



## **CENTENNIAL AIRPORT COMMUNITY NOISE ROUNDTABLE**

**AGENDA**  
**April 5, 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 meetings 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>	Leslie Summey/Vacant Paul Krier/Evan Colvin	<i>Foxfield:</i>	Pam Thompson/Frank Lawrence
<i>Douglas County:</i>	Abe Laydon/Dan Avery Alison Biggs/Mark Adams	<i>Greenwood Village:</i>	Donna Johnston/Libby Barnacle
<i>Aurora:</i>	Brad Pierce/Mindy Parnes	<i>Highlands Ranch Metro Dist.</i>	Andy Jones/Renee Anderson
<i>Castle Pines:</i>	Chris Eubanks/Ben Price	<i>Lone Tree:</i>	Mike Anderson/Chuck Darnell
<i>Castle Rock:</i>	Laura Cavey/Sandy Vossler	<i>Parker:</i>	Ashley Chasez/Vacant
<i>Centennial:</i>	Candace Moon/Don Sheehan	<i>ACPAA:</i>	Michael Fronapfel/Vacant
<i>Cherry Hills Village</i>	Robert Eber/Randy Weil	<i>AOPA:</i>	John Hirshman/Vacant
		<i>CABA:</i>	Don Kuskie/Mike Straka
		<i>CDOT Aeronautics Div:</i>	Todd Green/Vacant
		<i>Wings Over the Rockies:</i>	Bill Wasmund/Jordan Ashley

2. **CONSENT AGENDA:** (items here may be moved to Agenda Item #3, on the request of any CACNR Representative)

1. DRAFT MINUTES, March 1, 2023 – Alison Biggs, Secretary
2. TREASURER'S REPORT, March 2023 – Andy Jones, Treasurer
3. NOISE REPORT, February 2023 – Samantha Blymyer, ACPAA Staff

3. **ITEMS REMOVED FROM CONSENT AGENDA:**

4. **EXECUTIVE COMMITTEE:**

- A. CACNR Representative to ACPAA Meeting on April 13, 2023
- B. Draft 2023-2025 CACNR Work Program

5. **FAA RESPONSES TO CACNR QUESTIONS OF 2/27/23 (included), 1/16/23 and 12/31/22 (previously sent in March 2023):**

Michael Valencia, FAA Denver District General Manager

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

7. **COMMITTEE REPORTS:**

- A. COMMUNITY OUTREACH – Mike Anderson, Chair
- B. FLY QUIET – Bill Wasmund, Chair
- C. NOISE MONITORS – Candace Moon, Chair

8. **FAA REPORTS/COMMENTS:**

1. CENTENNIAL AIRPORT AIR TRAFFIC CONTROL TOWER – Mike Sackett/Ron Curry
2. FAA DISTRICT OFFICE – John Bauer/John Sweeney
3. FAA TRACON – Steve Martin/Bill Dunn
4. FAA DENVER DISTRICT GENERAL MANAGER – Michael Valencia
5. FAA NORTHWEST MOUNTAIN REGION/ALASKAN REGION COMMUNITY ENGAGEMENT OFFICER – Justin Biassou
6. FAA SENIOR ADVISOR, OFFICE OF THE REGIONAL ADMINISTRATOR, NORTHWEST MOUNTAIN REGION – Leslie Lardie

9. **OTHER REGULAR REPORTS:**

- A. ACPAA March 16, 2023 – Bill Wasmund
- B. AIRPORT DIRECTOR'S REPORT – Mike Fronapfel
  - 1. Community Related Activity
  - 2. FAA Response re Sub-Roundtable Technical Working Group
  - 3. Flight School Activity
  - 4. Other Airport Activity
  - 5. Legislative
  - 6. Status of Follow Up Items
  - 7. Other
- C. FLIGHT SCHOOLS: .
  - 1. Aspen Flying Club – Justin Mazza
  - 2. ATP – John Herman
  - 3. Flights Inc. – Kimber Bauer
  - 4. Independence Aviation – Jason Ahbe

10. **OLD BUSINESS:**

11. **NEW BUSINESS:**

- A. INFORMATION SHARING

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

13. **NEXT MEETINGS:**

- |                                  |   |
|----------------------------------|---|
| A. <b>CAENR</b> – 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. <b>ACPAA</b> – 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 |

14. **ADJOURN**



**CENTENNIAL AIRPORT COMMUNITY NOISE ROUNDTABLE  
MINUTES**

March 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 6:33 p.m. by Chair Brad Pierce. The following were in attendance, and a quorum was present:

Douglas County:	Dan Avery	Lone Tree:	Mike Anderson
Douglas County:	Alison Biggs	Parker:	Ashley Chasez
Aurora:	Brad Pierce	ACPAA:	Mike Fronapfel
Castle Rock:	Laura Cavey (virtual)	AOPA:	John Hirshman
Centennial:	Candace Moon	CABA:	Don Kuskie
Foxfield:	Pam Thompson	Wings Over the Rockies:	Bill Wasmund
Greenwood Village:	Donna Johnston		

Others in attendance were Centennial Alternate Representative Don Sheehan and ACPAA staff Samantha Blymyer, Chris Thompson, and Lauren Wiarda.

Those absent were:

Arapahoe County:	Leslie Summey/Vacant	CDOT Aeronautics Div:	Todd Green/Vacant
Arapahoe County:	Paul Krier/Evan Colvin	FAA APA Control Tower:	Jeff Lawton/Ron Curry
Castle Pines:	Chris Eubanks/Ben Price	FAA District Office:	John Bauer/John Sweeney
Cherry Hills Village:	Robert Eber/Randy Weil	FAA TRACON:	Steve Martin/B Dunn
Highlands Ranch:	Andy Jones/Renee Anderson		

2. **SPECIAL PRESENTATION:** Brad Pierce introduced Dan Reimer of the law firm Daniel S. Reimer LLC which provides legal services to several aviation clients. He had spoken to ACPAA in February. He provided information about what an airport such as Centennial can and cannot do in relation to noise abatement measures. He noted things which some airports had implemented prior to the Aircraft Noise and Capacity Act of 1990 (ANCA) had been grandfathered in, but after its passage, ANCA had taken responsibility for noise abatement away from local governments and airport sponsors and granted the FAA preemptive authority over the setting of noise levels and the imposition of noise and capacity restrictions at airports. Noise reduction measures such as nighttime curfews or other restrictions or limitations on anything aircraft wish to do are not allowed by the FAA.

He also noted the FAA supports airports by making substantial grants for airport infrastructure projects such as runways, taxiways, airport signage, lighting, and airport markings through the Airport Improvement Program (AIP). An airport taking any action that does not comply with FAA rulings or regulations could lose such funding. There is provision for a FAR Part 161 study for airports to prove, to the FAA, that an exception to ANCA is necessary, but to date, no airport has ever received an FAA exception to the FAA's rules. The FAA will challenge communities, but communities cannot challenge the FAA.

Reimer indicated that, with the absence of any noise mitigation actions which can be taken by an airport, efforts to reduce noise for citizens need to be made voluntarily by pilots, by working with local communities to achieve land use compatibility and prevent construction of new homes in obviously noisy areas, or sound mitigation measures in those homes, and community outreach and education.

Following his comments, citizens attending the meeting were asked to put their questions in writing, which Reimer would then compile and return further into the agenda to answer as many as possible.

3. **CONSENT AGENDA:** The Consent Agenda included the Draft CACNR Minutes from February 1, 2023; the Treasurer's Report from February 22, 2023, showing a balance of \$23,251.15; and the January 2023 Noise Report. On the motion of Mike Anderson, duly seconded, the Consent Agenda was approved.

The January 2023 Noise Report included the following information:

<b>January Local Operations:</b>	<b>11,961</b>	<b>January Total Operations:</b>	<b>23,734</b>
<b>Year to Date Local Operations:</b>	<b>11,961</b>	<b>Year to Date Total Operations:</b>	<b>23,734</b>

**23,734 Total Operations in January resulted in 774 complaints from 67 households.**

**January Noise Events:**

<u>January Total:</u>	<u>Jan. 60 – 69 db:</u>	<u>Jan. 70 – 79 db:</u>	<u>Jan. 80 – 89 db:</u>
6,930 Meridian	5,962 Meridian	1,881 Golf Course	338 Airport East
5,195 Golf Course	3,181 Golf Course	925 Meridian	131 Golf Course
2,782 Airport East	1,872 Parker	752 Airport East	40 Meridian
2,051 State Park	1,670 Airport East	522 State Park	24 Castle Rock
1,986 Parker	1,524 State Park	110 Parker	5 State Park
1,353 Grandview Estates	1,246 Grandview Estates	105 Grandview Estates	4 Parker
899 Castle Rock	779 Castle Rock	94 Castle Rock	2 Grandview Estates
795 Greenwood Village	728 Greenwood Village	67 Greenwood Village	1 Hunters Hill
582 Lone Tree	555 Lone Tree	26 Hunters Hill	1 Lone Tree
338 Hunters Hill	311 Hunters Hill	26 Lone Tree	1 Sagebrush Park
87 Castle Pines	83 Castle Pines	4 Castle Pines	0 Castle Pines
84 Sagebrush Park	81 Sagebrush Park	2 Sagebrush Park	0 Greenwood Village

**January Noise events in the 90+ decibel range:** Airport East – 22 Meridian – 3 Castle Rock – 2 Golf Course – 2

**January Noise Complaints and Numbers of Households:**

(774) (67)

**YTD Complaints & Number of Households:**

(774) (67)

**Noise Complaints:**

400 Greenwood Village (52%)  
 240 Unincorporated Arapahoe County (31%)  
 74 Centennial (10%)  
 22 Other ( 3%)  
 20 Castle Rock (3%)  
 8 Unincorporated Douglas County (1%)  
 4 Aurora  
 4 Highlands Ranch  
 1 Lone Tree  
 1 Parker  
 0 Castle Pines  
 0 Cherry Hills Village  
 0 Denver

**Number of Households:**

32 UAC (48%)  
 16 Greenwood Village (24%)  
 5 Other (7%)  
 4 UDC (6%)  
 2 Aurora (4%)  
 2 Castle Rock  
 2 Centennial  
 2 Centennial  
 1 Lone Tree  
 1 Parker  
 0 Castle Pines  
 0 Cherry Hills Village  
 0 Denver

**Noise Complaints:**

All numbers here are the same as January

**Households:**

**In January (YTD), the top five complaining households were in:**

Greenwood Village – 274 (35%) UAC – 46 (6%)  
 Centennial – 73 (9%) UAC – 28 (4%)

**Year to Date, the top five complaining households were the same as January.**

**In January, 60 responses were requested from 774 noise complaints**, with 44 of those requests made by email (73%), and 16 made by telephone (27%).

**In January, 707 complaints were made about daytime flights (7:00 a.m. – 9:59 p.m.) – 91%. 67 complaints were made about nighttime flights (10:00 p.m. – 6:59 a.m.) – 9%.**

**Year to Date, complaints about daytime and nighttime flights were the same as January.**

**In January, props accounted for 88% of the complaints by aircraft type; jets accounted for 11% of the complaints, and helicopters caused 1%.**

**In January, Training was responsible for 45% of the complaints; arrivals were responsible for 28% of the complaints, and departures were responsible for 26% of the complaints.**

**The January Complaint Map and a January Radar Track Density Map were provided.**

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

5. **EXECUTIVE COMMITTEE:**

A. Election of CACNR Officers. Brad Pierce announced he would stay on as Chair for at least a few more months if that was the will of the Representatives. The other officers had also agreed to stay on, if that was the will of the Representatives. Following brief discussion, on the motion of Donna Johnston, duly seconded, all four CACNR officers were unanimously reelected: Chair Brad Pierce; Vice Chair Paul Krier; Treasurer Andy Jones; and Secretary Alison Biggs.

B. CACNR Representative to ACPAA Meeting on March 16, 2023 – Bill Wasmund agreed to represent CACNR at that meeting.

C. Draft Work for Preparation and Adoption of 2023-2025 CACNR Work Program – Materials provided in the mailing from each committee showed ideas for possible inclusion in the next Work Program. There was discussion of the need for the Work Program to be forward focused, with information about what had been done being of use in any annual report which would be prepared. All were asked to look at everything that had been submitted, with any additions or deletions to be brought to the April CACNR meeting.

6. **REPORT OF FEBRUARY 28, 2023 MEETING WITH FLIGHT SCHOOLS:** Mike Fronapfel reported that unfortunately only one of the flight schools had attended this meeting, but it had been a good meeting. The training boxes are being rearranged, and the routes to and from them will be reviewed once there is agreement about the boxes. One of the flight school's practices are very specific and it may not be as flexible as others might be. A look at pattern traffic and interactions with the control tower may result in meetings with both.

At the last ACPAA meeting, new board member Jessica Campbell Swanson had asked for a committee to address training traffic pattern issues, to be called the Training Pattern Stakeholder Working Group (TPSWG). It could be comprised of members of the Quiet Skies Over Arapahoe community group, the flight schools, FAA representation, ACPAA Board members, CACNR representation, and ACPAA staff. Although this was reportedly envisioned to be a committee of CACNR, some individuals had apparently already been asked to serve, and a first meeting was to be held on March 2.

There had also been a request made to the FAA for the formation of a Sub-Roundtable Technical Working Group to help investigate and address the concerns of the community regarding pattern and training traffic. In particular, the purpose of this group would be to explore and recommend solutions to the issues caused by the extended training traffic pattern. This group would be comprised of individuals with a strong background in aviation, selected by CACNR, including representatives from CACNR, ACPAA, the FAA, and the flight schools.

Apparently, making these two some kind of subgroups of CACNR would give credibility with the FAA. The title of the second group in particular is reportedly recognized by the FAA and triggers it to assign experts to that work. The charge for each group would need to be clearly defined. It was noted that CACNR's bylaws call for the CACNR Chair to appoint Committees, which must be chaired by a CACNR Representative.

Following discussion, Candace Moon moved to approve the formation of a Sub-Roundtable Technical Working Group to help investigate and address the concerns of the community regarding the extended training traffic pattern and recommend solutions to the resulting issues. Motion was seconded and, following discussion of the title to clarify it would be a CACNR Committee by another name for the benefit of the FAA, was carried.

7. **FAA RESPONSES TO 12/31/22 AND 1/16/23 QUESTIONS:** There had as yet been no written responses to the questions which had been submitted to the FAA.

8. **RESPONSES BY DAN REIMER TO QUESTIONS SUBMITTED UNDER AGENDA ITEM #2:** Reimer thanked the group and provided responses to the compiled questions.

- Give more detail about his being here – Reimer noted he was being paid by ACPAA but did not represent ACPAA. He does represent all sorts of places, but not airport users.
- Provide more information on grant assurances – They are the lifeblood of airports, as there would be no way for airports to do the listed kinds of projects without the FAA moneys. The history of the fight to prevent commercial flights from coming to Centennial, which took legislation to accomplish but which caused a cessation of grants to the airport, was reviewed. In addition to cutting off grant assurances, the FAA could come after an airport to return money previously granted, which would essentially be impossible. In order to continue to receive grants, without commercial flights, Centennial Airport needs to stay above 300,000 operations a year; anything lower puts that arrangement in jeopardy with the FAA.
- Can the airport close a runway – no
- Could Front Range (now Colorado Air and Space Port) take the training flights from Centennial – as the airports in the vicinity are independent, this would not be possible. If all were in a system, traffic could be moved around. Pilots can voluntarily move to different airports, but Centennial cannot make them do so.
- Can the number of flights by the flight schools be decreased by the airport – no per ANCA's provisions.
- If the FAA is to be concerned about safety, what about safety of those on the ground – the FAA is supposed to pay attention to both, but it has the final word and so far the emphasis has been on keeping the skies safe as being the best way to keep everyone else safe. The FAA could put more emphasis on the public's safety on the ground but it is not likely to happen.
- Can a license be required to operate a flight school – fees can be charged, but there can be no restrictions on aeronautical use, post ANCA. Everything must be voluntary.

9. **PUBLIC/COMMUNITY/FAA DISCUSSION:** Following this portion of the agenda, Chair Pierce opened the meeting to additional comments from the audience and the 48 individuals who were in attendance online. Comments came from Cherry Creek Farms, Englewood, Centennial, Sundance Hills, Greenwood Village, Cherry Hills Vista, and Louviers.

- Appreciation for work being done on the training boxes but had never seen anything as protected as the flight schools seem to be by the FAA. The public is being discriminated against, and private businesses are being protected by a Federal agency. Lobbyists work to protect the privileged and they have succeeded.
- Thanks to all who are working to help with the noise problems, but there are still many frustrations about the lead in gasoline problem, noise and safety. Examples were given of specific times of two observed close calls. Recommended the FAA return to the previous method of managing flights before the mid air collision, as it seemed safer than what is going on now.

- Thanks to the attorney, but his message was depressing. The tower needs to be able to cut back numbers of flights if it is unsafe for those on the ground. Government is needed to protect the public, not just aircraft. It is tiring to keep asking for help and seemingly being ignored with no solutions being proposed for the public's problem. Perhaps the public needs to keep 'bugging' its elected officials.
- Did not feel CACNR understood the problem, and suggested creation of a legislative committee. Did not like discussions of semantics and bylaws and felt like things were going around in circles with no help in sight.
- Noise was not an issue before the midair collision, so why cannot things be changed back as quickly as they were changed before.
- Does the FAA take responsibility if a crash occurs due to its actions?
- It is sad that nobody cares about the public while the FAA cares so much about airplanes and pilots who appear to be privileged while the public is being discriminated against.
- Traffic over Louviers seemed to have decreased following discussions about problem flights.
- Sadness that the FAA did not attend this meeting, and still had not answered the questions which had been submitted in December 2022 and since.

Chair Brad Pierce also expressed frustration that the FAA was not at this meeting and had indicated it would not likely be coming in the future.

Mike Fronapfel reported he would be going to Washington D.C. and would be speaking with legislators and other personnel about several issues, including priorities and concerns as expressed here, replacing avgas with unleaded fuel, and increasing penalties for blinding pilots with laser pointers.

It was noted those attending the UC Davis Noise Symposium would likely be able to meet with others who were interested in regaining more local control or other topics of concern to communities surrounding Centennial Airport.

Mike Anderson expressed thanks to the Community Outreach Committee, and Pam Thompson for working with Trish Coberly to get the CACNR website brought up to date.

The remainder of the meeting's agenda was postponed again.

10. **NEXT MEETINGS:**

A. <b>CACNR</b> –	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. <b>ACPAA</b> –	March 16, 2023	3:00 p.m. 7565 S. Peoria Street, Unit 9D, Englewood, CO
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	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

11. **ADJOURNMENT:** The meeting was adjourned at 8:28 p.m.

Alison Biggs, Secretary

CENTENNIAL AIRPORT COMMUNITY NOISE ROUNDTABLE		2023 BUDGET - Approved October 5, 2022; Updated as of 3/31/23		
	BUDGET	ACTUAL	NOTES	
INCOME:		as of 03/31/23		
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 determined 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



**11. February 2023**



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**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<sub>max</sub>)** – 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.

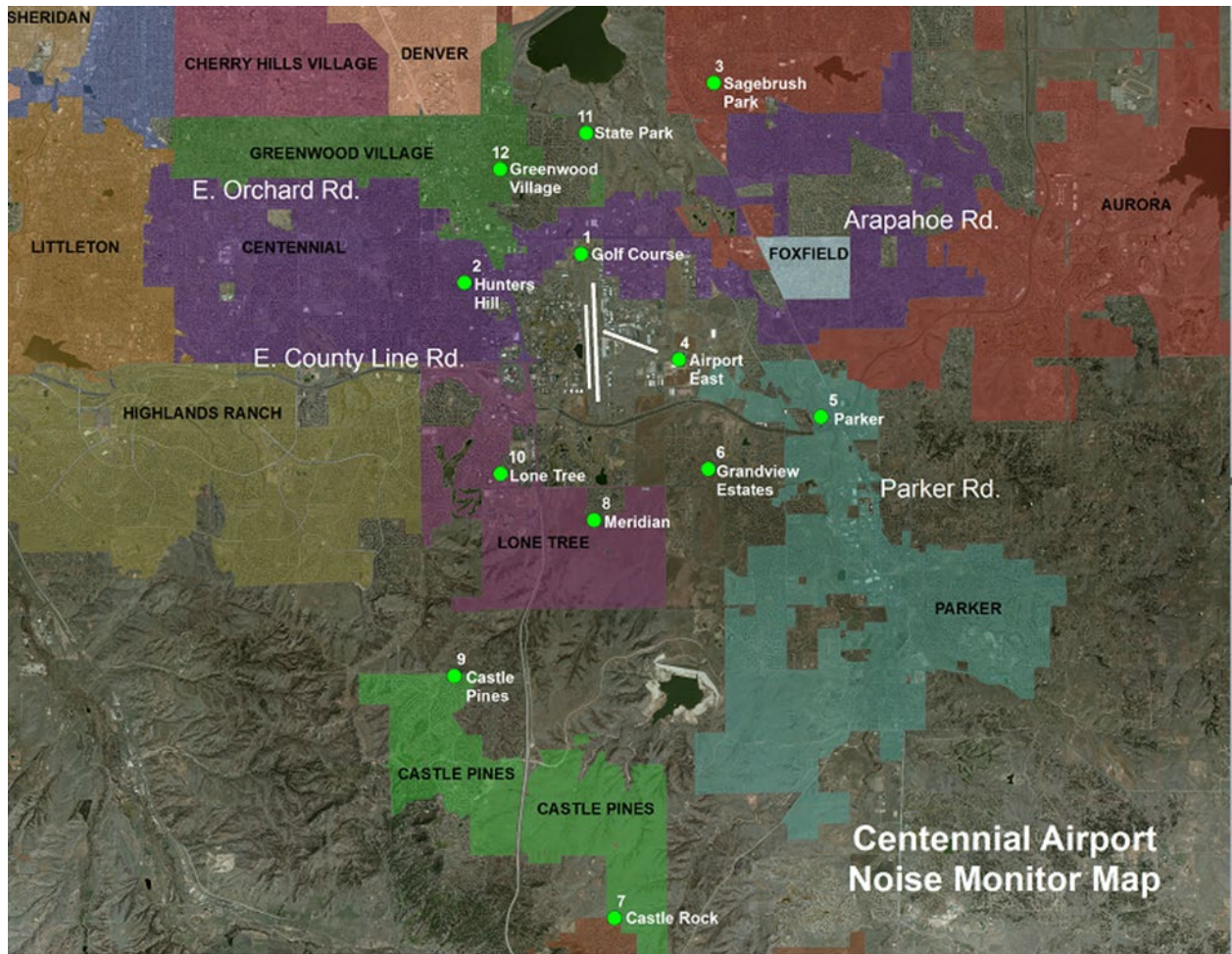
**Visual Flight Rules (VFR)** – A set of regulations under which a pilot operates an aircraft in weather conditions generally clear enough to allow the pilot to see where the aircraft is going. A flight plan is not required when the pilot is operating under Visual Flight Rules.

**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

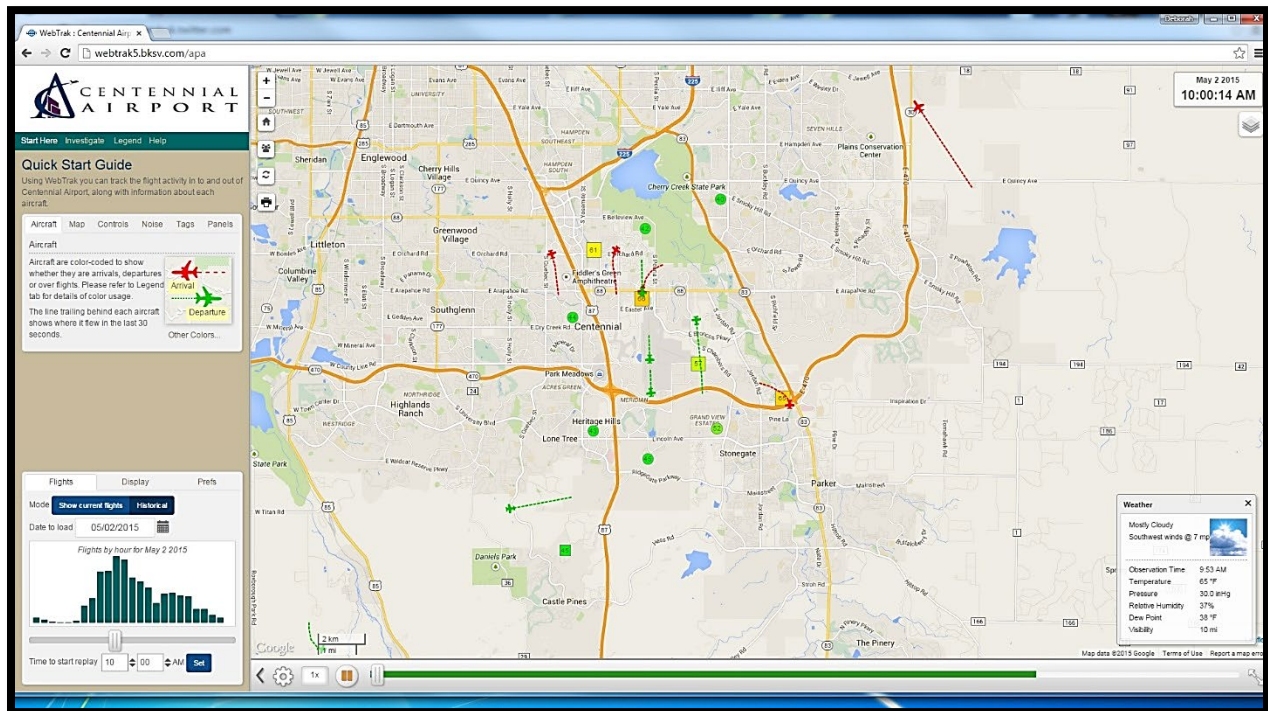
## 3 ABOUT APA'S NOISE MONITORING PROGRAM

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](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	2,304	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				0				0			0
April				0				0			0
May				0				0			0
June				0				0			0
July				0				0			0
August				0				0			0
September				0				0			0
October				0				0			0
November				0				0			0
December				0				0			0
<b>Y-T-D Totals</b>	<b>4,484</b>	<b>5,938</b>	<b>222</b>	<b>10,644</b>	<b>1,942</b>	<b>10,601</b>	<b>154</b>	<b>12,697</b>	<b>24,362</b>	<b>45</b>	<b>24,407</b>

	IFR OVERFLIGHTS				VFR OVERFLIGHTS				TOTAL OPERATIONS	
	AIR TAXI	G.A.	MILITARY	TOTAL INTINERANT	AIR TAXI	G.A.	MILITARY	TOTAL		
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	March	
April				0				0	April	
May				0				0	May	
June				0				0	June	
July				0				0	July	
August				0				0	August	
September				0				0	September	
October				0				0	October	
November				0				0	November	
December				0				0	December	
<b>Y-T-D Totals</b>	<b>8</b>	<b>8</b>	<b>6</b>	<b>22</b>	<b>74</b>	<b>153</b>	<b>12</b>	<b>239</b>	<b>Y-T-D Totals</b>	<b>48,009</b>

### 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

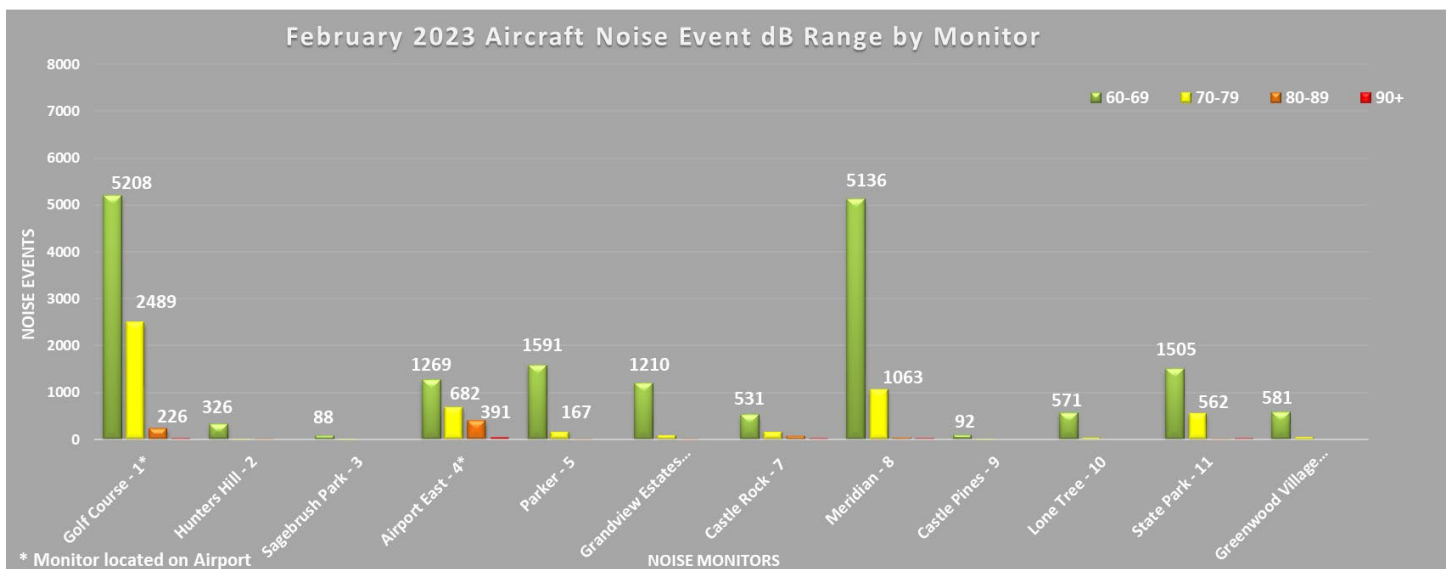
The following data displays the amount and associated decibel level of aircraft noise events at a given monitor. An aircraft noise event must contain the following characteristics:

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.

February 2023 Aircraft Noise Event Decibel Range By Monitor					
Monitor	60-69	70-79	80-89	90+	Totals
Golf Course- 1*	5208	2489	226	10	7933
Hunters Hill- 2	326	26	2	0	354
Sagebrush Park- 3	88	7	0	0	95
Airport East- 4*	1269	682	391	37	2379
Parker- 5	1591	167	4	0	1762
Grandview Estates- 6	1210	82	4	0	1296
Castle Rock- 7	531	166	76	8	781
Meridian- 8	5136	1063	40	3	6242
Castle Pines- 9	92	6	0	0	98
Lone Tree- 10	571	28	0	0	599
State Park- 11	1505	562	10	2	2079
Greenwood Village- 12	581	51	0	0	632
<b>Totals</b>	<b>18108</b>	<b>5329</b>	<b>753</b>	<b>60</b>	<b>24250</b>

\*Monitor located on Airport



## 7 FEBRUARY 2023 NOISE COMPLAINT STATISTICS

In February, Centennial Airport received 451 complaints from 67 households.

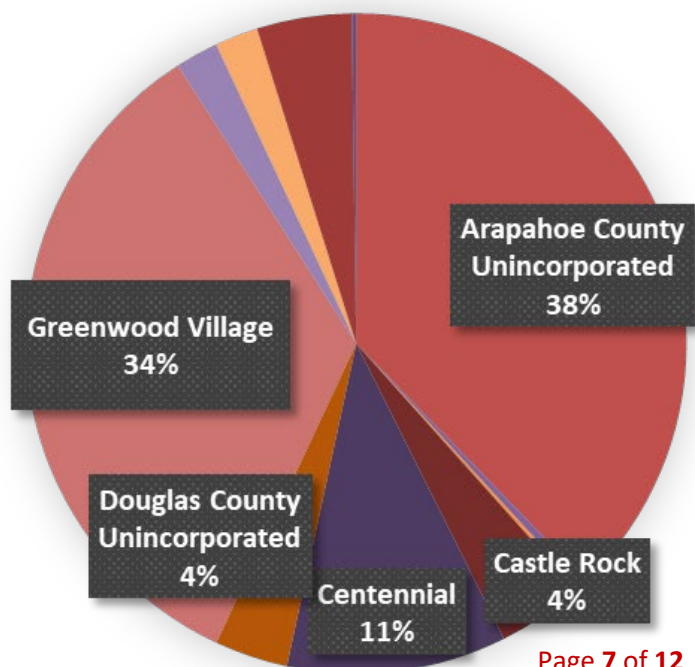
February Noise Complaints			YTD		Population
Municipality	Complaints	Households	Complaints	Households	Census 2018
Arapahoe County Unincorporated	179	33	420	47	83,764
Aurora	2	2	6	2	374,114
Castle Pines	1	1	1	1	10,507
Castle Rock	20	2	40	3	64,827
Centennial	51	3	125	4	110,831
Cherry Hills Village	0	0	0	0	6,650
Denver	0	0	0	0	716,492
Douglas County Unincorporated	17	3	24	4	100,536*
Greenwood Village	161	15	561	23	15,801
Highlands Ranch	0	0	4	2	105,264
Lone Tree	10	3	11	3	14,653
Parker	0	0	1	1	55,636
Other	10	5	32	8	UNK
<b>Total</b>	<b>451</b>	<b>67</b>	<b>1225</b>	<b>98</b>	<b>1,659,075</b>

\*Douglas County Unincorporated Population with Highlands Ranch Removed

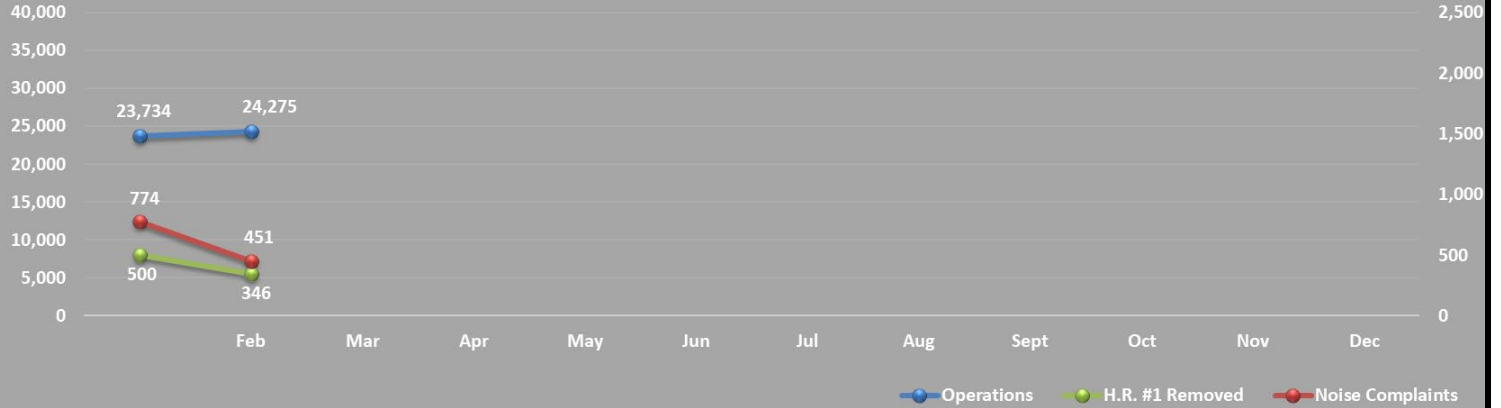
Complaints per Municipality

February 2023 Noise Complaint Responses Completed	
Email	49
Phone	7
<b>Total</b>	<b>56</b>

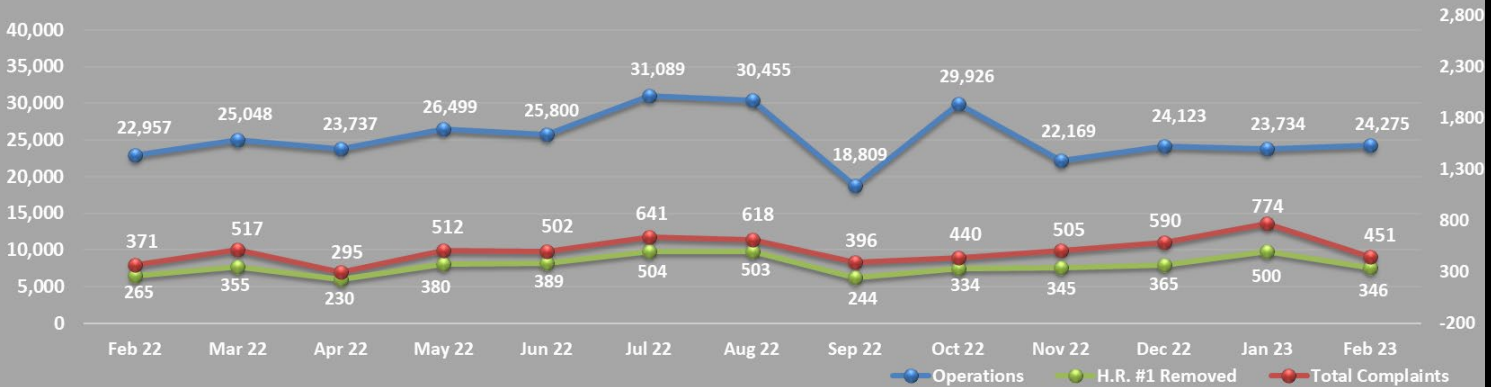
Time Complaint Received	Fed
Day Hours (7:00 am - 9:59pm)	419
Night Hours (10:00 pm - 6:59 am)	32
<b>TOTAL</b>	<b>451</b>



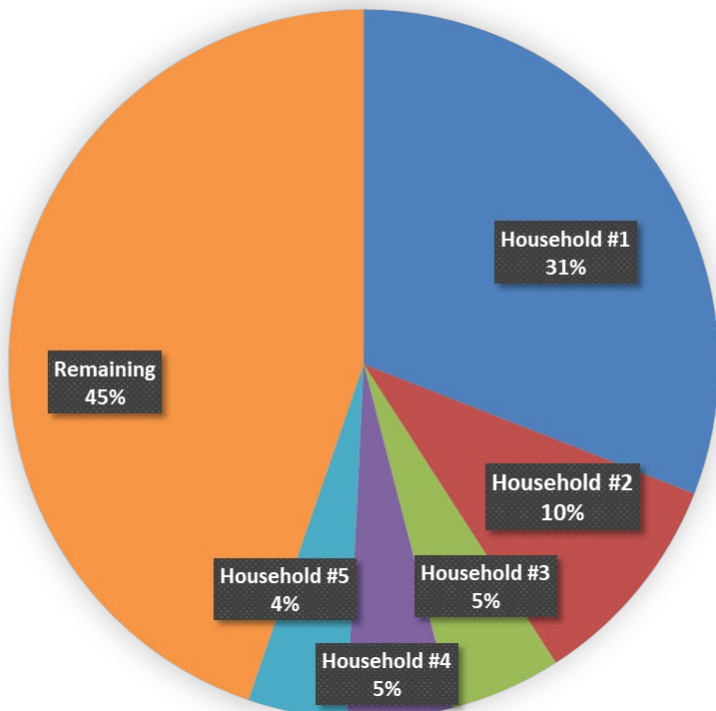
## Current 12 Month Trend



## Previous Year 13 Month Trend



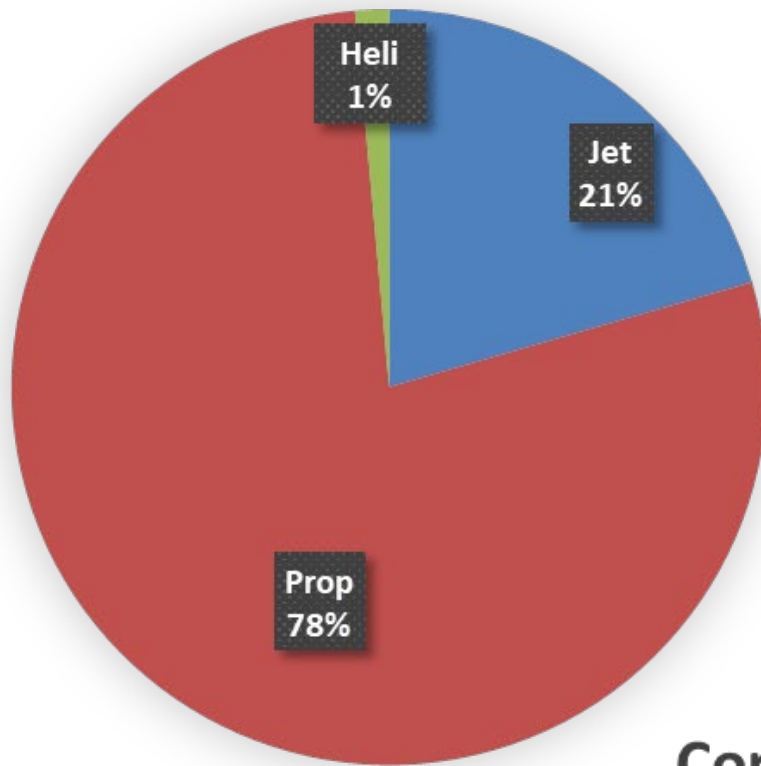
## Top 5 Household Complaints YTD



Top 5 Household Complaints YTD		
Household	Complaints	Households
Household #1	379	Greenwood Village
Household #2	122	Centennial
Household #3	62	Arapahoe County Unincorporated
Household #4	59	Arapahoe County Unincorporated
Household #5	55	Castle Rock
Remaining	548	
<b>Total</b>	<b>1,225</b>	

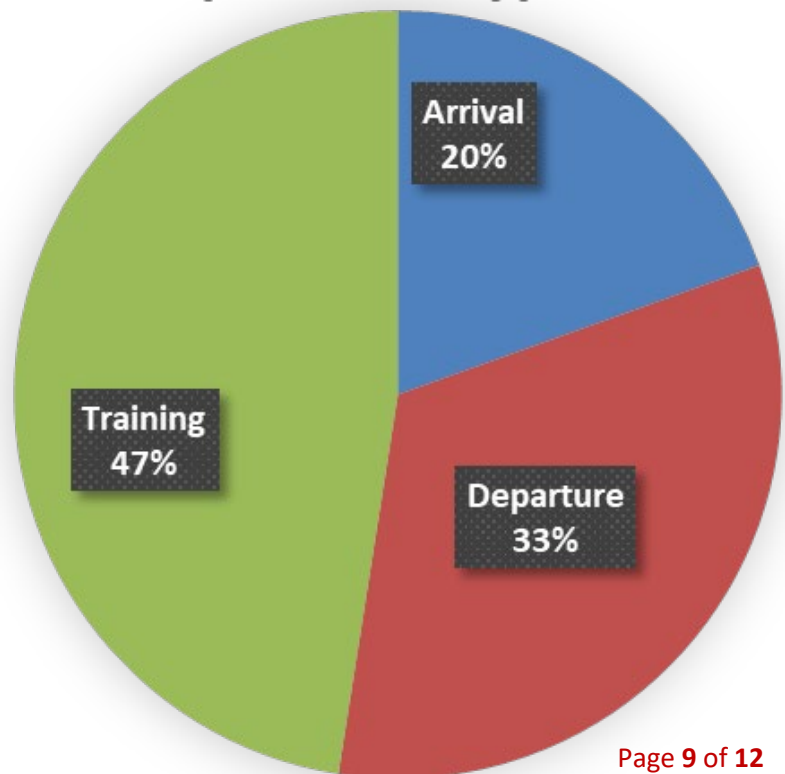


### Complaints by Aircraft Type

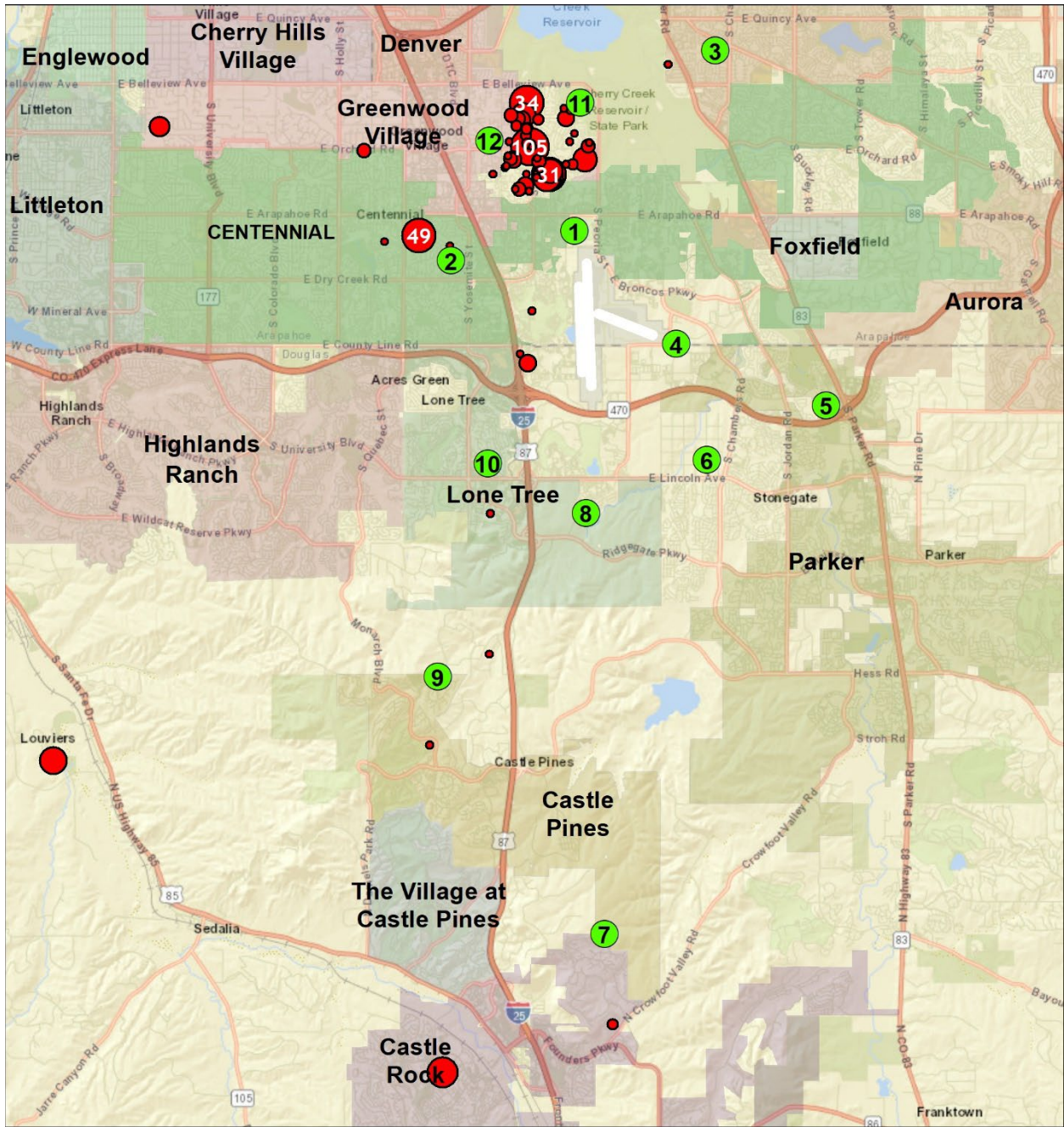


\*#1 Household Removed

### Complaints by Operation Type



# 8 CENTENNIAL AIRPORT COMPLAINT MAP



**February 2023 Complaints**

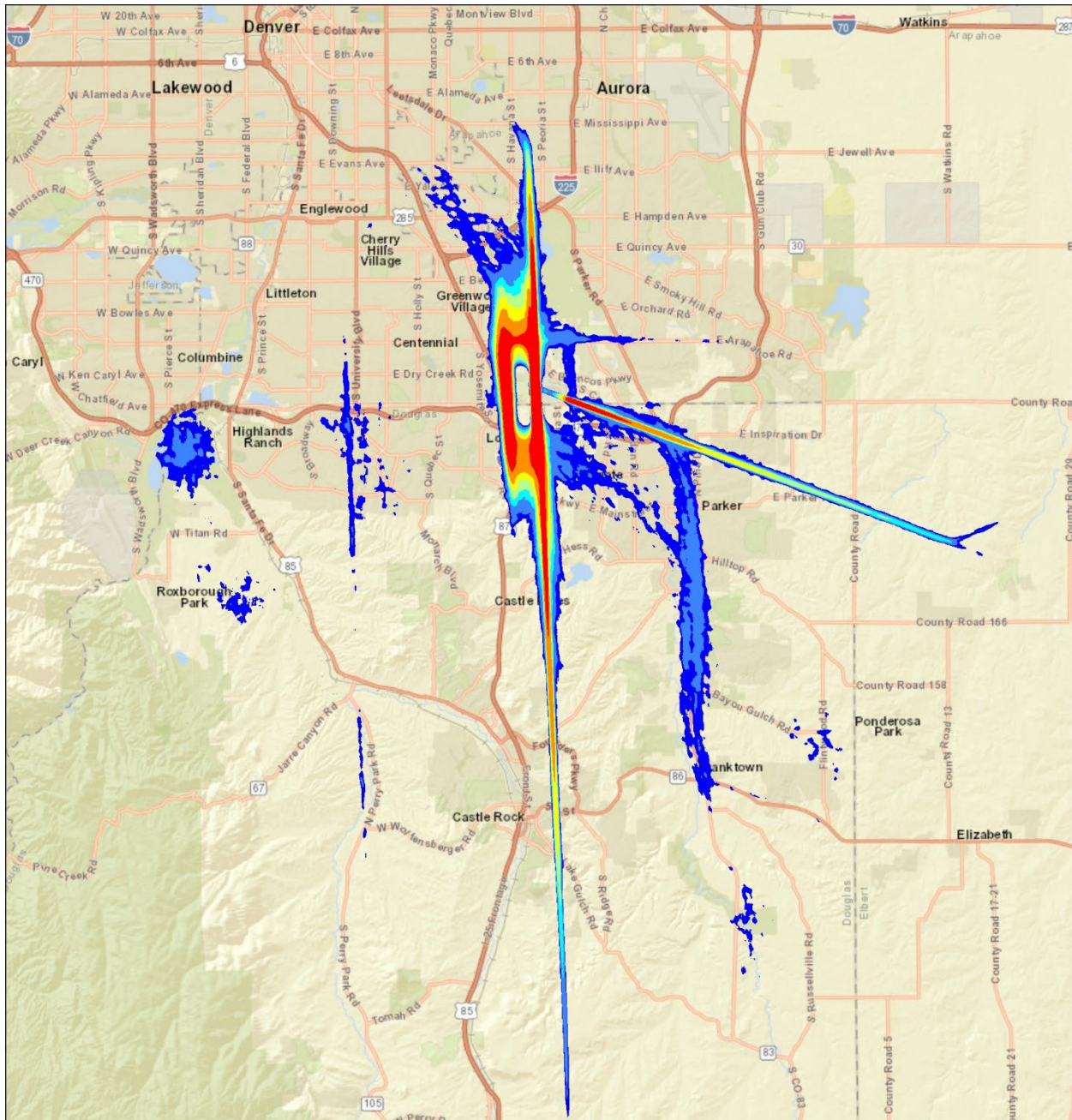


\*\*Larger dots equate to more complaints for that particular households

# 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.

February 2023 Flight Tracks associated with Centennial Airport



## 10 NOTES AND DISCLAIMER

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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](http://www.centennialairport.com)

## 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	Donna Johnston	February 03	February 09
March 01	Bill Wasmund	March 10	March 16 (note 3 <sup>rd</sup> 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

**\*\* PLEASE NOTE – This is based on the draft version presented on 03/01/23. Differences or explanations of changes from that version are shown in red. Further “fine-tuning” can occur between the 04/05/23 CACNR meeting and the 05/03/23 meeting when the document is to be finalized and adopted.**



# Centennial Airport Community Noise Roundtable

## 2023- 2025 Work Program

DRAFT for 04/05/23

### CACNR MEMBERSHIP

Arapahoe County	City of Lone Tree
Douglas County	Metropolitan District, Highlands Ranch
City of Aurora	Town of Parker
City of Castle Pines	Arapahoe County Public Airport Authority
Town of Castle Rock	Aircraft Owners and Pilots Association
City of Centennial	Colorado Aviation Business Association
City of Cherry Hills Village	Colorado Department of Transportation
Town of Foxfield	Aeronautics Division
City of Greenwood Village	Wings Over the Rockies

The Mission, Vision, and Values of the Centennial Airport Community Noise Roundtable (page 2) are implemented, in part, through the efforts of CACNR’s committees, as described on the following pages.

**VISION:** Quieter Skies for Our Communities

**MISSION:** Utilizing Partnerships to Reduce Airport Noise for the Benefit of Neighboring Communities

**VALUES:** In order to develop successful community partnerships, CACNR Members and Representatives value and adhere to the following:

RESPECT

- Mutual respect for all opinions, questions and responses
- Non-judgmental reaction and response to views expressed
- Listening with intention
- Value for the diverse view and perspectives of all Members and Representatives
- Trust of one another

ETHICS

- Honesty
- Keeping commitments
- Refrain from gossip
- No hidden agendas

COMMITMENT TO

- Attendance and participation
- The shared CACNR Vision and Mission Statements
- Team effort
- Continual learning and education
- Sharing of ideas
- An open environment conducive to development and mutual support of common goals
- Transparency of activities and information
- Resolution of conflicts and differences
- The entire community

ACCOUNTABILITY

- To one another
- To our represented communities and constituents
- For the dissemination of information among ourselves, the ACPAA Board, our represented communities, constituents, and other stakeholders

INNOVATION

- Foster an environment which encourages creative thought and implementation
- Seek solutions outside our comfort zone
- Remain persistent and persevere in achieving the CACNR Vision and Mission

## **COMMUNITY OUTREACH COMMITTEE**

### **2023 - 2025 PRIORITY TASKS**

1. Promote FAA participation and engagement with the CACNR  
Develop a sustainable relationship with the FAA built on common goals, collaboration, and public education.
2. CACNR Website – Further improvements in content.  
Evaluate public/stakeholder friendly content enhancements.
3. ~~Document Annual Report~~ Publish CACNR accomplishments/Annual Reports on the CACNR website.
4. Establish social media Public outreach.  
Develop CACNR consensus on platforms, topical content, resources, and management

*For reference, the following are the Priority Tasks from the prior Work Program:*

1. Website – Further improvements in content
2. Promote FAA participation/support of the Roundtable
  - FAA directly informing the community
  - Briefings to the public
  - Demonstrate collaboration with Airport > Roundtable > FAA
3. Expand outreach to elected officials (Briefings) and HOAs (Email)
4. Leverage social media as tool for community outreach
  - Social media strategy should focus on providing information to the public
  - Not intended as an outlet for noise complaints
  - Platforms to include NextDoor.com and Twitter



## EXECUTIVE/WORK PLAN COMMITTEE

### 2023 - 2025 PRIORITY TASKS

1. Update CACNR Work Program biennially.
5. ~~Develop annual reports.~~ Document CACNR accomplishments/ Annual Reports:
- 6.
2. Establish a roundtable training program.
3. Revise meeting agendas to align with the CACNR Mission and Work Program.
4. ~~Address developing matters related to the Mission and Vision of CACNR.~~ Oversee work being done with the community, airport staff, airport users and the FAA to further the CACNR Mission.
5. Engage local jurisdictions to proactively encourage compatibility between airport operations and land-use/zoning.

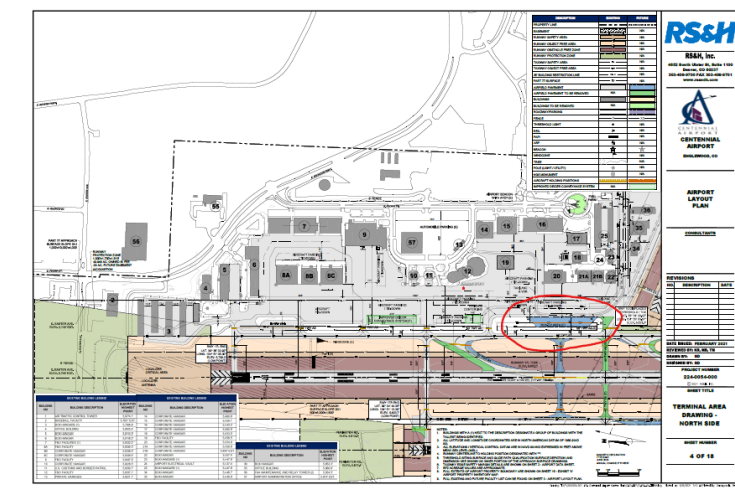
For reference, the following are the Priority Tasks from the Prior Work Program:

1. Update CACNR Work Program biennially.
2. Develop annual reports.
3. Establish a roundtable training program
4. Revise meeting agendas to more closely align with the CACNR mission and work plans.
5. Gain a better understanding of how noise complaints are reviewed and processed by airport staff. Review what noise complaint (and related) information is reported/presented to the Roundtable..
6. **[Secondary Priority]** Engage local jurisdictions to proactively encourage compatibility between airport operations and land-use/zoning

## FLY QUIET COMMITTEE

### 2023 - 2025 PRIORITY TASKS

1. Expand industry engagement efforts to encourage awareness and support of the Centennial Airport Fly Quiet Program **and help minimize noise impacts by encouraging pilots to fly the published voluntary Noise Abatement Guidelines.** Fly Quiet briefings for key stakeholder groups to include air traffic control, flight schools, and pilots.
2. Create Videos for the CACNR web Site. Use [FlySMCFriendly.com](https://www.flysmcfriendly.com) as a template. The goal would be for all of our pilots to utilize a Friendly Approach toward our neighbors and residents. **Familiarize pilots with the voluntary flight procedures through a series of 4K videos. Available for Centennial Airport and possibly others, the short videos would offer an informative look at the airports' best ways to arrive and depart as well as pattern flying.**
3. ~~Help minimize noise impact by encouraging pilot to fly the CACNR published voluntary noise abatement procedures--(moved to #1)~~
4. ~~Familiarize pilots with the voluntary flight procedures through a series of 4K videos. Available for Centennial Airport and possibly others, the short videos would offer an informative look at the airports' best ways to arrive and depart as well as pattern flying. (moved to # 2)~~
3. In conjunction with Wings Over The Rockies EOF facility, 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.
4. Continue looking at airports similar to Centennial to learn if ideas from those airports can benefit noise reduction efforts here. **Provide recommended ideas to CACNR.**
5. Continue working with airport staff to achieve completion of the installation of sign #2 at new run-up area between A6 and A8



6. Develop additional electronic sign noise abatement messages for approval of CACNR and submission to ACPAA.
- ~~7. Work with Colorado Pilots Association and Flight Schools, providing assistance to establish and document new SE practice areas. (deleted as being accomplished)~~
7. Continue to identify overlap of duties between the Fly Quiet and Noise Monitors Committees:
  - ~~Overlap in priority task – pilot incentive program~~
  - ~~Identify aircraft configuration – Prop, engine, etc.~~
  - ~~Discuss with ACPAA how to fairly evaluate the program~~
  - ~~Determine the maximum dB an aircraft could produce in order to be considered quiet and be eligible for an incentive.~~
  - ~~Identify how ANOMS would record the dB of the aircraft along with a data and time stamp~~
  - ~~Identify how ANOMS would report the data~~
  - ~~Identify what noise monitor location would produce the best results for a noise reading~~
  - ~~Discuss what incentives acceptable and appropriate from the perspective: Gas card, License plate cover, plaque, website recognition, etc.~~

For reference, the following are the Priority Tasks from the Prior Work Program:

1. Expand industry engagement efforts to encourage awareness and support of APA Fly Quiet Program. This would include Fly Quiet briefings for key stakeholder groups to include air traffic control, flight schools, and pilots.
2. Identify potential modifications to APA airspace and/or flight procedures to reduce community noise impacts.
3. **[Secondary Priority]** Continue research into aircraft technologies to reduce noise, specifically, the use of composite propellers and noise mufflers for piston aircraft.
4. **[Secondary Priority]** Establish incentive program to encourage pilots to overfly APA noise monitors and provide recognition for operations below a specified noise threshold.
5. Airport staff briefing about Noise Complaint Process – Unclear which committee would be responsible.

## NOISE MONITOR COMMITTEE

### 2023 - 2025 PRIORITY TASKS

1. ~~The Noise Monitor Committee and CACNR would benefit from getting a better understanding of what data is available through the NOMS (Noise and Operations Management) system and how it can be used in support of the CACNR Mission.~~

~~ACTION—On September 14, 2021, Noise Committee Members met with Centennial Airport staff and discussed the history and location of the 12 noise monitors placed throughout the South Metro Airport Influence Area. This information was presented to CACNR on October 6, 2021. On October 28, 2021, members of the Noise Committee met with Centennial Airport Staff and discussed the capabilities of the monitors' transmission capabilities. At the November 2, 2021, Noise Committee members and Centennial Airport Staff made a presentation to the CACNR. Topics covered were monitor transmission capabilities and adjustments. Also presented was information on the Flight Standard District Office (FSOD) for resident contact information for low flying aircraft and errant, unsafe flying aircraft. Information was presented on the use of portable noise monitors. Class Bravo airspace was discussed and the new impacts to Highlands Ranch, Centennial and Greenwood Village that are being experienced. Minimum air altitude requirements and results were discussed and noted that the air space is congested and takeoffs and landings will vary between 500-1000 feet. It was noted that with increasing weather temperatures, air density will affect low power propellers aircraft and residents will experience more air traffic in the morning and evenings. Airport staff made a NOMS presentation and airspace classification. Through noise monitors and NOMS, airport staff are able to distinguish different types and levels of noise and work with the required operations levels. It was recommended that refresher training be held by CACNR to share NOMS information with the public and how the information can be used to support the CACNR mission. Due to airport staffing changes, regular meetings and presentations on this topic ceased after November. (Moved to what was done with priority tasks from 2021-2013 Work Program below)~~

1. **Continue ongoing education with airport staff and share information from FAA conversations.**
2. ~~The Noise Monitor data should be used to help communities understand changes in noise and overflight activity due to changes in conditions such as: season/flow changes, firefighting activities, special events. This can be used to better inform the community, especially of temporary changes. ACTION—At the meetings in October and November 2021, information on season/flow changes was shared with the CACNR as noted in Action 1. In 2022, the website was used to notify the public of runway repair closures and the subsequent events that would impact communities as well as runway changes due to the midair collision in March 2022. Due to the absence of a web master posting additional information about the noise that communities might experience was not possible. (Moved to what was done with priority tasks from 2021-2013 Work Program below)~~
2. **Add additional noise monitors in areas of unincorporated Arapahoe and Douglas County, contingent upon the airport staff obtaining grants.**

~~3. Development of Fly Quiet Incentives for pilots and/or companies. Leverage noise monitor data in support of Fly Quiet incentives. ACTION — In September, October and November 2022, Noise Committee members met with members of the Fly Quiet committee and airport staff to discuss incentives. Members discussed working with Flight Schools and airport staff to obtain their buy-in to incentivize pilot to be in abeyance with noise levels and fly quiet procedures over impacted neighborhoods in Greenwood Village, Centennial, Unincorporated Arapahoe County and areas in Douglas counties. Incentives discussed were the awarding of plaques, notable mentions on the CACNR website and possible monetary awards. Due to an increased demand for action to stop the noise from aircraft, stop the use of leaded gas and decrease airspace crowding from residents of Greenwood Village, Centennial, unincorporated Arapahoe County and Douglas County, progress on the incentives program has been halted. Until these issues are resolved, incentive programs do not appear to be feasible at this time. — (Moved to what was done with priority tasks from 2021-2013 Work Program below)~~

**3. Continue to work with the Fly Quiet Committee to develop an incentive program for flight schools.**

~~4. Noise complaint processing should include Correlating complaints with specific noise events and identifying specific/single events resulting in multiple complaints. ACTION — Airport staff gather information on noise events and handle calls from residents. Noise committee members recommend to the CACNR actions that could be taken. Noise committee members have requested the use of portable noise monitors that can be placed on consenting residential property to identify noise. The increased use of portable noise monitors has met with success as residents and staff have been able to learn noise levels in neighborhoods and whether the source of noise is from Centennial Airport or other neighboring airports such as Denver International Airport. During the months of December 2022 and January and February 2023, CACNR meetings have been at capacity with residents' complaints about noise from prop aircraft, leaded fuel exposure and crowded airspace. Noise Committee members have attended all meetings. The complaints are catalogued by airport staff. The CACNR met with representatives of the FAA and community members in February and hope to facilitate a resolution of the community residents' complaints. — (Moved to what was done with priority tasks from 2021-2013 Work Program below)~~

**4. Work more closely with airport staff in the gathering of information on residential noise complaints. Develop a working relationship with FAA, flight schools and community members to educate and resolve noise complaints and have a noise committee member attend meetings with airport staff and flight schools.**

*For reference, the following are the Priority Tasks from the Prior Work Program:*

1. *The Noise Monitor Committee and CACNR would benefit from getting a better understanding of what data is available through the NOMS (Noise and Operations Management) system and how it can be used in support of the CACNR Mission.*

ACTION TAKEN: On September 14, 2021, Noise Committee Members met with Centennial Airport staff and discussed the history and location of the 12 noise monitors placed throughout the South Metro Airport Influence Area. This information was presented to CACNR on October 6, 2021. On October 28, 2021, members of the Noise Committee met with Centennial Airport Staff and discussed the capabilities of the monitors' transmission capabilities. At the November 2, 2021, Noise Committee members and Centennial Airport Staff made a presentation to the CACNR. Topics covered were monitor transmission capabilities and adjustments. Also presented was information on the Flight Standard District Office (FSOD) for

resident contact information for low flying aircraft and errant, unsafe flying aircraft. Information was presented on the use of portable noise monitors. Class Bravo airspace was discussed and the new impacts to Highlands Ranch, Centennial and Greenwood Village that are being experienced. Minimum air altitude requirements and results were discussed and noted that the air space is congested and takeoffs and landings will vary between 500-1000 feet. It was noted that with increasing weather temperatures, air density will affect low power propellers aircraft and residents will experience more air traffic in the morning and evenings. Airport staff made a NOMS presentation and airspace classification. Through noise monitors and NOMS, airport staff are able to distinguish different types and levels of noise and work with the required operations levels. It was recommended that refresher training be held by CACNR to share NOMS information with the public and how the information can be used to support the CACNR mission. Due to airport staffing changes, regular meetings and presentations on this topic ceased after November.

2. *The Noise Monitor data should be used to help communities understand changes in noise and overflight activity due to changes in conditions such as: seasonal/flow changes, firefighting activities, special events. This can be used to better inform the community, especially of temporary changes.*

ACTION TAKEN: At the meetings in October and November 2021, information on season/flow changes was shared with the CACNR as noted in Action 1. In 2022, the website was used to notify the public of runway repair closures and the subsequent events that would impact communities as well as runway changes due to the midair collision in March 2022. Due to the absence of a web master posting additional information about the noise that communities might experience was not possible.

3. *Development of Fly Quiet Incentives for pilots and/or companies. Leverage noise monitor data in support of Fly Quiet incentives.*

ACTION TAKEN: In September, October and November 2022, Noise Committee members met with members of the Fly Quiet committee and airport staff to discuss incentives. Members discussed working with Flight Schools and airport staff to obtain their buy-in to incentivize pilot to be in abeyance with noise levels and fly quiet procedures over impacted neighborhoods in Greenwood Village, Centennial, Unincorporated Arapahoe County and areas in Douglas counties. Incentives discussed were the awarding of plaques, notable mentions on the CACNR website and possible monetary awards. Due to an increased demand for action to stop the noise from aircraft, stop the use of leaded gas and decrease airspace crowding from residents of Greenwood Village, Centennial, unincorporated Arapahoe County and Douglas County, progress on the incentives program has been halted. Until these issues are resolved, incentive programs do not appear to be feasible at this time.

4. *Noise complaint processing should include:*

- o *Correlating complaints with specific noise events*
- o *Identifying specific/single events resulting in multiple complaints*

ACTION TAKEN: Airport staff gather information on noise events and handle calls from residents. Noise committee members recommend to the CACNR actions that could be taken. Noise committee members have requested the use of portable noise monitors that can be placed on consenting residential property to identify noise. The increased use of portable noise monitors has met with success as residents and staff have been able to learn noise levels in neighborhoods and whether the source of noise is from Centennial Airport or other neighboring airports such as Denver International Airport. During the months of December 2022 and January and February 2023, CACNR meetings have been at capacity with residents' complaints about noise from prop aircraft, leaded fuel exposure and crowded airspace. Noise Committee members have attended all meetings. The complaints are catalogued by airport staff. The CACNR met with representatives of the FAA and community members in February and hope to facilitate a resolution of the community residents' complaints.

### **Questions Raised by Public at CACNR February 1, 2023 meeting**

- 1) Pinning down the cause of the increase in the flight pattern north of Arapahoe Road, is it possible there was a slight overcorrection in what the FAA has been communicated to air traffic controllers after the mid-air crash? Is it possible for the air traffic controllers to back off a bit so we can have more parallel landings?
- 2) How does the FAA factor in the safety of residents on the ground when it makes decisions?
- 3) Did the FAA coordinate with Arapahoe County or other authorities when it expanded the Airport Influence Area extending pattern traffic north of Arapahoe Road?
- 4) What is the capacity for the number of planes that can fly in the area at any given time?
- 5) How does the FAA determine if there are too many planes in the pattern?
- 6) Can the FAA extend the pattern south or in any other direction?
- 7) Can the FAA implement formal noise abatement?
- 8) Is the increase in the flight pattern north of Arapahoe Road related to Metroplex?
- 9) How does the FAA determine the capacity/growth limit for Centennial Airport?
- 10) Has the FAA conducted an environmental study for Centennial Airport? Has the FAA participated in any other federal, state, or local air quality or health studies?

From: Brad Pierce

Hello Leslie,

Thank you for the information.

In reference to your 2/22/23 email to Mike Fronapfel and Samantha Blymyer which said: In regards to the March 1 meeting, FAA will not be in attendance. I believe it is imperative that all entities (FAA, airport operator, airport users, and community) are involved with addressing with the Flight School noise issues. To me that includes the FAA attending CACNR and sub-group meetings. Ongoing, open and honest dialog by everyone will be needed.

I respectfully request that you and your colleagues read the FAA Community Engagement Manual.

Specifically I draw your attention to this section:

#### 3.6.2 Identify Ongoing Community Involvement Opportunities

The community should know how it can reach out to the FAA once the project has ended, particularly where the FAA practitioners who worked with the community move on to projects in other locations. There are a number of different mechanisms for communities to communicate with the FAA after project completion including:

- Ongoing Community Organizations: **In many locations, FAA regional or district office staff participate in airport and local community groups (e.g., Noise Roundtables) on a regular basis, not just during specific projects. These venues may provide opportunities for continuing FAA and community dialogue.** (emphasis added)

I believe there is misunderstanding of the structure of the CACNR and it's voting members. Nowhere in any of our documents have we have said FAA is a voting member. To the contrary the FAA is not a member. To avoid further confusion we'll will revise our agendas to remove the FAA from the Establishment of a Quorum.

Thank you and please me know if you have any questions.

Brad Pierce



**From:** Anonymous  
**Sent:** Wednesday, February 1, 2023 12:47 PM  
**To:** Info <[info@centennialairportnoise.com](mailto:info@centennialairportnoise.com)>  
**Subject:** Open Letter from a Flight Instructor

Dear Noise Abatement Committee and Public,

I am a Flight Instructor at Centennial and I have attended every noise roundtable meeting since September in-person or virtually. I write this anonymously because it is clear the public has picked on flight schools and pilots as the one to blame for the recent noise issues since the Key Lime mid-air and now the issues with leaded fuel. I would like to answer some of the public's questions from my point of view. You will find that we agree with you on virtually all counts.

## **For Unleaded Fuels**

I know I speak for all reasonable pilots when I say that leaded fuel needs to go away entirely. Unleaded fuel for aircraft has only just been developed and approved for use with minor modifications to the aircraft. Unleaded fuel is better for our health, the public's health, and the aircraft's health.

We can and will make the switch to unleaded fuels as soon as they are made available on the field. The responsibility for providing this fuel rests with suppliers like Denver Jet Center as we are not allowed to use outside suppliers.

## **For Noise Abatement**

I cannot speak for all pilots however I rarely think there is a need for any training aircraft to fly over the communities north of Arapahoe. Virtually all traffic being routed that direction is doing so at the command of the tower, who is operating under the direction of the FAA. We don't like flying this way it as it puts us over residential areas and increases our time in the pattern.

The school I work with will commit to the following voluntary additions to the current Voluntary Noise Abatement procedure:

1. We will restrict north-bound touch-and-go's to the hours of 6am-7pm. There are FAA requirements for night landings that must be met however those must be full-stop-taxi-back landings.
2. We will stay south of Arapahoe after departure when Tower and safety of flight allows.
3. We will modify our climb technique to gain the most altitude possible prior to Arapahoe.
4. We will avoid flying directly over any of the smaller towns like Louviers and Sedalia.
5. We will limit training over Chatfield and around Louviers to 'high-altitude' training only.
6. We will also commit to working with the other flight schools towards re-forming the practice areas to accommodate the new and existing residential developments.

Ultimately the responsibility of returning pattern operations to its previous standard rests solely with the FAA. The failures of one private pilot does not represent the capabilities of the hundreds of commercial pilots that operate at this field every day. The non-standard traffic environment has increased both pilot and controller work-load, reducing safety for us in the air, and the people below us.

## **For Thought**

I would guess that around 100 flight instructors make their living at this airport. Most instructors are young people just starting their careers. Full-time flight instructors have a capacity of training 8-10 students at a time. Most of those students also have the goal of becoming professional pilots. Adding up all the instructors, students, admin, maintenance, and other support staff, I would estimate that around 1200 people are directly involved with flight instruction at Centennial airport at any given time. These pilots grow to become not only airline pilots, but cargo, medevac, aerial survey, pipeline survey, electrical survey, police, border patrol, and military pilots. National security, public infrastructure, and effective long-distance travel in the US relies on aviation.

We will do everything we can to accommodate the communities we affect and we ask that you also do everything you can to accommodate us.

- A Flight Instructor and Community Member.

**From:** [Geno Riley](#)  
**To:** [info@centennialairportnoise.com](mailto:info@centennialairportnoise.com)  
**Subject:** Invalid Distance Information on your VNAP Guide  
**Date:** Wednesday, March 1, 2023 6:20:59 PM

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Dear CACNR,

My name is Geno Riley and I'm writing to you today as an individual not representing any other entity but myself as a private citizen. I retired from the FAA in 2016 after 36 years. I retired as the Air Traffic Manager at the Phoenix-Deer Valley Control Tower which at the time, was the busiest VFR airport in the National Airspace System. Prior to that I held positions as a Senior Executive Technical Representative (Air Traffic) at FAA HQ as well as Operations Manager, Traffic Management Officer and Manager of Safety Assurance for the Arizona District out of the Phoenix TRACON. During my FAA employment, I was also a certified Air Safety Investigator. I've participated alongside the NTSB on several aircraft accidents. I also used to fly in and out of APA back in the 1980s and 1990s when I was an Air Traffic Controller at the Denver ARTCC.

Please be advised that you have a significant charting error in your Voluntary Noise Abatement Guidelines - Voluntary Touch & Go Guideline inset. Specifically, you list a distance of 1 mile from the runway 17R arrival threshold to a point adjacent to the southern third of Family Sports Golf Course just north of APA that is in no way accurate. That longitudinal distance is actually .7 NM.

A simple Google Earth review will indeed show that the actual 1 NM distance extended centerline from the threshold is directly over the south roof air conditioner at the Sierra Nevada (Aerospace) Corporation on the north side of Arapahoe Road.

I understand you have a very vocal noise lobby in the surrounding community and perhaps the chart distance was "tweaked" to help fudge a little and mitigate the noise footprint but a false published distance like this can have fatal consequences. I'm sure I don't have to explain the legal liability of having such a charting error published in the event of an aircraft accident. A student pilot trying to be a good neighbor, consulting the VNAP placard in an attempt to comply could be lulled into thinking they were further from the threshold than is actually true; ultimately resulting in an unsafe descent rate by an inexperienced pilot and thus resulting in an accident. I understand it's just a VNAP chart but it still matters--pilots must be provided accurate information.

I trust you will take the necessary steps to correct the charting error very soon, which is why I contacted you directly rather than working through any official FAA safety channels and contacts.

Respectfully,

Geno Riley



54r6t

## Fly Quiet Committee – March 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 and pilots 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 (KSQ)** and **Half Moon Bay Airport (KHA)** 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 (KBED)** (<https://www.massport.com/hanscom-field/about-hanscom/airport-activity-monitor/>)

Voluntary arrival and departure procedures listed for possible adoption at KAPA. These are used at Bedford Mass Hanscom Field

## Voluntary Noise abatement procedures for piston wing aircraft - **Bedford Mass Hanscom Field**

[https://www.massport.com/media/1550/c\\_hansc\\_pisto.pdf](https://www.massport.com/media/1550/c_hansc_pisto.pdf)

### RECOMMENDED ARRIVAL PROCEDURES

1. Straight-in approaches maintain at least 1500 feet MSL until intercepting the VASI/PAPI glide path. (This would equate to maintaining 7300 feet MSL at KAPA).
2. VFR aircraft maintain at least 1500 feet MSL until 3 miles from the airport. (This would equate to maintaining 7300 feet MSL at KAPA).
3. On final approach, stay **on or above** the VASI/PAPI glide path until crossing the airport threshold.
4. For constant speed propeller aircraft, Set the propeller to high RPM on short final, after making your final power setting.
5. When practicing touch & go operations, touch down within 1000 feet of the runway threshold (Aiming Point Marking)

### RECOMMENDED DEPARTURE PROCEDURES

1. Use the full length of the runway for departures, avoiding intersection takeoffs.
2. After lift-off, climb out at the best rate-of-climb airspeed (Vy).
3. For constant speed propeller aircraft, set propeller to the "cruise climb" power setting before reaching the airport boundary. Avoid flying over residential areas with the propeller set to high rpm.
4. When departing the pattern, unless otherwise instructed by ATC, maintain runway heading to 1000 feet MSL (6800 ft at KAPA) before turning on course.
5. When staying in the traffic pattern, unless otherwise instructed by ATC, \*climb straight ahead to 500 ft AGL (6380 ft AGL at KAPA) before turning crosswind.

### AIRPORT REGULATIONS (all operations)

1. **Avoid operations between the hours of 11:00 PM and 7:00 AM, whenever possible. A fee applies to all operations during this period. Note: Restrictions under 14 CFR Part 161 are very broadly defined and include: Use charges directly or indirectly controlling airport noise.**
2. Touch and go operations are not permitted between the hours of 11:00 PM and 7:00 AM.
3. Touch and go operations are not permitted at any time by aircraft exceeding 12,500 lbs.
4. Maintenance runups are only permitted in designated areas and shall not be conducted after 9:00 PM without the express prior approval of the Airport Director

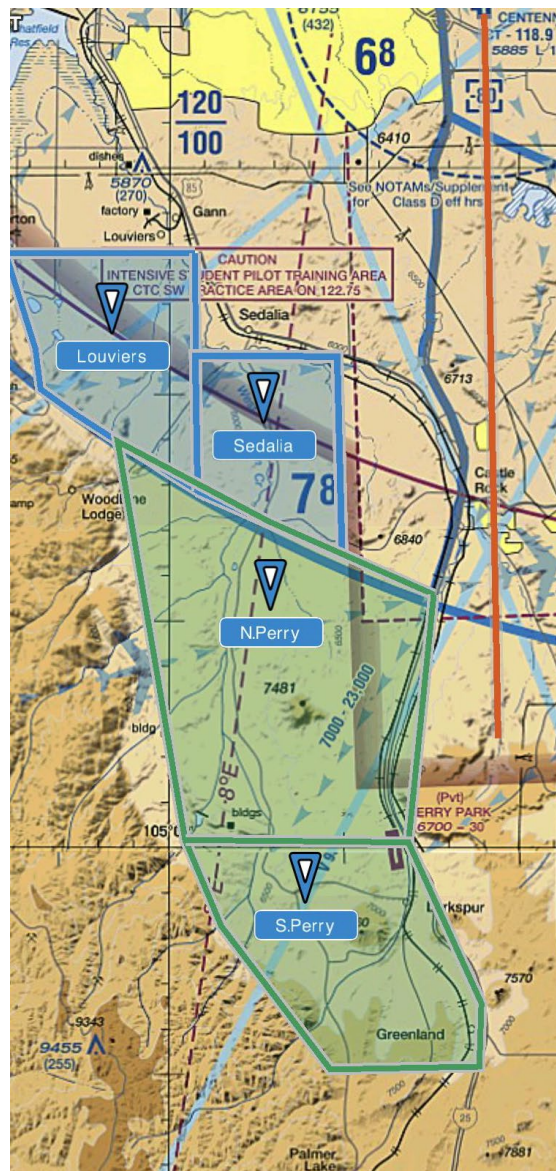


March 16, 2023

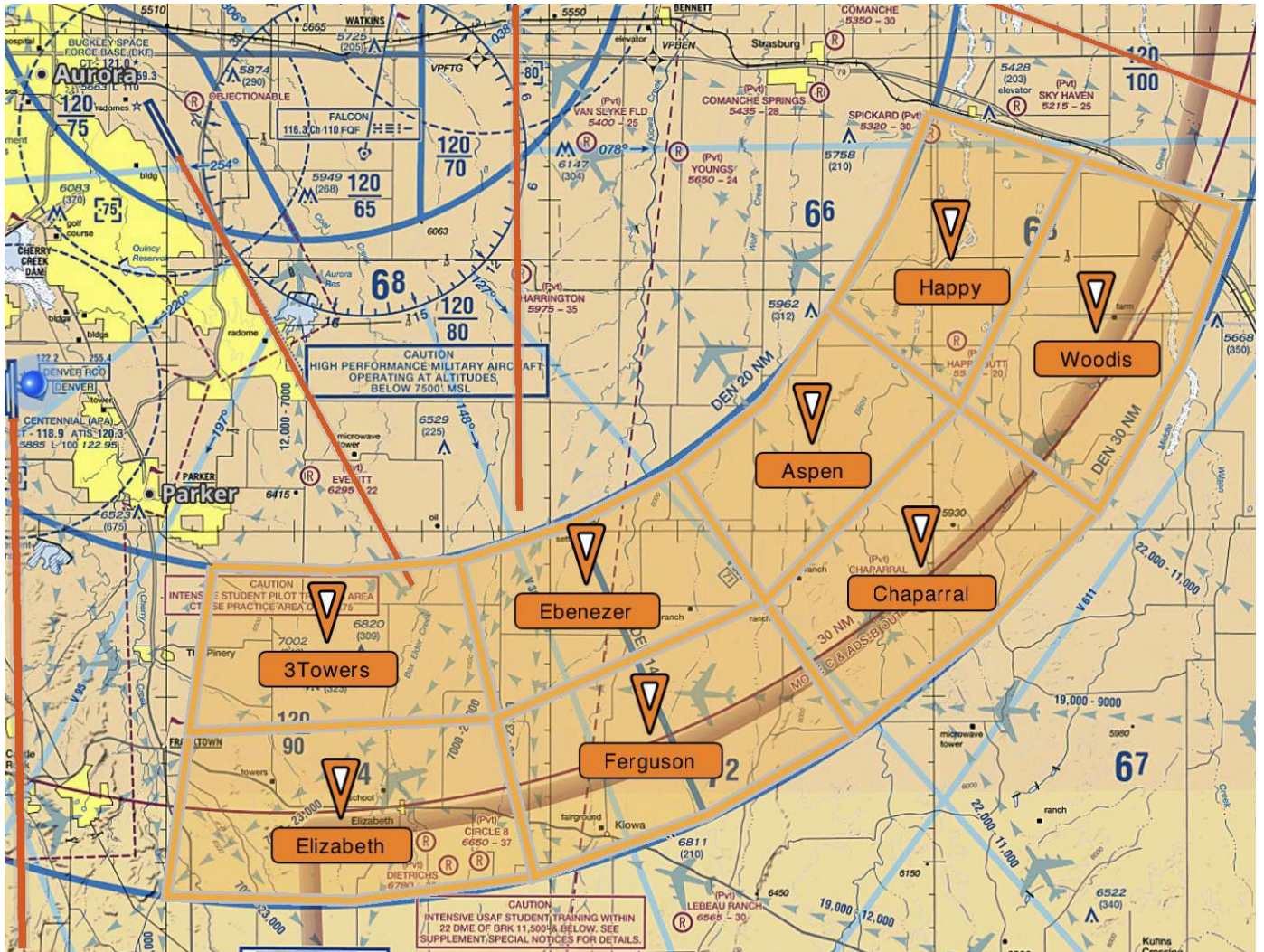
## **CACNR report to ACPAA Board from March 1<sup>st</sup> meeting**

- Dan Reimer - Independent aviation attorney
  - Provided information regarding ANCA, 14CFR part 161, and 14CFR part 36
  - Provided Information on FAA Grant Assurances, formal and informal complaints, Loss of funding for violations
  - Community supplied questions – Answered
- Review Airport Noise and Capacity Act (ANCA) of 1990
  - Mandated the establishment of 14 CFR Part 161, Notice and Approval of Airport Noise and Access Restrictions
  - Required the phase out of aircraft with part 36 Stage 2 engines by year 2000
  - Placed limits on local user restrictions (curfews)
  - Failure to follow the provisions in 14 CFR Part 161 can result in loss of AIP funds or Grant Assurances
- Review 14CFR part 36
  - Centered on reducing the amount of from Turbojet engine. Creation of Stage I-V standards for aircraft engines.
  - Prop Aircraft not stage rated. Part 36 does not apply

- Practice Box Development** – Practice box additions and modifications communicated at high level – PDF from Aspen Flying club
  - The southwest practice areas have been reworked: 1. The Box over Chatfield has been removed entirely. The Louviers and Sedalia Boxes have been moved to the south to avoid training activity over developed areas including Sedalia, Louviers, The Meadows, and Castle Rock. Multi-engine training will have priority in the N.Perry and S.Perry boxes. 4. Nearby instrument approaches are accurately depicted by the red line.

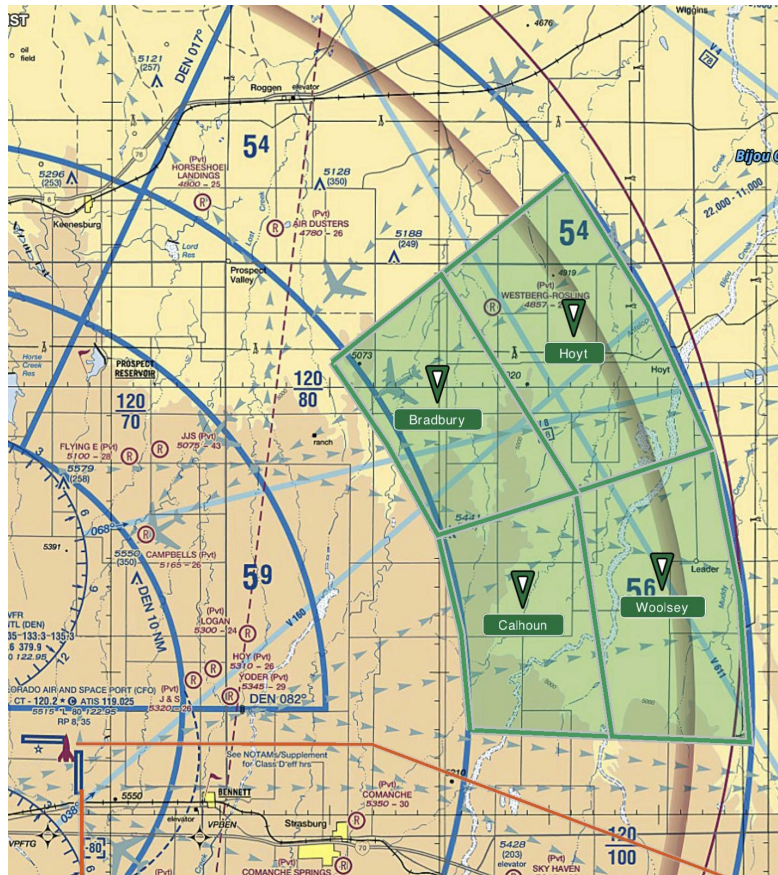


- The SE Boxes have been replaced with the following layout: The 3 Towers and Elizabeth boxes are created using the DEN VOR 180 Radial as a reference. Each new box is then created in 20° increments counter clockwise: ie. 160°, 140°, 120°, 100°. Nearby instrument approaches are accurately depicted by the red lines.





- The East Practice Boxes have been replaced with the following layout identical in format to the SE Practice Boxes
- The draft concept for these practice areas was approved by the 4 largest flight schools at Centennial Airport. The flight schools at Colorado Air and Space Port will be approached with this final draft. One has agreed to switch already.



- A change-over date has yet to be agreed upon. This date will be announced to the general public by the Colorado Pilot's Association.
- Pending tasks for completion: 1. Final review by local Flight Schools 2. Development of supporting documentation
- FAA was not present at the meeting in person or remote
- Public Comment

**From:** Michael Fronapfel <[mfronapfel@centennialairport.com](mailto:mfronapfel@centennialairport.com)>  
**Sent:** Wednesday, March 22, 2023 5:28 PM  
**To:** 'Lardie, Leslie (FAA)' <[Leslie.Lardie@faa.gov](mailto:Leslie.Lardie@faa.gov)>; Brad Pierce <[bmpierce2@comcast.net](mailto:bmpierce2@comcast.net)>; Valencia, Michael (FAA) <[Michael.Valencia@faa.gov](mailto:Michael.Valencia@faa.gov)>  
**Cc:** Biassou, Justin W (FAA) <[Justin.W.Biassou@faa.gov](mailto:Justin.W.Biassou@faa.gov)>; Stone, Grady (FAA) <[grady.stone@faa.gov](mailto:grady.stone@faa.gov)>; Samantha Blymyer <[sblymyer@centennialairport.com](mailto:sblymyer@centennialairport.com)>  
**Subject:** RE: CACNR Sub-Roundtable Technical Working Group

Ms. Lardie,

Mr. Pierce and I are confused by your response to our request to set up a Sub-Roundtable Technical Working Group (SRTWG). This group would be similar to technical working groups that have been setup at a couple of airports in California with representation from the FAA, Airport, Noise Roundtable, Flight Schools and Communities.

The Centennial Airport Community Noise Roundtable approved the creation of this SRTWG at the March 1<sup>st</sup> meeting. We respectfully request the FAA assign two representatives to assist the Sub-Roundtable Technical Working Group in exploring solutions to the extended traffic pattern issue here at Centennial Airport. We have identified the following participants/representatives we would like included:

Brad Pierce – Chair of CACNR  
Chris Eubanks – Roundtable Representative from Castle Pines and Pilot  
Mike Fronapfel – Executive Director Centennial Airport  
Samantha Blymyer – Noise & Environmental Specialist – Centennial Airport  
Commissioner Campbell-Swanson – Arapahoe County Community representative  
Justin Mazza – Aspen Flying Club  
Kimber Bauer – Flights Inc.  
Centennial FAA ATCT – TBD  
FAA Technical Experts - TBD

We are very anxious to begin work with this technical working group so ideally we would have the FAA personnel identified before the April 5<sup>th</sup> CACNR meeting so we can schedule our first meeting of the SRTWG in early April.

Please respond to this request no later than COB on March 29<sup>th</sup>.

Sincerely,

*Mike*

Mike Fronapfel  
Executive Director – CEO  
Centennial Airport/Arapahoe County Public Airport Authority  
7565 South Peoria Street, Unit D9  
Englewood, Colorado 80112  
O 303.790.0598 D 303.218.2903 M 303.522.4650



**From:** Lardie, Leslie (FAA) <[Leslie.Lardie@faa.gov](mailto:Leslie.Lardie@faa.gov)>  
**Sent:** Monday, March 13, 2023 2:30 PM  
**To:** Brad Pierce <[bmpierce2@comcast.net](mailto:bmpierce2@comcast.net)>; Valencia, Michael (FAA) <[Michael.Valencia@faa.gov](mailto:Michael.Valencia@faa.gov)>  
**Cc:** Biassou, Justin W (FAA) <[Justin.W.Biassou@faa.gov](mailto:Justin.W.Biassou@faa.gov)>; Stone, Grady (FAA) <[grady.stone@faa.gov](mailto:grady.stone@faa.gov)>; Michael Fronapfel <[mfronapfel@centennialairport.com](mailto:mfronapfel@centennialairport.com)>; Samantha Blymyer <[sblymyer@centennialairport.com](mailto:sblymyer@centennialairport.com)>  
**Subject:** RE: CACNR Sub-Roundtable Technical Working Group

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hello Mr. Pierce,

On February 21, 2023, we provided a Community Roundtable Info Sheet to the CACNR. The roundtable should make recommendations, ideally in coordination with the airport, that have some recognition of the impacts reflect through discussion/vetting before raising them to the FAA SME's for consideration. If requested and available, the FAA representatives can participate in roundtable meetings to provide technical information and advice.

We received your follow up questions on February 27, 2023. Our office is addressing these questions and, when we have completed our research, analysis and review, we will forward the entire Q&A response to you and Airport Director Mike Fronapfel.

*Regards,*

*Leslie Lardie*  
*Senior Advisor*  
*Office of the Regional Administrator*  
*Northwest Mountain Region*  
*Office (206) 231-2008*  
Restorative | Achiever | Positivity | Learner | Responsibility

**From:** Brad Pierce <[bmpierce2@comcast.net](mailto:bmpierce2@comcast.net)>  
**Sent:** Friday, March 10, 2023 10:02 AM  
**To:** Valencia, Michael (FAA) <[Michael.Valencia@faa.gov](mailto:Michael.Valencia@faa.gov)>; Lardie, Leslie (FAA) <[Leslie.Lardie@faa.gov](mailto:Leslie.Lardie@faa.gov)>  
**Cc:** Biassou, Justin W (FAA) <[Justin.W.Biassou@faa.gov](mailto:Justin.W.Biassou@faa.gov)>; Stone, Grady (FAA) <[grady.stone@faa.gov](mailto:grady.stone@faa.gov)>; Mike Fronapfel <[mfronapfel@centennialairport.com](mailto:mfronapfel@centennialairport.com)>; Samantha Blymyer <[sblymyer@centennialairport.com](mailto:sblymyer@centennialairport.com)>; Brad Pierce (home) <[bmpierce2@comcast.net](mailto:bmpierce2@comcast.net)>  
**Subject:** CACNR Sub-Roundtable Technical Working Group

Hello Ms. Lardie and Mr. Valencia,

At the 3/1/23 Centennial Airport Community Noise Roundtable (CACNR) meeting we voted unanimously to approve the creation of the Sub- Roundtable Technical Working Group Committee. The purpose of this sub-group is to explore and recommend solutions to flight school pattern traffic.

Please reply to confirm that the FAA acknowledges the creation of this sub-group. Once we receive your confirmation we will select the members of the sub-group on our end.

Can you also please provide a timeframe for responding in writing to the questions we submitted to you on 12/31/22, 1/16/23 and 2/27/23.

I've copied Mike Fronapfel and Samantha Blymyer.

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

Brad Pierce  
Chair, CACNR

ATTENDANCE RECORD for 2022 - 2023 CACNR MEETINGS		2022	2022	2022	2022	2022	2022	2022	2022	2022	2022	2023	2023	2023	MEMBER REPRESENTED		
		APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	%	TOTAL %		
ARAPAHOE COUNTY	Carrie Warren-Gully/Leslie Summey	X	X	absent	X	X	absent	X	X	absent	X	X	absent	67%	67%		
	Vacant	-	-	absent	-	-	absent	-	-	absent	-	-	absent	0%			
	Paul Krier	X	X	X	-	X	X	X	X	X	X virtual	X	absent	83%	92%		
	Evan Colvin	X	-	X	X	X	X	X	X	-	X	X	absent	75%			
X																	
DOUGLAS COUNTY	Abe Laydon	-	-	-	absent	-	absent	-	-	-	absent	-	-	0%	75%		
	Dan Avery	X	X	X	absent	X	absent	X	X	X	absent	X virtual	X	75%			
	Alison Biggs	X	X	absent	X	X	X	X	X	X	X	X	X	92%	92%		
	Mark Adams	-	-	absent	-	-	-	-	-	-	-	-	-	0%			
AURORA	Brad Pierce	X	X	X	X	X	X	X	X	X	X	X	X	100%	100%		
	Karen Hancock/Mindy Parnes	-	-	X	-	X	-	-	-	-	-	-	-	17%			
CASTLE PINES	Chris Eubanks	X	X	X	absent	X	X	X	absent	X virtual	X	X	absent	75%	75%		
	Ben Price	-	-	-	absent	-	-	-	absent	-	-	-	absent	0%			
CASTLE ROCK	Laura Cavey	absent	absent	absent	X	X	absent	absent	absent	absent	-	X virtual	X virtual	33%	42%		
	Sandy Vossler	absent	absent	absent	-	-	absent	absent	absent	absent	X	-	-	8%			
CENTENNIAL	Candace Moon	X	X	absent	X	X	X	X	X	X	X	X	X	92%	92%		
	Don Sheehan	-	-	absent	-	-	-	-	-	-	-	-	X	8%			
CHERRY HILLS VILLAGE	Al Blum/Robert Eber	absent	absent	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	absent	absent	0%			
FOXFIELD	Pam Thompson	X	X	absent	absent	X	X	absent	X	X	X	X	X	75%	75%		
	Frank Lawrence	-	-	absent	absent	-	-	absent	-	-	-	-	-	0%			
GREENWOOD VILLAGE	Donna Johnston	X	X	X	absent	X	X	X	X	X	X	X	X	92%	92%		
	Libby Barnacle	-	-	-	absent	-	-	-	-	-	X virtual	X virtual	-	17%			
HIGHLANDS RANCH	Andy Jones	X	absent	absent	X	X	absent	-	X	absent	X virtual	absent	absent	42%	50%		
METROPOLITAN DISTRICT	Renee Anderson	-	absent	absent	-	-	absent	X	-	absent	-	absent	absent	8%			
LONE TREE	Mike Anderson	X	X	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	absent	X	X	17%	42%		
	Vacant	-	absent	absent	absent	X	X	X	absent	absent	absent	-	-	25%			
ACPAA	Mike Fronapfel	X	X	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	X	X	75%	83%		
	John Hirshman/Vacant	X	X	X	X	-	-	absent	-	-	absent	-	-	33%			
CABA	Don Kuskie	X	X	X	X	X	X	X	X	X	X	X	X	100%	100%		
	Mike Straka	-	-	-	-	-	-	-	-	-	-	-	-	0%			
CDOT AERONAUTICS DIVISION	Todd Green	absent	absent	absent	absent	absent	absent	absent	absent	absent	absent	absent	absent	0%	0%		
	Vacant	-	-	-	-	-	-	absent	absent	absent	absent	absent	absent	0%			
FAA APA CONTROL TOWER	Jeff Holmes/Jeff Lawton	absent	-	absent	absent	absent	absent	absent	absent	absent	absent	absent	absent	0%	8%		
	Ron Curry	absent	X	absent	absent	absent	absent	absent	absent	absent	absent	absent	absent	8%			
FAA DISTRICT OFFICE	John Bauer	absent	absent	absent	absent	absent	absent	absent	absent	absent	absent	absent	absent	0%	0%		
	John Sweeney	absent	absent	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	absent	absent	0%	0%		
	Bill Dunn	absent	absent	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	X	X	83%	83%		
	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).																	
															03.06.2023		