



CENTENNIAL AIRPORT COMMUNITY NOISE ROUNDTABLE

AGENDA **February 1, 2023** **6:30 p.m. – 8:30 p.m.**

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

Members' Representatives and Alternate Representatives are requested to attend all meetings in person
Members of the public may attend meeting in person, or virtually

CACNR 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 AND DETERMINATION OF QUORUM:

<i>Arapahoe County:</i> Carrie Warren-Gully/Vacant Paul Krier/Evan Colvin <i>Douglas County:</i> Abe Laydon/Dan Avery Alison Biggs/Mark Adams <i>Aurora:</i> Brad Pierce/Jeanne Rustad <i>Castle Pines:</i> Chris Eubanks/Ben Price <i>Castle Rock:</i> Laura Cavey/Sandy Vossler <i>Centennial:</i> Candace Moon/Don Sheehan <i>Cherry Hills Village:</i> Robert Eber/Randy Weil <i>Foxfield:</i> Pam Thompson/Frank Lawrence <i>Greenwood Village:</i> Donna Johnston/Libby Barnacle	<i>Highlands Ranch Metro Dist.</i> Andy Jones/Renee Anderson <i>Lone Tree:</i> Mike Anderson/Chuck Darnell <i>Parker:</i> Ashley Chasez/Vacant <i>ACPAA:</i> Michael Fronapfel/Vacant <i>AOPA:</i> John Hirshman/Vacant <i>CABA:</i> Don Kuskie/Mike Straka <i>CDOT Aeronautics Div:</i> Todd Green/Vacant <i>FAA APA Control Tower:</i> Jeff Lawton/Ron Curry <i>FAA District Office:</i> John Bauer/John Sweeney <i>FAA TRACON:</i> Steve Martin/Bill Dunn <i>Wings Over the Rockies:</i> Bill Wasmund/Jordan Ashley
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2. CONSENT AGENDA: (items here may be moved to Agenda Item #3, on the request of any CACNR Representative)

1. DRAFT MINUTES, January 4, 2023 – Alison Biggs, CACNR Secretary
2. TREASURER'S REPORT, January 31, 2023 – Andy Jones, CACNR Treasurer
3. NOISE REPORT, December 2022 – Samantha Blymyer, ACPAA Planning Specialist – Noise & Environment

3. ITEMS REMOVED FROM CONSENT AGENDA:

4. EXECUTIVE COMMITTEE:

- A. CACNR Election in March 2023
- B. CACNR Attendance at UC Davis Noise and Emissions Symposium, May 1 – 3, UC Davis Campus.
- C. CACNR Representative to ACPAA Meeting on February 9, 2023
- D. Timetable for Preparation and Adoption of 2023-2025 CACNR Work Program
- E. Airport Director's Summary of Flight School Engagement Meeting, 1/25/23

5. FAA RESPONSE TO DECEMBER 31, 2022 QUESTIONS: Michael Valencia, FAA Denver District General Manager

6. PUBLIC COMMENT/DISCUSSION: 3 minutes per person time limit

7. INFORMATION SHARING: Links to Press Coverage

8. COMMITTEE REPORTS:

- A. EXECUTIVE/WORK PLAN COMMITTEE – Brad Pierce, Chair
 1. Status of Follow Up Items
 2. Other
- B. COMMUNITY OUTREACH – Mike Anderson
 1. Status of Follow Up Items
 2. Other

- C. FLY QUIET – Bill Wasmund, Chair
 - 1. Status of Follow Up Items
 - 2. Other
- D. NOISE MONITORS – Candace Moon, Chair
 - 1. Status of Follow Up Items
 - 2. Other
- 9. **FAA REPORTS:**
 - 1. CENTENNIAL AIRPORT AIR TRAFFIC CONTROL TOWER – Jeff Lawton/Ron Curry
 - 2. FAA DISTRICT OFFICE – John Bauer/John Sweeney
 - 3. FAA TRACON – Steve Martin/Bill Dunn
 - 4. FAA NORTHWEST MOUNTAIN REGION/ALASKAN REGION COMMUNITY ENGAGEMENT OFFICER – Justin Biassou
 - 5. FAA SENIOR ADVISOR, OFFICE OF THE REGIONAL ADMINISTRATOR, NORTHWEST MOUNTAIN REGION – Leslie Lardie
- 10. **OTHER REGULAR REPORTS:**
 - A. ACPAA – No January Meeting
 - B. AIRPORT DIRECTOR'S REPORT – Mike Fronapfel
 - 1. Community Related Activity
 - 2. Flight School Activity
 - 3. Other Airport Activity
 - 4. Legislative
 - 5. Status of Follow Up Items
 - 6. Other
 - C. FLIGHT SCHOOLS:
 - 1. Aspen Flying Club – Justin Mazza
 - 2. ATP – John Herman
 - 3. Flights Inc. – Mike Underriner
 - 4. Independence Aviation – Ian Howells
- 11. **OLD BUSINESS:**
 - A. CONGRESSIONAL QUIET SKIES CAUCUS
- 12. **NEW BUSINESS:**
- 13. **PUBLIC COMMENT:** (3 minutes per person time limit):
- 14. **NEXT MEETINGS:**
 - A. **CACNR** –

March 1, 2023	6:30 p.m. 7565 S. Peoria Street, Unit 9D, Englewood, CO
April 5, 2023	6:30 p.m. 7565 S. Peoria Street, Unit 9D, Englewood, CO
May 3, 2023	6:30 p.m. 7565 S. Peoria Street, Unit 9D, Englewood, CO
June 7, 2023	6:30 p.m. 7565 S. Peoria Street, Unit 9D, Englewood, CO
July 2023	NO MEETING
August 2, 2023	6:30 p.m. 7565 S. Peoria Street, Unit 9D, Englewood, CO
 - B. **ACPAA** –

February 9, 2023	3:00 p.m. 7565 S Peoria Street, Unit 9D, Englewood, CO
March 16, 2023	3:00 p.m. 7565 S. Peoria Street, Unit 9D, Englewood, CO
April 13, 2023	3:00 p.m. 7565 S. Peoria Street, Unit 9D, Englewood, CO
May 11, 2023	3:00 p.m. 7565 S. Peoria Street, Unit 9D, Englewood, CO
June 8, 2023	3:00 p.m. 7565 S. Peoria Street, Unit 9D, Englewood, CO
July 2023	NO MEETING
August 10, 2023	3:00 p.m. 7565 S. Peoria Street, Unit 9D, Englewood, CO
- 15. **ADJOURN**



CENTENNIAL AIRPORT COMMUNITY NOISE ROUNDTABLE MINUTES

January 4, 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 6:30 p.m. by Chair Brad Pierce. The following were in attendance, and a quorum was present:

Arapahoe County:	Carrie Warren-Gully	Foxfield:	Pam Thompson
Arapahoe County:	Evan Colvin	Greenwood Village:	Donna Johnston
Douglas County:	Alison Biggs	Highlands Ranch:	Andy Jones
Aurora:	Brad Pierce	Lone Tree:	Mike Anderson
Castle Pines:	Chris Eubanks	ACPAA:	Mike Fronapfel
Castle Rock:	Sandy Vossler	CABA:	Don Kuskie (virtual)
Centennial:	Candace Moon	Wings Over the Rockies:	Bill Wasmund

Others in attendance were Greenwood Village Alternate Representative Libby Barnacle; and ACPAA staff Samantha Blymyer.

Those absent were:

Douglas County:	Abe Laydon/Dan Avery	CDOT Aeronautics Div:	Todd Green/Vacant
Cherry Hills Village:	Al Blum/Afshin Safavi	FAA APA Control Tower:	Jeff Lawton/Ron Curry
Parker:	Todd Hendreks/Vacant	FAA District Office:	John Bauer/John Sweeney
AOPA:	John Hirshman/Vacant	FAA TRACON:	Steve Martin/Bill Dunn

2. **CONSENT AGENDA:** The Consent Agenda included the Draft CACNR Minutes from December 7, 2022; the End of Year Treasurer's Report from December 30, 2022, showing a balance of \$23,251.155; and the November 2022 Noise Report. On the motion of Candace Moon, duly seconded, the Consent Agenda was approved.

The November 2022 Noise Report included the following information:

November Local Operations:	9,713	November Total Operations:	22,169
Year to Date Local Operations:	120,726	Year to Date Total Operations:	278,537
22,169 Total Operations in November gave rise to 505 complaints from 43 households.			

November Noise Events:

(Golf Course, Noise Monitor #1, was missing data due to a terminal shortage.)

<u>November Totals:</u>	<u>Nov. 60 – 69 db:</u>	<u>Nov. 70 – 79 db:</u>	<u>Nov. 80 – 89 db:</u>
6,381 Meridian	5,187 Meridian	1,147 Meridian	466 Airport East
2,513 Airport East	1,731 State Park	834 Airport East	75 Castle Rock
2,316 State Park	1,412 Parker	578 State Park	47 Meridian
1,603 Parker	1,366 Grandview Estates	194 Castle Rock	7 State Park
1,546 Grandview Estates	1,175 Airport East	187 Parker	4 Grandview Estates
975 Castle Rock	853 Greenwood Village	167 Grandview Estates	4 Parker
964 Greenwood Village	706 Castle Rock	108 Greenwood Village	3 Greenwood Village
704 Lone Tree	656 Lone Tree	62 Hunters Hill	2 Lone Tree
521 Hunters Hill	458 Hunters Hill	46 Lone Tree	1 Hunters Hill
162 Castle Pines	152 Castle Pines	14 Sagebrush Park	0 Castle Pines
123 Sagebrush Park	109 Sagebrush Park	10 Castle Pines	0 Sagebrush Park
0 Golf Course	0 Golf Course	0 Golf Course	0 Golf Course

November Noise events in the 90+ decibel range: Airport East – 38 Grandview Estates - 9

November Noise Complaints(505) and Numbers of Households (33):

<u>Noise Complaints:</u>	<u>Number of Households:</u>
1. Centennial 33%)	15 UAC (35%)
138 Greenwood Village (27%)	8 Greenwood Village (19%)
120 Unincorporated Arapahoe County (24%)	5 Other (12%)
52 Castle Rock (10%)	4 Centennial (9%)
15 Unincorporated Douglas County (3%)	3 Lone Tree (7%)
6 Lone Tree	3 UDC
5 Other	2 Castle Rock

YTD Complaints & Number of Households:

<u>Noise Complaints:</u>	<u>Households:</u>
1,379 Greenwood Village	67 UAC
1,223 Centennial	43 Greenwood Village
1,060 UAC	26 Other
624 Castle Rock	22 UDC
265 UDC	16 Lone Tree
218 Other	11 Centennial
138 Aurora	10 Denver

2 Aurora
2 Castle Pines
1 Highlands Ranch
0 Cherry Hills Village
0 Denver
0 Parker

1 Aurora
1 Castle Pines
1 Highlands Ranch
0 Cherry Hills Village
0 Denver
0 Parker

78 Highlands Ranch
50 Lone Tree
34 Denver
29 Parker
20 Castle Pines
2 Cherry Hills Village

7 Aurora
7 Parker
6 Castle Rock
5 Highlands Ranch
4 Castle Pines
1 Cherry Hills Village

Year to date, the **top five complaining households** were in:

Centennial – 1,101 (21%)

Greenwood Village – 835 (16%)

Castle Rock – 557 (11%)

UAC – 403 (8%)

UAC – 181 (4%)

In November, **52 responses were requested from 505 noise complaints**, with 39 of those requests made by email (75%), and 13 made by telephone (25%).

In November, **468 complaints** were made about **daytime flights** (7:00 a.m. – 9:59 p.m.) – 93%.

29 complaints were made about **nighttime flights** (10:00 p.m. – 6:59 a.m.) – 6%.

In November, **props** accounted for **87% of the complaints by aircraft type**; **jets** accounted for **11% of the complaints**, and **helicopters caused 2%**.

In November, **departures** were responsible for **41% of the complaints**. **Arrivals** were responsible for **24% of the complaints**, and **Training was responsible for 35% of the complaints**.

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

3. **ITEMS REMOVED FROM THE CONSENT AGENDA:** None

4. **PUBLIC/COMMUNITY/FAA DISCUSSION:** CACNR Chair Brad Pierce welcomed everyone and indicated Michael Valencia, FAA Denver District General Manager and Leslie Lardie, FAA Senior Advisor NW Mountain Region had joined the group by telephone. They again indicated they were attending primarily to listen to the public's concerns,

Those providing comment/in attendance were from Greenwood Village/Sundance Hills; Englewood; Centennial; Highlands Ranch; Louviers; Elizabeth; and Cherry Creek Vista South. (The sign-in sheets are available.)

Many comments were reiterations of those made during the December meeting, including length of residencies in the problematic areas, and how the quality of life had changed dramatically after the FAA had unilaterally made changes following the mid-air collision in May 2021. There were numerous requests for the FAA to be actively involved.

In no specific order, observations, questions, and requested actions included:

- A decrease in the quality of life. the ability to carry on conversations and such, and an increase in stress, levels of lead pollution, and mental health issues, are all concerns which must be addressed.
- The public is tired of complaining about noise and having nothing happen to improve the situation, so complaints have diminished.
- The airport needs to keep more wheels on the ground and the FAA must allow that to happen.
- Where are the flight schools at these meetings?
- The FAA's silence about such problems is deafening.
- The FAA being willing to answer only three questions per CACNR meeting, and requiring those questions to be submitted 30 days in advance, was not greeted positively. There was a lack of clarity, even seemingly on the part of the FAA personnel present on the telephone, about why was there a limit of three questions – it would take forever to get answers at that rate and action was needed now - how many entities could submit three questions, and to whom they were to be submitted. Limiting citizens to three questions only was deemed a joke.
- There needs to be dialogue at these meetings with those who can affect or allow change, not just the public expressing grievances with no response.
- The FAA needs to take such situations and the public more seriously and get involved in creating/allowing solutions.
- Increased flights overpopulated areas are not safe; numerous examples such as 10 flights in fifteen minutes were given.
- It is more likely the next mid-air or other crash will occur over the more populated areas now than before the FAA-initiated changes took place.
- Seemingly constant flights from 5:30 a.m. – 11:00 p.m. are not acceptable, nor are 300-600 touch and go flights over the same areas.

- Reportedly, over 600,000 gallons of leaded fuel was burned in 2022 – a report on the negative health aspects of lead is due shortly from the Environmental Protection Agency.
- Noise is beginning to affect housing prices and sales.
- How quickly can flight spacing be returned to previous system when things were much quieter?
- There should not be incentives such as low fuel prices to encourage flight schools and others to use this airport
- There seemed to have been retribution against some who have lodged complaints – at least low and more frequent overflights have occurred following complaints being made.
- What are the FAA's priorities, and to whom is it accountable? Are these only for the benefit of pilots and airlines? What about the millions of citizens and residents who must live under the privileged? Is consideration given to the health and safety of pilots and airlines only?
- What would be the most efficient way to undo what the FAA did following the mid-air collision?

With the repeated questioning of the 3-question limitation of questions to the FAA, and how those were to be handled, Leslie Lardie indicated she would do some research on the matter. The FAA wanted things funneled through CACNR; it does research about anything asked of it, headquarters and the region must sign off any answers given. This would obviously be time-consuming. Question was asked how much research it took to make the change in the first place, and why should a change back take any longer than that?

Various ideas for submittal of questions were suggested. Question was asked why the FAA would restrict the public from asking questions of it. Question was asked if those present were talking to the right people. Response from Lardie was "Yes," and she would forward things to the right people to do the research; she could not guarantee how long it would take to receive answers to everything. To streamline the process, questions from the public would be compiled by the head of the citizens group that had been formed regarding this issue. Those would be provided to CACNR which would submit them to the FAA. Request was made for answers to all questions by the February 1st CACNR meeting, but Lardie indicated that would not be possible.

Question was asked if the airport director could limit traffic? Response was no, but the airport was working with legal counsel to further specify what it is and is not allowed to do, and why. Things such as making it 'less comfortable' for those who use the airport would be explored. Pros and cons of various actions would also need to be considered. This information would be shared first with ACPAA, and then with CACNR for the public's knowledge.

Request was made for the FAA to have a physical presence at the February 1st CACNR meeting. During some discussion, it was noted answers to the three questions required by the letter from Grady Stone, Regional Administrator, FAA Northwest Mountain Region should be available at that meeting.

Question was asked if CACNR could meet more than once a month. Response was it could, with the specifics of how that could occur spelled out in the bylaws.

Michael Valencia indicated he would attend the February 1st CACNR meeting in person, and hoped to have answers to the three questions submitted on December 31, 2022. He also indicated the FAA would accept more than three questions submitted at any one time.

Leslie Lardie noted CACNR could just ask for a presentation on leaded fuels or any other program. There was a mixed response to the idea of a presentation on leaded fuels in February, as action on the public's noise concerns were first priority.

Mike Fronapfel reminded the group that CACNR was formed to address noise issues, and environmental matters were not officially included in its mission. The group's membership and advisory role were reviewed.

Michael Valencia commented that the FAA had actually made no change in flight patterns after the mid-air collision. He indicated he was in charge of all air traffic control for the Denver District, and he had made no decision or direction to change the traffic pattern at Centennial. This seemed to be somewhat a matter of semantics, as the directions given to the control tower after the mid-air collision changed the sequencing of aircraft on the parallel runways which resulted in more aircraft flying over the neighborhoods, which made it seem like a change of flight paths. The change was to prevent another collision, but had actually made the skies over the communities less safe due to the increase of overhead flights. Valencia noted he would address this further in February.

Valencia was invited to come to Greenwood Village at any time convenient for him, to see and hear what the community deals with.

The remainder of the meeting's agenda was postponed until the February 2023 meeting.

6. **NEXT MEETINGS:**

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|---|--|
| A. CACNR – February 1, 2023
March 1, 2023 | 6:30 p.m. 7565 S. Peoria Street, Unit 9D, Englewood, CO
6:30 p.m. 7565 S. Peoria Street, Unit 9D, Englewood, CO |
|---|--|

B. **ACPAA** – No Meeting, January 2023

February 9, 2023

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

March 16, 2023

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

7. **ADJOURNMENT:** The meeting was adjourned at 8:41 p.m.

Alison Biggs, Secretary

CENTENNIAL AIRPORT COMMUNITY NOISE ROUNDTABLE		2023 BUDGET - Approved October 5, 2022; Updated as of 01/01/23		
		BUDGET	ACTUAL	
INCOME:			as of 01/27/23	NOTES
CARRY OVER FROM PRIOR YEAR		\$ 23,000.00	\$ 23,251.15	estimated carry over from prior year - exact amount to be determined
ACPAA		\$ 10,000.00		
CACNR REGULAR MEMBERS		\$ -		Members not invoiced for 2023 due to amount of carry over available
TOTAL INCOME:		\$ 33,000.00		
EXPENDITURES:				
WORK PROGRAM:				
COMMUNITY OUTREACH		\$ 2,000		WebsiteUpdating and Maintenance
		\$ 5,000		MediaOutreach Project
FLY QUIET		\$ 1,000		Placeholder for Projects tbd
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		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/ TASK SUPPORT		\$ 3,000		Projects with Jason Schwartz
MEMBERSHIP DUES		\$ 1,000		N.O.I.S.E.
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.
TOTAL EXPENDITURES:		\$ 33,000.00		
CARRY OVER TO 2024		\$ -		Actual to be determned at the end of 2023
** Usually includes registration, travel, ground transportation, lodging, meals.				
FRAME OF REFERENCE: The MOU Funding Structure adopted 12/13/2018 called for an initial two-year funding mechanism. "Thereafter, CACNR will provide ACPAA and each Regular Member with a report on the previous year's expenditures, and an annual invoice accompanied by a proposed budget indicating how the requested funds would be utilized, so that funds could be appropriated for the coming year."				



Centennial Airport Monthly Noise Report



18. December 2022 & YTD

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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.

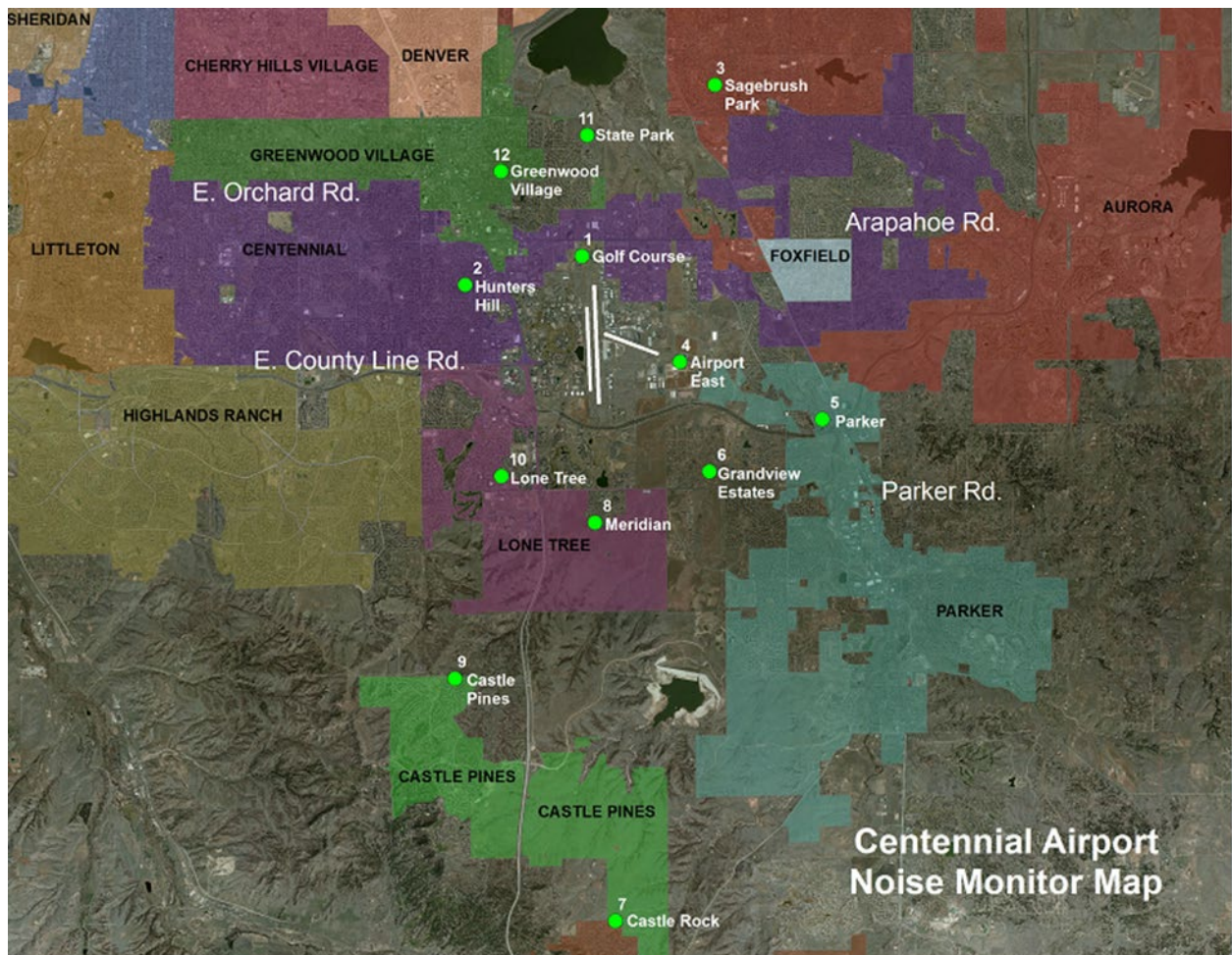
Visual Flight Rules (VFR) – A set of regulations under which a pilot operates an aircraft in weather conditions generally clear enough to allow the pilot to see where the aircraft is going. A flight plan is not required when the pilot is operating under Visual Flight Rules.

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

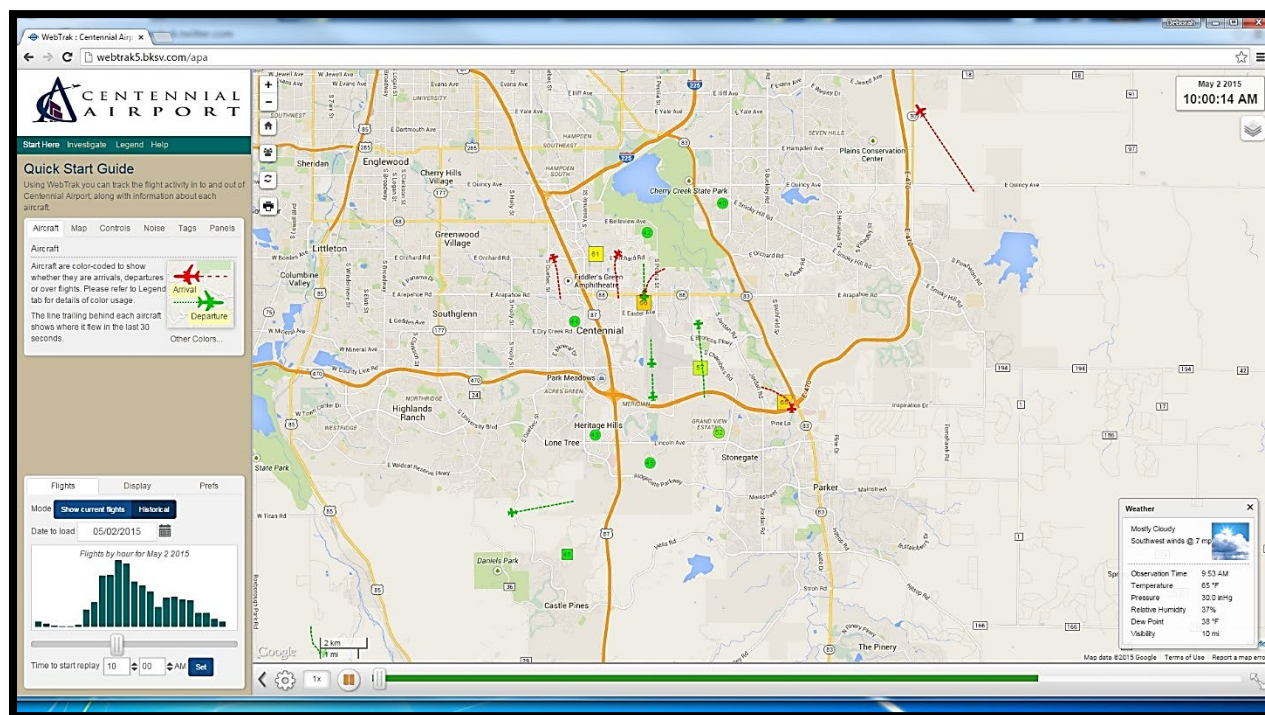
3 ABOUT APA'S NOISE MONITORING PROGRAM

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_szUAIHFtyYBNI_ZTACOI1PF7ZSH8PPbBxORnnaidUUE

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

	IFR ITINERANT				VFR ININERANT				LOCAL		
	AIR TAXI	G.A.	MILITARY	TOTAL INTINERANT	AIR TAXI	G.A.	MILITARY	TOTAL	G.A.	MILITARY	TOTAL LOCAL
January	2,494	3,405	114	6,013	1,133	5,391	88	6,612	9,190	78	9,268
February	2,396	3,396	98	5,890	1,247	5,624	105	6,976	9,863	38	9,901
March	2,741	4,129	170	7,040	1,330	5,922	90	7,342	10,435	50	10,485
April	2,425	3,440	191	6,056	1,220	5,502	106	6,828	10,611	35	10,646
May	2,655	3,439	235	6,329	1,315	5,930	134	7,379	12,556	18	12,574
June	2,660	3,881	190	6,731	1,227	6,808	158	8,193	10,608	71	10,679
July	2,552	4,039	169	6,760	1,172	7,545	126	8,843	15,221	46	15,267
August	2,726	3,985	176	6,887	1,113	7,567	183	8,863	14,500	43	14,543
September	2,710	3,892	143	6,745	989	7,207	129	8,325	3,531	16	3,547
October	2,772	3,586	181	6,539	1,163	7,793	156	9,112	14,076	27	14,103
November	2,445	3,076	94	5,615	926	5,692	99	6,717	9,692	21	9,713
December	2,659	3,258	97	6,014	954	5,627	94	6,675	11,274	26	11,300
Y-T-D Totals	31,235	43,526	1,858	76,619	13,789	76,608	1,468	91,865	131,557	469	132,026
	IFR OVERFLIGHTS				VFR OVERFLIGHTS						
	AIR TAXI	G.A.	MILITARY	TOTAL INTINERANT	AIR TAXI	G.A.	MILITARY	TOTAL			
January	2	2	1	5	41	98	11	150	January		22,048
February	1	2	0	3	38	132	17	187	February		22,957
March	4	4	1	9	46	115	11	172	March		25,048
April	6	7	1	14	38	144	11	193	April		23,737
May	2	6	0	8	47	156	6	209	May		26,499
June	1	9	1	11	47	132	7	186	June		25,800
July	3	5	3	11	38	159	11	208	July		31,089
August	1	3	0	4	36	97	25	158	August		30,455
September	3	5	2	10	54	119	9	182	September		18,809
October	1	8	2	11	44	104	13	161	October		29,926
November	3	8	0	11	32	73	8	113	November		22,169
December	0	7	2	9	29	91	5	125	December		24,123
Y-T-D Totals	27	66	13	106	490	1,420	134	2,044	Y-T-D Totals		302,660

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:

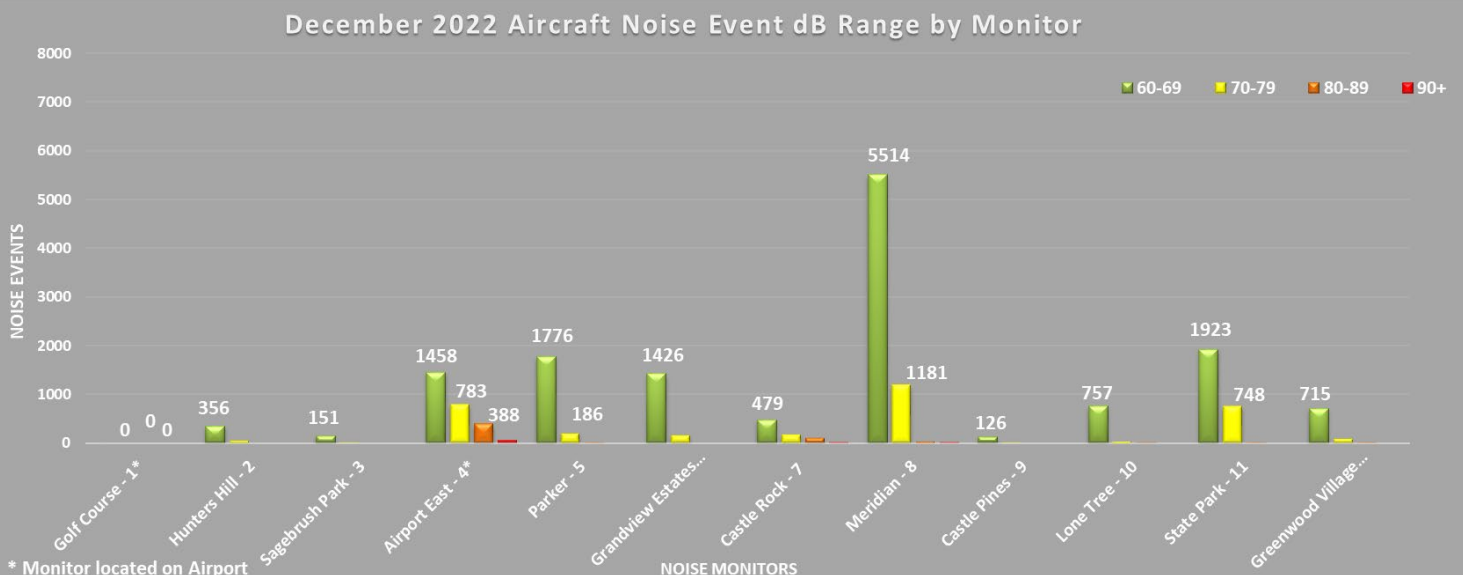
First, the noise event must exceed the ambient noise level. This number varies at every monitor, but is generally greater than 50-55db. Secondly, the noise event must last longer than 5 seconds. Lastly, using radar data, the system must correlate an aircraft with the noise event. This ensures that the 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.

December 2022 Aircraft Noise Event Decibel Range By Monitor					
Monitor	60-69	70-79	80-89	90+	Totals
Golf Course- 1*	0	0	0	0	0
Hunters Hill- 2	356	42	0	0	398
Sagebrush Park- 3	151	14	0	0	165
Airport East- 4*	1458	783	388	49	2678
Parker- 5	1776	186	3	0	1965
Grandview Estates- 6	1426	154	0	0	1580
Castle Rock- 7	479	168	103	14	764
Meridian- 8	5514	1181	38	3	6736
Castle Pines- 9	126	8	0	0	134
Lone Tree- 10	757	32	1	0	790
State Park- 11	1923	748	10	0	2681
Greenwood Village- 12	715	84	3	0	802
Totals	14681	3400	546	66	18693

NMT 1 missing data due to battery damage

*Monitor located on Airport



7 DECEMBER 2022 NOISE COMPLAINT STATISTICS

In December, Centennial Airport received 590 complaints from 45 households.

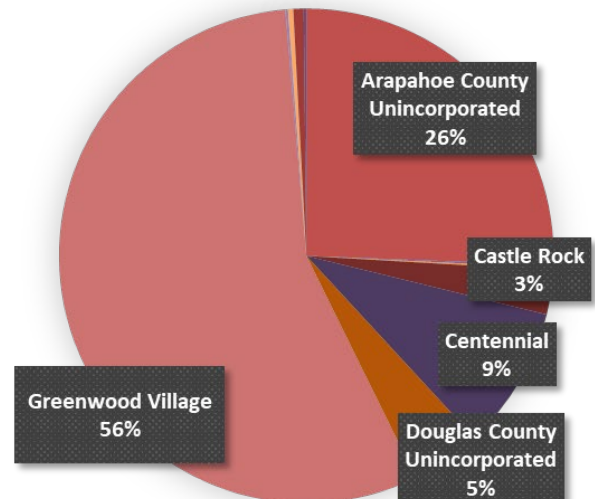
In 2022, Centennial Airport received 5,710 complaints from 160 households.

December Noise Complaints			YTD		Population
Municipality	Complaints	Households	Complaints	Households	Census 2018
Arapahoe County Unincorporated	151	16	1211	74	83,764
Aurora	1	1	139	7	374,114
Castle Pines	1	1	21	4	10,507
Castle Rock	17	2	641	6	64,827
Centennial	55	2	1278	12	110,831
Cherry Hills Village	0	0	2	1	6,650
Denver	0	0	34	10	716,492
Douglas County Unincorporated	27	2	292	22	100,536*
Greenwood Village	330	15	1709	50	15,801
Highlands Ranch	1	1	79	5	105,264
Lone Tree	2	2	52	17	14,653
Parker	1	1	30	8	55,636
Other	4	2	222	27	UNK
Total	590	45	5710	243	1,659,075

*Douglas County Unincorporated Population with Highlands Ranch Removed

Time Complaint Received	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	2022 YTD
Day Hours (7:00 am - 9:59pm)	312	361	474	289	484	458	611	574	373	411	468	554	5,369
Night Hours (10:00 pm - 6:59 am)	11	10	43	6	28	44	30	44	23	29	37	36	341
TOTAL	323	371	517	295	512	502	641	618	396	440	505	590	5,710

Complaints per Municipality



December 2022 Noise Complaint Responses Completed	
Email	36
Phone	10
Total	46

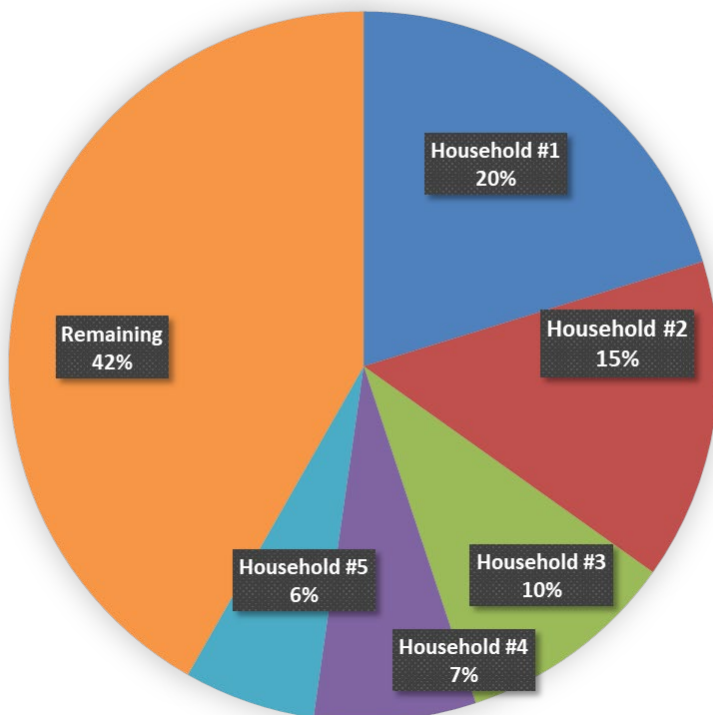
Current 12 Month Trend



Previous Year 13 Month Trend

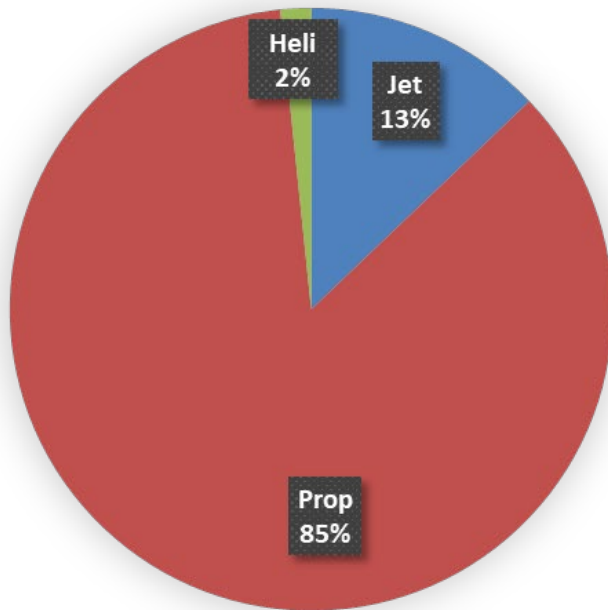


Top 5 Household Complaints YTD

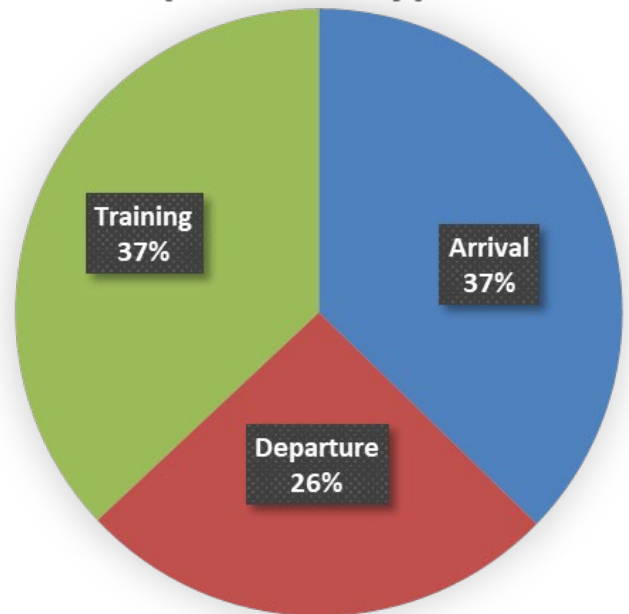


Top 5 Household Complaints YTD		
Household	Complaints	Households
Household #1	1,155	Centennial
Household #2	835	Greenwood Village
Household #3	573	Castle Rock
Household #4	421	Arapahoe County Unincorporated
Household #5	342	Greenwood Village
Remaining	2,384	
Total	5,710	

Complaints by Aircraft Type

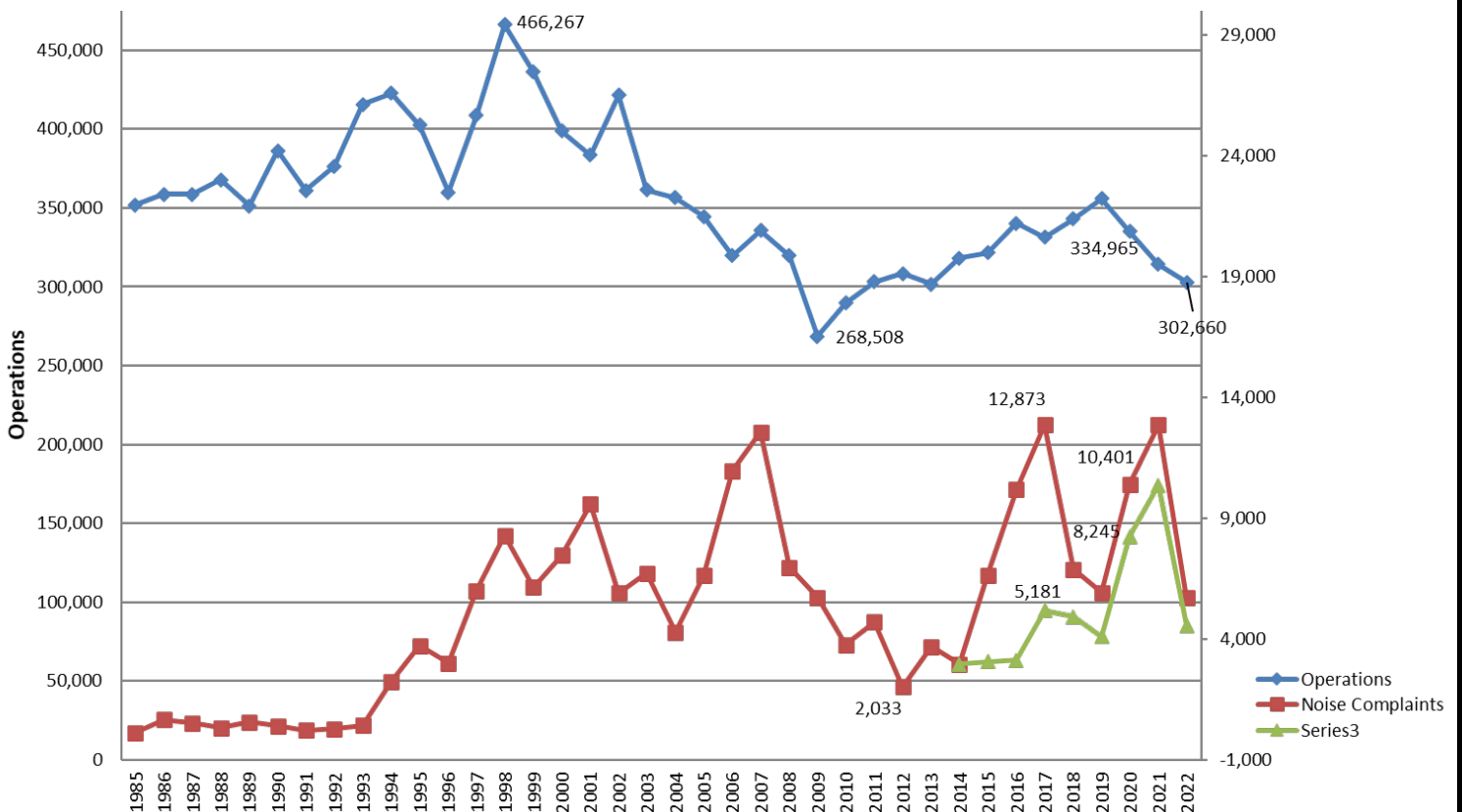


Complaints by Operation Type

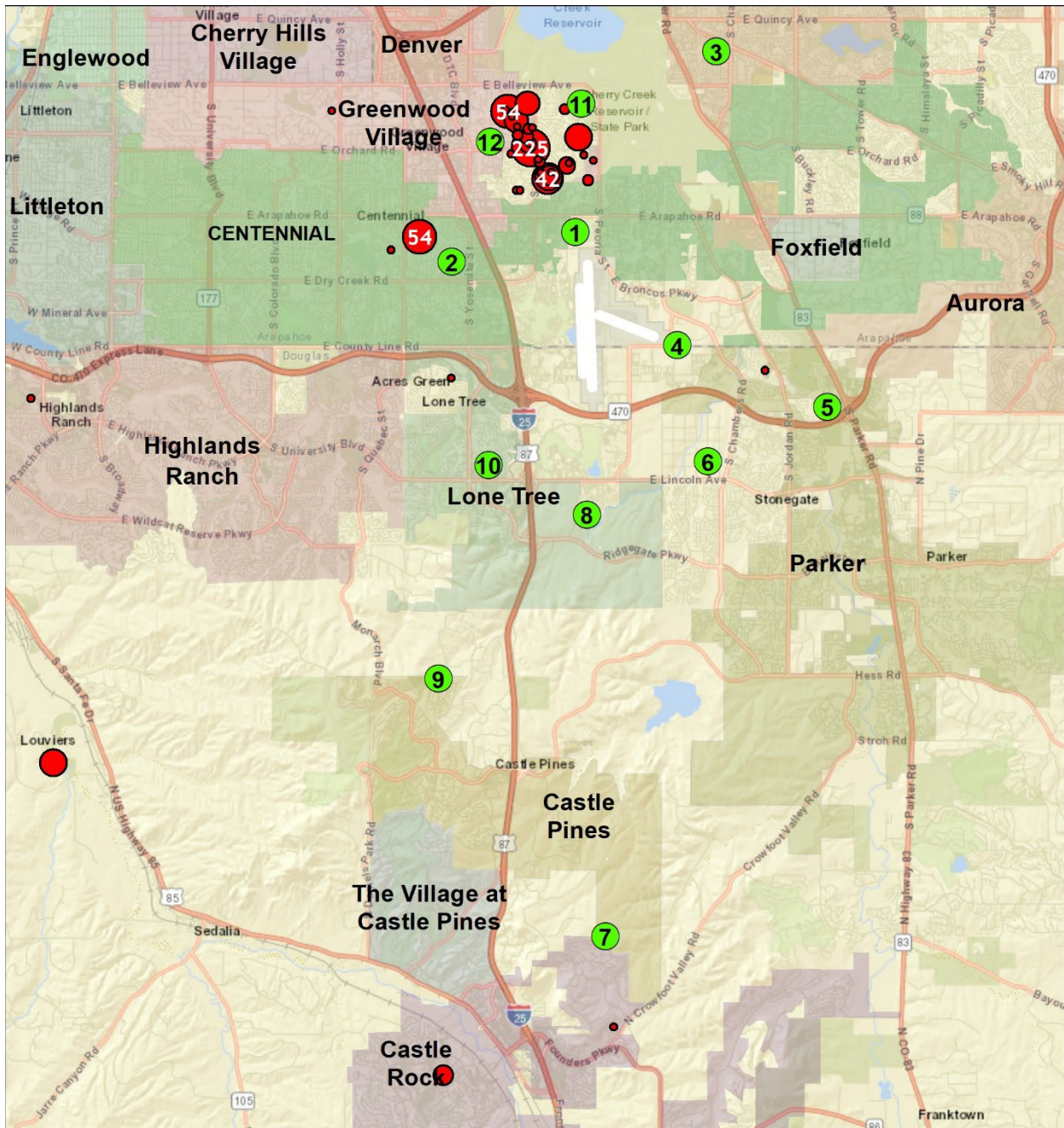


*#1 Household Removed

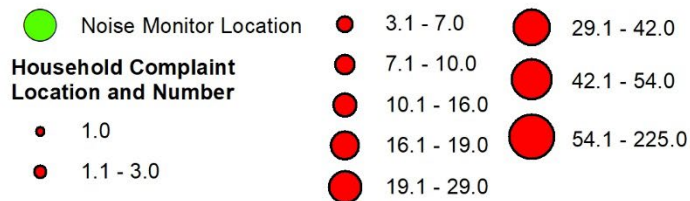
Previous 38 Year Operations Vs. Noise Complaints 1985-2022



8 CENTENNIAL AIRPORT COMPLAINT MAP



December 2022 Complaints

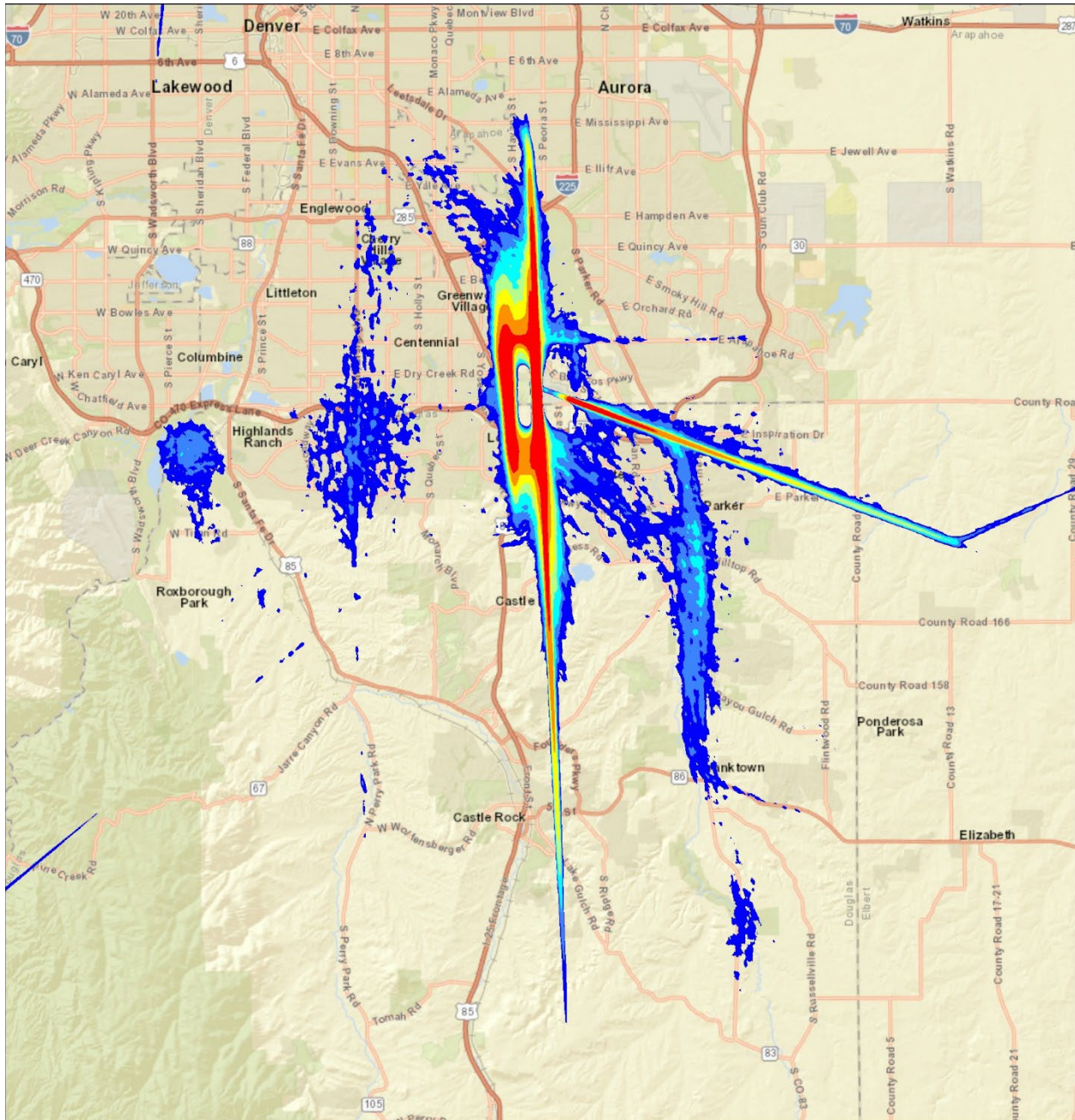


*Larger dots equate to more complaints for that particular households

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.

December 2022 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



Aviation Noise & Emissions Symposium 2023

May 1-3, 2023, UC Davis

Schedule

Aviation Noise & Emissions Symposium 2023 • Program • [Schedule](#)

Preliminary Symposium Schedule



The 2023 ANE Symposium will be held in-person at the UC Davis Conference Center. Pre-symposium trainings and meetings will be on Monday, May 1st. The Symposium Sessions and Exhibit Hall will be held Tuesday, May 2 through Wednesday, May 3.

Take a look at the Schedule Overview below!

Monday, May 1st

11:00 a.m. PT	Registration Opens
12:30 a.m. PT	Noise 101 (<i>Extra registration fee</i>)
5:00 p.m. PT	Noise 101 Concludes
5:00 p.m. PT	Aviation Noise & Emissions Officer Meeting

Tuesday, May 2nd

7:00 a.m. PT	Venue & Registration Opens
8:00 a.m. PT	Conference Begins
5:00 p.m. PT	Day 1 Conclusion
5:00 p.m. PT	Awards Reception
7:30 p.m. PT	Reception Concludes

Wednesday, May 3rd

7:00 a.m. PT	Venue & Registration Opens
8:00 a.m. PT	Conference Begins
5:00 p.m. PT	Day 2 Conclusion

CACNR Job Descriptions for Officers

CHAIR: The Chair of CACNR will

1. chair all regular and special meetings of CACNR, and coordinate with the Vice Chair if unable to be present at any meeting;
2. assure business of CACNR is conducted in accordance with Robert's Rules of Order Newly Revised;
3. assure business of CACNR is conducted with decorum and with respect for differing points of view;
4. notify any Member whose Representative(s) or Alternate(s) have not attended at least 75% of CACNR meetings as established in Article III c. of the bylaws, documenting such absences and requesting replacement of that Representative or Alternate;
5. notify any Member whose Representative(s) or Alternate(s) have behaved in a manner detrimental to the advancement of CACNR's Work Program or has displayed disruptive or rude behaviors, documenting such behaviors, and requesting replacement of that Representative or Alternate;
6. represent CACNR to the general public and at outside functions as appropriate;
7. coordinate CACNR activities with ACPAA, the FAA, and any other appropriate agencies or organizations;
8. oversee implementation of the CACNR Work Program and develop plans to advance its various components;
9. serve as Chair of the CACNR Executive Committee;
10. as necessary, appoint committees to address the various matters relating to CACNR's Work Program;
11. upon the resignation of any officer, appoint a replacement to fill the unexpired term, subject to the approval of CACNR's Regular Representatives;
12. upon the absence of the Secretary at any meeting, appoint an Acting Secretary for that meeting;
13. authorize, with the Treasurer or other member of the CACNR Executive Committee, the expenditure of funds from the designated/restricted fund maintained for CACNR by ACPAA;
14. in coordination with the Treasurer, prepare a CACNR budget for approval of the Regular Representatives;
15. determine the time and place for any special meeting requested by at least 25% of the Regular Representatives;
16. prepare the agenda for all regular and special meetings, in coordination with ACPAA staff;
17. assume other responsibilities and tasks as directed by the Members' Representatives.

VICE CHAIR: The Vice Chair of CACNR will

1. perform the duties of the Chair in her/his absence;
2. serve on the CACNR Executive Committee;
3. work closely with the Chair to develop and implement plans to advance CACNR's Work Program;
4. assist the Chair in monitoring the implementation of the CACNR Work Program;
5. authorize, with either the Chair or the Treasurer, the expenditure of funds from the designated/restricted fund maintained for CACNR by ACPAA, in the absence of either the Chair or the Treasurer;
6. assume other responsibilities and tasks as requested by the Chair or as directed by the Members' Representatives.

SECRETARY: The Secretary of CACNR will

1. record and keep the minutes of each regular and special meeting of CACNR which, when approved, shall be posted on the CACNR and Centennial Airport websites;
2. record meeting attendance at each regular and special meeting of CACNR;
3. assure the records of all meetings are available to the Members' Representatives and Alternates and to the general public;
4. be the custodian of CACNR records, and may coordinate with ACPAA staff to assure maintenance of the CACNR archives;
5. assume responsibility for maintaining and updating the CACNR Work Program which, when approved, will be posted on the CACNR and Centennial Airport websites;
6. provide for notice of the biennial review and updating of the CACNR Work Program as required by these bylaws;
7. provide notice of the upcoming election, one month prior to that election, and invite nominations in accordance with Article IV.a.
8. receive any written, proposed amendments to the bylaws, confirm such amendments have been provided by at least 25% of the Regular Members' Representatives, and provide electronic notification of the proposed amendments to the CACNR Members' Representatives at least 48 hours in advance of the next meeting.
9. serve on the CACNR Executive Committee;
10. authorize, with either the Chair or the Treasurer, the expenditure of funds from the designated/restricted fund maintained for CACNR by ACPAA, in the absence of either the Chair or the Treasurer;
11. assume other responsibilities and tasks as requested by the Chair or as directed by the Members' Representatives.

TREASURER: The Treasurer of CACNR will

1. serve as the chief financial officer of CACNR;
2. coordinate with ACPAA staff in the establishment and management of the designated/restricted fund maintained for CACNR by ACPAA containing the funds from CACNR Members;
3. monitor and provide oversight for CACNR funds and expenses;
4. in coordination with the Chair, prepare a CACNR budget for approval of the Regular Members' Representatives;
5. provide financial reports to CACNR at every regularly scheduled meeting, and as otherwise requested;
6. authorize, with the Chair or other member of the CACNR Executive Committee, the expenditure of funds from the designated/restricted fund maintained for CACNR by ACPAA;
7. serve as a member of the CACNR Executive Committee;
8. assume other responsibilities and tasks as requested by the Chair or as directed by the Members' Representatives.

CACNR/ACPAA 2023 MEETING SCHEDULES

CACNR REPRESENTATIVES TO 2023 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

<u>CACNR MEETINGS</u>	<u>CACNR REPRESENTATIVE</u>	<u>REPORT DUE DATE</u>	<u>ACPAA MEETINGS</u>
(To sblymyer@centennialairport.com)			
January 04		combines with February report	NO ACPAA MEETING
February 01		February 03	February 09
March 01		March 10	March 16 (note 3 rd Thursday)
April 05		April 07	April 13
May 03		May 05	May 11
June 07		June 07/08 if possible, or verbal June 08	
July 05 - NO CACNR MEETING	---	----	NO ACPAA MEETING
August 02		August 04	August 10
September 06		September 08	September 14
October 04		October 06	October 12
November 01		November 03	November 09
Dec 06 – NO CACNR MEETING	---	---	December 14



Centennial Airport Community Noise Roundtable (CACNR)

BYLAWS

Adopted December 4, 2019

Updated in 2021 to show addition of New Members

Article I – Purpose of Bylaws

The purpose of these by-laws is to establish guidelines for the internal structure and conduct of meetings of the Centennial Airport Community Noise Roundtable (hereinafter referred to as CACNR), and its interface with elected and/or appointed officials, and the general public. These bylaws are adopted in accordance with Article IV(1)(B) of the CACNR Memorandum of Understanding (MOU).

Article II – Statement of CACNR Purpose

- a. CACNR is a voluntary association of the Arapahoe County Public Airport Authority (ACPAA), neighboring communities, federal and state agencies and airport users created to monitor programs implemented as a result of the adoption of the ACPAA Noise Compatibility Program, including the Fly Quiet Program guidelines and the Noise Monitoring Program, and to address aircraft noise issues impacting the communities surrounding Centennial Airport. The participation and advice of these entities is essential to the success of CACNR.
- b. In an interactive and collaborative open forum, CACNR will adopt a Work Program which includes identifying the dimension of noise issues, discovering possible mitigation actions, finding opportunities for implementation, and evaluating the effectiveness of the mitigations.
- c. While CACNR's initial efforts in the development and implementation of a Work Program will be directed to noise issues associated with current aircraft operations, consideration of future noise issues also will be addressed, including interaction with noise roundtable activities at other airports.

Article III – Membership & Participation (also see Appendices I and II attached hereto)

- a. CACNR membership shall consist of Regular Members (voting members) and Advisory Members (non-voting members) as shown in Appendix I.
- b. New Members, both Regular and Advisory, may be added from time to time in accordance with Article III of the adopted MOU. Members, both Regular and Advisory, may withdraw from time to time in accordance with Article III of the adopted MOU.
- c. Members' Representatives and/or Alternates are expected to attend all regular and special meetings. If a Regular Member's Representative or an Alternate does not attend at least 75% of such meetings annually in the period from April 1 through March 31, the Regular Member will be notified for potential appointment of a replacement(s).
- d. A vacancy in the position of any Member's Representative and/or Alternate shall be filled as soon as possible by that Member. All Representatives and Alternates who serve on CACNR shall serve at the pleasure of their appointing Members. CACNR encourages and recommends Representative and Alternates be appointed to serve a minimum of two years.
- e. An Alternate shall attend and have full authority to represent a Member at any CACNR meeting when the designated Representative is absent, including the authority to vote if the Member is a Regular Member.
- f. On issues to be referred to the ACPAA Board, the ACPAA Representative's vote shall be nonbinding on ACPAA.
- g. If the Representative and Alternate of any Member will be absent for a CACNR meeting, the Representative of such Member may designate a Substitute Representative for that meeting only, and shall notify the CACNR Chair of that designation, in writing.

Article IV - Officers and Terms of Office (also see Appendix II attached hereto)

- a. The Officers of CACNR shall consist of a Chair, Vice Chair, Secretary, and Treasurer, elected from the Regular Membership by a majority of the Regular Member Representatives present at the meeting when elections are held. All officers will continue to hold voting rights during their terms. Terms of office shall be one year. Elections shall be held at the March meeting of each year and officers will serve from April through March of the year following. There shall be no term limits.

- b. The officers of CACNR may resign from their positions at any time with written notification to CACNR. Upon resignation of the Chair, and until such time as new elections are held, the Vice Chair shall serve as the Chair. Upon resignation of the Vice Chair, Secretary, or Treasurer, the Chair shall appoint a new officer subject to approval of a majority of the Regular Member Representatives present at the meeting when any appointment is made.
- c. In the absence of the Chair at a meeting, the Vice Chair shall serve as the chair for that meeting. In the absence of the Secretary at a meeting, the Chair will appoint an acting Secretary for that meeting

Article V – Conduct of Meetings

- a. All meetings of CACNR shall be open to the public.
- b. Meetings of CACNR shall be conducted in accordance with Robert's Rules of Order Newly Revised.
- c. A quorum of CACNR shall consist of at least fifty percent of the Regular Member Representatives, one of whom must be the Chair or Vice Chair. In the event the fifty percent is an even number, a quorum shall be fifty percent plus one. An official meeting cannot be held if a quorum is not present, as determined by the roll call. In the absence of a quorum, the Chair may decide to:
 - i. Delay the start of the official meeting as a means to achieve a quorum, if possible, or
 - ii. Ask for consensus from the Representatives/Alternates present to hear the information items only on the agenda.
- d. To assure advancement of the work of CACNR through active participation in the formation and implementation of CACNR's Work Program, all present at meetings will be expected to present new, supportive, or differing ideas or testimony in a cooperative, respectful and objective manner.

Article VI – Schedule and Location of CACNR Meetings

- a. Regular meetings of CACNR shall be held monthly at a time and location agreed upon by a majority of CACNR Regular Representatives and posted on the CACNR and the Centennial Airport websites. Meetings may be canceled and/or not scheduled in advance in the absence of sufficient business, at the discretion of the CACNR Chair.
- b. Special meetings shall be held at the request of no fewer than 25% of the Regular Representatives at a time and place to be determined by the Chair, but within two weeks of the request having been made.

Article VII – Notice of Meetings

Notice of regular CACNR meetings shall be given to all representatives at least 48 hours in advance of each meeting. Notice shall include an agenda which has been formalized by the Chair, and, whenever possible, all available supporting material. These items shall also be posted on the CACNR and Centennial Airport websites.

Article VIII – Record of Meetings and Availability of Materials

- a. The minutes of each meeting shall be recorded by the Secretary and made available for Members' Representatives as well as to the public. The minutes shall be reviewed, corrected as necessary and approved by CACNR at the next regular meeting. All records of CACNR meetings shall be posted on the CACNR and Centennial Airport websites after approval.
- b. Copies of all supporting meeting materials shall also be available for the public in printed form at CACNR meetings.
- c. The CACNR Work Program shall be reviewed biennially, to show progress and revise goals. Such review shall take place at the March meeting, with notice provided by the Secretary at the February meeting of each review year.

Article IX – Public Participation

Specific opportunities and time limits for public comment shall be designated on each meeting agenda. At the discretion of the Chair, opportunities for public comment may be offered during discussion of specific topics or during presentations.

Article X – Committees

- a. There shall be an Executive Committee, consisting of the Chair, Vice Chair, Secretary and Treasurer. The Executive Committee shall have the authority to act for CACNR between regular meetings. None of its acts shall conflict with CACNR policies, procedures, or actions previously taken. The Executive Committee, through the Chair, shall report at the next regularly scheduled meeting on any activities undertaken in accordance with this paragraph.
- b. The CACNR Chair, at his/her discretion, may appoint committees to work on specific issues that come before CACNR. Committee chairs shall be appointed by the CACNR Chair and shall be CACNR Representatives. Committee membership shall include appropriate or interested CACNR Representatives and may include members of the public with skills or knowledge relevant to a committee's assignment.
- c. Any recommendations from CACNR committees shall be considered final and official only upon approval of a majority of the Regular Member's Representatives.

Article XI – Ability to Enter into Contracts

- a. Under Colorado Revised Statutes 7-30-101, CACNR is an unincorporated non-profit association and therefore has the ability to enter into contracts.

Article XII - Amendments to the By-Laws

- a. These by-laws may be amended by a majority vote of all Regular Member Representatives, at any regularly scheduled meeting. Proposed amendments shall be drafted by at least 25% of the Regular Representatives and submitted in writing to the Secretary no later than one week before the meeting at which their adoption is to be considered. Written notification of the proposed amendments shall then be provided, via email, to all representatives at least 48 hours in advance of such meeting.

APPENDIX I MEMBERS OF CACNR*

REGULAR MEMBERS (voting)

Arapahoe County (2)
Douglas County (2)
Arapahoe County Public Airport Authority (1)
Aurora, City of (1)
Castle Pines, City of (1)
Castle Rock, Town of (1)
Centennial, City of (1)
Cherry Hills Village, City of (1)
Foxfield, Town of (1)
Greenwood Village, City of (1)
Highlands Ranch Metropolitan District (1) (added 5/5/21)
Lone Tree, City of (1)
Parker, Town of (1)

ADVISORY MEMBERS (non-voting)

Aircraft Owners and Pilots Association (AOPA) (1)
Colorado Airport Business Association (CABA) (1)
Colorado Department of Transportation – Aeronautics
Division (CDOT) (1)
Federal Aviation Administration Centennial Control Tower (1)
Federal Aviation Administration Airport Dist. Office (FAA) (1)
Federal Aviation Administration Terminal Radar Approach
Control (TRACON) (1)
Wings Over the Rockies (1) (added 2/3/21)

*The following were also invited to become initial members of CACNR, but subsequently decided not to be involved: Cherry Hills Village, and the City and County of Denver. Cherry Hills Village did become a member in 2014.

APPENDIX II RESPONSIBILITIES OF CACNR MEMBERS, REPRESENTATIVES/ALTERNATES, AND OFFICERS

MEMBERS: Members in good standing of CACNR will

1. appoint their Representatives and Alternates, or their replacements, in accordance with these bylaws and in a timely fashion;
2. understand and support the objectives and activities of CACNR;
3. communicate with CACNR through their Representatives/Alternates;
4. maintain their financial obligations in accordance with the CACNR MOU.

REPRESENTATIVES/ALTERNATES: All Members' Representatives/Alternates to CACNR will

1. coordinate with each other to assure their Member's representation at all CACNR meetings;
2. if the Representative and Alternate of any Member will be absent for a CACNR meeting, the Representative of such Member may designate a Substitute Representative for that meeting only, and shall notify the CACNR Chair of that designation, in writing;
3. become familiar with the agenda and other meeting materials prior to each meeting;
4. assure confidentiality of designated information shared during CACNR meetings;
5. support the work of CACNR through active participation in the formation and implementation of CACNR's Work Program;
6. present new or differing ideas in a cooperative, respectful and objective manner;
7. assume responsibilities related to the CACNR Work Program as requested by the Chair.
8. If the Representative and Alternate of any Member will be absent for a CACNR meeting, the Representative of such Member may designate a Substitute Representative for that meeting only, and shall notify the CACNR Chair of that designation, in writing.

CHAIR: The Chair of CACNR will

1. chair all regular and special meetings of CACNR, and coordinate with the Vice Chair if unable to be present at any meeting;
2. assure business of CACNR is conducted in accordance with Robert's Rules of Order Newly Revised;
3. assure business of CACNR is conducted with decorum and with respect for differing points of view;

4. notify any Member whose Representative(s) or Alternate(s) have not attended at least 75% of CACNR meetings as established in Article III c. of the bylaws, documenting such absences and requesting replacement of that Representative or Alternate;
5. notify any Member whose Representative(s) or Alternate(s) have behaved in a manner detrimental to the advancement of CACNR's Work Program or has displayed disruptive or rude behaviors, documenting such behaviors, and requesting replacement of that Representative or Alternate;
6. represent CACNR to the general public and at outside functions as appropriate;
7. coordinate CACNR activities with ACPAA, the FAA, and any other appropriate agencies or organizations;
8. oversee implementation of the CACNR Work Program and develop plans to advance its various components;
9. serve as Chair of the CACNR Executive Committee;
10. as necessary, appoint committees to address the various matters relating to CACNR's Work Program;
11. upon the resignation of any officer, appoint a replacement to fill the unexpired term, subject to the approval of CACNR's Regular Representatives;
12. upon the absence of the Secretary at any meeting, appoint an Acting Secretary for that meeting;
13. authorize, with the Treasurer or other member of the CACNR Executive Committee, the expenditure of funds from the designated/restricted fund maintained for CACNR by ACPAA;
14. in coordination with the Treasurer, prepare a CACNR budget for approval of the Regular Representatives;
15. determine the time and place for any special meeting requested by at least 25% of the Regular Representatives;
16. prepare the agenda for all regular and special meetings, in coordination with ACPAA staff;
17. assume other responsibilities and tasks as directed by the Members' Representatives.

VICE CHAIR: The Vice Chair of CACNR will

1. perform the duties of the Chair in her/his absence;
2. serve on the CACNR Executive Committee;
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4. assist the Chair in monitoring the implementation of the CACNR Work Program;
5. authorize, with either the Chair or the Treasurer, the expenditure of funds from the designated/restricted fund maintained for CACNR by ACPAA, in the absence of either the Chair or the Treasurer;
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2. record meeting attendance at each regular and special meetings of CACNR;
3. assure the records of all meetings are available to the Members' Representatives and Alternates and to the general public;
4. be the custodian of CACNR records, and may coordinate with ACPAA staff to assure maintenance of the CACNR archives;
5. assume responsibility for maintaining and updating the CACNR Work Program which, when approved, will be posted on the CACNR and Centennial Airport websites;
6. provide for notice of the biennial review and updating of the CACNR Work Program as required by these bylaws;
7. provide notice of the upcoming election, one month prior to that election, and invite nominations in accordance with Article IV.a.
8. receive any written, proposed amendments to the bylaws, confirm such amendments have been provided by at least 25% of the Regular Members' Representatives, and provide electronic notification of the proposed amendments to the CACNR Members' Representatives at least 48 hours in advance of the next meeting.
9. serve on the CACNR Executive Committee;
10. authorize, with either the Chair or the Treasurer, the expenditure of funds from the designated/restricted fund maintained for CACNR by ACPAA, in the absence of either the Chair or the Treasurer;
11. assume other responsibilities and tasks as requested by the Chair or as directed by the Members' Representatives.

TREASURER: The Treasurer of CACNR will

1. serve as the chief financial officer of CACNR;
2. coordinate with ACPAA staff in the establishment and management of the designated/restricted fund maintained for CACNR by ACPAA containing the funds from CACNR Members;
3. monitor and provide oversight for CACNR funds and expenses;
4. in coordination with the Chair, prepare a CACNR budget for approval of the Regular Members' Representatives;
5. provide financial reports to CACNR at every regularly scheduled meeting, and as otherwise requested;
6. authorize, with the Chair or other member of the CACNR Executive Committee, the expenditure of funds from the designated/restricted fund maintained for CACNR by ACPAA;
7. serve as a member of the CACNR Executive Committee;
8. assume other responsibilities and tasks as requested by the Chair or as directed by the Members' Representatives.



CENTENNIAL AIRPORT COMMUNITY NOISE ROUNDTABLE

POLICIES AND PROCEDURES

Adopted July 6, 2022

1. Expenditures of CACNR funds not to exceed \$500 may be approved by the Executive Committee.
2. Expenditures of CACNR funds exceeding \$500 will be submitted to CACNR for approval.
3. Those wishing to utilize CACNR funds shall submit a request in writing to the EC, or to CACNR depending upon the amount of funding being requested. The request should include a description of the use of the funds, to whom the funds would be paid, the services to be provided, a time-line, and the anticipated outcome. If funds will be utilized for the services of Jason Schwartz, the request will be submitted on the Task Order form per the Consulting Services Agreement with him.
4. Expenses will be paid for two (2) CACNR Representatives to attend the UC Davis symposium annually.
5. Expenses will be paid for two (2) Representatives to attend each of the N.O.I.S.E. Fall and Spring conferences, with the understanding whoever goes to the Spring conference should not have attended the UC Davis symposium, if possible.
6. The Executive Committee will draft an annual budget for CACNR, to be approval by the October meeting of each year.

12/31/22

Dear Mr. Grady, Ms. Lardie and Mr. Valencia,

Below are three questions we are requesting the FAA respond to at or before our February 1st Centennial Airport Community Noise Roundtable (CACNR) meeting 30 days from now. These questions were compiled through participation of our Airport Board, Airport Staff, CACNR, the City of Greenwood Village and community members affected by the extended pattern traffic from Centennial Airport. Thank you for your time and careful consideration of our questions.

1. The communities north of Arapahoe Rd, continue to be severely impacted by the increase in aircraft over their homes due to the extended traffic pattern implemented after the midair collision. Did the FAA consider the environmental impact on the 1,000's of residents and its alternatives on the quality of the human environment as a result of that change and more specifically, did the FAA consider and meet its NEPA obligations, policy objectives 40 CFR § 1500.2 to the fullest extent possible before changing how the traffic pattern is managed at Centennial Airport and if not, do you plan to consider and meet them?
2. In your 12/16 letter you state traffic patterns cannot be confined based on noise abatement. We understand, it could be possible to confine a traffic pattern based on noise abatement through a Part 150 Noise and Land Use Compatibility Study followed by a successful Part 161 Notice and Approval of Airport Noise and Access Restrictions. In lieu of going through these steps, what criteria can be used by the FAA or Airport NOW to confine the pattern area or limit how many aircraft are in the traffic pattern at once? The intent would be to have the aircraft more frequently use a standard pattern area that would reduce the likelihood of having to extend the pattern over the community. (standard pattern for Centennial Airport defined as South of Arapahoe Rd and north of Lincoln Ave and East of I-25)
3. Safety concerns have been expressed not only by the community but also the flight schools that are being directed to extend the traffic pattern over the residential areas. Because of the new procedure, the pattern is extended so frequently that their students aren't getting sufficient training on flying a non-extended pattern. This becomes a safety concern if the student is expected to fly a normal pattern at other airports and they are unable to stay ahead of the aircraft while transitioning to and from their landing or departure. Another safety concern is by flying over such dense residential areas pilots have limited options in an emergency for safely landing their aircraft and that now it's more likely a midair collision could occur over a neighborhood, unlike the last midair that fortunately occurred over the Cherry Creek State Park. In our opinion having an extended pattern doesn't enhance the safety of the operations when there has been 1 midair accident in over 16.2 million operations at Centennial Airport. Were these factors considered by the FAA prior to the change and if not can they be considered?

Sincerely

Mike Fronapfel

1/16/22

From Brad Pierce:

Dear Mr. Valencia and Ms. Lardie,

Based on the January 4, 2023 Centennial Airport Community Noise Roundtable meeting I am sending questions and supporting attachments that I received from Audra Dubler, the leader of the community group of residents concerned about flight school noise at Centennial Airport.

The questions and statements were submitted by residents affected by the extended pattern traffic and do not necessarily reflect the opinions of CACNR or the Airport Authority.

I've copied airport staff, CACNR Executive Committee and Ms. Dubler.

We look forward to your prompt responses to the questions.

Thank you and please let us know if you have any questions.

Brad Pierce

Chair, Centennial Airport Community Noise Roundtable

Attached email:

Chairman Pierce and CANCR,

Below are the community questions and attached are the supporting documents. The community submitted scores of questions and comments. We in turn, combined and pared all question and comments to 18. Some changes were made to the wording of questions and how supporting documentation is referenced.

Other items:

- The community's primary interest is the FAA's explanation of the "operational sequence change."
- The community's secondary interest is the FAA's lead presentation. However, if the lead presentation limits the FAA's time to answer questions and engage the community, we'd prefer that the lead presentation be eliminated at the February 1st, 2023, meeting.
- If the FAA deems a question outside of their scope, then we'd request the airport to answer.

Questions:

- 1. General aviation, local operations (flight schools) account for nearly 50% of total yearly flight operations at Centennial Airport. A flight pattern or operational sequence change was implemented (2022?) to send these flights over our neighborhoods (north of Arapahoe Road). Where were all these flight operations (approx.150,000/year) prior to the change? Where were the "pattern boxes"? They were NOT over our homes and it's not due to an increase in total operations.**

2. With the FAA solving one “perceived” problem (the midair collision in 2021), the FAA created many more: incessant noise with low flying altitude planes 8-10 hours/day, toxic lead concentrations that are poisoning our children, schools, parks and homes, and a greater probability of ground casualties over dense residential communities. How can the one “perceived” problem override the problems of these listed above? The mid-air crash happened exactly where it should have!
3. Is this new sequence/pattern change permanent? Is there paperwork or a memo formalizing the changes? May we get a copy?
4. The community was never notified or communicated with regarding the pattern or “operational sequence” change that is negatively affecting our homes and schools. Why isn’t the community on the ground considered a “stakeholder” when making decisions that will affect adjacent airport communities?
5. Can air traffic control direct the flight school traffic to fly south of Arapahoe Road and north of Hess Reservoir? The area south of Lincoln Ave is 99% open space. The x’s in the diagram are new or current home developments.
6. How many planes are allowed in the flight pattern (defined as the touch and go pattern/box)? Can this number be reduced to stop planes flying north of Arapahoe Rd. and south of Lincoln Ave? Can the number of planes in the pattern be regulated (limited) so they do not fly north of Arapahoe and the remaining planes be maintained in a holding pattern on the ground until there is room in the pattern for them to fly? Planes wanting to bypass the waiting period on the ground could be incentivized to purchase a voucher, similar to cars wanting to use a HOV lane, so as not to discriminate those planes wanting to take off. The community is suffering due to the number of “laps” each flight is making in the flight school pattern.
7. Rationale has been given that the FAA needs to stagger the landings, but planes land together all the time. Why would some planes be allowed to land together and not others? Does this mean the FAA could revert to the original touch & go pattern box.
8. As a result of the mid-air collision (May ’21), the community believes the FAA changed the flight pattern at Centennial Airport. If the FAA did indeed change the flight pattern because of the mid-air collision, then all airports in this country with a similar, pre-collision, flight patterns to Centennial Airport must have also been changed. How many other airports, nationwide were affected because of the collision over Cheery Creek State Park? If no other airports experienced any change, then what’s the rationale to change anything at Centennial Airport? Simply put, if the FAA is not changing the flight pattern at every other airport, why do it at Centennial?
9. Since the midair collision in May of 2021, there have been 3 other crashes associated with Centennial Airport: March 9th 2022 , August 2022 (pilot killed because he ran out of fuel) and November 9th, 2022. Thankfully nobody on the ground was injured. But it’s only a matter of time before a crash occurs in our community. Since the FAA is concerned only with the safety of the pilots and passengers, what government agency is concerned that our community now has 150,000, local, G.A. operations/year, with novice pilots, over dense residential communities where OUR safety is in imminent danger?
10. When there are only a few planes in the pattern and no staggering needed, for example 2 planes, why do the planes still fly north of Arapahoe Rd. and south of Lincoln Ave.? In fact, occasionally a single plane in the pattern will fly repeatedly north of Arapahoe Rd. Why?

11. How do pre-and post mid-air collision flight patterns compare to the other 100 top general aviation airports in the country? How similar or dissimilar are the pre-and post crash patterns to other airports? Why was our flight pattern/sequence changed when others were not? For example, the midair collision in Niwot, CO in September '22 that killed 3 people?
12. Was the mid-air collision (May '21) the result of a faulty flight pattern, tower error or pilot error?
13. What is most important to the FAA: pilot safety or innocent children and families on the ground, or both?
14. The Centennial Airport Voluntary Noise Abatement Guidelines map out specific noise sensitive areas. Nearly all pilots (not just flight schools) completely ignore the noise abatement guidelines? How can formal noise abatement be achieved?
15. CACNR is comprised of various group, including airport users (flight schools). Why are the flight schools not obligated to be at every CACNR meeting?
16. Can there be ONE spokesperson from the FAA assigned to this situation to get back with our community in a timely manner? Also, can there be a formal acknowledgment of the questions received and a timeline given for a response and/or resolution.
17. The community is requesting the FAA's attendance at each roundtable meeting either in person or remotely until this issue is resolved. Will the FAA agree to that request?
18. When did flight schools get instituted to Centennial Airport and when did touch and goes start at the airport?



U.S. Department
of Transportation
**Federal Aviation
Administration**

Northwest Mountain Region
Office of the Regional Administrator

2200 S. 216th Street
Des Moines, Washington 98198

January 9, 2023

The Honorable Jason Crow
House of Representatives
1323 Longworth HOB
Washington, DC 20515

Dear Congressman Crow:

Thank you for your letter to the Federal Aviation Administration's (FAA) Acting Administrator Billy Nolen dated December 14, 2022. Acting Administrator Nolen asked me to respond to your concerns regarding several issues raised by Centennial Airport's (KAPA) Executive Director and CEO, Mike Fronapfel, and residents living within noise-affected communities.

We appreciate your advocacy on behalf of your constituents. The FAA responded to their October 19, 2022, letter on December 16, 2022. In that letter, we explained the primary purpose of Air Traffic Control (ATC) and the direction the FAA took after the mid-air collision. There has been no delineated change in the traffic pattern. An excerpt of our response is below.

[ATC] is tasked with the safe, orderly, and expeditious flow of air traffic—preventing aircraft collisions is their primary purpose. Following the 2021 mid-air collision at KAPA, air traffic controllers were directed to use more active control when managing pattern traffic with arriving aircraft.

Airport traffic pattern procedures are designed to enhance safety and improve the flow of traffic at an airport. At airports with an operating airport traffic control tower, pattern traffic is generally sequenced around other aircraft, especially aircraft that are on an instrument approach procedure or a straight-in approach to a runway. Extending either the upwind or downwind of traffic in the pattern to Runway 17R results from sequencing traffic or an increased volume in the touch-and-go pattern and, as such, cannot be confined for noise abatement. If there is no conflicting traffic—which often allows the pilot to determine the timing of the crosswind or base—it falls to the pilot to follow the voluntary noise abatement guidelines.

Other concerns in your letter were increases in traffic and flight school operations, potentially increasing lead and noise pollution. Unlike private airports, a public airport like KAPA is restricted—by laws enacted by Congress—from imposing mandatory curfews or unilaterally banning certain types of flight activity, including pilot flight training. Therefore, working with airport proprietors to address aircraft noise is a partnership and not the sole jurisdiction of the FAA.

In that spirit, as conveyed in our letter to Mr. Fronapfel, a delegation from the FAA—which included the Air Traffic Control District Manager, the Regional Community Engagement Officer, and a representative from the Northwest Mountain Regional Administrator’s office—attended the Centennial Airport Community Noise Roundtable (CACNR) meeting held on December 7, 2022. They attended to hear firsthand the issues of the Centennial Airport community members. At the meeting, they informed the CACNR that these issues/concerns would need to be investigated and that they would reach out to the CACNR if any clarification of the concerns were needed.

We also agreed to study a request made by the KAPA sponsor to change a departure procedure to the north.

Thank you for this opportunity to review and respond to your concerns. An identical response has been sent to the co-signers of your letter.

Sincerely,



Grady Stone
Regional Administrator
Northwest Mountain Region

ATTENDANCE RECORD for 2022 - 2023 CACNR MEETINGS		2022 APR	2022 MAY	2022 JUNE	2022 JULY	2022 AUG	2022 SEPT	2022 OCT	2022 NOV	2022 DEC	2023 JAN	2023 FEB	2023 MAR	MEMBER %	REPRESENTED TOTAL %
ARAPAHOE COUNTY	Carrie Warren-Gully	X	X	absent	X	X	absent	X	X	absent	X			70%	70%
	Vacant	-	-	absent	-	-	absent	-	-	absent	-			0%	
	Paul Krier	X	X	X	-	X	X	X	X	X	X virtual			100%	100%
	Evan Colvin	X	-	X	X	X	X	X	X	-	X			80%	
X															
DOUGLAS COUNTY	Abe Laydon	-	-	-	absent	-	absent	-	-	-	absent			0%	70%
	Dan Avery	X	X	X	absent	X	absent	X	X	X	absent			70%	
	Alison Biggs	X	X	absent	X	X	X	X	X	X	X			90%	90%
	Mark Adams	-	-	absent	-	-	-	-	-	-	-			0%	
AURORA	Brad Pierce	X	X	X	X	X	X	X	X	X	X			100%	100%
	Karen Hancock/Jeanne Rustad	-	-	X	-	X	-	-	-	-	-			20%	
CASTLE PINES	Chris Eubanks	X	X	X	absent	X	X	X	absent	absent	X			70%	70%
	Ben Price	-	-	-	absent	-	-	-	absent	absent	-			0%	
CASTLE ROCK	Laura Cavey	absent	absent	absent	X	X	absent	absent	absent	absent	-			20%	30%
	Sandy Vossler	absent	absent	absent	-	-	absent	absent	absent	absent	X			10%	
CENTENNIAL	Candace Moon	X	X	absent	X	X	X	X	X	X	X			90%	
	Don Sheehan	-	-	absent	-	-	-	-	-	-	-			0%	
CHERRY HILLS VILLAGE	Al Blum/Robert Eber	absent	absent	absent	absent	absent	absent	absent	absent	absent	absent			0%	0%
	Afshin Safavi/Randy Weil	absent	absent	absent	absent	absent	absent	absent	absent	absent	absent			0%	
FOXFIELD	Pam Thompson	X	X	absent	absent	X	X	absent	X	X	X			70%	70%
	Frank Lawrence	-	-	absent	absent	-	-	absent	-	-	-			0%	
GREENWOOD VILLAGE	Donna Johnston	X	X	X	absent	X	X	X	X	X	X			90%	90%
	Libby Barnacle	-	-	-	absent	-	-	-	-	-	-			0%	
HIGHLANDS RANCH	Andy Jones	X	absent	absent	X	X	absent	-	X	absent	X virtual			50%	60%
METROPOLITAN DISTRICT	Renee Anderson	-	absent	absent	-	-	absent	X	-	absent	-			10%	
LONE TREE	Mike Anderson	X	X	X	X	X	X	X	X	X	X			100%	100%
	Chuck Darnell	-	-	-	-	-	-	-	-	-	-			0%	
PARKER	Todd Hendreks/Ashley Chasez	absent	absent	absent	-	-	-	-	absent	absent	absent			0%	30%
	Vacant	-	absent	absent	absent	X	X	X	absent	absent	absent			30%	
ACPAA	Mike Fronapfel	X	X	X	X	X	X	X	X	X	X			100%	100%
	Vacant	-	-	-	-	-	-	-	-	-	-			0%	
AOPA	Robert Doubek/John Hirshman	-	X	X	X	X	X	absent	X	X	absent			70%	80%
	John Hirshman/Vacant	X	X	X	X	-	-	absent	-	-	absent			40%	
CABA	Don Kuskie	X	X	X	X	X	X	X	X	X	X			100%	100%
	Mike Straka	-	-	-	-	-	-	-	-	-	-			0%	
CDOT AERONAUTICS	Todd Green	absent	absent	absent	absent	absent	absent	absent	absent	absent	absent			0%	0%
DIVISION	Vacant	-	-	-	-	-	-	absent	absent	absent	absent			0%	
FAA APA CONTROL	Jeff Holmes/Jeff Lawton	absent	-	absent	absent	absent	absent	absent	absent	absent	absent			0%	10%
TOWER	Ron Curry	absent	X	absent	absent	absent	absent	absent	absent	absent	absent			10%	
FAA DISTRICT OFFICE	John Bauer	absent	absent	absent	absent	absent	absent	absent	absent	absent	absent			0%	0%
	John Sweeney	absent	absent	absent	absent	absent	absent	absent	absent	absent	absent			0%	
FAA TRACON	Steve Martin	absent	absent	absent	absent	absent	absent	absent	absent	absent	absent			0%	0%
	Bill Dunn	absent	absent	absent	absent	absent	absent	absent	absent	absent	absent			0%	
WINGS OVER THE ROCKIES	Bill Wasmund	absent	X	X	X	absent	X	X	X	X	X			80%	80%
	Vacant/Jordan Ashley	-	-	-	-	-	-	-	-	-	-			0%	
CACNR BYLAWS ADOPTED NOVEMBER 3, 2021:															
ARTICLE III.c. Members' Representatives and/or Alternates are expected to attend all regular and special meetings. If a Regular Member's Representative or Alternate does not attend at least 75% of such meetings annually in the period from April 1 through March 31, the Regular Member will be notified for potential appointment of a replacement(s).															
01 11 2023															



Fly Quiet Committee – January 2023 Monthly Report

- Submitted additional electronic sign noise abatement message ideas to the executive committee. Discussions and approvals will need to be occur before submittal to ACPAA
- Looking into offering simulated KAPA traffic pattern flights in order to give the public a pilot/instructor perspective to the noise issues around the airport. Goal is to provide an understanding as to what the flight schools can and cannot do to reduce ground noise.
- Continuing to look at similar airports to KAPA and how ideas from those airports can benefit KAPA noise reduction efforts. The County of San Mateo, which owns **San Carlos Airport** ([KSQL](#)) and **Half Moon Bay Airport** ([KHAF](#)) in the San Francisco Bay Area of California, has launched its **Friendly Approach Program**. The noise abatement procedure videos are noteworthy. [FlySMCFriendly.com](https://www.flysmcfriendly.com)
- Recommendation from November public comment: Reviewed **Bedford Mass Hanscom Field** (<https://www.massport.com/hanscom-field/about-hanscom/airport-activity-monitor/>)