

CENTENNIAL AIRPORT COMMUNITY NOISE ROUNDTABLE AGENDA

January 3, 2024

6:30 p.m. - 8:30 p.m.

Centennial Airport, 7565 S. Peoria Street, Unit D9, Englewood, CO 80112

Chair: Brad Pierce Vice Chair: Paul Krier Treasurer: Andy Jones Secretary: Alison Biggs

Members' Representatives and Alternate Representatives are requested to attend all meetings in person.

Members of the public may attend meetings in person, or virtually.

CACNR Mission:

CACNR will bring together airport, community, FAA, and aviation industry representatives to collaboratively identify and discuss noise issues at Centennial Airport and recommend courses of action that could reduce noise over affected communities.

1. CALL TO ORDER AND DETERMINATION OF QUORUM:

Arapahoe County: Leslie Summey/Sreenivasan Alakappan Greenwood Village: Donna Johnston/Libby Barnacle

Paul Krier/Vacant Highlands Ranch Metro Dist. Andy Jones/Renee Anderson

Douglas County: Abe Laydon/Dan Avery Lone Tree: Mike Anderson/Chuck Darnell

Alison Biggs/Mark Adams Parker: Ashley Chasez/Vacant Brad Pierce/Mindy Parnes ACPAA: Michael Fronapfel/Vacant

Aurora:Brad Pierce/Mindy ParnesACPAA:Michael Fronapfel/VacantCastle Pines:Chris Eubanks/Ben PriceAOPA:John Hirshman/VacantCastle Rock:Laura Cavey/Sandy VosslerCABA:Don Kuskie/Mike StrakaCentennial:Don Sheehan/Amy TharpeCDOT Aeronautics Div:Todd Green/Vacant

Cherry Hills Village Robert Eber/Randy Weil Wings Over the Rockies: Bill Wasmund Jordan Ashley

Foxfield: Pam Thompson/Frank Lawrence

- 2. CONSENT AGENDA: (items here may be moved to Agenda Item #3, on the request of any CACNR Representative)
 - A. DRAFT MINUTES, November 1, 2023 Alison Biggs, Secretary
 - B. TREASURER'S REPORT, December 2023 Andy Jones, Treasurer, Samantha Blymyer, ACPAA Staff
 - C. NOISE REPORTS, October and November 2023 Samantha Blymyer, ACPAA Staff
 - 1. Report from 2ND Portable Noise Monitor

3. <u>ITEMS REMOVED FROM CONSENT AGENDA:</u>

4. CACNR STUDY GROUP COMMITTEE: Brad Pierce, Chris Eubanks, Mike Fronapfel

5. **EXECUTIVE COMMITTEE:**

- A. PUBLIC COMMENT PROCEDURE approved by email vote, 12/15/23
- B. FINAL CACNR/ACPAA 2024 MEETING SCHEDULE
- C. RETREAT PRIORITIES see 11/01/23 Minutes, page 3 under 6.C.

6. **REPRESENTATIVES' COMMENTS:**

A. FLY QUIET/BILL WASMUND

7. OTHER REGULAR REPORTS:

- A. AIRPORT DIRECTOR Mike Fronapfel
 - 1. Flight School Activity
 - 2. Part 150 Study Update
 - 3. Aviation Fuel How Much Sold/What Kind
 - 4. Community Related Activity
 - 5. Other Airport Activity
 - 6. Legislative
 - 7. Status of Follow Up Items

8. OLD BUSINESS:

A. 2023-2024 CACNR Attendance Record

9. <u>NEW BUSINESS:</u>

A. UC Davis Aviation Noise & Emissions Symposium – March 4-6, Hotel Zoso, Palm Springs, California

10. **PUBLIC COMMENT**: (3 minutes per person time limit):

- A. RECEIVED BY CACNR
- B. MEETING ATTENDEES

11. NEXT MEETINGS:

A. **CACNR** – February 7, 2024 6:30 p.m. 7565 South Peoria Street, Englewood, CO 80112 6:30 p.m. 7565 South Peoria Street, Englewood, CO 80112

B. ACPAA – January, 2024 NO ACPAA MEETING

February 8, 2024 3;00 p.m. 7565 South Peoria Street, Englewood, CO 80112 March 6, 2024 3:00 p.m. 7565 South Peoria Street, Englewood, CO 80112

12. **ADJOURN:**



CENTENNIAL AIRPORT COMMUNITY NOISE ROUNDTABLE **MINUTES**

November 1, 2023 **DRAFT**

VISION - QUIETER SKIES FOR OUR COMMUNITIES

MISSION - UTILIZING PARTNERSHIPS TO REDUCE AIRPORT NOISE FOR THE BENEFIT OF NEIGHBORING COMMUNITIES Chair: Brad Pierce Vice Chair: Paul Krier Treasurer: Andy Jones Secretary: Alison Biggs

1. CALL TO ORDER, ROLL CALL, and QUORUM: The meeting was called to order at 6:32 p.m. by Chair Brad Pierce. The following were in attendance, and a quorum was present:

Arapahoe County: Sreenivasan Alakappan (on line) Foxfield: Pam Thompson Arapahoe County: Paul Krier Greenwood Village: Donna Johnston Douglas County Alison Biggs Lone Tree: Mike Anderson Aurora: **Brad Pierce** Parker: Ashlev Chasez Castle Rock: Sandy Vossler (on line) AOPA: John Hirshman Chris Eubanks Castle Pines: Wings Over the Rockies: Bill Wasmund

Others in attendance were ACPAA staff Samantha Blymyer, Chris Thompson, and Lauren Wiarda. There were 16 members of the public on line, and four in attendance.

Highlands Ranch: Those absent were: Douglas County: Abe Laydon/ Dan Avery Andy Jones /Renee Anderson

Centennial: Vacant/Don Sheehan ACPAA: Mike Fronapfel/vacant Cherry Hills Village: Robert Eber/Randy Weil CABA Don Kuskie/Mike Straka CDOT Aeronautics Div: Todd Green/Vacant

2. CONSENT AGENDA: The Consent Agenda included the Draft CACNR Minutes from October 4, 2023; a Treasurer's Report from October 30, 2023, showing a balance of \$27,691.66 and the September 2023 Noise Report. On the motion of Mike Anderson, duly seconded, the Consent Agenda was approved.

The **September 2023 Noise Report** included the following information:

September Local Operations: **September Total Operations:** 17,508 34,469 Year to Date Local Operations: 147,878 Year to Date Total Operations: 276,521

34,469 Total Operations in September resulted in 1,145 complaints from 129 households.

September Noise Events:

September Total:	1	September 60 - 6	9 db:	<u>September 70 – 7</u>	9 db:	September 80 - 89	<u>db:</u>
Golf Course	10,355	Meridian	7,117	Golf Course	3,618	Airport East	695
Meridian	9,285	Golf Course	6,510	Meridian	2,101	Golf Course	205
Airport East	3,409	Parker	2,462	State Park	976	Meridian	64
State Park	3,108	State Park	2,117	Airport East	902	Portable Station	33
Parker	2,690	Portable Station	1,930	Portable Station	379	Grandview Estates	23
Portable Station	2,345	Airport East	1,740	Parker	226	State Park	15
Grandview Estates	s 1,927	Grandview Estates	1,690	Grandview Estates	214	Hunters Hill	12
Greenwood Village	e 1,189	Greenwood Village	1,078	Greenwood Village	107	Greenwood Village	4
Lone Tree	811	Lone Tree	775	Hunters Hill	59	Lone Tree	2
Castle Rock	765	Castle Rock	745	Castle Pines	19	Parker	2
Hunters Hill	589	Hunters Hill	518	Lone Tree	34	Castle Pines	1
Castle Pines	327	Castle Pines	307	Castle Rock	20	Sagebrush Park	1
Sagebrush Park	153	Sagebrush Park	138	Sagebrush Park	14	Castle Rock	0

September Noise events in the 90+ decibel range: Airport East – 72 Golf Course - 22 Meridian - 3 Portable Station - 3

September Noise Complaints	and	Numbers of House	eholds:	YTD Compla	ints and N	Number of He	ouseholds:
(1,145)		(129)		(8,786)		(386)	
Unincorporated Arapahoe County	387 (34 %)	UAC	49 (38%)	UAC	3,681 (42%)	UAC	169(44%)
Greenwood Village	279 (24%)	Greenwood Village	33 (25%)	GW Village	2,463 (28%)	GV	85 (22%)
Parker	150 (13%)	UDC	10 (8%)	Parker	786 (9%)	Other	28 (7%)
Centennial	143 (13%)	Other	8 (6%)	Centennial	759 (9%)	UDC	20 (5%)
Castle Rock	60 (5%)	Parker	8 (6%)	Castle Rock	351 (4%)	Centennial	18 (5%)
Unincorporated Douglas County	47 (4%)	Centennial	7 (5%)	UDC	338 (4%)	Parker	18 (5%)
Other	34	Highlands Ranch	4	Denver	138	Lone Tree	13
Denver	20	Lone Tree	3	Other	108	Aurora	10
Highlands Ranch	13	Aurora	2	Aurora	61	Highlands	10
Lone Tree	6	Castle Pines	2	Highlands Ra	inch 46	Castle Roo	k 7
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pg. 1

Aurora	4	Castle Rock	2	Lone Tree	46	Denver 4
Castle Pines	2	Denver	1	Castle Pines	9	Castle Pines 4
Cherry Hills Village	0	Cherry Hills Village	0	Cherry Hills V	0	Cherry Hills 0

Year to Date, the top five households complaining were:

Household #1 1,363 Greenwood Village Household #4 570 Unincorporated Arapahoe County
Household #2 764 Parker Household #5 403 Unincorporated Arapahoe County
Household #3 722 Centennial

In September, 88 responses were requested from 1,145 noise complaints, with 72 of those requests made by email (82%), and 16 made by telephone (18%).

In September, 966 complaints were made about daytime flights (7:00 a.m. - 9:59 p.m.) - 84%. 179 complaints were made about nighttime flights (10:00 p.m. - 6:59 a.m.) - 16%.

In September, props accounted for 83% of the complaints by aircraft type; jets accounted for 15% of the complaints, and helicopters caused 2%.

In September, training was responsible for 35% of the complaints, **arrivals** were responsible for **35**% of the complaints, and **departures** were responsible for 30% of the complaints.

The September Complaint Map and a September Radar Track Density Map were provided.

3. ITEMS REMOVED FROM THE CONSENT AGENDA: None

4. <u>CACNR STUDY GROUP COMMITTEE</u>: Question was raised about the mitigation strategies named during the last meeting – were they to be done in the short term or long? (Two mitigation strategies had been selected as being able to be implemented by the FAA on October 5th. The first would be during the late evening and early morning hours, when FAA-ATC determine it is possible, the main runway (17L/35R) would be utilized so that pattern work would be conducted east of the airport over commercial areas. The second to be implemented on October 5th would be to have the noise sensitive areas added to the radar display in the control tower.) Would CACNR receive an update on progress on these two items? Another important strategy would be for the airport to add an FTE in 2024 to improve the staff's ability to provide investigation, analysis and reporting of data from the Airport Noise and Operations Monitoring System (ANOMS).) This position would be for the long term, and would possibly be filled by April, 2024.

There continued to be interest in how the two above listed mitigations would be measured to assess any improvement and would CACNR be able to see those measurements. Request had also been made for the FAA to do something to decrease the overall traffic. A final request had been made for the next report to be made available sooner than Spring of 2024, unless Spring was defined as perhaps January or February. The next meeting of the Study Group would be held on November 3, 2023.

As follow-up to the last report of the Study Group, a draft letter was sent from the Study Group to CACNR, asking CACNR to recommend the airport hire additional staff for data collection and analysis, as quickly as possible. On the motion of Chris Eubanks, duly seconded, the recommendation was approved. A draft letter to implement this recommendation was then presented. Following discussion, an amendment was accepted to further request ACPAA expedite the hiring process for this position. On the motion of Donna Johnston, duly seconded, the amended letter was approved; Brad Pierce would provide it to Chris Eubanks and to Samantha Blymyer for distribution to ACPAA as follows:

Dear Thad Bagnato, Chair Arapahoe County Public Airport Authority,

As you are aware the Study Group Committee has been meeting to address the noise exposure created by the extended traffic pattern. We have discussed numerous possible mitigation strategies. In order to show progress with those mitigation strategies we realized data needs to be collected going back in time to show not only the noise exposure but the repetitive nature of pattern traffic. The next step would be to perform the same kind of data collection after mitigation strategies have been implemented.

Accordingly, the Centennial Airport Community Noise Roundtable recommends to the Arapahoe County Public Airport Authority that additional staff be hired for data collection and analysis. Further, we request that the Arapahoe County Public Airport Authority expedite the hiring process.

Sincerely,

Brad Pierce

Chair, Centennial Airport Community Noise Roundtable

5. PUBLIC COMMENT:

- 1. Received by CACNR none
- 2. Meeting Attendees Chair Pierce opened the meeting for public comment. There were 4 in attendance and 16 on line. Overall, they were from Louviers, Orchard & Havana, the Denver Tech Center and Yosemite, and Greenwood Village Comments are summarized below:

Randy Johnson from Louviers presented statistics from the numbers of noisy planes he had registered over his residence – 710 - ,and noted there frequently were more flights per individual plane than previously. He provided comparison heat maps which rather dramatically showed the increases being heard in the area and had registered 14 complaints of planes circling overhead.

Directed to the airport – it is only caring for pilots, planes and profits, with the flight schools being cared for and about, rather than the unimportant people who have to live around the airport. The concerns about the dangers of lead pollution, untrained pilots flying over the population, and the stress and torment for the tax-paying public were all raised as in previous meetings. It was felt the FAA's rules were from the Cold War era, and today's public does not need to live with such outdated approaches by a government which is failing us all.

There should have been consultation with the public when things changed after the mid-air collision. Those changes were made quickly, so why could not changes to help the public be made just as quickly? It was felt no one was listening, giving nothing but lip service while providing nothing but lip service to concerns, and that included CACNR. It has been at least 15 months of the public bringing concerns to CACNR and ACPAA, and nothing has been done to improve the situation.

It was noted the ACPAA meetings scheduled in the middle of the afternoon seemed designed to make it difficult for the average working member of the public to attend. The public is rather effectively shut out of learning what is going on and contributing thoughts to the decision making body which governs how the airport functions.

In relation to the Study Group, it seemed there would be several more months' wait for evidence of its work having any effect – could there be any effort to hurry things along more?

Several had gone to a meeting held in Superior, including legislators from Districts 12, 37, and 49, plus the Senate Majority Leader and the Colorado Attorney General. Concerns were expressed about more than lead pollution. It was reported some pilots in attendance behaved poorly, and an AOPA letter which had been sent to the Attorney General had perhaps not been written with the best judgement, as 'fights' do not usually engender collaborative cooperation. There was frustration because only about ten of the many attendees had been allowed to speak. It was noted the Attorney General does not have the authority to act independently, but acts on what the legislators have done.

- 6. **EXECUTIVE COMMITTEE:** It was noted that Candace Moon would no longer be representing Centennial on CACNR. She was thanked for all she had contributed to the group as a Representative, and as Chair of the Noise Monitors Committee, and she would be missed.
- A. REPRESENTING CACNR AT NOVEMBER 9, 2023 ACPAA MEETING Chris Eubanks volunteered to fill that role. No one would represent CACNR at the December 14, 2023 ACPAA meeting, as CACNR would not meet in December.
 - B. DRAFT LETTER TO ACPAA IF 4.A. IS APROVED see action under Agenda Item #4.
 - C. SEPTEMBER 26, 2024 RETREAT -
- 1. The Summary Report from Jason Schwartz was received and accepted. Comment was made that the retreat was useful, and perhaps such meetings should be held more often. Agreed upon as top priorities from that report were:
- 1) Establish training for roundtable members
- 2) Make recommendations to Airport Authority and other than can reduce noise
- 3) Restructure meeting agendas to make meetings more effective and productive (We approved a revised agenda structure)
- 4) Publish annual reports
- 5) Expand community outreach
- 6) Strengthen relationships with FAA
- 7) Expand industry engagement
- 8) Fly Quiet briefings
- 9) Study Noise Monitor data

Correlate complaints to noise levels

Do more to leverage available noise data

Other Current / High Priority Issues were:

- 1) FAA Support of Roundtable (this is being handled through the Study Group Committee on extended pattern traffic)
- 2) Flight School Engagement
- 3) Airport Capacity

Finally, from the Consultant's Observations and Recommendations:

- 1) Sometimes roundtable "structures" seem to get in the way of the mission
- 2) Relationship to the Airport and Airport Board
- 3) Meetings with Airport Management
- 4) Value in additional Roundtable training
- 5) Expand community outreach
- 6) Consider additional roundtable support

There was general support for hiring a consultant for the above items. One of our reps suggested we form an Ad Hoc 'Consultant' committee to develop priority tasks, a job description, a budget to be dedicated to this work; and whether it should be an hourly or flat rate.

- 2. A draft Mission Statement was provided, and after discussion, on the motion of Donna Johnston, duly seconded, the following was approved: CACNR will bring together airport, community, FAA, and aviation industry representatives to collaboratively identify and discuss noise issues at Centennial Airport and recommend courses of action that could reduce noise over affected communities.
- 3. A draft revised meeting agenda was provided. There was discussion about the usefulness of the current committee structure or whether having ad hoc groups to address specific topics might be more fruitful. There would be an opportunity for Representatives to present what they were working on, and any other topics they chose, as an agenda item. There was also discussion about putting public comment at the end of the meeting, so the public could hear what the roundtable was doing before commenting might also be more useful. On the motion of Paul Krier, duly seconded, the revised basic Agenda was approved, and would be used in January, 2024. Samantha Blymyer was asked to put a special note calling attention to the agenda revision when she sends out the January 2024 meeting materials.

CENTENNIAL AIRPORT COMMUNITY NOISE ROUNDTABLE

AGENDA

January 3, 2024

6:30 p.m. – 8:30 p.m.

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- 1. CALL TO ORDER AND DETERMINATION OF QUORUM:
- 2. CONSENT AGENDA: (items here may be moved to Agenda Item #3, on the request of any CACNR Representative)
 - A. DRAFT MINUTES,
 - B. TREASURER'S REPORT,
 - C. NOISE REPORTS,
- 3. ITEMS REMOVED FROM CONSENT AGENDA:
- 4. CACNR STUDY GROUP COMMITTEE:
- 5. **EXECUTIVE COMMITTEE:**
- 6. **REPRESENTATIVES' COMMENTS:**
- 7. OTHER REGULAR REPORTS:
 - A. AIRPORT DIRECTOR
- 8. OLD BUSINESS:
- 9. NEW BUSINESS:
- 10. PUBLIC COMMENT: (3 minutes per person time limit):
 - A. RECEIVED BY CACNR
 - **B. MEETING ATTENDEES**
- 11. NEXT MEETINGS:

A. CACNR – February 7, 2024
March 6, 2024
B. ACPAA – January, 2024
February 8, 2024
G:30 p.m. 7565 South Peoria Street, Englewood, CO 80112
NO ACPAA MEETING
3;00 p.m. 7565 South Peoria Street, Englewood, CO 80112

March 14, 2024 3:00 p.m. 7565 South Peoria Street, Englewood, CO 80112

12. ADJOURN:

- 4. A Draft Public Comment Procedures document was provided. There was considerable discussion, with many ideas provided for inclusion in it. There was general agreement with these ideas. In the interest of time, it was agreed the Executive Committee plus Chris Eubanks and Donna Johnston would rework the document and email it to all Representatives and Alternate Representatives for a final electronic vote on its acceptance in time for its use at the January 3, 2024 CACNR meeting.
- D. 2024 DRAFT CACNR/ACPAA MEETING SCHEDULE the draft was provided, to be finalized when ACPAA's meeting dates had been approved. A copy of the final version would be provided in January.
- E. CACNR 2024 DRAFT BUDGET A draft 2024 budget was provided which called for no invoicing of Regular Members for 2024, due to the anticipated carry-over from 2023. If possible, an annual report would be created to accompany the budget when it would be presented to the Members. It was noted that ACPAA anticipated providing its usual \$10,000.

The draft also had monies assigned to the various committees, which may or may not be utilized in that fashion in 2024. Staff assistance seemed to be of particular use, as would working with contract consultation services. It was felt the Notes section was flexible enough to be utilized without having to make specific changes at this time. On the motion of Alison Biggs, duly seconded, the Draft 2024 budget was approved. Treasurer Andy Jones would be asked to send out the 2024 budget to the Members, noting there would be no invoice for funds for 2024.

Request was made for the Noise Reports to extend all maps to include Castle Rock, at least to Wolfensberger Road. Blymyer indicated she would try to accomplish that. She would also try to provide updated population numbers.

7. OTHER COMMITTEE REPORTS:

- A. COMMUNITY OUTREACH No report.
- B. FLY QUIEET No report.
- C. NOISE MONITORS No report.

8. OTHER REGULAR REPORTS:

- A. AIRPORT DIRECTOR'S REPORT No report.
- 9. OLD BUSINESS: An updated CACNR attendance record had been provided.

10. NEW BUSINESS:

A. INFORMATION SHARING - None.

11. <u>PUBLIC COMMENT</u>: It was wondered how the public would feel about moving Public Comment time in the agenda to the end of the meeting. Some educational information previously provided might be lost with the three minute limit, though that had always been the time limit. It was felt such information could be provided to CACNR in advance, for inclusion in the mailings so that everyone would have access to it. There was also concern about not allowing delegation of one's time to someone who had already signed in to speak. Such ideas would be shared with the group working on fine-tuning the Public Comment Procedure.

12. **NEXT MEETINGS**:

A. CACNR - December, 2023 NO MEETING

January 3, 2024 6:30 p.m. 7565 S. Peoria Street, Unit 9D, Englewood, CO

B. ACPAA – November 9, 2023 3:00 p.m. 7565 S. Peoria Street, Unit 9D, Englewood, CO

December 14, 2023 3:00 p.m. 7565 S. Peoria Street, Unit 9D, Englewood, CO

January, 2024 NO MEETING

13. ADJOURNMENT: The meeting was adjourned at 9:09 p.m.

Alison Biggs, Secretary

	BUD	GET	ACTUAL	
ICOME:			as of 12/29/23	NOTES
CARRY OVER FROM PRIOR YEAR	\$	23,000.00	\$23,791.15	Carry over from 2022
ACPAA	\$	10,000.00	\$10,000.00	
CACNR REGULAR MEMBERS	\$	-		Members not invoiced for 2023 due to amount of carry over available
TOTAL INCOME:	\$	33,000.00	\$33,791.15	
XPENDITURES:				
WORK PROGRAM:				
COMMUNITY OUTREACH	\$	2,000		Website Updating and Maintenance
	\$	5,000	a	Media Outreach Project
FLY QUIET	\$	1,000		Placeholder for Projects tbd
. 21 00:21	Ψ	1,000		1 additional for a rejecto tod
NOISE MONITOR	\$	1,000		Exploration of desired data and software for 2024
EXECUTIVE/WORK PLAN	\$	500		Orientation Manual, Annual Report
EDUCATION				
2 Reps to UC Davis Symposium	\$	5,000	\$3,215.80	Symposium to be at UC Davis; estimate based on prior symposiums
2 Reps to 2 N.O.I.S.E. Conferences	\$	4,000		based on prior years on-site conferences
CONSULTATION/	\$	3,000	\$9,257.80	Projects with Jason Schwartz
TASK SUPPORT		0,000	40,201100	
MEMBERSHIP DUES	\$	1.000	\$1,000.00	N.O.I.S.E.
MEMBERSHIP BOES	Ψ	1,000	φ1,000.00	N.O.I.O.L.
ADMINISTRATIVE	\$	1,000		Part time secretarial assistance
	\$	-		Legal
RESERVE	\$	9,500.00		for presently unidentified and unanticipated expenses and/or work CACNR activities consistent with the approved Work Plan.
OTAL EXPENDITURES:	\$	33,000.00	\$13,473.60	
CARRY OVER TO 2024	Ф.		\$20.247.55	Actual to be determined at the end of 2022
ARRY OVER TO 2024	\$	-	\$20,317.55	Actual to be determined at the end of 2023
Usually includes registration, travel, ground trans	portation	ı, lodging, meals	S	



Centennial Airport Monthly Noise Report



October 2023

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1 Definitions

A-weighted Sound Level – A measure of sound level with weighted frequency characteristics that correspond to human subjective response to noise.

Arrival – The act of an aircraft approaching and landing at an airport.

Ambient Noise Level – The level of noise that is all-encompassing within a given environment for which a single source cannot be determined. It is usually a composite of sounds from many and varied sources near to and far from the noise monitor.

Community Noise Event Level (CNEL) – The average sound level over a 24-hour period, with a penalty of 10dB for nighttime hours between 10:00 PM and 7:00 AM.

Day Night Average Sound Level (DNL) – A measure of the average noise level over a 24-hour day. It is the 24-hour, logarithmic (or energy) average, A-weighted sound pressure level with a 10-decibel penalty applied to the nighttime event levels that occur between 10:00 PM and 7:00 AM.

Decibel (dB) – A logarithmic quantity reflecting the ratio of the sound pressure of the source to a reference pressure. This results in a sound pressure level of about 0 dB for the quietest sounds that we can detect and sound pressure levels of about 120 dB for the loudest sounds that can be heard without pain.

Departure – The act of an aircraft taking flight and leaving the airport.

Energy-Averaged Sound Pressure Level (Leq) – The value or level of a steady, non-fluctuating sound that represents the same sound energy as the actual time-varying sound evaluated over the same time period.

Flight Track – The path along the ground followed by an aircraft in flight.

Instrument Flight Rules (IFR) Rules and regulations established by the FAA to govern flight under conditions in which flight by outside visual reference is not safe. IFR flight depends upon flying by reference to instruments, and navigation is accomplished by reference to electronic signals. It is also a term used by pilots and controllers to indicate the type of flight plan an aircraft is flying, such as an IFR or VFR flight plan.

Local Operations – Operations in the local traffic pattern or within sight of the airport; flight in local practice areas within a 20 mile radius; execute simulated instrument approaches or low airport passes.

Maximum Noise Level (L_{max)} – The peak noise level for a single noise event.

Noise Exposure – The cumulative sound energy affecting a person over a specified period of time.

Overflight – Aircraft flight originating and terminating outside the area that transits the airspace without landing.

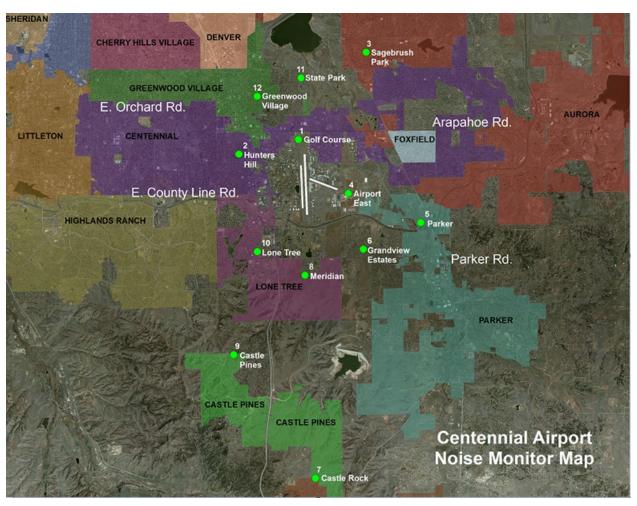
Visual Flight Rules (VFR) – A set of regulations under which a pilot operates an aircraft in weather conditions generally clear enough to allow the pilot to see where the aircraft is going. A flight plan is not required when the pilot is operating under Visual Flight Rules.

Sound Exposure Level (SEL) – The total energy in the A-weighted sound level measured during a transient noise event. SEL accounts for both the duration and the loudness of a noise event.

Overview

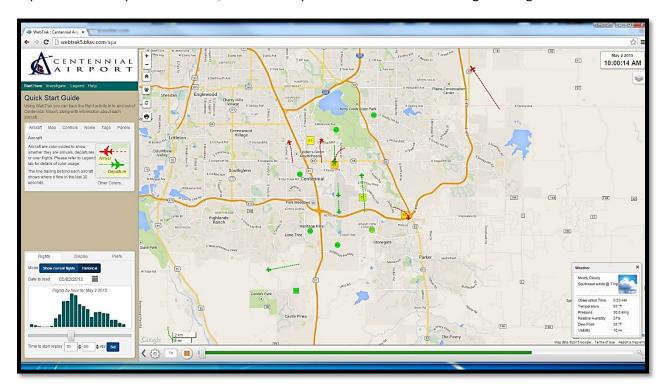
3 ABOUT APA'S NOISE MONITORING PROGRAM

Centennial Airport's (KAPA) Noise and Operations Monitoring System (ANOMS) is a new state of the art system that enables the Arapahoe County Public Airport Authority to monitor and better understand aircraft noise in the vicinity of Centennial Airport. This system is comprised of 12 fixed noise monitoring terminals in the community, as well as 2 portable monitors that are available for short term monitoring anywhere in the community.



4 ABOUT WEBTRAK™

As part of an ongoing program, Centennial Airport now offers an online tracking system for the movement of flights and air traffic patterns within the Denver Metro area. **WebTrak** Flight Tracking and Noise Information System allows concerned individuals to research data about flights to and from Centennial Airport, Denver International Airport, Rocky Mountain Metropolitan Airport, Front Range Airport and Buckley Air Force Base, as well as any transitional air traffic through the region.



How to participate

The general public may use **WebTrak** to investigate a noise or flight that occurred near their location. The system also simplifies the process of filing a noise complaint, offering an easy, online option for residents to register concerns regarding noise levels at the following web addresses:

APA WebTrak:

https://webtrak.emsbk.com/apa?fbclid=IwAR1xnXwQ2sVwisSZ_szUAlHFtyYBNIZTACOI1PF7ZSH8PPbBxORnnaidUUE

Centennial Airport Website: http://www.centennialairport.com

In addition, noise complaints can also be submitted on our noise hotline:

APA Noise Hotline:

303-790-4709

5 OPERATIONS STATISTICS

		IF	R ITINERAN	Т	VFR ITINERANT				LOCAL		
	AIR TAXI	G.A.	MILITARY	TOTAL ITINERANT	AIR TAXI	G.A.	MILITARY	TOTAL	G.A.	MILITARY	TOTAL LOCAL
January	2,304	3,055	99	5,458	896	5,213	69	6,178	11,936	25	11,961
February	2,180	2,883	123	5,186	1,046	5,388	85	6,519	12,426	20	12,446
March	2,512	3,260	187	5,959	1,555	5,523	100	7,178	14,989	20	15,009
April	2,152	2,693	144	4,989	1,616	6,550	137	8,303	16,940	40	16,980
May	2,556	3,026	175	5,757	1,542	5,734	116	7,392	17,833	21	17,854
June	2,584	3,338	165	6,087	1,544	6,277	159	7,980	16,101	31	16,132
July	2,524	3,341	189	6,054	1,999	8,004	131	10,134	18,733	53	18,786
August	2,536	3,434	245	6,215	2,283	8,727	118	11,128	21,173	29	21,202
September	2,718	3,332	198	6,248	2,293	8,159	87	10,539	17,465	43	17,508
October	2,655	3,229	202	6,086	2,238	7,472	111	9,821	14,216	44	14,260
November				0				0			0
December				0				0			0
Y-T-D Totals	24,721	31,591	1,727	58,039	17,012	67,047	1,113	85,172	161,812	326	162,138
		IFR	OVERFLIGH	ITS	VFR OVERFLIGHTS						TOTAL
	AIR TAXI	G.A.	MILITARY	TOTAL INTINERANT	AIR TAXI	G.A.	MILITARY	TOTAL			OPERATIONS
January	2	4	4	10	43	73	11	127		January	23,734
February	6	4	2	12	31	80	1	112		February	24,275
March	0	0	3	3	24	90	4	118		March	28,267
April	3	5	2	10	37	79	13	129		April	30,411
May	1	5	0	6	32	120	8	160		May	31,169
June	2	9	1	12	29	87	6	122		June	30,333
July	6	12	3	21	28	138	7	173		July	35,168
August	8	12	5	25	32	86	7	125		August	38,695
September	3	4	1	8	53	109	4	166		September	34,469
October	3	8	2	13	35	80	8	123		October	30,303
November				0				0		November	
December				0				0		December	
Y-T-D Totals	34	63	23	120	344	942	69	1,355		Y-T-D Totals	306,824

Definitions

Air Taxi – A company that operates aircraft that carry cargo or mail, or passengers on an on demand or charter basis.

General Aviation (G.A.) – All civil aviation operations other than scheduled air services and non-scheduled air transport operations for remuneration or hire.

Local – Operations are performed by aircraft which operate in the local traffic pattern or within sight of the airport; flight in local practice areas located within a 20-mile radius of the airport; execute simulated instrument approaches or low passes at the airport.

IFR Itinerant – Operations other than local operations conducted under Instrument Flight Rules.

VFR Itinerant – Operations other than local operations conducted under Visual Flight Rules.

Overflight – Operation performed by aircraft that transit the area and did not originate or did not terminate within the airspace.

6 Noise Monitor Reports

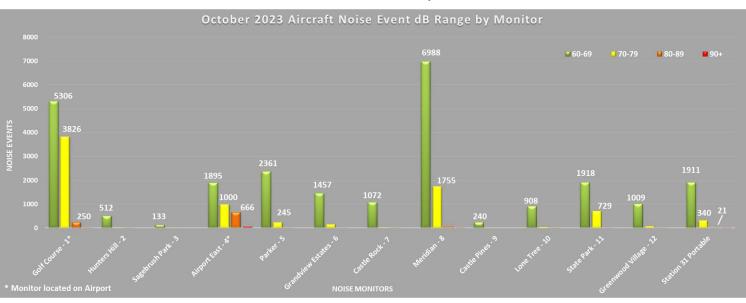
The following data displays the amount and associated decibel level of aircraft noise events at a given monitor. An aircraft noise event must contain the following characteristics:

First, the noise event must exceed the ambient noise level. This number varies at every monitor, but is generally greater than 50-55db. Secondly, the noise event must last longer than 5 seconds. Lastly, using radar data, the system must correlate an aircraft with the noise event. This ensures that the sound is not associated with a 'community noise event' such as a lawn mowers or emergency sirens.

The information below reflects only aircraft noise events as described above.

October 2023 Aircraft Noise Event Decibel Range By												
Monitor												
Monitor 60-69 70-79 80-89 90+ Totals												
Golf Course- 1*	5306	3826	250	6	9388							
Hunters Hill- 2	512	43	3	0	558							
Sagebrush Park- 3	133	9	0	0	142							
Airport East- 4*	1895	1000	666	52	3613							
Parker- 5	2361	245	4	0	2610							
Grandview Estates- 6	1457	164	5	0	1626							
Castle Rock- 7	1072	39	1	0	1112							
Meridian- 8	6988	1755	67	6	8816							
Castle Pines- 9	240	15	0	0	255							
Lone Tree- 10	908	49	1	0	958							
State Park- 11	1918	729	6	0	2653							
Greenwood Village- 12	1009	95	5	0	1109							
Portable Station 31	1911	340	21	2	2274							
Totals	25710	8309	1029	66	35114							

*Monitor located on Airport



7 OCTOBER 2023 NOISE COMPLAINT STATISTICS

In October, Centennial Airport received <u>1,295</u> complaints from <u>90</u> households.

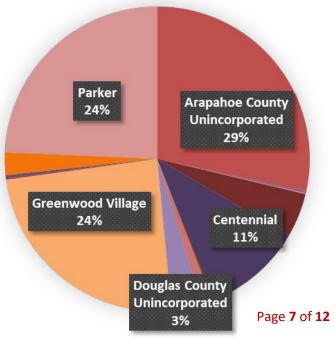
October	Noise Comp	olaints	Y	Population		
Municipality	Complaints	Households	Complaints	Households		
Arapahoe						
County	368	44	4,030	170	98,066	
Unincorporated						
Aurora	3	2	64	11	399,913	
Castle Pines	1	1	10	5	14,000	
Castle Rock	60	3	411	7	82,000	
Centennial	138	3	897	20	108,422	
Cherry Hills	2	1	2	1	6,442	
Village	2	1	2	1	0,442	
Denver	14	1	152	4	715,522	
Douglas County	42	5	380	20	276,493*	
Unincorporated	42	3	380	20	270,493	
Greenwood	315	27	2,808	99	15,691	
Village	313	27	2,808	99	15,051	
Highlands	2	1	49	11	103,444	
Ranch	2	1	45	11	103,444	
Lone Tree	4	3	50	14	14,253	
Parker	315	2	1,101	19	68,000	
Other	31	6	110	28	UNK	
Total	1,295	90	10,064	409	1,867,296	

*Douglas County Unincorporated Population with Highlands Ranch Removed

October 2023 Noise Complaint Responses Completed Email 45 Phone 17 Total 62

Time Complaint Received	Oct
Day Hours (7:00 am - 9:59pm)	1,166
Night Hours (10:00 pm - 6:59 am)	129
TOTAL	1,295

Complaints per Municipality



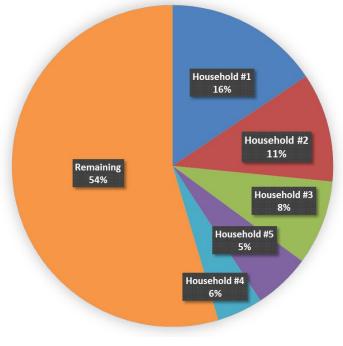
Current 12 Month Trend



Previous Year 13 Month Trend

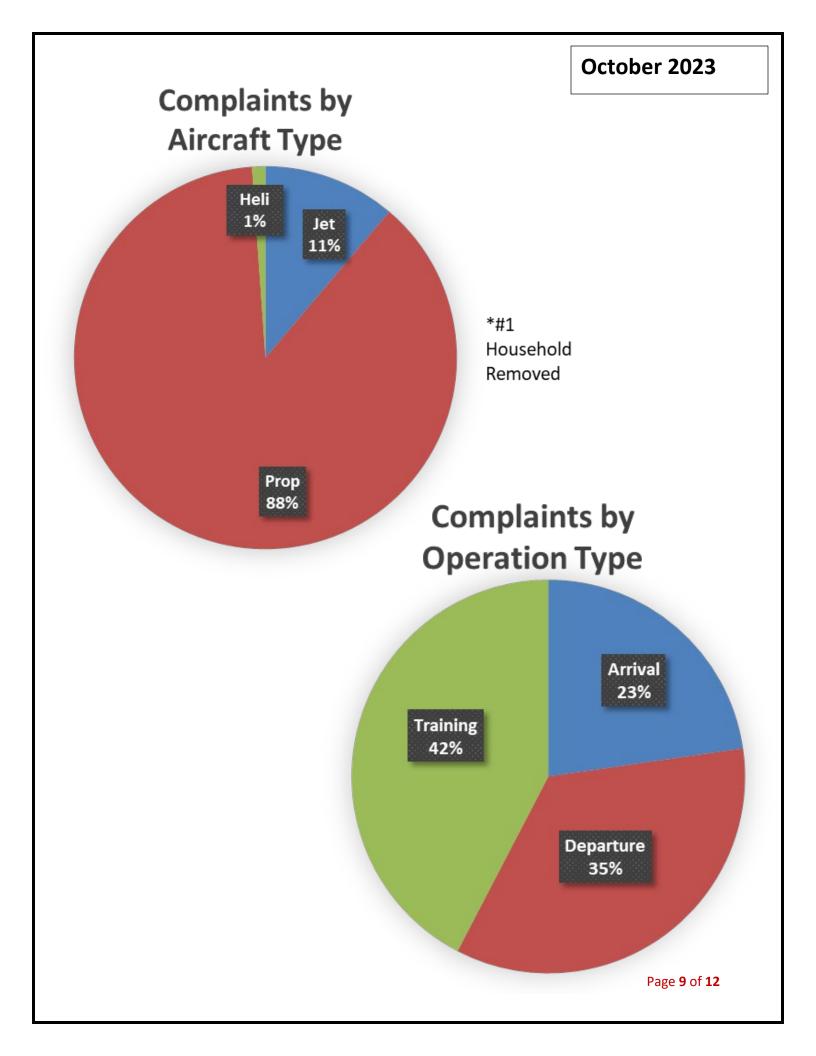




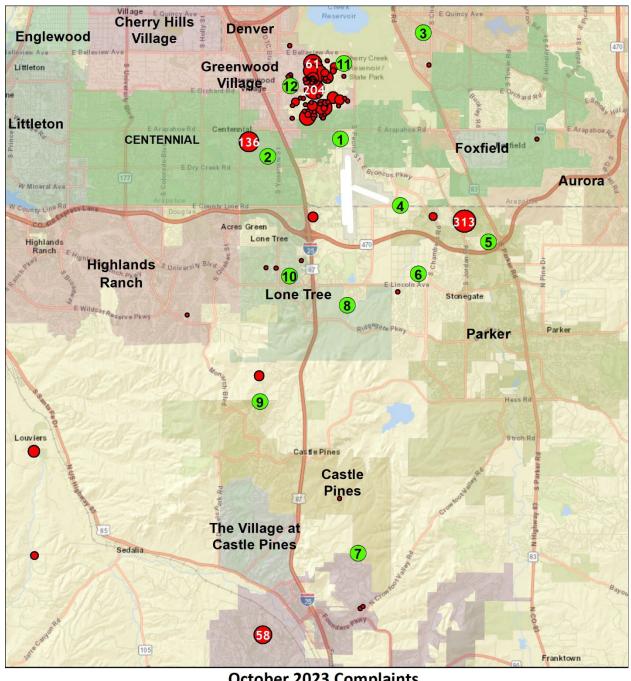


Top	Top 5 Household Complaints										
Household	Complaints	Households									
Household #1	1,570	Greenwood Village									
Household #2	1,103	Parker									
Household #3	858	Centennial									
Household #4	575	Arapahoe County									
Household #5	464	Arapahoe County									
Remaining		5,495									
Total		10,065									

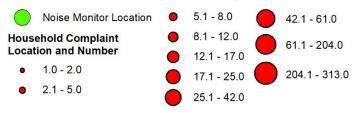
Page **8** of **12**



CENTENNIAL AIRPORT COMPLAINT MAP



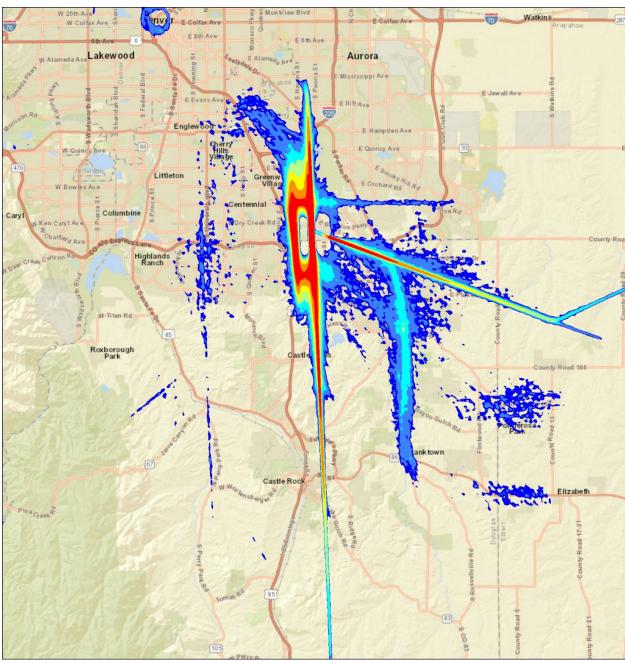
October 2023 Complaints



^{**}Larger dots equate to more complaints for that particular households

9 CENTENNIAL AIRPORT RADAR TRACK DENSITY MAP

The following maps take all of the flight track data for the given time period and create a line density plot. This enables everyone to have a better understanding of where the flight tracks are at, while allowing for historical comparisons. Dark red in the middle of the picture shows the highest density of flight tracks over the runways. The colors gradually move out to blue as the least dense.



October 2023 Flight Tracks associated with Centennial Airport

Lower Density Traffic

Higher Density Traffic

10 Notes and Disclaimer

This report is for informational use only. Every effort has been made to ensure the accuracy of this data; however, the material may be altered as new information is added or updated in the system.

Centennial Airport disclaims any responsibility or liability for any direct or indirect damages resulting from the use of this data. We hope this information provides you with a valuable tool in which to review noise data and characteristics in your area. If you have questions or concerns, please contact the Centennial Airport Noise office at **303-790-0598**.



Noise Hotline: 303-790-4709 www.centennialairport.com



Centennial Airport Monthly Noise Report



November 2023

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2	Definitions	2
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1 Definitions

A-weighted Sound Level – A measure of sound level with weighted frequency characteristics that correspond to human subjective response to noise.

Arrival – The act of an aircraft approaching and landing at an airport.

Ambient Noise Level – The level of noise that is all-encompassing within a given environment for which a single source cannot be determined. It is usually a composite of sounds from many and varied sources near to and far from the noise monitor.

Community Noise Event Level (CNEL) – The average sound level over a 24-hour period, with a penalty of 10dB for nighttime hours between 10:00 PM and 7:00 AM.

Day Night Average Sound Level (DNL) – A measure of the average noise level over a 24-hour day. It is the 24-hour, logarithmic (or energy) average, A-weighted sound pressure level with a 10-decibel penalty applied to the nighttime event levels that occur between 10:00 PM and 7:00 AM.

Decibel (dB) – A logarithmic quantity reflecting the ratio of the sound pressure of the source to a reference pressure. This results in a sound pressure level of about 0 dB for the quietest sounds that we can detect and sound pressure levels of about 120 dB for the loudest sounds that can be heard without pain.

Departure – The act of an aircraft taking flight and leaving the airport.

Energy-Averaged Sound Pressure Level (Leq) – The value or level of a steady, non-fluctuating sound that represents the same sound energy as the actual time-varying sound evaluated over the same time period.

Flight Track – The path along the ground followed by an aircraft in flight.

Instrument Flight Rules (IFR) Rules and regulations established by the FAA to govern flight under conditions in which flight by outside visual reference is not safe. IFR flight depends upon flying by reference to instruments, and navigation is accomplished by reference to electronic signals. It is also a term used by pilots and controllers to indicate the type of flight plan an aircraft is flying, such as an IFR or VFR flight plan.

Local Operations – Operations in the local traffic pattern or within sight of the airport; flight in local practice areas within a 20 mile radius; execute simulated instrument approaches or low airport passes.

Maximum Noise Level (L_{max}) – The peak noise level for a single noise event.

Noise Exposure – The cumulative sound energy affecting a person over a specified period of time.

Overflight – Aircraft flight originating and terminating outside the area that transits the airspace without landing.

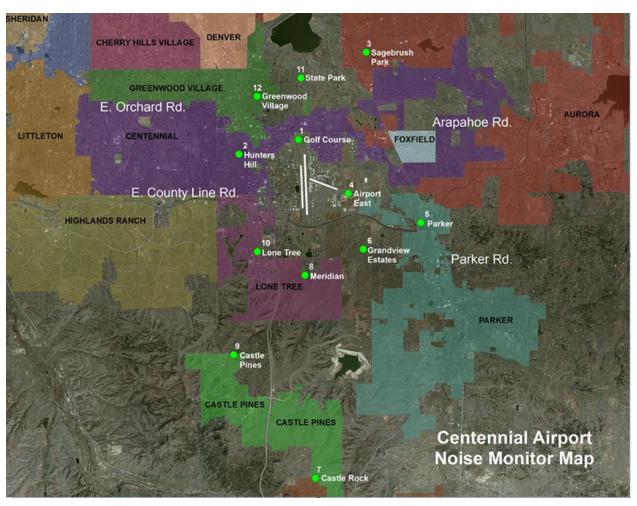
Visual Flight Rules (VFR) – A set of regulations under which a pilot operates an aircraft in weather conditions generally clear enough to allow the pilot to see where the aircraft is going. A flight plan is not required when the pilot is operating under Visual Flight Rules.

Sound Exposure Level (SEL) – The total energy in the A-weighted sound level measured during a transient noise event. SEL accounts for both the duration and the loudness of a noise event.

Overview

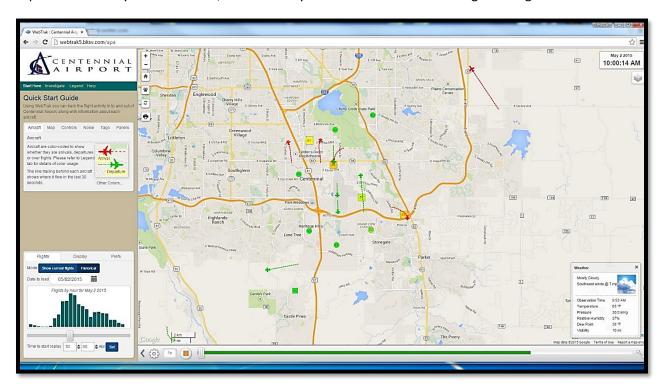
3 ABOUT APA'S NOISE MONITORING PROGRAM

Centennial Airport's (KAPA) Noise and Operations Monitoring System (ANOMS) is a new state of the art system that enables the Arapahoe County Public Airport Authority to monitor and better understand aircraft noise in the vicinity of Centennial Airport. This system is comprised of 12 fixed noise monitoring terminals in the community, as well as 2 portable monitors that are available for short term monitoring anywhere in the community.



4 ABOUT WEBTRAK™

As part of an ongoing program, Centennial Airport now offers an online tracking system for the movement of flights and air traffic patterns within the Denver Metro area. **WebTrak** Flight Tracking and Noise Information System allows concerned individuals to research data about flights to and from Centennial Airport, Denver International Airport, Rocky Mountain Metropolitan Airport, Front Range Airport and Buckley Air Force Base, as well as any transitional air traffic through the region.



How to participate

The general public may use **WebTrak** to investigate a noise or flight that occurred near their location. The system also simplifies the process of filing a noise complaint, offering an easy, online option for residents to register concerns regarding noise levels at the following web addresses:

APA WebTrak:

https://webtrak.emsbk.com/apa?fbclid=IwAR1xnXwQ2sVwisSZ_szUAlHFtyYBNIZTACOI1PF7ZSH8PPbBxORnnaidUUE

Centennial Airport Website: http://www.centennialairport.com

In addition, noise complaints can also be submitted on our noise hotline:

APA Noise Hotline:

303-790-4709

5 OPERATIONS STATISTICS

		IF	R ITINERAN	Т		VFI	RITINERANT			LOCAL	
	AIR TAXI	G.A.	MILITARY	TOTAL ITINERANT	AIR TAXI	G.A.	MILITARY	TOTAL	G.A.	MILITARY	TOTAL LOCAL
January	2,304	3,055	99	5,458	896	5,213	69	6,178	11,936	25	11,961
February	2,180	2,883	123	5,186	1,046	5,388	85	6,519	12,426	20	12,446
March	2,512	3,260	187	5,959	1,555	5,523	100	7,178	14,989	20	15,009
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October	2,655	3,229	202	6,086	2,238	7,472	111	9,821	14,216	44	14,260
November	2,506	2,811	182	5,499	1,911	6,055	109	8,075	15,878	23	15,901
December				0				0			0
Y-T-D Totals	27,227	34,402	1,909	63,538	18,923	73,102	1,222	93,247	177,690	349	178,039
		IFR	OVERFLIGH	ITS	VFR OVERFLIGHTS						TOTAL
	AIR TAXI	G.A.	MILITARY	TOTAL INTINERANT	AIR TAXI	G.A.	MILITARY	TOTAL			OPERATIONS
January	2	4	4	10	43	73	11	127		January	23,734
February	6	4	2	12	31	80	1	112		February	24,275
March	0	0	3	3	24	90	4	118		March	28,267
April	3	5	2	10	37	79	13	129		April	30,411
May	1	5	0	6	32	120	8	160		May	31,169
June	2	9	1	12	29	87	6	122		June	30,333
July	6	12	3	21	28	138	7	173		July	35,168
August	8	12	5	25	32	86	7	125		August	38,695
September	3	4	1	8	53	109	4	166		September	34,469
October	3	8	2	13	35	80	8	123		October	30,303
November	1	7	12	20	31	87	11	129		November	29,624
December				0				0		December	
	35	70	35	140	375	1,029	80	1,484		Y-T-D Totals	336,448

Definitions

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6 NOISE MONITOR REPORTS

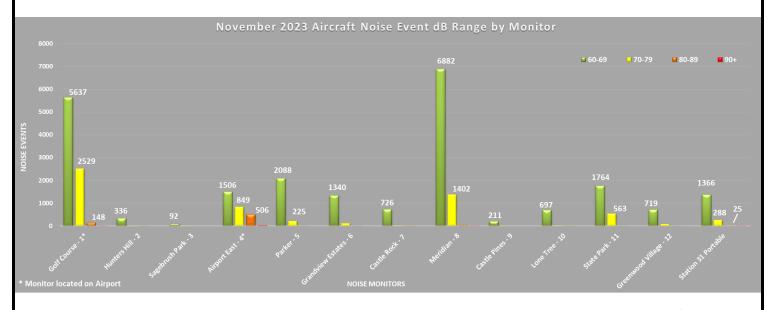
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First, the noise event must exceed the ambient noise level. This number varies at every monitor, but is generally greater than 50-55db. Secondly, the noise event must last longer than 5 seconds. Lastly, using radar data, the system must correlate an aircraft with the noise event. This ensures that the sound is not associated with a 'community noise event' such as a lawn mowers or emergency sirens.

The information below reflects only aircraft noise events as described above.

November 2023 Aircraft Noise Event Decibel Range By Monitor					
Monitor	60-69	70-79	80-89	90+	Totals
Golf Course- 1*	5637	2529	148	2	8316
Hunters Hill- 2	336	25	4	0	365
Sagebrush Park- 3	92	8	0	0	100
Airport East- 4*	1506	849	506	36	2897
Parker- 5	2088	225	1	0	2314
Grandview Estates- 6	1340	130	2	0	1472
Castle Rock- 7	726	39	1	0	766
Meridian- 8	6882	1402	46	4	8334
Castle Pines- 9	211	14	0	0	225
Lone Tree- 10	697	33	1	0	731
State Park- 11	1764	563	8	0	2335
Greenwood Village- 12	719	97	6	0	822
Portable Station 31	1366	288	25	2	1681
Totals	23364	6202	748	44	30358

*Monitor located on Airport



7 NOVEMBER 2023 NOISE COMPLAINT STATISTICS

In November, Centennial Airport received <u>1,097</u> complaints from <u>48</u> households.

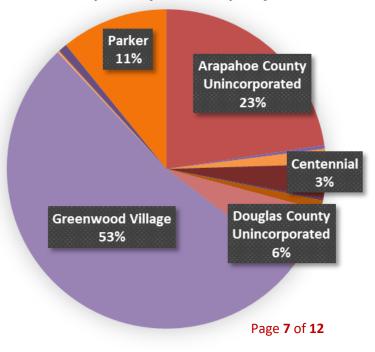
November Noise Complaints			YTD		Population
Municipality	Complaints	Households	Complaints	Households	
Arapahoe					
County	248	18	4,278	170	98,066
Unincorporated					
Aurora	4	1	68	11	399,913
Castle Pines	0	0	10	5	14,000
Castle Rock	17	3	428	9	82,000
Centennial	38	3	935	22	108,422
Cherry Hills Village	2	1	4	1	6,442
Denver	11	1	163	4	715,522
Douglas County Unincorporated	68	4	448	20	276,493*
Greenwood Village	578	8	3,386	99	15,691
Highlands Ranch	2	1	51	12	103,444
Lone Tree	1	1	51	14	14,253
Parker	119	2	1,220	20	68,000
Other	9	5	119	31	UNK
Total	1,097	48	11,161	418	1,867,296

^{*}Douglas County Unincorporated Population with Highlands Ranch Removed

Complaints per Municipality

November 2023		
Noise Complaint		
Responses Completed		
Email	40	
Phone	5	
Total	45	

Time Complaint Received	Nov
Day Hours (7:00 am - 9:59pm)	1,018
Night Hours (10:00 pm - 6:59 am)	79
TOTAL	1,097

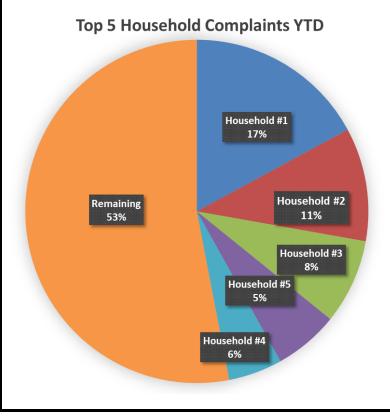


Current 12 Month Trend



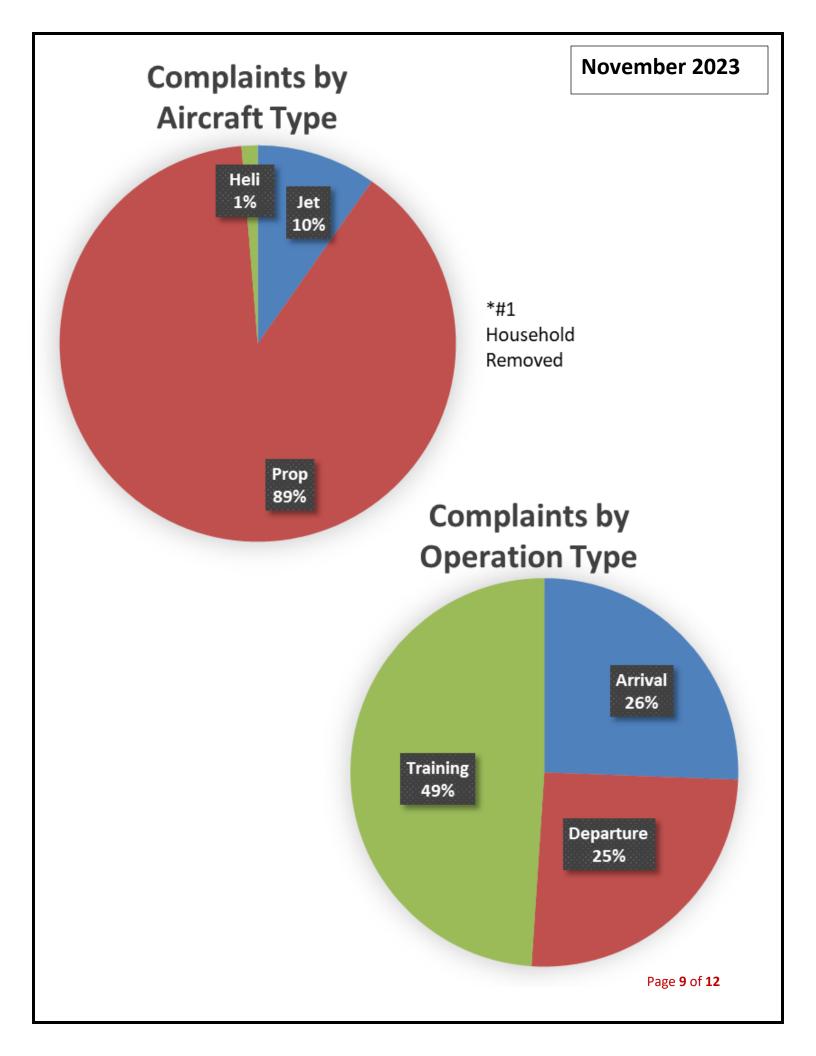
Previous Year 13 Month Trend



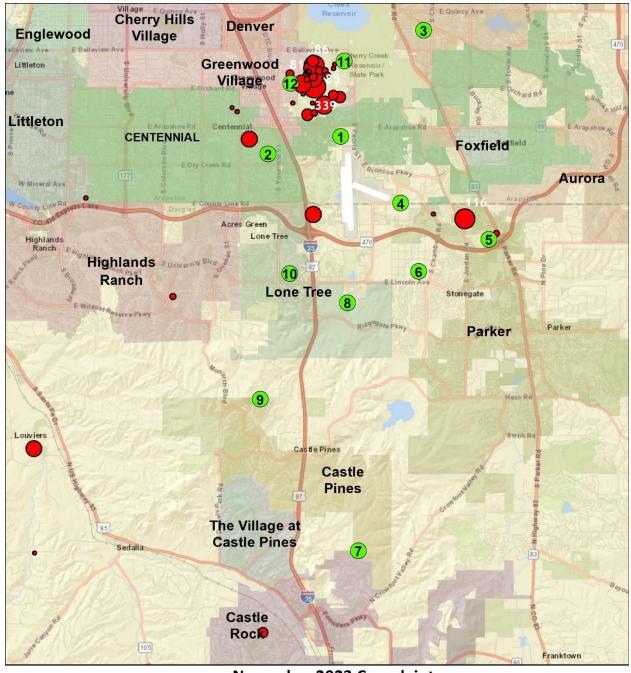


Top 5 Household Complaints			
Household	Complaints	Households	
Household #1	1,909	Greenwood Village	
Household #2	1,193	Parker	
Household #3	894	Centennial	
Household #4	680	Arapahoe County	
Household #5	567	Arapahoe County	
Remaining	5,918		
Total	11,161		

Page **8** of **12**



8 CENTENNIAL AIRPORT COMPLAINT MAP



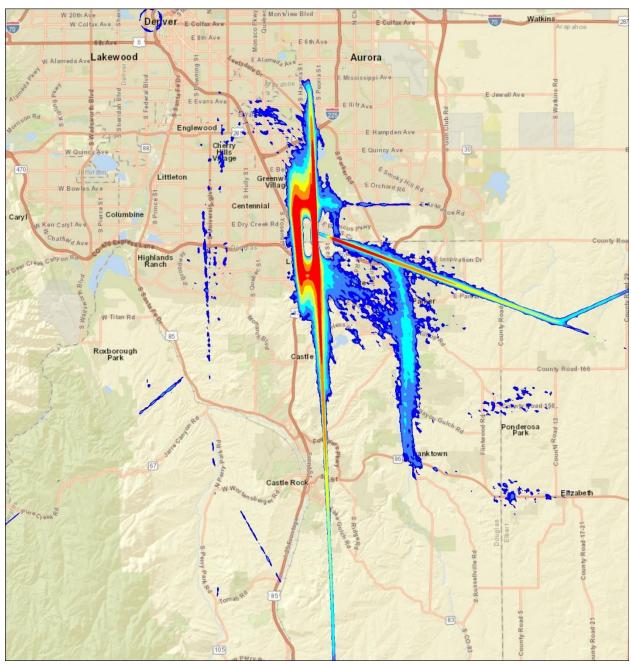
November 2023 Complaints



^{**}Larger dots equate to more complaints for that particular households

9 CENTENNIAL AIRPORT RADAR TRACK DENSITY MAP

The following maps take all of the flight track data for the given time period and create a line density plot. This enables everyone to have a better understanding of where the flight tracks are at, while allowing for historical comparisons. Dark red in the middle of the picture shows the highest density of flight tracks over the runways. The colors gradually move out to blue as the least dense.



November 2023 Flight Tracks associated with Centennial Airport

Lower Density Traffic

Higher Density Traffic

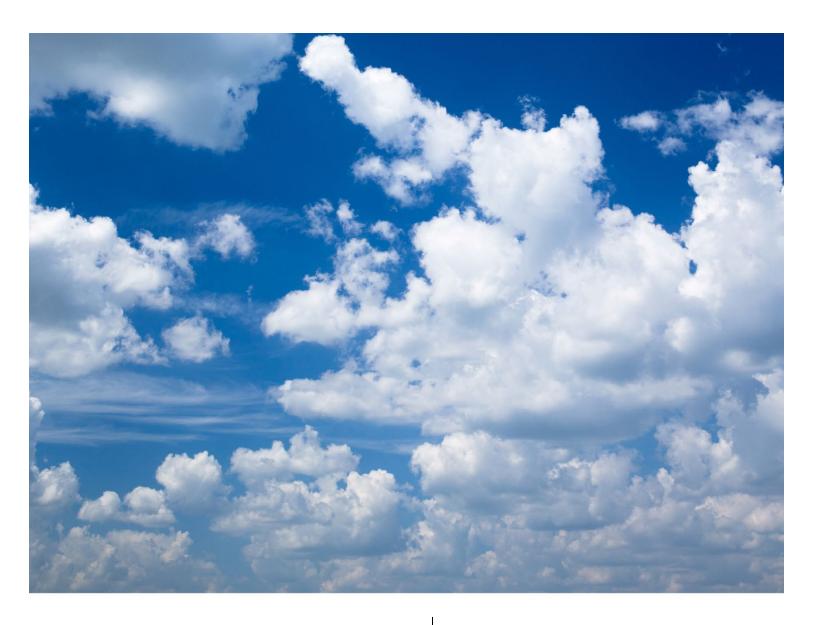
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Noise Hotline: 303-790-4709 www.centennialairport.com



Portable Noise Monitor Report

Report Prepared: September 20, 2023

Centennial Airport (KAPA) 7565 S. Peoria St. Englewood, CO 80112



Centennial Airport Arapahoe County Public Airport Authority



Neighborhood Noise Report

Background

Installed in September of 2012, the Airport Noise and Operations Management System (ANOMS) enables Centennial Airport to monitor the amount of noise being generated over communities surrounding Centennial Airport. The ANOMS collects, analyzes and processes data from multiple sources of information including a network of 12 permanent noise monitors located around Centennial Airport, noise complaints, FAA radar data and weather data. In addition, the Airport also has 2 portable noise monitors to provide aircraft noise information at specific locations that are not covered by the permanent noise monitors.

Description of Noise Monitoring Location

The portable noise monitor for this report was placed approximately 1.3 miles north-west of Centennial Airport.

Noise Level Reports

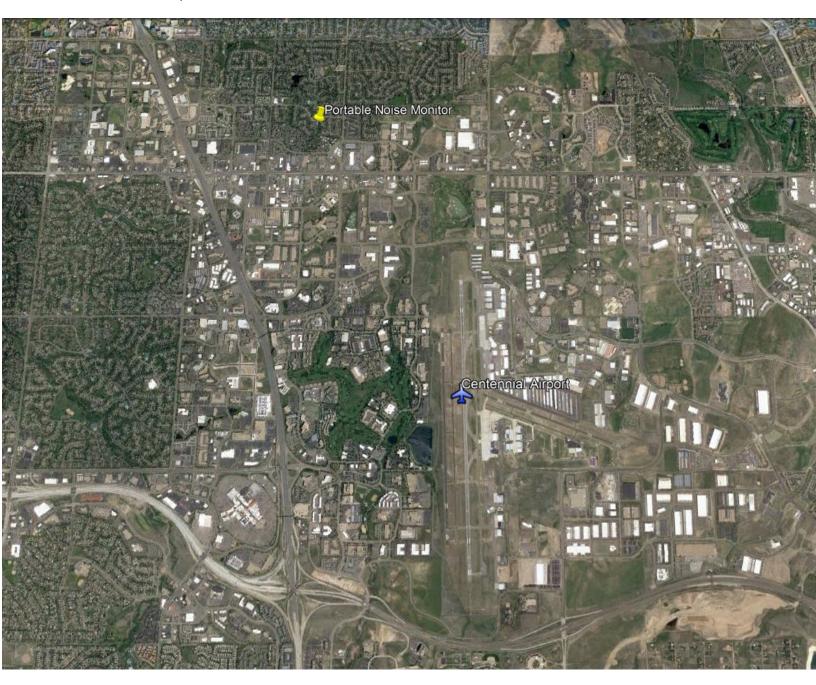
The Noise Level Reports summarizes measurement results at the noise monitoring site. The data presented summarizes the noise levels and the individual measured aircraft noise events. The noise data presents the measured noise during the period of the measurements for aircraft, community, and total noise in Day-Night Average Sound Levels (DNL's). DNL is a 24-hour time-averaged logarithmic sound exposure level with a 10 decibel (dB) nighttime (10 p.m. to 7 a.m.) penalty to account for the lower ambient noise levels during the nighttime hours. Aircraft noise is noise that can be correlated to aircraft in the vicinity of the noise monitor. Community noise is noise from all other sources such as vehicles, trains, and lawn mowers that all contribute to the overall ambient noise. Total noise is noise from all the above sources.

Daily aircraft noise levels can vary day to day primarily because different runways are used under different wind conditions, which affect where the aircraft fly. The daily noise levels measured, while this monitor was at this location, are indicative of the levels during the time period when the monitor was installed. It is not necessarily representative of the noise level on an annual basis.



Neighborhood Noise Report

Dates of Report August 14th, 2023 – September 13th, 2023 (1 month)





Neighborhood Noise Report cont.

Aircraft DNL	47.2	The 24-hour average sound level of aircraft with a 10dB penalty for nighttime noise events.
Community DNL	52.5	The 24-hour average sound level of the community with a 10dB penalty for nighttime noise events

Total DNL	53.8	The 24-hour average sound level with a 10dB penalty for nighttime noise events
Average Aircraft LMax (dB)	65.1	The peak noise level for a single aircraft noise event.

<u>Centennial Airport-associated aircraft flight</u> paths within 1 mile of Portable Monitor

Props: 4,952

Jets: 1,456

Heli: 47

Unknown: 557

Total: 7,012

<u>Centennial Airport Aircraft Noise Events</u> <u>at Portable Monitor</u>

3,043

Non-Centennial Airport Aircraft Noise
Events at Portable Monitor

27

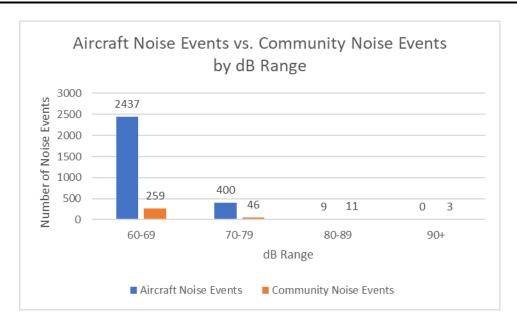
<u>Total Aircraft Noise Events at Portable</u> <u>Monitor</u>

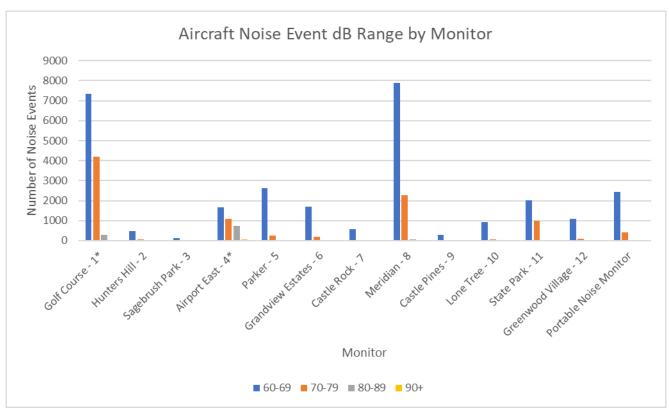
3,070

<u>Total Community Noise Events at</u> <u>Portable Monitor</u>

382

Noise Monitor Statistics





Definitions

A-weighted Sound Level – A measure of sound level with weighted frequency characteristics that correspond to human subjective response to noise.

Arrival – The act of an aircraft approaching and landing at an airport.

Ambient Noise Level – The level of noise that is all-encompassing within a given environment for which a single source cannot be determined. It is usually a composite of sounds from many and varied sources near to and far from the noise monitor.

Community Noise Event Level (CNEL) – The average sound level over a 24-hour period, with a penalty of 10dB for nighttime hours between 10:00 PM and 7:00 AM.

Day Night Average Sound Level (DNL) – A measure of the average noise level over a 24-hour day. It is the 24-hour, logarithmic (or energy) average, A-weighted sound pressure level with a 10-decibel penalty applied to the nighttime event levels that occur between 10:00 PM and 7:00 AM.

Decibel (dB) – A logarithmic quantity reflecting the ratio of the sound pressure of the source to a reference pressure. This results in a sound pressure level of about 0 dB for the quietest sounds that we can detect and sound pressure levels of about 120 dB for the loudest sounds that can be heard without pain.

Departure – The act of an aircraft taking flight and leaving the airport.

Energy-Averaged Sound Pressure Level (Leq) – The value or level of a steady, non-fluctuating sound that represents the same sound energy as the actual time-varying sound evaluated over the same time period.

Flight Track – The path along the ground followed by an aircraft in flight.

Instrument Flight Rules (IFR) Rules and regulations established by the FAA to govern flight under conditions in which flight by outside visual reference is not safe. IFR flight depends upon flying by reference to instruments, and navigation is accomplished by reference to electronic signals. It is also a term used by pilots and controllers to indicate the type of flight plan an aircraft is flying, such as an IFR or VFR flight plan.

Local Operations – Operations in the local traffic pattern or within sight of the airport; flight in local practice areas within a 20 mile radius; execute simulated instrument approaches or low airport passes.

Maximum Noise Level (L_{max}) – The peak noise level for a single noise event.

Noise Exposure – The cumulative sound energy affecting a person over a specified period of time.

Overflight – Aircraft flight originating and terminating outside the area that transits the airspace without landing.

Visual Flight Rules (VFR) – A set of regulations under which a pilot operates an aircraft in weather conditions generally clear enough to allow the pilot to see where the aircraft is going. A flight plan is not required when the pilot is operating under Visual Flight Rules.

Sound Exposure Level (SEL) – The total energy in the A-weighted sound level measured during a transient noise event. SEL accounts for both the duration and the loudness of a noise event.



Noise Hotline: 303-790-4709

www.centennialairport.com

Notes and Disclaimer

This report is for informational use only. Every effort has been made to ensure the accuracy of this data; however, the material may be altered as new information is added or updated in the system.

Centennial Airport disclaims any responsibility or liability for any direct or indirect damages resulting from the use of this data. We hope this information provides you with a valuable tool in which to review noise data and characteristics in your area. If you have questions or concerns, please contact the Centennial Airport Noise Office at 303-790-0598.

MEMORANDUM

DATE: December 27, 2023

TO: ACPAA Board Members

FROM: Samantha Blymyer - Senior Planner

RE: Land Use Review

The following is a list of Land Use Development referrals that have been reviewed by Centennial Airport staff from 10/1/2023 through 12/31/2023:

Date	Previously Referred	Development	Location	Referring Entity	Type Recom.
10/26/2023	В	374 Inverness PD	374 Inverness PD	Douglas County	S
10/26/2023	В	RidgeGate Senior Housing	Ridgegate Pkwy	City of Lone Tree	N
11/13/2023	3 🗌	RidgeGate East Filing No. 4	RidgeGate Parkway	City of Lone Tree	N
11/15/2023	3 🗌	Creekside Centennial Tech Center Site Plan	RDA	City of Centennial	S
11/27/2023	3 🗌	RidgeGate Couplet Apartments	RidgeGate	City of Lone Tree	N
12/18/2023	В	The Ranches of Cherry Creek Filing No. 4	15076 E Pinewood Place	City of Centennial	S
12/26/2023	В	Encompass 150 Vehicle Repair	6951 South Blackhawk St.	City of Centennial	Α

Type of Development: R = Residential

C = Commercial | |

Recommendation: A = Approved as Submitted

S = Subject to Comments N = Not Recommended



CACNR Public Comment Procedure Approved 12 18 23

CACNR'S MISSION STATEMENT Adopted 11 01 2023

"CACNR will bring together airport, community, FAA, and aviation industry representatives to collaboratively identify and discuss noise issues at Centennial Airport and recommend courses of action that could reduce noise over affected communities."

It is important for both roundtable representatives and the community to understand the roundtable's role, responsibilities, and the scope and limits of its authority.

CACNR does not have the responsibility nor the authority to manage the airport or air traffic. CACNR does have the responsibility make recommendations to the ACPAA.

CACNR believes that hearing from the community is critical to our mission. Public comment provides an important opportunity for roundtable representatives to hear directly from the communities we represent. The public may also share its questions or concerns before our meeting in writing via the CACNR email address at info@centennialairportnoise.com. All input is required and encouraged to ensure the roundtable is able to accurately understand resident concerns.

However, CACNR needs to balance the importance of hearing from the community while allowing time to conduct business in an orderly and efficient manner. To help that effort, CACNR is making changes to its public comment procedures.

The "Public Comment" section will be moved to the end of the meeting to allow for critical roundtable business to be conducted. Public Comment Procedures will be posted on the screen and summarized by the CACNR Chair at opening of Public Comment. They are as follows:

- 1. Sign-up for public comment is required. A sign-up sheet will be available at the meeting.
- 2. The Chair will only call on those attending in person who have indicated they wish speak on the sign-in sheet prior to the start of the meeting. Online attendees who wish to speak will be asked to "raise their hand" at the beginning of the public comment period.
- 3. Comment time will be limited to 3 minutes per individual speaker. Individuals with presentations longer than 3 minutes will contact the CACNR Chair in advance of the meeting.
- 4. Comment time will be limited to 4 minutes per person for speakers representing a group.

- 5. Each speaker will be afforded the ability to speak once during the public comment period.
- 6. An individual's public comment time may be delegated to someone who has previously signed in to speak and is present. Unused time cannot be yielded to another speaker.
- 7. Each speaker shall state their name and their community.
- 8. Speakers are asked to provide new information whenever possible and will avoid repeating comments made by other speakers.
- 9. When speaking, please remain polite, courteous and respectful and address the CACNR.
- 10. Speakers shall not make personal, slanderous or profane remarks toward airport staff, roundtable representatives or other individuals or organizations. Such behavior will not be tolerated.
- 11. There will not be back and forth discussion between the speakers and the roundtable during public comment.
- 12. Please do not interrupt speakers while they are at the podium providing comments.
- 13. When your time is up, please leave the podium.
- 14. If the meeting has not adjourned by 8:30 PM, the chair will call for a one time vote to approve or not approve extending the meeting by 30 minutes for the purpose of additional public comment for those that have previously signed up.
- 15. At the conclusion of public comments, an attempt will be made by CACNR Representatives, airport staff or other individuals to address questions raised during public comment or to clarify misunderstanding or misinformation.
- 16. Questions not addressed after the public comment period may be addressed at a later time by roundtable representatives and/or airport staff one-on-one following the meeting. Roundtable Representative are also available between meetings for those wishing to pursue concepts or questions further.
- 17. The changes to the public comment procedures will be discussed among the roundtable representatives at the November 2023 meeting and if approved, will be implemented starting in January 2024. Changes discussed during the November meeting will be made to the document which will be emailed to Representatives for approval for implementation in January 2024.

CACNR/ACPAA 2024 MEETING SCHEDULES

CACNR REPRESENTATIVES TO 2024 MEETINGS OF THE ARAPAHOE COUNTY PUBLIC AIRPORT AUTHORITY

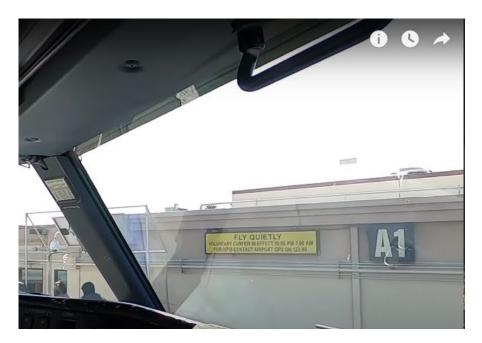
CACNR meets at 6:30 p.m., 7565 South Peoria Street, Englewood, CO 80112 ACPAA meets at 3:00 p.m., 7565 South Peoria Street, Englewood, CO 80112

CACNR MEETINGS	CACNR REPRESENTATIVE	REPORT DUE DATE	ACPAA MEETINGS
	(~	To sblymyer@centennialairport.com	
January 03		due January 31 for Feb 8 meeting	NO ACPAA MEETING
February 07		verbal or on dias	February 08
March 06		March 07	March 14
April 03		April 04	April 11
May 01		May 02	May 09
June 05		June 06	June 13
July 02 - NO CACNR N	MEETING	N	O ACPAA MEETING
August 07		verbal or on dias	August 08
September 04		September 05	September 12
October 02		October 03	October 10
November 06		November 07	November 14
Doc 03 NO CACNE	NACETINIC		Dogombor 12
Dec 03 – NO CACNR	IVIEETING		December 12



Fly Quiet Committee - January 2024 Monthly Report

Hollywood Burbank Noise Abatement Signage:
 https://www.hollywoodburbankairport.com/noise/noise-rules-summary/



The Hollywood Burbank Airport Authority has a **voluntary curfew** at the Airport. The voluntary curfew applies to scheduled commercial operations and has over **99% compliance**.

The Part 161 Study was necessary for the Authority to be able to apply for a mandatory nighttime curfew that would be enforceable under federal law, superseding the current voluntary airline curfew now in place. The Airport began a Part 161 Study in 2000, in pursuit of a mandatory curfew from 10 p.m. to 7 a.m. The study and an application for a curfew were completed in 2009, at a cost of over \$7 million, and submitted to the FAA. It was the first Part 161 Study ever accepted as "complete" by the FAA, a landmark accomplishment that attests to the difficulty involved in the endeavor.

The Authority requested FAA approval to convert the voluntary curfew into a mandatory curfew and was denied. (161) The Authority supports **Federal law being changed by Congress** to allow establishment of a mandatory curfew at the Airport.

https://www.hollywoodburbankairport.com/noise/part-161-update/

- 2023 Update: Government Accounting Office Recommendations to Improve FAA Outreach Through Enhanced Noise Metrics
 - FAA plans to conduct stakeholder and community engagement and seek public comments regarding policy options in 2023-2024 to inform future changes to the noise policy.

GAO Recommendations from UC Davis 2022

- Recommended Further defining Enhanced Noise Alternative Metrics and circumstances for their use to aid in FAA internal assessments of noise impacts related to Performance Based Navigation (PBN)
- Recommended the incorporation of additional communication tools that more clearly convey expected impacts such as use of the Enhanced Noise Alternative Metrics and enhanced visualization applications.
- The Administrator of the Federal Aviation Administration should, related to postimplementation outreach, provide clearer information to airports and communities on what communities can expect from FAA, including the technical assistance FAA can provide.
- 062022 UC Davis. The FAA agreed with the Government Accounting Office recommendations and plan to take steps to implement them by the end of 2022. Reality – Implementation not expected for 2-3 years. Updates will be posted at www.gao.gov/products/GAO-21-103933

ATTENDANCE RECORD for	r 2023 - 2024 CACNR MEETINGS	2023	2023	2023	2023	2023	2023	2023	2023	2023	2024	2024	2024	MEMBE	R REPRESENTED
		APR	MAY	JUNE	JULY*	AUG	SEPT	OCT	NOV	DEC*	JAN	FEB	MAR	%	TOTAL %
ARAPAHOE COUNTY	Leslie Summey	Χ	Χ	absent		Х	Х	Х	-					71%	86%
	Alternate Vacant/Sreenivasan Alakappan	-	-	absent		-	-	-	virtual					14%	
	Paul Krier	Х	Χ	absent		virtual	Х	Х	Х					86%	86%
	Alternate Evan Colvin/Vacant	-	-	absent		-	-	-	-					0%	
DOUGLAS COUNTY	Abe Laydon	-	-	-		absent	-	-	absent					0%	71%
	Alternate Dan Avery	Х	Х	Х		absent	Х	Х	absent					71%	
	Alison Biggs	Χ	Χ	Х		Х	Х	Х	Χ					100%	100%
	Alternate Mark Adams	-	-	-		-	-	-	-					0%	1
AURORA	Brad Pierce	Χ	Χ	Х		Х	Х	Х	Χ					100%	100%
	Mindy Parnes	-	-	-		-	-	-	-					0%	1
CASTLE PINES	Chris Eubanks	Х	absent	Х		Х	Х	Х	Х					86%	86%
	Ben Price	-	absent	-		-	-	-	-					0%	
CASTLE ROCK	Laura Cavey	-	absent	absent		absent	absent	absent	-					0%	29%
	Sandy Vossler	virtual	absent	absent		absent	absent	absent	virtual					29%	
CENTENNIAL	Candace Moon	Х	Х	Х		Х	Х	Х	absent					86%	86%
	Don Sheehan	-	-	-		-	-	Х	absent					0%	
CHERRY HILLS VILLAGE	Robert Eber	absent	absent	absent		absent	absent	absent	absent					0%	0%
	Randy Weil	absent	absent	absent		absent	absent	absent	absent					0%	
	,														
FOXFIELD	Pam Thompson	Х	Х	Х		absent	Х	Х	virtual					86%	86%
	Frank Lawrence	-	-	-		absent	-	-	-					0%	
GREENWOOD VILLAGE	Donna Johnston	Х	Х	Х		Х	absent	Х	Х					86%	86%
	Libby Barnacle	-	-	-		-	absent	-	-					0%	
HIGHLANDS RANCH	Andy Jones	Х	Х	Х		absent	Х	absent	absent					57%	57%
METROPOLITAN DISTRIC		-	-	-		absent	-		absent					0%	
LONE TREE	Mike Anderson	Х	Х	Х		Х	Х	Х	Х					100%	100%
	Chuck Darnell	virtual	-	-		-	-	-	-					14%	
PARKER	Todd Hendreks/Ashley Chasez	Х	virtual	absent		virtual	Х	Х	virtual					86%	86%
	Vacant	-	-	absent		-	-	-	-					0%	
ACPAA	Mike Fronapfel	Х	Х	Х		Х	Х	Х	absent					86%	86%
	Vacant	-	-	-		-	-	-	-					0%	
AOPA	Robert Doubek/John Hirshman	х	Х	Х		Х	х	Х	х					100%	100%
	John Hirshman/Vacant	-	-	-		-	-	-	-					0%	
CABA	Don Kuskie	absent	Х	absent		absent	Х	Х	absent					43%	43%
	Mike Straka	absent	-	absent		absent	-	-	absent					0%	
		2.70		10000					2.70					- 7 -	
CDOT AERONAUTICS	Todd Green	absent	absent	absent		absent	absent	absent	absent					0%	0%
DIVISION	Vacant	absent		absent		absent								0%	
		2230	2-20	2230.70		2.2500	2230.70	2230.70	22300					2,0	
WINGS OVER THE ROCKIE	Bill Wasmund	absent	Х	Х		-	Х	Х	х					71%	86%
	Vacant/Jordan Ashley	absent	X	-		Х	-	X	-					43%	
	- Learny sor dair risiney	3230110												.570	
* No meetings in July or D	ecember ecember														
CACNR BYLAWS ADOPTED															
	rs' Representatives and/or Alternate	s are ev	nected to	attend	all regul	ar and sn	ecial me	etings	If a Regi	ılar Mem	her's Re	nresenta	itive or 4	Alternate	
	5% of such meetings annually in the														
replacement(s).	575 5. Such meetings annually in the	Period	J Apii	. 100	S. IVIGIT	51, 1110	cguiai		•••••		pote	ar app	, J	01 0	11 02 23
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