

Charlotte Airport Community Roundtable

January 13, 2021 Meeting

Handouts

- ❖ Meeting Agenda
- ❖ FAA Slate Review/Implementation Checklist
- ❖ CLT Updates
- ❖ Community Engagement Project Team 2021 Work Plan
- ❖ Government Engagement Project Team 2021 Work Plan
- ❖ Local Operations/Improvement Project Team Update
- ❖ Listing of Requests for Analysis and Motions from December
- ❖ Written Updates Document
- ❖ HMMH MIT Study Results Presentation

CLT Airport Community Roundtable

Meeting Agenda – 1/13/21, 6p-730p

1) Open the Meeting (5-10 Mins.)

- a) Call Meeting to Order – Kurt Wiesenberger, ACR Chair
- b) Describe Meeting Approach – Ed Gagnon, Facilitator
 - i) WebEx Process, Confirm WebEx/Phone Functionality with Members
 - (1) “Raise the Hand” function; stating name when speaking; structure of handout; screen-sharing
 - ii) Review Ground Rules
- c) Approve Minutes from December – Kurt Wiesenberger, ACR Chair

2) Receive Public Input, if applicable (Time TBD)

3) Update on Moving Forward – Monitor, Engage, and Improve (40-50 Mins.)

- a) **Monitor:** FAA Progress and CLT Updates
 - i) Update on FAA Slate Evaluation Process – Pearlis Johnson, Deputy Regional Administrator – Southern Region, FAA (15-20 Mins.)
 - ii) CLT Update – Stuart Hair, Director of Economic & Community Affairs, CLT (5-10 Mins.)
 - (1) Environmental Assessment and Part 150 Updates
 - (2) CLT Updates on Existing Initiatives, Operations, and Semi-Annual Complaint Statistics
- b) **Engage: Updates from Project Teams** (10 Mins.)
 - i) Community Engagement Project Team – 2021 Work Plan Goals and Deliverables – Phil Gussman, Project Team Lead
 - ii) Government Engagement Project Team – 2021 Work Plan Goals and Deliverables – Bob Cameron, Project Team Lead
- c) **Improve: Update from Project Local Ops/Improvement Team** – Sherry Washington, Project Team Co-lead (5-10 Mins.)

4) Request/Address Additional Business (25 Mins.)

- a) Unfinished Business
 - i) Note **Written Updates** on Motions/Requests for Support (2 Mins.)
 - ii) **Confirm 2021 Meeting Schedule** (Bi-Monthly from 6p-8p on 2nd Wednesdays: March 10, May 12, July 14, September 8, November 10)
- b) New Business
 - i) **Update on New Member Recruitment/Onboarding Approach** – Dan Gardon, Noise Abatement Specialist, CLT (5 Mins.)
 - ii) **Note Updating ACR Charter (Mission/Guidelines Document)** – Dan Gardon, Noise Abatement Specialist, CLT (2 Mins.)
 - iii) **Review MIT Study Results (Impact of Speed on Community Noise)** – Gene Reindel, Vice President, HMMH (10-15 Mins.)

5) Adjourn (2 Mins.)

- a) Next Meeting: **March 10, 6p-8p**

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
<input type="checkbox"/> 11 - National FAA: Phase 1 - Preliminary Activities - Initial Review and Baseline Analysis Report (BAR) - (May take 30 days+)					
<input type="checkbox"/> 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+)					
<input type="checkbox"/> 13 - IF there are triggers in the area under the proposed procedure, perform noise screening/analysis to help assess the impacts					
<input type="checkbox"/> 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+) **					
<input type="checkbox"/> 15 - Phase 4 - Implementation - Implement the procedures and/or routes as designed					
<input type="checkbox"/> 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 Update

Environmental Assessment and Part 150 Updates

EA Update

The following statement was prepared by Amber Leathers:

- ❖ The EA is progressing along. The virtual presentation that replaced the second set of public meetings occurred last month. The comment period ended last week, and the Airport is reviewing those comments. The virtual presentation will remain on the website throughout the remainder of the EA study. The consultant is continuing to complete the draft EA that will be available late Spring 2021. There will be one more set of public meetings with the Draft EA. The Final EA will follow for this Summer 2021.

CLT Updates on Existing Initiatives, Operations, and Semi-Annual Complaint Statistics

Operations: December activity was down an average of 44%; November 2020 activity was down an average of 43%; October 2020 was down an average of 40%; September 2020 was down 49% (compared to the same month in 2019) for measured business intelligence categories.

Existing Initiatives: Environmental Assessment for the Major Capacity Enhancement projects continues on track to finish this year. City Budget process is underway for FY2022 with Aviation budget submitted as equal to FY2021. Multiple Aviation controlled properties are working through the rezoning process requesting changes to I2 Heavy Industrial class.

Charlotte ACR Community Engagement Project Team

2021 Work Plan

Identify Goals for 2021

- A. Increase awareness among residents and businesses of aircraft-related noise concerns, how to voice issues and convey viewpoints, how to suggest improvements
- B. Build awareness of the ACR and its purpose
- C. Share progress made to-date by the ACR and upcoming plans

Identify Deliverables for 2021

- A. Have media exposure six times this year (through articles published, news reports, releases, etc.), addressing each goal in at least 2 publications
- B. Create 2 "ACR Updates" or letters to media outlets and communities highlighting the current state of the ACR's efforts and the Airport activity
- C. Appear in 10 community/neighborhood newsletters or electronic communications
- D. Hold at least 1 town hall (or virtual town hall) with local residents to address some/all of the Goals

Schedule for 2021 (Target scheduled ACR meeting dates)

January	Develop and Approve CEPT 2021 work plan
March	Develop and complete documents addressing each of the Team Goals, Refine contacts and distribution
May	Focus on 3 Broad regional media outlets, Send "ACR Update"
July	Target holding "Town Hall" event likely including a virtual element
September	Focus on 3 Broad regional media outlets, Review materials to include any updates
November	Send "ACR Update"

The CEPT will work with the GEPT and the ACR as a whole to make certain we distribute the most current information possible and collaborate to make the documents and information available and useful to the entire group and the community at large.

CLT ACR Government Engagement Project Team (GEPT)

2021 Work Plan

1. Identify goals for 2021:

- A. Increase relevant government representatives' awareness and understanding of the CLT noise issue, and of the CLT ACR purpose, progress, and upcoming activities.
- B. Define the type of support desired from government officials, and seek same.
- C. In support of the above two goals, utilize the GEPT PowerPoint briefing developed during year 2020, amended and updated with results of ACR Slate feedback from the FAA, status of the 4th Runway Environmental Assessment, and any other major germane developments.

2. Identify deliverables for 2021:

- A. Hold at least 4 meetings with relevant government representatives to address Goals 1.A. and 1.B.
- B. Develop a suitable letter and send to at least 20 relevant representatives to support Goals 1.A and 1.B.

3. Schedule:

January	Develop Work Plan and submit to ACR
February	Definitize "government support" needed to meet ACR goals (Goal 1.B.)
March	Develop letter to government officials (Deliverable 2.B.)
April	Send letter to representatives (Deliverable 2.B.)
May	Meet with at least 1 representative or group (Deliverable 2.A.)
June	Meet with at least 1 representative or group (Deliverable 2.A.)
July	
August	
September	Meet with at least 1 representative or group (Deliverable 2.A.)
October	Meet with at least 1 representative or group (Deliverable 2.A.)
November	Hold group feedback on topic of Work Plan progress, and provide results to ACR, seeking ACR guidance for future activities
December	Develop Work Plan for year 2022, for providing to ACR in January 2022

CLT Airport Community Roundtable

Local Operations/Improvement Project Team

Update for January 13, 2021 ACR Meeting

Project Team Members: Sherry Washington (Co-lead), Kurt Wiesenberger (Co-lead), Priscilla Johnson, Mark Loflin, Thelma Wright, Bob Lemon.

Project Team Activities to-Date

- 1) **Held Two Meetings** (12/8/20, 1/7/21)
- 2) **Developed/Refined Purpose Statement**
 - a) *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.*
- 3) **Identified Process:** Decided on a continuous process approach to uncovering, vetting, analyzing, and implementing noise improvements.
- 4) **Determined Meeting Frequency:** Project Team will meet monthly until they get work flowing well, then will eventually move to bi-monthly meetings.
- 5) **Reviewed Initial Sources of Improvement Ideas:** Reviewed results from the 2020 Member Idea Generation Survey, CLT's feedback on survey results, and North v. South Flow Decisioning Communications
 - a) Will seek clarification relating to several concepts addressed in the survey including noise monitoring, effects of aircraft noise reduction initiatives, and adherence to procedures.
 - b) Still reviewing information on North Flow v. South Flow Decisioning and other member survey ideas.
- 6) **Considered Benchmarking Approach**
 - a) Decided to access all existing information the ACR has on other airports/roundtables prior to seeking any new information or conducting additional benchmarking activities with other airports and roundtables.
 - b) Project Team to seek call with Gene (HMMH) to gain his perspective on the approach of other roundtables to ongoing efforts to improve the noise situation in their communities.

Charlotte Douglas International Airport

Airport Community Roundtable

Analysis/Support Requests and Motions from the [December 2020 Meeting](#)

Motions and Officer Transition Votes

Motion to Accept Sara Nomellini's Resignation as Chair

The ACR passed this Motion unanimously via acclimation.

Kurt Wiesenberger nominated to become Chair

The ACR elected Kurt Wiesenberger unanimously via acclimation.

Phillip Gussman nominated to become Vice Chair

The ACR elected Phillip Gussman unanimously via acclimation.

Requests for Action

Requesting Member Participation in EA Public Input Process (ACR/CLT)

On behalf of CLT and those involved with the Environmental Assessment process, Stuart Hair requested ACR member participation in the EA public input process. CLT provided a link to the EA web page during the meeting and will e-mail the link to all members on December 3. The EA presentation is on-demand, so members can review when convenient for them. The website will note how members can provide feedback over the next 30 days.

Requesting ACR Member Feedback on the Proposed Recruitment/Development Approach (ACR/CSS)

After the post-meeting Debrief with the Chair and Vice Chair, CSS will send information to ACR members on the Proposed Recruitment/Development Approach and the desired qualities/experience of new members. The Chair/Vice Chair will seek input from members to refine this Approach.

CLT Airport Community Roundtable

Updates on Requests/Motions – 1/13/21 ACR Meeting

Community Engagement/Communications Updates

Requests for Support – Communication Plan Development – CLT Staff

Dan J. Gardon, Noise Abatement Specialist, CLT on January 11

No further update on the CLT Communication Plan Development.

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, 2020

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 January 11

No updates to share on the FOIA request at this time.

Airlines-related Updates

Update on NADP-2 Recommendation

Dan J. Gardon, Noise Abatement Specialist, CLT on January 11

No further update on the NADP-2 recommendation.

American Airlines Retrofit of Airbus Aircraft with Vortex Generators

Tracy Montross, American Airlines Regional Director of Government Affairs as of December 15

We have now modified 222 of 283 aircraft with vortex generators. No changes to the due date (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 January 11

No further update on the Voluntary Restraint Program.

Evaluation of Speed on Aircraft Noise

FAA Report to Congress – December 2020
Includes MIT Report ICAT-2020-03, April 2020



1

FAA Report to Congress

Provided to four members of Congress via letters on December 23, 2020

- Committee on Commerce, Science, and Transportation
 - Roger Wicker (R-MS), Chairman
 - Maria Cantwell (D-WA), Ranking Member
- Committee on Transportation and Infrastructure
 - Peter A. DeFazio (D-OR), Chairman
 - Sam Graves (R-MO), Ranking Member




2

Presentation Outline

- FAA Reauthorization Act of 2018, Section 179
- Aircraft Noise Sources
- Takeoff Noise
- Approach Noise
- Report Conclusions

https://www.faa.gov/about/plans_reports/congress/media/Airport_Noise_Mitigation_Safety_Study_report_PL115-254_Sec179.pdf



Federal Aviation Administration

Report to Congress

*FAA Reauthorization Act of 2018
(Pub. L. 115-254)
Section 179: Airport Noise Mitigation and Safety Study*


June 1, 2020



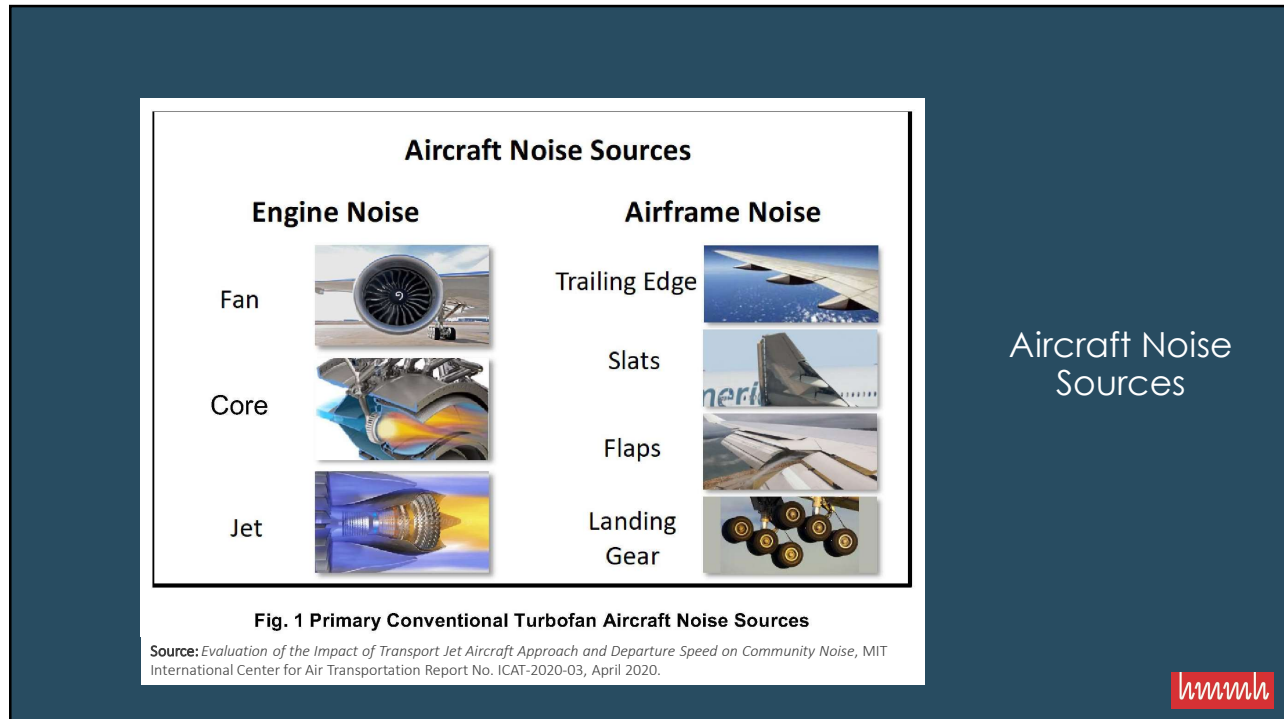
3

FAA Reauthorization Section 179 Requirements

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 reductions jeopardizes aviation safety; or decreases the efficiency of the National Airspace System, including lowering airport capacity, increasing travel time, or increasing fuel 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




4



5

Takeoff Noise

- Engines continue to be the dominant noise source during jet aircraft takeoffs
- Engine noise increases with:
 - Increased power setting
 - Increased difference between:
 - Speed of the high velocity jet airflow
 - Speed of the aircraft
- MIT evaluated the following jet aircraft takeoff scenarios with NASA's Aircraft Noise Prediction Program (ANOPP)
 - "Close-In" Noise Abatement Departure Profile (NADP 1) vs "Distant" Noise Abatement Departure Profile (NADP 2)
 - Reduced climb speed to maintain the aircraft at the minimum safe airspeed with flaps up until 10,000 feet in altitude



6

Takeoff Noise

Two jet aircraft takeoff scenarios evaluated:

1. Changing the location of the start of acceleration and flap retraction through NADPs
2. Reduced climb speed to maintain the aircraft at the minimum safe airspeed with flaps up until 10,000 feet in altitude

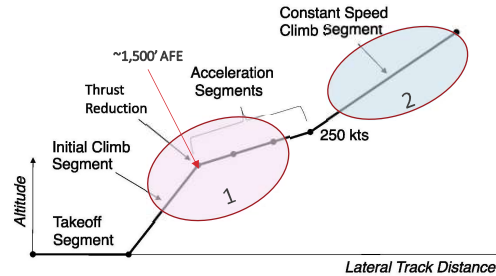


Fig. 4 Typical Departure Procedure Divided into Segments, Consistent with NADP 2.

Sources: (1) *Evaluation of the Impact of Transport Jet Aircraft Approach and Departure Speed on Community Noise*, MIT International Center for Air Transportation Report No. ICAT-2020-03, April 2020. (2) HMMH annotations (red arrow and red outlined ellipses).

hmmh

7

Results of Takeoff Noise Evaluation

1. NADP Evaluation

Changes in the acceleration location on departure results in minimal (likely not noticeable) noise reduction

2. Reduced Climb Speed

Because the noise is dominated by the engines during the climb, the climb speed does not have a significant effect on noise

hmmh

8

Approach Noise

- Airframes have become a more dominant noise source during jet aircraft approaches
- Airframe noise sources are highly sensitive to aircraft speed and speed is tightly coupled to the deployment of flaps, slats and landing gear
- MIT evaluated a delayed deceleration approach (DDA) concept with NASA's Aircraft Noise Prediction Program (ANOPP)



9

Pros and Cons of DDA Concept

Pros

- Reduced noise from engines and airframes 10 to 25 miles from touch down
- Reduced fuel burn due to:
 - Reduced flight times
 - Lower engine thrust settings

Cons

- Ideal deceleration profile varies by:
 - Aircraft type
 - Weight
 - Weather
- Varying deceleration rates poses a challenge to air traffic controllers in terms of:
 - Sequencing
 - Spacing



10

Report Conclusions

- Takeoff
 - Changes in aircraft climb speed after initial acceleration do not noticeably affect the overall aircraft takeoff noise due to the dominance of engine noise
- Approach
 - Delaying the deceleration of the aircraft on approach could reduce noise between 4 and 8 dB (noticeable) 10 to 25 miles from touch down
 - Additional work is required to validate this potential noise benefit and resolve implementation challenges



11

Questions/Discussion

Presented by Gene Reindel, HMMH Vice President



12



Annual Complaint Report

CHARLOTTE DOUGLAS INTL NOISE DEPARTMENT

2020

Annual Totals & Trends

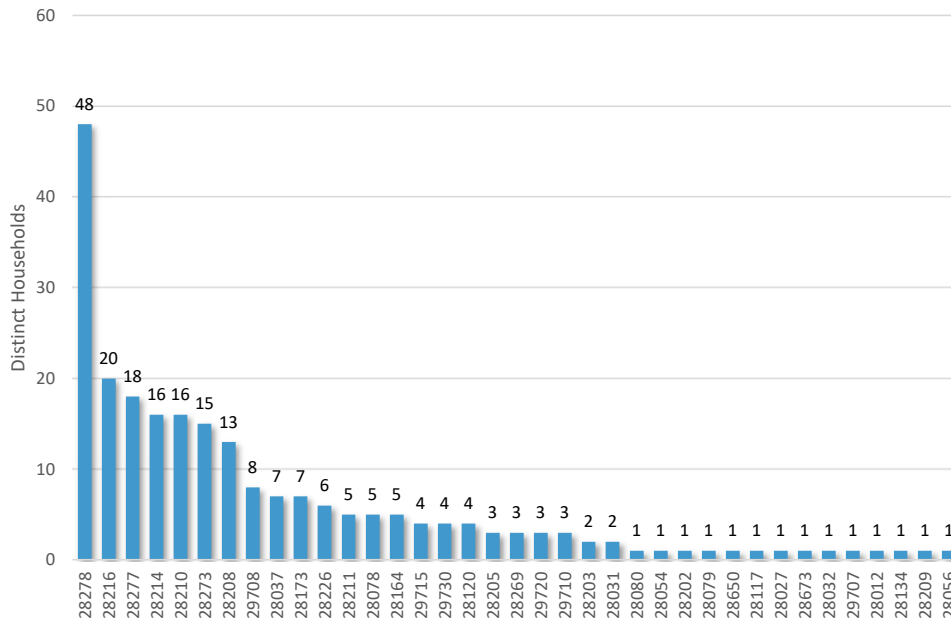
231

Households

55,035

Comments

Distinct Households, Ranking by Zip Code (All)

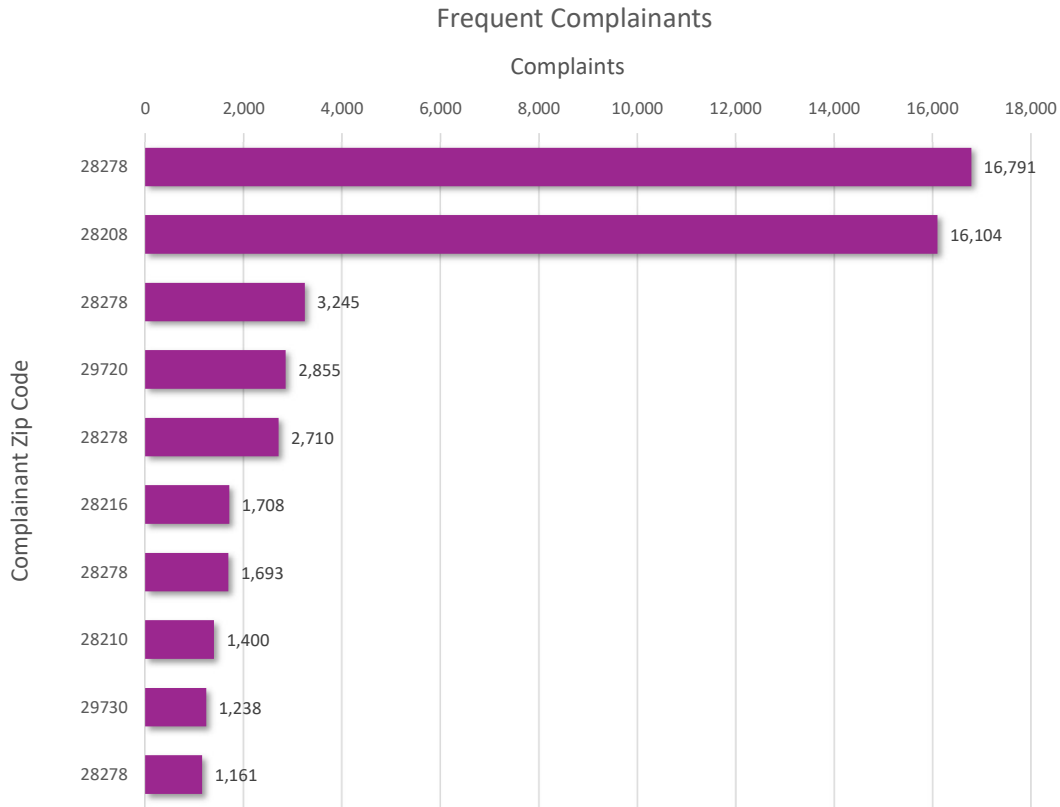


Charlotte Douglas International Airport's 2020 aircraft noise complaints from area residents totaled 55,035 and were generated by 231 distinct households (238.2 complaints per household). This represents a -33.0% change in complaints and a -33.8% change in households from the previous year.

The top-10 reporting households generated 48,905 complaints or 88.9% of the yearly total.

Complaints were geographically concentrated in zip codes: 28278 (27,585), 28208 (16,129), 28216 (3,279) and 29720 (2,857). See Page 3 for a complete list of complaints and the associated number of reporting households.

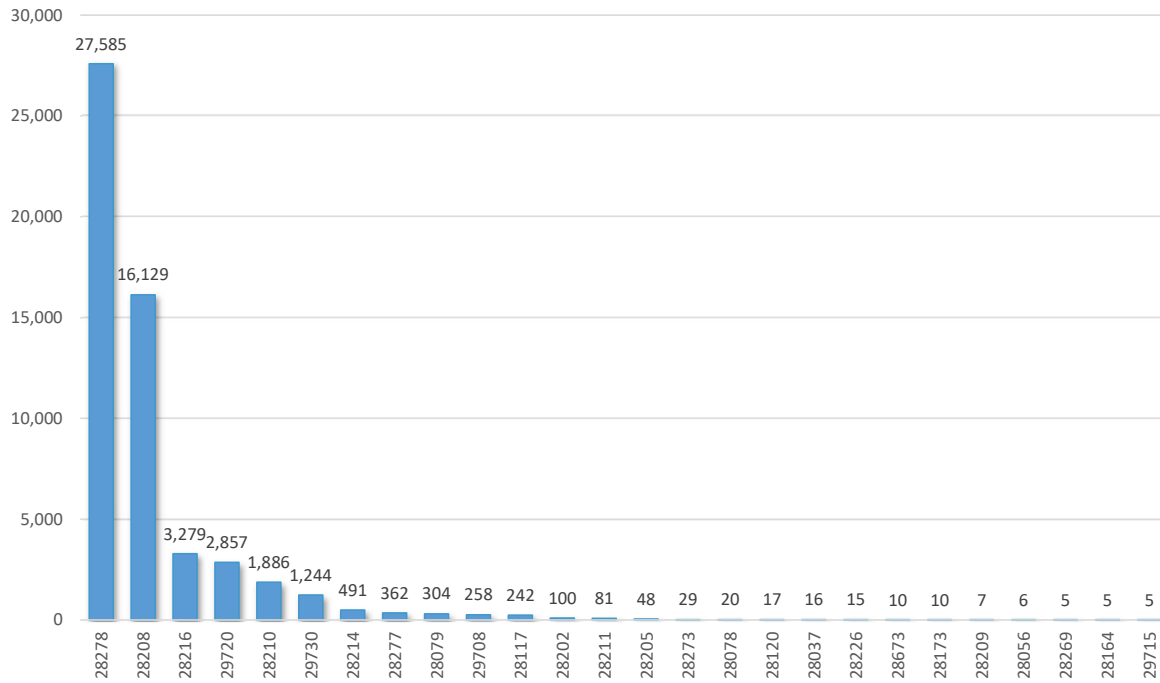
Complainant Ranking (Top-10)



	RESIDENT FROM	ZIP CODE	COMPLAINTS THIS YEAR	PERCENT OF YEAR
1	Charlotte	28278	16,791	30.5%
2	Charlotte	28208	16,104	29.3%
3	Charlotte	28278	3,245	5.9%
4	Lancaster	29720	2,855	5.2%
5	Charlotte	28278	2,710	4.9%
6	Charlotte	28216	1,708	3.1%
7	Charlotte	28278	1,693	3.1%
8	Charlotte	28210	1,400	2.5%
9	Rock Hill	29730	1,238	2.2%
10	Charlotte	28278	1,161	2.1%
Top-10 Totals			48,905	88.9%

Complaints this Year

Area Ranking by Zip Code (All)



ZIP CODE	CITY	COMPLAINTS	HOUSEHOLDS	COMPLAINTS/ HOUSEHOLD
28278	Charlotte	27,585	48	574.7
28208	Charlotte	16,129	13	1240.7
28216	Charlotte	3,279	20	164.0
29720	Lancaster	2,857	3	952.3
28210	Charlotte	1,886	16	117.9
29730	Rock Hill	1,244	4	311.0
28214	Charlotte	491	16	30.7
28277	Charlotte	362	18	20.1
28079	Indian Trail	304	1	304.0
29708	Tega Cay	258	8	32.3
28117	Mooresville	242	1	242.0
28202	Charlotte	100	1	100.0
28211	Charlotte	81	5	16.2
28205	Charlotte	48	3	16.0
28273	Charlotte	29	15	1.9
28078	Huntersville	20	5	4.0
28120	Mount Holly	17	4	4.3
28037	Denver	16	7	2.3
28226	Charlotte	15	6	2.5
28056	Gastonia	10	1	10.0
28173	Waxhaw	7	1	7.0
28209	Charlotte	6	5	1.2
28269	Charlotte	6	1	6.0
29715	Fort Mill	5	4	1.3
28673	Sherrills Ford	4	2	2.0
Remaining Zip Codes		34	23	1.5
Totals		55,035	231	238.2

Complaint Map: 2020

Distinct Households - 231 / Complaints - 55,035

NOTES: Noise complaints from households submitted without valid address information are not depicted on the map.

