

Davidson Town Council
Brief re
Charlotte Douglas Airport (CLT)
Community Roundtable

Bob Cameron
Davidson ACR representative
July 2019

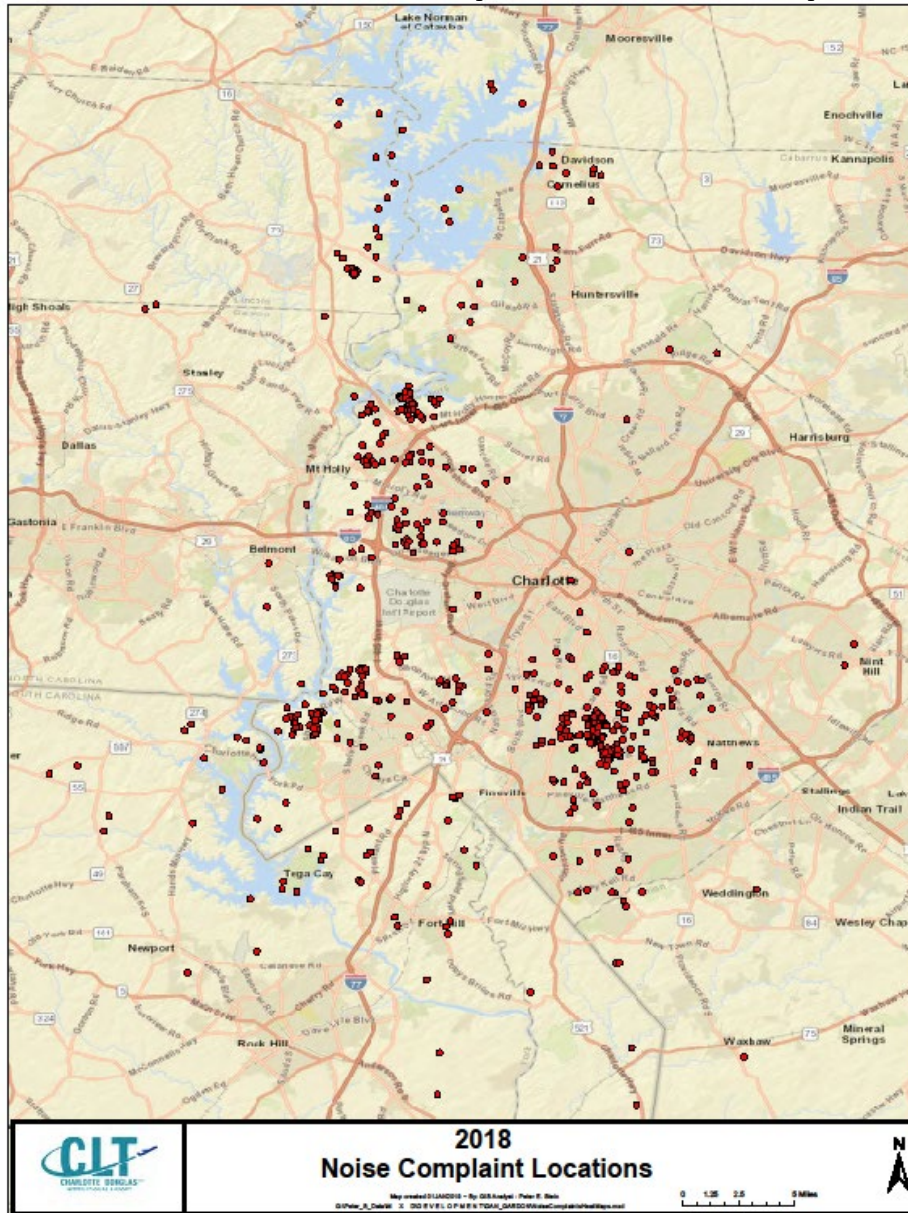
Charlotte-Douglas International Airport: CLT

- By number of landings/takeoffs, CLT is the:
 - 6th busiest airport in the U.S.
 - 7^h busiest Airport in the world (after ATL, ORD, LAX, DFW, Beijing, and DEN)
 - CY18: 550,013 operations (landings + takeoffs = >1500/day), 46.4m passengers, 34% increase since 2008
- CLT contributes \$23B to NC economy (~60% of all airports in NC total)
- Airport has 3 parallel north/south runways, with a 4th in EPA Assessment process, est. 2024 operations

CLT Noise Complaints

- 2017: 144,840 formal noise complaints filed with the CLT Airport/FAA.
- 2018: 27,351 complaints (the ACR takes no credit for the decrease!)
- For Davidson, 12 in 2018 (7 households)
- 2019: YTD (through May) 14,508 complaints (168 addresses), one from Davidson

2018 Complaint Map



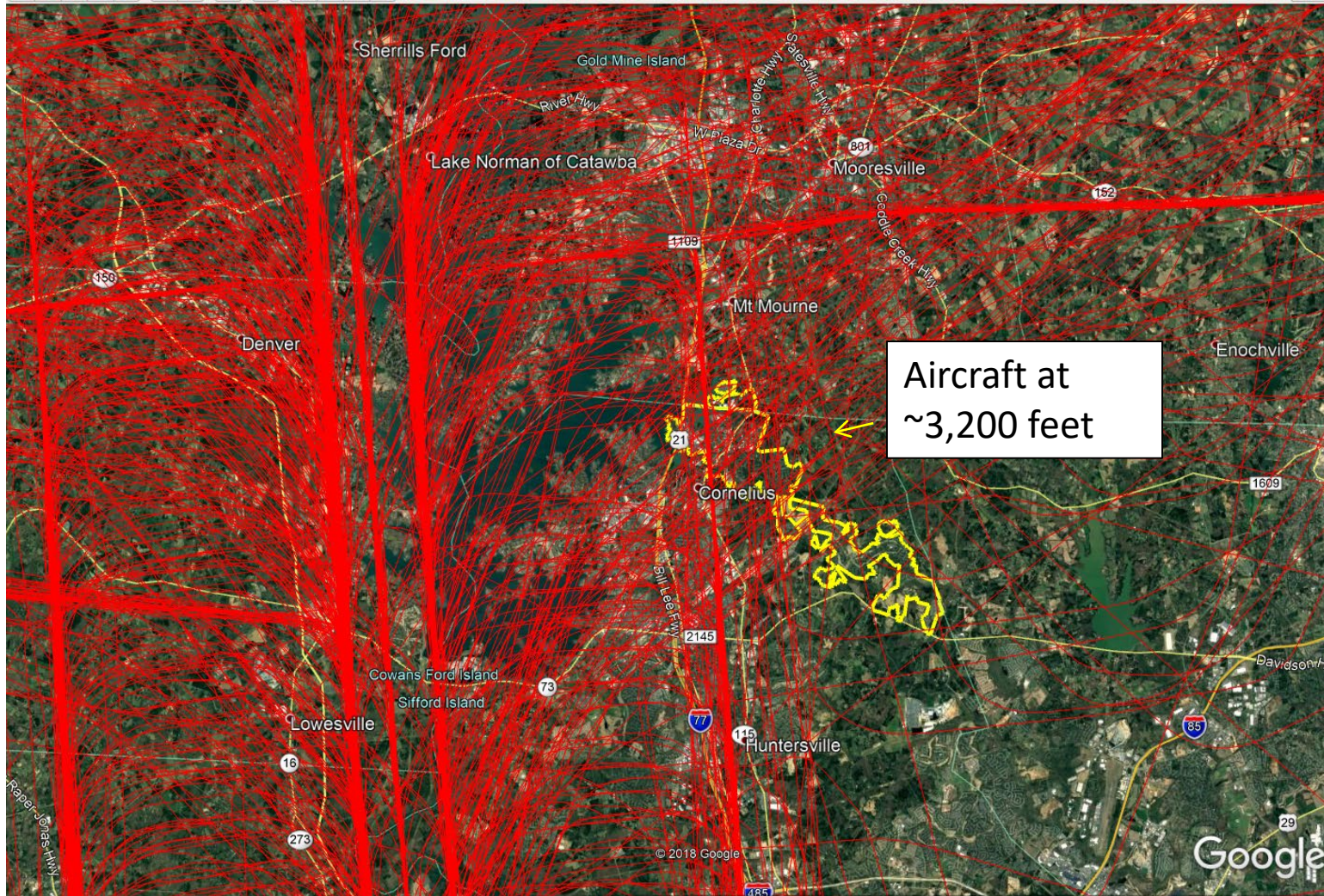
Noise: what is it good for?

- Noise = UNwanted sound, so, absolutely nothing.
- Sound is measured as sound pressure level, expressed in decibels (duh).
- Typical levels (since dB are logarithmic, each 10 dB about doubles the “sound”):
 - 40 dB: quiet library, ambient outdoors
 - 50 dB: car passing by on a quiet residential street
 - 60 dB: Davidson N. Main St. in the afternoon
 - 60 dB: noise from typical Davidson overflight by jet
 - 65 dB: Day/Night Average (DNL) legal limit that the EPA considers to be excessive – no one beyond about 1.5 miles from CLT is anywhere near that.
 - 70 dB: vacuum cleaner, aircraft overhead at 300', generally an accepted level of peak excessive noise.
- The frequency of noise events is actually more disturbing to most residents than the actual peak amount of noise generated, so trying to capture objectivity on this whole subjective issue is tough – there is no absolute, accepted threshold for airplane noise other than the 65dB DNL noted below.

Noise Influencers

- Aircraft (model, distance [vertical, lateral], flight mode [climbing, descending, level-off])
- FAA procedures (new technology project: Metroplex, 2017)
- Wind (CLT operates about $\frac{1}{2}$ north, $\frac{1}{2}$ south, but more spring/summer operations are takeoffs and landings heading south, and Davidson gets more noise with south operations)
- Frequency of events
- Receiver sensitivity (subjective)

South Flow Arrivals – actual tracks on one day



A single day of Arrivals to CLT

ACR Involvement

- ACR has sent to all the CLT commercial operators a request that they voluntarily avoid scheduling/flying between 2300 and 0600 if at all possible.
- In response to an ACR request, the FAA has initiated an internal revision to raise two intersections' minimum altitudes (doesn't impact Davidson, but is a positive move for some communities), since it is within the FAA's power to improve noise over Davidson due to the "shortcut" practice by controllers – this is the first indication we can point to of a move by the FAA to help mitigate CLT airport noise impact on the communities.
- The ACR has developed a slate of 8 options, now in study by a consulting firm, to determine which may merit forwarding to the FAA as recommendations – doing an engineering deep dive, seeing what unintended consequences may occur, etc. The 7 options are focused on the neighborhoods/areas with the most noise, understandably.

Takeaways / Conclusions

- CLT noise is here to stay (34% growth since 2008 shows no abating)
- \$23B economic contribution
- FAA efficiency goal
- 600 households out of a metropolitan population of 2.5 million doesn't weigh much.
- 4th parallel runway coming in 2024
- Aircraft are getting quieter (Stage 4 current, 5 on its way, but that is overwhelmed by traffic increases, from residents' perspectives)
- The ACR is working the situation, but the FAA process is slow, and we don't anticipate any formal requests until late 2018, or any FAA adoption of any of those before the end of 2019 (everything effects everything else, and Atlanta Center is the big dog in this kennel)

Questions?

- Feel free to call / email / chat / whatever
 - Bob Cameron
 - 139 Harper Lee St. Davidson
 - (704) 929-4531
 - rcamero1@gmail.com