon, Noise Abatement Specialist, CLT on October 13

The CLT planning department will likely be conducting EA public meetings in December, with the record of decision (ROD) for the new runway expected in Summer 2021.

CLT Airport Community Roundtable

North v. South Flow Decisioning

FAA September 2019 Response to ACR Questions

- Please list the criteria used to decide North flow v. South flow departures.

Runway selection is based on the wind in accordance with national orders and local directives. Anticipated traffic, weather and availability runways and navigational systems factor in to the decision. Each item can affect airport throughput and the north operation offers the best opportunity for consistent throughput. Congestion on the ramp area is a consideration.

The 7110.65Y is the guiding regulation:

3 5 1. SELECTION

a. Except where a "runway use" program is in effect, use the runway most nearly aligned with the wind when 5 knots or more or the "calm wind" runway when less than 5 knots (set tetrahedron accordingly) unless use of another runway:

NOTE

1. If a pilot prefers to use a runway different from that specified, the pilot is expected to advise ATC.

2. At airports where a "runway use" program is established, ATC will assign runways deemed to have the least noise impact. If in the interest of safety a runway different from that specified is preferred, the pilot is expected to advise ATC accordingly. ATC will honor such requests and advise pilots when the requested runway is noise sensitive.

REFERENCE

FAA Order 8400.9, National Safety and Operational Criteria for

Runway Use Programs.

1. Will be operationally advantageous, or

2. Is requested by the pilot.

b. When conducting aircraft operations on other

than the advertised active runway, state the runway in

use.

Local order 7110.65U states:

3-6-1. RUNWAY UTILIZATION

a. The Tower OS, with input from the OSIC, must determine the departure/landing direction. Departure/landing direction must determine "active runways."

- Please provide a brief definition of each criteria assessed in determining whether departures are in North flow or South flow.
    - *The wind component is a key factor but there is latitude with wind of less than 5 knots.*
    - *Current and forecasted weather impact the operation. Each morning there is meeting to discuss how weather (and other issues) may affect Charlotte (and the entire system). The facility is briefed on when wind shifts and changes to weather patterns are anticipated.*
    - *Runway and taxiway availability are factors in determining the operation. There have been a number of construction projects that have impacted taxi routes and runway 5/23 has not been available for many months.*
    - *Availability of navigational aids and the precision of the NAVAIDS are factors in choosing the operational direction (northbound ILS approaches have lower minimums, therefore airport throughput can remain higher on a consistent basis). Departures do not occur independently therefore, arrivals must be considered.*
    - *Ramp area congestions seems to be more manageable in the north configuration (this congestion can affect throughput).*

- Assuming there is little wind and “all other things being equal,” is there a preference for North flow v. South flow departures? If so, please note which is preferred and why it’s preferred.

Because runway 23 is not available, landing and departing to the north is the preferred operation. The driving factors are the instrument systems to the north have lower minimums and the operations is more efficient in the ramp area with regard to congestion. The day-to-day volume of aircraft is fairly consistent due to the flight schedules set by the commercial users but there is some variation when General Aviation and Military flights are added to the daily mix. Throughput is important as it can influence schedules and issues with schedules can have negative impact on the entire National Airspace System.

CLT Airport Community Roundtable

North v. South Flow Decisioning

FAA December 2019 Response to ACR Follow-up Questions

1) **Why North Flow Throughput Higher:** Could more detail, understandable to the layperson, be given around why throughput is higher with North flow operations. It states due to closure of runways, but to the layperson, the same number of runways are available given both approaches.

   The availability of runways is one consideration and yes, the same paved surfaces are available for north or south operations. As an example, CLT historically did not use runway 5 with a parallel(s) but did used runway 23 with a parallel(s). In this instance throughput would be higher landing and departing south. Again, availability of runways is only part of the equation.

   Another example the instrument landing systems to the north have lower minimums. In extremely bad weather aircraft may have to hold in the air or on the ground waiting to go to Charlotte if the airport was in a south configuration.

   - 18L vs 36R: 300' ceiling and ¾ mile visibility vs 100' decision altitude and 600' RVR
   - 18C vs 36C: 200' ceiling and ½ mile visibility vs 100' decision altitude and 700' RVR
   - 18R vs 36L: 100' decision altitude and 600' RVR vs 100' decision altitude and 600' RVR

   On a north operation the northwest corner arrivals fly further than on a south operation thus allowing for more departures prior to the arrivals reaching the runway. Conversely, on a south operation the arrivals reach the runway quicker. This phenomenon has an incremental effect on throughput.

   Ramp area congestion should be addressed by the user and airport authority.

2) **Winds from the East or West:** It appears that if the wind is from the west or east and there are no anticipated weather changes, that the selection of flow is discretionary. Other factors may influence that discretion, but either flow meets the regulations. Is that correct?

   Crosswind components create complexities for air traffic control and for the aviators. In a hypothetical situation where the wind was exactly perpendicular to the runways either direction could meet the regulations. Even ten degrees off of perpendicular would influence the operational direction. Depending on the severity of the wind the operation could be greatly reduced in that side by side aircraft on final may not be possible.

3) Ramp Congestion

a. Does the FAA or CLT have any insight as to why ramp congestion seems to be better with North flow operations? **Is there data to support this or is this anecdotal?** My experience as a frequent business traveler, while certainly anecdotal, seems to disagree with this assertion. Since being involved with the committee, I notice on each of my flights home what the approach is, and sitting on the ramps to 20-30 minutes seems consistent on both North flow and South flow.

Anecdotal: In a south operation there is little room to taxi to an active runway and aircraft tend to bunch up in the ramp as these line up for taxi and departure. Once this occurs the inbounds get slowed to the ramp. Departures get bogged down on the east side and arrivals on both east and west side.

Arrivals from the northwest take longer to reach the airport in a north operation and this gives more time for departures to leave the ramp.

Many factors impact arrival/departure from a gate. Including, but not limited to, weather at CLT, enroute or destination airport, gate availability at CLT or destination, security issues and industry considerations.

Ramp area congestion should be addressed by the user and airport authority.
From different ACR member: Can it be explained in further detail/matrix what the operational advantages of North flow over South flow are? (*Ramp area congestions seems to be more manageable in the north configuration*)

The north runways have lower ILS minima

Anecdotal: In a south operation there is little room to taxi to an active runway and aircraft tend to bunch up in the ramp as these line up for taxi and departure. Once this occurs the inbounds get slowed to the ramp. Departures get bogged down on the east side and arrivals on both east and west side.

Arrivals from the northwest take longer to reach the airport in a north operation and this gives more time for departures to leave the ramp.

Ramp area congestion should be addressed by the user and airport authority.

4) Runway Use Program

a. In reference to, "*At airports where a "runway use" program is established, ATC will assign runways deemed to have the least noise impact. If in the interest of safety a runway different from that specified is preferred, the pilot is expected to advise ATC accordingly. ATC will honor such requests and advise pilots when the requested runway is noise sensitive."* Does CLT have a "runway use" program established? If so, what areas are deemed "noise sensitive"? How are areas added or removed from that designation? Based on the wording, it seems that this program could supersede the regs listed above, is that the case?

   CLT does not have a runway use program but does have Informal Noise Abatement procedures. (CLT Order 1050.1j)

b. From different ACR member: Does Charlotte have/ever had a "*Runway Utilization*" program in place?

   CLT does not have a runway use program but does have Informal Noise Abatement procedures. (CLT Order 1050.1j)

   Airport may be a better resource as they were involved in the lawsuit from the late 70s

c. From different ACR member: What criterion is necessary to implement a "Runway Utilization" program, and who makes the initial request?

   See FAA Order 8400.9

5) Noise being/becoming a Consideration

a. During times that higher throughput is not required (i.e. ties where total volume is lower) and wind speed or changes are not a factor, what prevents flow from being switched to reduce noise in a certain area?

   Air Traffic and flight crews plan based on known and forecasted data (ie: weather/wind will change at XXXX or Runway XX will close at XXXX).

   So an arbitrary runway change would impact things like top of descent, data input in the Flight Management System, expected approaches. All of which is pre-briefed by crews before leaving the departure airport.

   Preventive maintenance and airfield maintenance is planned and executed based on forecasted conditions. Current and forecasted weather impact the operation. The facility is briefed on when wind shifts and changes to when weather patterns are anticipated. Each morning there is meeting with stakeholders, including AAL, CDIA and Atlanta Center Traffic Management Unit to discuss how weather (and other issues) may affect Charlotte (and the entire system).

The Airport and/or users may be able to add insight.

b. In Note-2 of section 3-5-1 SELECTION; "*assign runways deemed to have the least noise impact*" how is a value of "least noise impact" assigned/determined among multiple runways?

CLT Order 1050.1j describes Informal Noise Abatement Program.

Airport generally requires no arrivals on west runway until 7:00am (need to confirm)

Airport may have insight as well.

6) **Changing Flow During Day:** What are the operational considerations to changing flow during the day?

The wind component is a key factor but there is latitude with wind of less than 5 knots.

Preventive maintenance and airfield maintenance is planned and executed based on forecasted conditions. Current and forecasted weather impact the operation. The facility is briefed on when wind shifts and when changes to weather patterns are anticipated. Each morning there is meeting with stakeholders, including AAL, CDIA and Atlanta Center Traffic Management Unit to discuss how weather (and other issues) may affect Charlotte (and the entire system).

Runway and taxiway availability are factors in determining the operation. There have been a number of construction projects that have impacted taxi routes and runway 5/23 had not been available for many months.

Availability of navigational aids and the precision of the NAVAIDS are factors in choosing the operational direction (northbound ILS approaches have lower minimums, therefore airport throughput can remain higher on a consistent basis). Departures do not occur independently therefore, arrivals must be considered.

Ramp area congestions seems to be more manageable in the north configuration (this congestion can affect throughput).

7) **Navigation Systems:** What is meant by navigation systems having "lower minimums"? Why are the navigational aides unequal?

Some instrument landing systems have lower minimums and some runways have better lighting systems that allow for lower minimums. Aircraft are equipped differently and some flight crews are certified at lower minimums or for different equipment.

The lower minimums allow for arrivals during reduced visibility and lower ceiling heights.

- 18L vs 36R: 300' ceiling and ¾ mile visibility vs 100' decision altitude and 600' RVR
- 18C vs 36C: 200' ceiling and ½ mile visibility vs 100' decision altitude and 700' RVR
- 18R vs 36L: 100' decision altitude and 600' RVR vs 100' decision altitude and 600' RVR

8) **Runway 5/23**

a. Since runway 5/23 is essentially closed and the airport's intention is for it to be decommissioned, where specifically (by runway #) have flights been diverted to among the remaining runways?

There is no definitive answer as each day, and each push within a day, is different. The daily schedule may be the same but the circumstances presented by weather and other things impacting the system make for a series of tactical decisions. Air Traffic is planned in a strategic sense in that all of the entities discuss, and plan for, the daily events. We then respond tactically as things arise during the day or push.

b. Follow up to above: at what time period were most flights from 5/23 arriving/departing?

Prior to the long term closure of runway 05/23, in 2018, ATC generally had not landed or departed on runway 5 unless during night noise operations, unusual situations or weather.

ATC generally did not depart on runway 23 except during night noise operations, unusual situations or weather.

When runway 23 was available aircraft arriving from the east were generally assigned that runway. This would be all day long if the airport was in a south configuration.

c. Since runway 5/23 is essentially closed, what advantages/disadvantages in operational capabilities have been realized?

Runway 23 is not closed but only used for night noise and special circumstances.

With runway 23 in use the tower must comply with Arrival Departure Window (ADW) rules. This stressor is eliminated but more aircraft arrive on 18C and this creates an additional stressor. (Could be viewed as both a plus and minus)

Some arrivals that previously landed runway 23 now land on runway 18L. In certain instances there is a longer taxi to the ramp but those aircraft the ramp at taxiway Romeo or taxiway Golf which creates congestion at those points. (Could be viewed as both a plus and minus)