



Centennial Airport Monthly Noise Report



July 2022

Item 21

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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_{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.

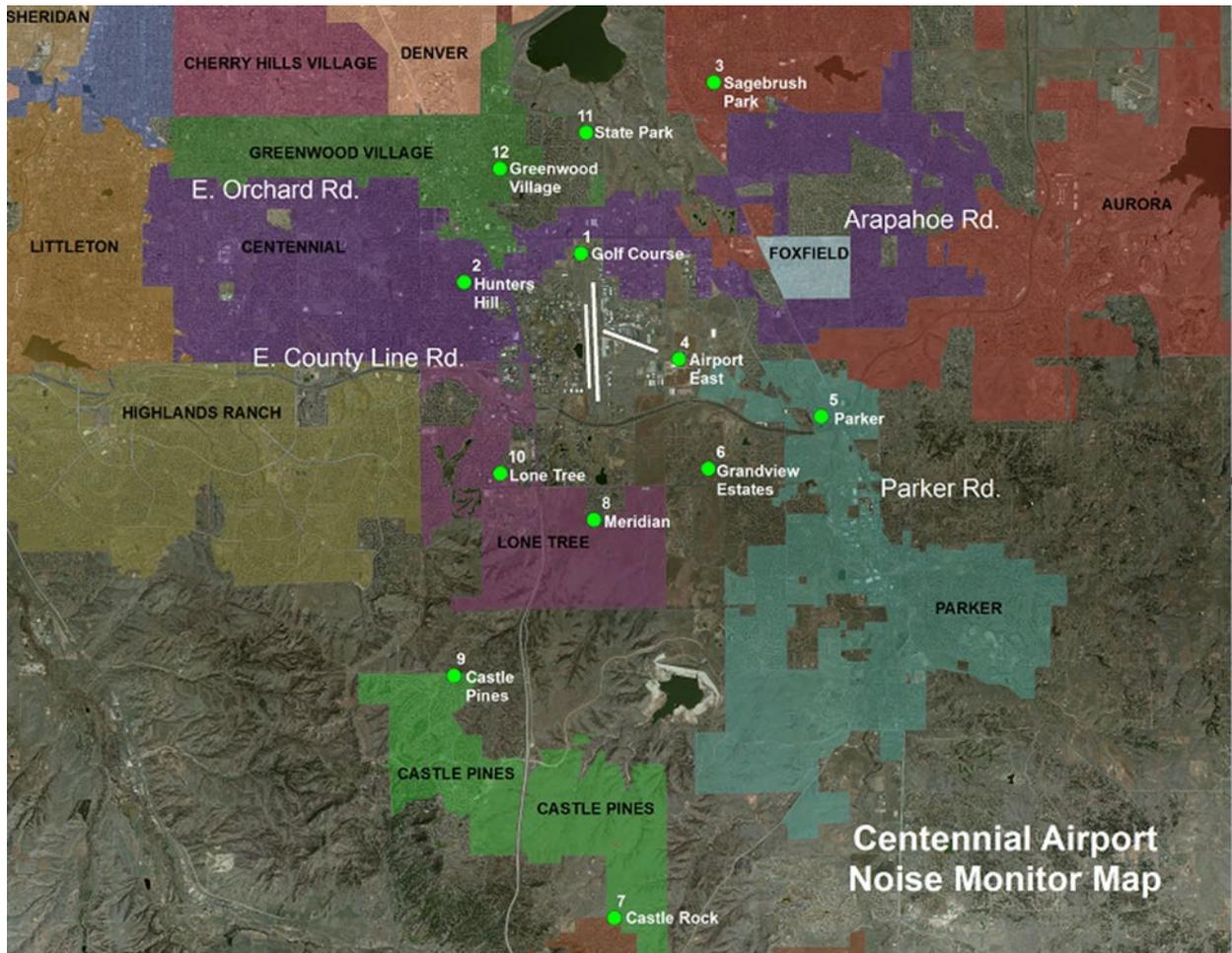
Visual Flight Rules (VFR) – A set of regulations under which a pilot operates an aircraft in weather conditions generally clear enough to allow the pilot to see where the aircraft is going. A flight plan is not required when the pilot is operating under Visual Flight Rules.

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

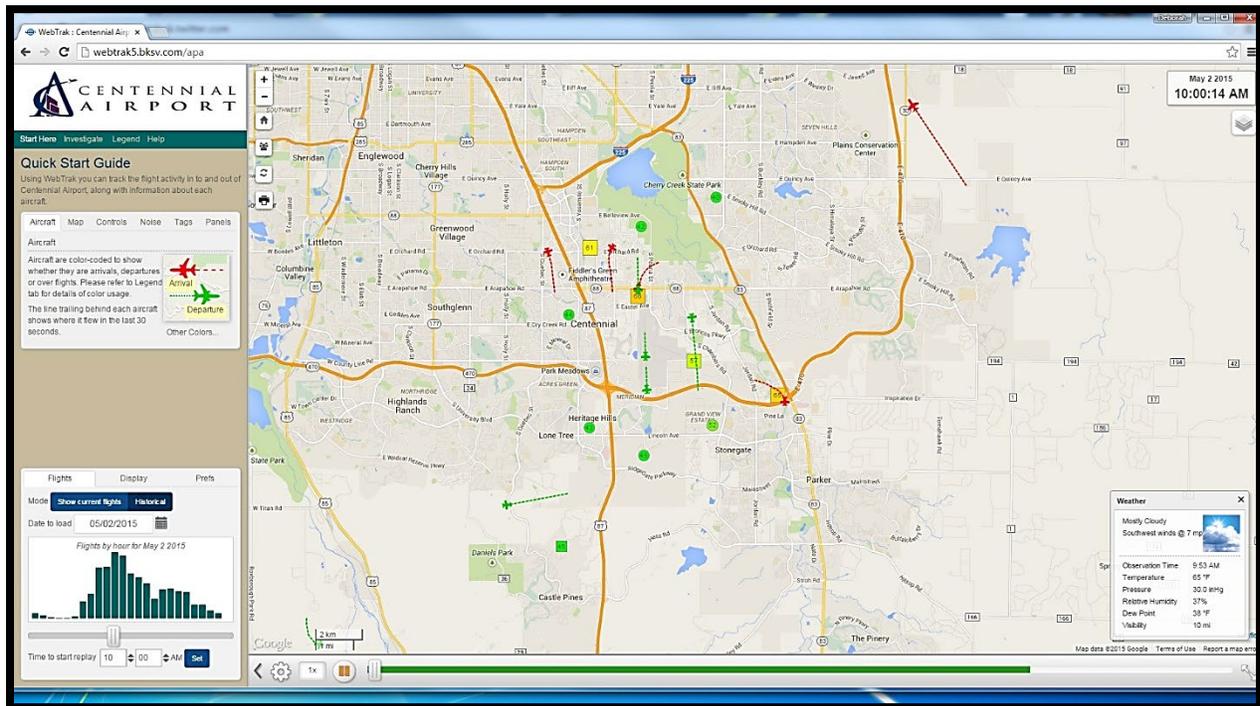
3 ABOUT APA'S NOISE MONITORING PROGRAM

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>

Centennial Airport Website: <https://www.centennialairport.com/index.php/en/>

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				0				0			0
September				0				0			0
October				0				0			0
November				0				0			0
December				0				0			0
Y-T-D Totals	17,923	25,729	1,167	44,819	8,644	42,722	807	52,173	78,484	336	78,820

	IFR OVERFLIGHTS				VFR OVERFLIGHTS				TOTAL OPERATIONS	
	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				0				0	August	
September				0				0	September	
October				0				0	October	
November				0				0	November	
December				0				0	December	
Y-T-D Totals	19	35	7	61	295	936	74	1,305	Y-T-D Totals	177,178

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.

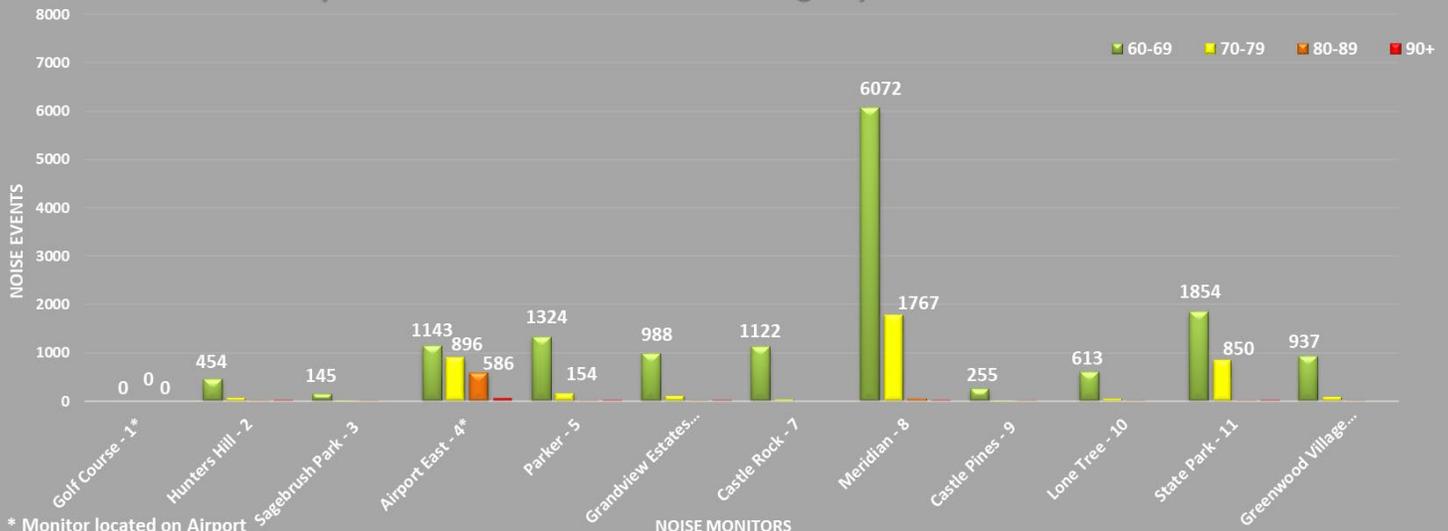
The information below reflects only aircraft noise events as described above.

July 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	454	64	3	2	523
Sagebrush Park- 3	145	13	1	0	159
Airport East- 4*	1143	896	586	49	2674
Parker- 5	1324	154	3	1	1482
Grandview Estates- 6	988	111	8	2	1109
Castle Rock- 7	1122	40	0	0	1162
Meridian- 8	6072	1767	55	3	7897
Castle Pines- 9	255	11	1	0	267
Lone Tree- 10	613	52	4	0	669
State Park- 11	1854	850	13	1	2718
Greenwood Village- 12	937	85	9	0	1031
Totals	14907	4043	683	58	19691

*NMT 1 was down for whole month of July

*Monitor located on Airport

July 2022 Aircraft Noise Event dB Range by Monitor



* Monitor located on Airport

NOISE MONITORS

7 JULY 2022 NOISE COMPLAINTS

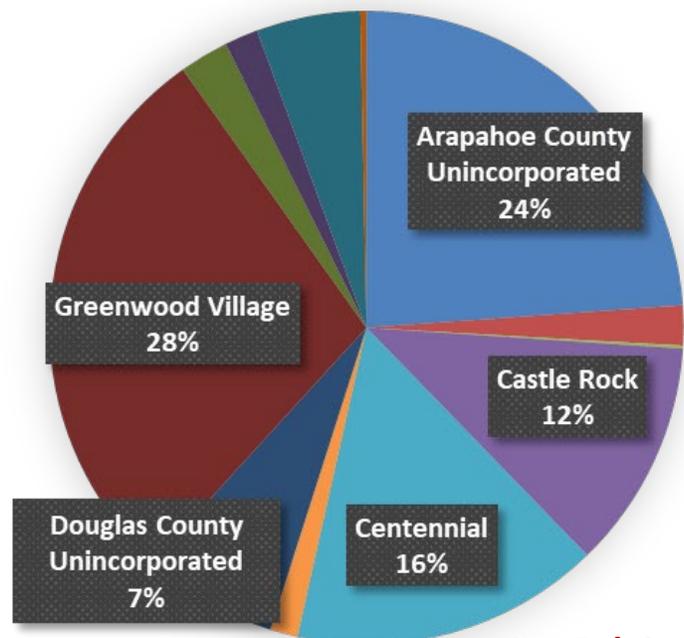
In July, Centennial Airport received 641 complaints from 73 households.

July Noise Complaints			YTD		Population
Municipality	Complaints	Households	Complaints	Households	Census 2018
Arapahoe County Unincorporated	153	25	629	39	83,764
Aurora	13	1	96	5	374,114
Castle Pines	1	1	15	3	10,507
Castle Rock	75	2	345	5	64,827
Centennial	101	4	675	8	110,831
Cherry Hills Village	0	0	0	0	6,650
Denver	9	5	25	6	716,492
Douglas County Unincorporated	44	6	144	12	100,536*
Greenwood Village	182	12	945	22	15,801
Highlands Ranch	16	2	53	5	105,264
Lone Tree	11	7	31	9	14,653
Parker	2	2	28	6	55,636
Other	34	6	175	15	UNK
Total	641	73	3161	135	1,659,075

*Douglas County Unincorporated Population with Highlands Ranch Removed

*Other: Littleton, Englewood, Boulder

Complaints per Municipality



Noise Complaints Response Requested	
Email	29
Phone	26
Total	55

Time Complaint Received	July
Day Hours (7:00 am - 9:59pm)	611
Night Hours (10:00 pm - 6:59 am)	30
TOTAL	641

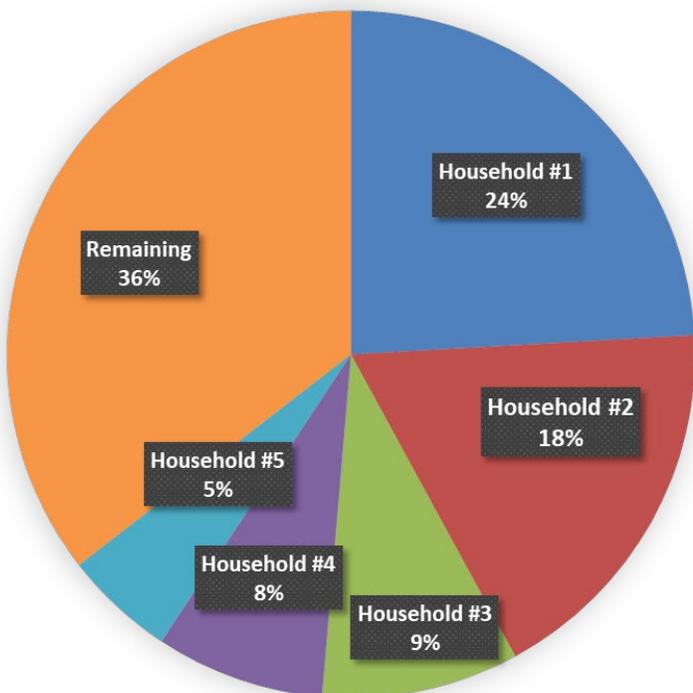
Current 12 Month Trend



Previous Year 13 Month Trend



Top 5 Household Complaints YTD

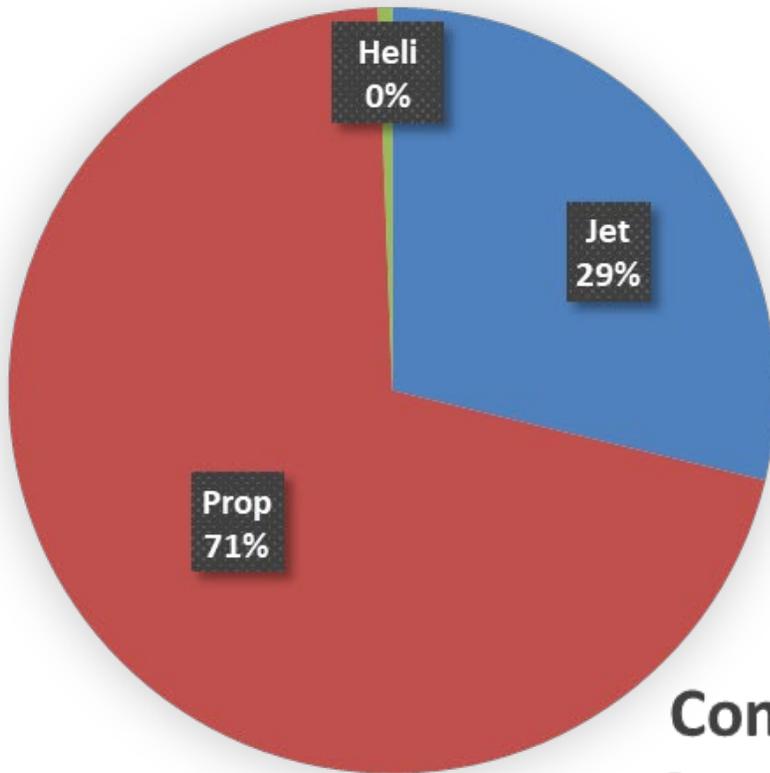


Top 5 Household Complaints

Household	Complaints	Households
Household #1	762	Greenwood Village
Household #2	568	Centennial
Household #3	293	Castle Rock
Household #4	251	Arapahoe County Unincorporated
Household #5	165	Arapahoe County Unincorporated
Remaining	1,122	
Total	3,161	

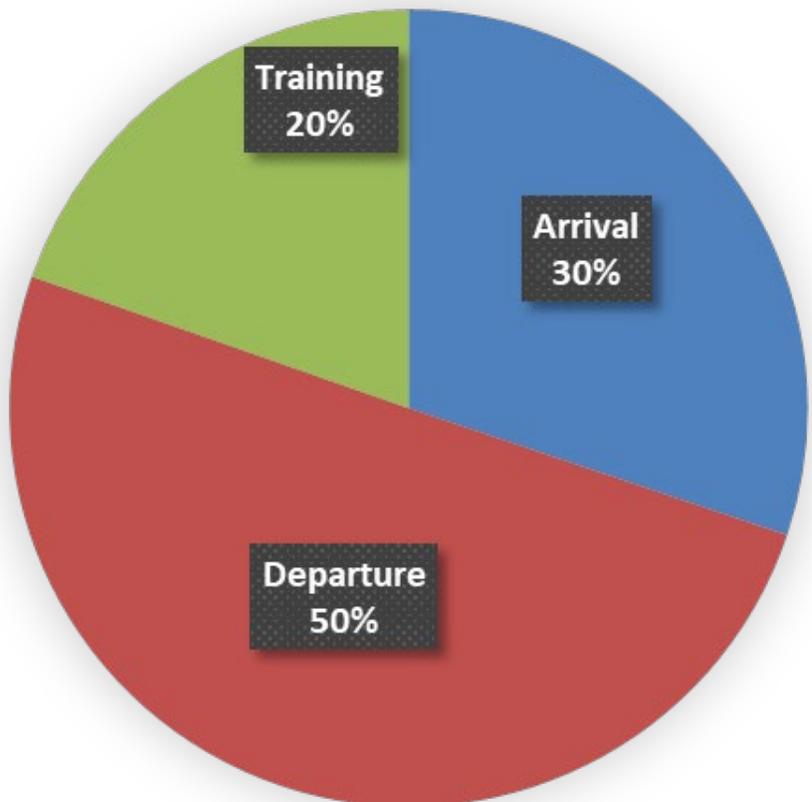
Complaints by Aircraft Type

July 2022



*#1 Household Removed

Complaints by Operation Type



*#1 Household Removed

8 NOTES AND DISCLAIMER

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

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



Noise Hotline: 303-790-4709

www.centennialairport.com



CENTENNIAL AIRPORT COMMUNITY NOISE ROUNDTABLE
MINUTES

July 6, 2022

Approved 08/03/22

VISION – QUIETER SKIES FOR OUR COMMUNITIES

MISSION – UTILIZING PARTNERSHIPS TO REDUCE AIRPORT NOISE FOR THE BENEFIT OF NEIGHBORING COMMUNITIES

Chair: Brad Pierce **Vice Chair:** Melissa Coudeyras **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, but a quorum was not present at that time:

Arapahoe County:	Carrie Warren-Gully (later)	Highlands Ranch Metro:	Andy Jones
Arapahoe County:	Evan Colvin	Lone Tree:	Mike Anderson
Douglas County:	Alison Biggs	ACPAA:	Mike Fronapfel
Aurora:	Brad Pierce	AOPA:	Bob Doubek
Castle Rock:	Laura Cavey (virtual)	CABA:	Don Kuskie
Centennial:	Candace Moon (virtual later)	Wings Over the Rockies:	Bill Wasmund

Others in attendance were John Hirshman, AOPA Alternate Representative; Randy Johnson of Louviers; and ACPAA staff Samantha Blymyer and Lauren Wiarda, and Chris Thompson via telephone.

Those absent were:

Douglas County:	Abe Laydon/Dan Avery	Parker:	Amy Holland/Todd Hendreks
Castle Pines:	Chris Eubanks/Ben Price	CDOT Aeronautics Div:	Todd Green/Vacant
Cherry Hills Village:	Al Blum/Afshin Safavi	FAA APA Control Tower:	Jeff Holmes/Ron Curry
Foxfield:	Pam Thompson/Frank Lawrence	FAA District Office:	John Bauer/John Sweeney
Greenwood Village:	Donna Johnston/Libby Barnacle	FAA TRACON:	Steve Martin/Bill Dunn

SPECIAL PRESENTATION: Will Rummel, Training Support Manager with ATP Flight School – Mr. Rummel was unable to be present, but had confirmed he would attend in August.

2. **PUBLIC COMMENT:**

A. **VIRTUAL/IN-PERSON MEETING ATTENDEES** – Randy Johnson of Louviers said thing had gotten considerably quieter, and he had noted training aircraft seemed to be flying more north and south of Louviers, rather than directly over the town. This was much appreciated.

B. **FROM CACNR EMAIL ADDRESS** – None.

3. **CONSENT AGENDA:** To be considered in its entirety following the arrival of a quorum.

4. **ITEMS REMOVED FROM CONSENT AGENDA:** To be considered following arrival of a quorum and action on #3.

Due to the lack of a quorum, action could not be taken on Agenda Items 3 & 4, so informational reports were considered next.

5. **COMMITTEE REPORTS:**

A. **EXECUTIVE /WORK PLAN COMMITTEES** –The status of follow-up items was briefly reviewed.

B. **COMMUNITY OUTREACH** – Mike Anderson indicated the committee had not met, and work with Trish Coberly related to the website was proceeding slowly. The airport's new Manager of Communications might be available to help with the use of social media at some point.

C. **FLY QUIET** –Bill Wasmund presented a written report and highlighted some portions of it. Among others, the Government Accountability Office (GAO) made recommendations to the FAA about the use of Alternative Metrics in combination with DNL to define noise impacts. These Enhanced Noise Metrics include Sound Exposure Level SEL (Single Event Sound Exposure), the Number Above (number of noise events that exceed a selected sound level threshold over a 24 hour period), and the Time Above (Total time that aircraft noise levels exceed a selected sound level).

The FAA agreed with the GAO's recommendations and indicated it would take steps to implement them by the end of 2022, although realistically, implementation is not expected for 2-3 years. Updates were to be available at www.gao.gov/products/GAO-21-103933

Stanford University's Aerospace Design Laboratory is looking at what would comprise a good alternative metric, as DNL alone is not a good predictor of annoyance measurement.

Now that a new Manager of Communications (see 7.B.4.) is on board at the airport, the topic of adding brief noise abatement statements to the airport's electronic signs will be revisited with him.

The Aspen Flying Club seems to have taken the lead in working on new practice boxes east of Kiowa, in collaboration with the other flight schools. This may possibly evolve into two areas. Mike Fronapfel reported he is also speaking with the Air Force Academy about letting our flight schools use the Academy's practice boxes when they are not in use by the Academy. It is not yet known if the Academy has any kind of scheduled use of the boxes that would make this possible, but it was agreed this was something certainly worth exploring.

A quorum had arrived, so CACNR returned to consideration of Agenda Items 3 and 4.

3. CONSENT AGENDA:

A. & B. – DRAFT MINUTES AND TREASURER'S REPORT - The Consent Agenda included the May 4, 2022 draft CACNR minutes, the June 1, 2022 draft CACNR minutes; and a Treasurer's Report from 05/26/22 which showed a balance of \$24,310.30. The Consent Agenda also included the May 2022 Noise Report. On the motion of Carrie Warren-Gully, duly seconded, the Consent Agenda was approved.

C. NOISE REPORT – The May 2022 Noise Report included the following information:

May Total Operations:	26,499	May Total Local Operations:	12,574
Year to Date Total Operations:	120,289	Year to Date Local Operations:	52,874

512 Complaints from 26,499 Total Operations in May

Noise Events:

<u>May Totals:</u>	<u>May 60 – 69 db:</u>	<u>May 70 – 79 db:</u>	<u>May 80 – 89 db:</u>
8,592 Golf Course	5,251 Meridian	3,415 Golf Course	437 Airport East
6,905 Meridian	4,871 Golf Course	1,555 Meridian	297 Golf Course
2,471 Airport East	1,593 State Park	773 State Park	56 Meridian
2,402 State Park	1,360 Parker	738 Airport East	33 State Park
1,511 Parker	1,297 Grandview Estates	193 Grandview Estates	18 Lone Tree
1,500 Grandview Estates	1,259 Airport East	163 Greenwood Village	10 Grandview Estates
1,305 Castle Rock	1,223 Castle Rock	148 Parker	5 Hunters Hill
1,133 Greenwood Village	996 Greenwood Village	82 Castle Rock	4 Greenwood Village
760 Lone Tree	659 Lone Tree	70 Hunters Hill	3 Parker
608 Hunters Hill	533 Hunters Hill	63 Lone Tree	1 Sagebrush Park
231 Castle Pines	208 Castle Pines	23 Castle Pines	- Castle Pines
177 Sagebrush Park	156 Sagebrush Park	20 Sagebrush Park	- Sagebrush Park

May Noise events in the 90+ decibel range were Meridian – 43 Airport East – 37 Lone Tree – 20 Golf Course – 9 State Park – 3

May Noise Complaints(512) and Numbers of Households (48)

YTD Complaints & Number of Households

<u>Noise Complaints:</u>	<u>Number of Households:</u>	<u>Complaints:</u>	<u>Households:</u>
146 Centennial (29%)	10 Other (21%)	630 Greenwood Village	17 Other
143 Greenwood Village (28%)	7 UAC (15%)	456 Centennial	13 UAC
79 Unincorporated Arapahoe Cnty (16%)	7 UDC (15%)	349 UAC	13 Greenwood Village
57 Castle Rock (11%)	7 Greenwood Village (15%)	223 Castle Rock	8 UDC
29 Other (6%)	4 Castle Rock (8%)	133 Other	5 Castle Rock
24 Unincorporated Douglas County (5%)	4 Lone Tree (8%)	78 UDC	5 Centennial
12 Aurora (2%)	3 Aurora (6%)	65 Aurora	5 Lone tree
11 Highlands Ranch (2%)	3 Centennial (6%)	26 Highlands Ranch	4 Aurora
10 Lone Tree (2%)	2 Highlands Ranch (4%)	25 Parker	4 Parker
1 Castle Pines (0.2%)	1 Castle Pines (2%)	16 Lone Tree	3 Highland Ranch
		15 Denver	1 Castle Pines
		2 Castle Pines	1 Denver

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

Greenwood Village – 512 (25%)	UAC – 146 (7%)
Centennial – 379 (19%)	UAC – 122 (5%)
Castle Rock – 180 (9%)	

In May, 33 responses were requested from 512 noise complaints, with 15 of those requests made by email (45%), and 18 made by telephone (55%).

In May, 484 complaints were made about daytime flights (7:00 a.m. – 9:59 p.m.) – 95%
28 complaints were made about nighttime flights (10:00 p.m. – 6:59 a.m.) – 5%

In May, props accounted for **75% of the complaints by aircraft type; jets** accounted for **24% of the complaints**; and **1% was about helicopters**.

In May, departures were responsible for **43% of the complaints**. **Arrivals** were responsible for **27% of the complaints**, and **Training was responsible for 30% of the complaints**.

The Year to Date complaint maps were not provided with this report, and a **Radar Track Density Map** was also not available. Staff continues to work to provide this information.

CACNR then returned to the remainder of its agenda.

5. **COMMITTEE REPORTS (continued):**

D. **NOISE MONITORS** – No report.

E. **WORK PLAN** – A revised/updated version of the CACNR Policies and Procedures was presented. There was a brief discussion of the FAA's prior concern about revenue diversion and the use of ACPAA funds. On the motion of Committee Chair Alison Biggs, duly seconded, the revisions were adopted.

6. **FAA REPORTS:**

A. **CENTENNIAL (APA) AIR TRAFFIC CONTROL TOWER** – No report..

7. **OTHER REGULAR MONTHLY REPORTS:**

A. **ACPAA** – The reports from Don Kuskie to the June 16, 2022 ACPAA meeting were provided, both for information and as examples for future CACNR Representatives to ACPAA to use when they prepare their reports. The more lengthy report is included in the ACPAA Board Packet sent to that Board prior to its meetings, along with CACNR's meeting minutes. The bulleted version of CACNR's Report is placed in the slide deck which is shown during the actual ACPAA meeting and is available to the public.

Robert Doubek presented his written report from the June 16, 2022 ACPAA meeting. There had also been discussion, with some expressed concern, about the possible change in the number of flight hours needed for pilots in training. It was reported United Airlines proposes to hire 60 new pilots a week.

Doubek then informed CACNR that he was resigning his position as the CACNR Representative from AOPA; he would remain on the ACPAA Board. John Hirshman would be assuming the role of the AOPA Representative to CACNR. CACNR Representatives expressed regret that Doubek would be leaving, and thanked him profusely for all the contributions he had made to the group in the 20+ years he had been its AOPA Representative.

B. **AIRPORT DIRECTOR'S REPORT** –

1. Flight School Engagement Meeting Summary – The agenda and meeting summary from the second flight school engagement meeting, held on June 20th, had been provided. Efforts are being made to utilize the west training boxes less, and to improve communications with the schools.

Copies of the Noise Abatement Guidelines were distributed, and all were requested to review them and let Samantha Blymyer know of any suggested changes or additions. There had been consideration of ACPAA and CACNR providing some kind of incentive for flying quiet, for flight schools or student pilots.

It was noted the demand for pilots was overcoming the increased cost of fuel. ACPAA was provided with data on the amount of fuel sold at Centennial Airport, and request was made for that information to also be shared with CACNR. Mike Fronapfel indicated that could be done. The next meeting with the flight schools would be in September.

2. Airport Activity – Fronapfel reported Centennial Airport had been named as the "2022 Colorado Airport of the Year" by the Colorado Department of Transportation (CDOT) Division of Aeronautics. The award is presented annually to recognize Colorado public-use airports that exhibit outstanding contributions to the Colorado Aviation System. Airports with this recognition demonstrate values that fall in line with the CDOT Division of Aeronautics mission to advance a safe, efficient, and effective statewide aviation system through collaboration, investment, and advocacy.

Fronapfel reported the War Birds would be at the airport on July 9 from 10:00 – 2:00. It was unclear if the WW II aircraft would be offering rides to the public.

3. Legislative – Fronapfel indicated the airport was still waiting for the grant which would be used for the touch and go runway. When that arrives, that runway would be closed, so the remaining runways would assume more traffic and probably more resulting noise. Airport staff will let CACNR when that would occur, so neighborhoods can be informed.

4. Other – Fronapfel indicated Chris Thompson had been named as the airport's Manager of Communications/PIO. Thompson was introduced via phone, and indicated he was looking forward to attending future meetings. He was welcomed.

8. **OLD BUSINESS:**

A. **TO REPRESENT CACNR AT 2022 ACPAA MEETINGS** – John Hirshman would handle the August 11 meeting. Still to be filled were September 8, October 13, November 10, and December 8.

B. **CONGRESSIONAL QUIET SKIES CAUCUS** – Brad Pierce will soon address this topic with Jason Crow's staff.

9. **NEW BUSINESS:**

A. **INFORMATION SHARING** –A *Denver Post* article from this morning, entitled “Construction Taking Off At Centennial Airport” was shared. It was noted that DIA Chief Executive Phil Washington had been nominated by President Biden to head the Federal Aviation Administration (FAA). The nomination must be approved by the US Senate.

10. **PUBLIC COMMENT:** None

11. **NEXT MEETINGS:**

A. **CACNR** – September 7, 2022 6:30 p.m. 7565 S. Peoria Street, Unit 9D
October 5, 2022 6:30 p.m. 7565 S. Peoria Street, Unit 9D
November 2, 2022 6:30 p.m. 7565 S. Peoria Street, Unit 9D
December 7, 2022 6:30 p.m. 7565 S. Peoria Street, Unit 9D

B. **ACPAA** – July 2022 NOT MEETING
August 11, 2022 3:00 p.m. 7565 S. Peoria Street, Unit 9D – John Hirshman for CACNR
September 8, 2022 3:00 p.m. 7565 S. Peoria Street, Unit 9D

October 13, 2022 3:00 p.m. 7565 S. Peoria Street, Unit 9D
November 10, 2022 3:00 p.m. 7565 S. Peoria Street, Unit 9D
December 8, 2022 3:00 p.m. 7565 S. Peoria Street, Unit 9D

12. **ADJOURNMENT:** The meeting was adjourned at 7:42 p.m.

Alison Biggs, Secretary



CENTENNIAL AIRPORT COMMUNITY NOISE ROUNDTABLE

July 6, 2022

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 this meeting in person
Members of the public may attend the meeting in person, or virtually**

AGENDA

Chair: Brad Pierce **Vice Chair:** Paul Krier **Treasurer:** Andy Jones **Secretary:** Alison Biggs
CACNR Mission: Utilizing Partnerships to Reduce Airport Noise for the Benefit of Neighboring Communities

1. CALL TO ORDER AND DETERMINATION OF QUORUM:

<i>Arapahoe County:</i>	Carrie Warren-Gully/Vacant Paul Krier/Evan Colvin	<i>Highlands Ranch Metro Dist.</i>	Andy Jones/Renee Anderson
<i>Douglas County:</i>	Abe Laydon/Dan Avery Alison Biggs/Mark Adams	<i>Lone Tree:</i>	Mike Anderson/Chuck Darnell
<i>Aurora:</i>	Brad Pierce/Karen Hancock	<i>Parker:</i>	Amy Holland/Todd Hendreks
<i>Castle Pines:</i>	Chris Eubanks/Ben Price	<i>ACPAA:</i>	Michael Fronapfel/Vacant
<i>Castle Rock:</i>	Laura Cavey/Sandy Vossler	<i>AOPA:</i>	Robert Doubek/John Hirshman
<i>Centennial:</i>	Candace Moon/Don Sheehan	<i>CABA:</i>	Don Kuskie/Mike Straka
<i>Cherry Hills Village:</i>	Al Blum/Afshin Safavi	<i>CDOT Aeronautics Div:</i>	Todd Green/Vacant
<i>Foxfield:</i>	Pam Thompson/Frank Lawrence	<i>FAA APA Control Tower:</i>	Jeff Holmes/Ron Curry
<i>Greenwood Village:</i>	Donna Johnston/Libby Barnacle	<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/Vacant

SPECIAL PRESENTATION: Will Rummel, Training Support Manager with ATP Flight School

2. **PUBLIC COMMENT:** (non-Agenda items – 3 minutes per person time limit; correspondence from the public)
 - A. MEETING ATTENDEES
 - B. FROM CACNR EMAIL ADDRESS
3. **CONSENT AGENDA:** (items here may be moved to Agenda Item #4, on the request of any CACNR Representative)
 - A. DRAFT MINUTES, June 1, Melissa Coudeyras, Acting Secretary; May 4, 2022 – Alison Biggs, Secretary
 - B. TREASURER'S REPORT, June 2022 – Andy Jones, Treasurer
 - C. NOISE REPORT, May, 2022 – Samantha Blymyer
4. **ITEMS REMOVED FROM CONSENT AGENDA:**
5. **COMMITTEE REPORTS:**
 - A. EXECUTIVE/WORK PLAN COMMITTEE – Brad Pierce, Chair
 1. Status of Follow Up Items
 - B. COMMUNITY OUTREACH – Mike Anderson
 1. Status of Follow Up Items
 - C. FLY QUIET – Bill Wasmund, Chair
 1. Report re UC Davis
 2. Status of Follow Up Items
 - D. NOISE MONITORS – Candace Moon, Chair
 1. Status of Follow Up Items
 - E. WORK PROGRAM – Alison Biggs, Chair
 1. Status of Follow Up Items
 2. Revisions to Policies and Procedures
6. **FAA REPORT:**
 - A. CENTENNIAL AIRPORT AIR TRAFFIC CONTROL TOWER – Jeff Holmes/Ron Curry

7. **OTHER REGULAR REPORTS:**
 A. ACPAA – Robert Doubek, ACPAA Treasurer; Don Kuskie/CACNR-Report to June 16 2022 ACPAA Meeting
 B. AIRPORT DIRECTOR'S REPORT – Mike Fronapfel
 1. Report on 6/20/22 Meeting with Flight Schools
 2. Airport Activity
 3. Legislative
 4. Status of Follow Up Items
 5. Other
8. **OLD BUSINESS:**
 A. TO REPRESENT CACNR AT NEXT ACPAA MEETINGS:
 1. August 11 September 8 October 13 November 10 December 8
 B. CONGRESSIONAL QUIET SKIES CAUCUS
 1
9. **NEW BUSINESS:**
 A. INFORMATION SHARING
10. **PUBLIC COMMENT:** (3 minutes per person time limit):
11. **NEXT MEETINGS:**
- | | | |
|------------|-------------------|--|
| A. CACNR – | August 3, 2022 | 6:30 p.m. 7565 S. Peoria Street, Unit 9D |
| | September 7, 2022 | 6:30 p.m. 7565 S. Peoria Street, Unit 9D |
| | October 5, 2022 | 6:30 p.m. 7565 S. Peoria Street, Unit 9D |
| | November 2, 2022 | 6:30 p.m. 7565 S. Peoria Street, Unit 9D |
| | December 7, 2022 | 6:30 p.m. 7565 S. Peoria Street, Unit 9D |
| B. ACPAA – | July 2022 | NOT MEETING |
| | August 11, 2022 | 3:00 p.m. 7565 S. Peoria Street, Unit 9D |
| | September 8, 2022 | 3:00 p.m. 7565 S. Peoria Street, Unit 9D |
| | October 13, 2022 | 3:00 p.m. 7565 S. Peoria Street, Unit 9D |
| | November 10, 2022 | 3:00 p.m. 7565 S. Peoria Street, Unit 9D |
| | December 8, 2022 | 3:00 p.m. 7565 S. Peoria Street, Unit 9D |
12. **ADJOURN**



CENTENNIAL AIRPORT COMMUNITY NOISE ROUNDTABLE

MINUTES

June 1, 2022

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 AND DETERMINATION OF QUORUM:

Meeting called to order at 6:36 pm. Those present were:

Arapahoe County: Paul Krier/Evan Colvin

AOPA: Robert Doubek/John Hirshman

Douglas County: Dan Avery

CABA: Don Kuskie

Aurora: Brad Pierce/Karen Hancock

Wings Over the Rockies: Bill Wasmund

Castle Pines: Chris Eubanks

Greenwood Village: Donna Johnston

Lone Tree: Mike Anderson

ACPAA: Michael Fronapfel

2. PUBLIC COMMENT: (non-Agenda items – 3 minutes per person time limit; correspondence from the public)

A. MEETING ATTENDEES: Randy Johnson, Larkspur

B. FROM CACNR EMAIL ADDRESS - Brad read an email sent since last meeting from a woman who lives in South Meridian area about a loud plane that went over her house at 8:05 am that sounded like it was going to crash land in her neighborhood. Samantha Blymyer looked into it and stated it wasn't flying low. She also mentioned an antique type plane that flew over that was loud. This was probably the B-29 fighter plane that was in town.

3. CONSENT AGENDA:

B. TREASURER'S REPORT, May 2022 – Andy Jones, Treasurer

C. NOISE REPORT, April 2022 – Samantha Blymyer

Mike Anderson moved to approve; Paul Krier seconded. Approved.

4. ITEMS REMOVED FROM CONSENT AGENDA: None

5. COMMITTEE REPORTS:

A. EXECUTIVE/WORK PLAN COMMITTEE – Brad Pierce, Chair

1. Status of Follow up items

B. COMMUNITY OUTREACH – Mike Anderson

1. Status of Follow up items- Mike Anderson stated that they haven't followed up on items but have been focusing on the website to update it. Chris Eubanks contacted Trish Coberly who designed the website and would like to meet with Mike Fronapfel about some ideas. Chris updated that he spoke to Trish. She is willing to work with the Roundtable and still charges \$30 an hour. Doesn't need redesign but needs to be updated. Last updates are years old. Minutes since June 2020, financials since 2017. Also include agendas and noise reports. Propose to hire Trish to update but may need maintenance. She is willing. Asked about working with the Airport Communications Mgr, Chris Thompson, to link to Airport site so that info isn't duplicated. Not asking for him to manage the Roundtable's website. Mike Fronapfel stated that he is willing to have them work with Chris after he updates the Airport website. Samantha Blymyer stated that the Airport has those documents that would be needed to update the website. Chris Eubanks did not speak to Trish about how long it would take.

C. FLY QUIET – Bill Wasmund, Chair

1. Status of Follow up items-committee is working on follow up items. Working on second noise sign, fly quiet procedures update, and propeller materials. Don Kuskie stated they didn't meet this month. Donna Johnston stated that Bill did a good job with his update and that they are almost ready to present about what they have learned from other airports and how they address noise.

D. NOISE MONITORS – Candace Moon, Chair 1. Status of Follow up items-Paul Krier stated they did not meet this month.

E. WORK PROGRAM – Alison Biggs, Chair 1. Status of Follow up items-have not met.

7. OTHER REGULAR REPORTS:

A. ACPAA – Robert Doubek, ACPAA Treasurer; Donna Johnston/CACNR-Report to April 2022 ACPAA Meeting-Bob Doubek submitted his report. Hotel status update-conditional approval granted for a new lease with Nupen Patel as new owner/operator. Signature purchased all assets of TAC Airnationwide. Board approved change of FBO from TAC Air to Signature. Approval was given to purchase more snow removal equipment. \$350,000 of purchase will be funded by a grant from the Colorado Division of Aeronautics. Paul Krier attended and gave report. His report will be a template for future reports.

B. AIRPORT DIRECTOR'S REPORT – Mike Fronapfel

1. Flight School Engagement Meeting Summary & Proposed Initiatives-next meeting will be June 20, 2022. Invite will be sent out tomorrow.

2. Airport Activity-fuel sales 20% higher than this time lase year. Breaking ground for 18 new hangars this month. Approved for Federal grant for touch and go runway and taxiway Bravo, and midfield run up. \$9 million grant. Will announce when runways will be closed for construction. Should be about a month for each. Construction won't begin until mid-July.

3. Legislative – no updates.

4. Other - Chris Eubanks asked about flight operations as defined in the Noise Report. Mike and Samantha clarified. Donna Johnston asked about decibel level 65 DnL? Mike explained about decibels versus DnL. She then asked about what is done when a plane is say 90 decibels on the noise report? Mike stated those were on airport property. Those that take place outside the airport would be actionable to follow up on. They also look at the frequency of the event. Must balance employees time and effort with the offenses. Chris Eubanks asked about Highlands Ranch? They do still have a portable monitor but don't have a way to produce a portable noise report. There was an issue but they have some data. Working on this.

Brad Pierce asked about the HOA suing Rocky Mountain Airport. How does that affect us? Avigation easements there warned HOA about air traffic and limited what aircraft could be at airport, and type of lights etc. Rocky Mountain Airport violated this and wants to be released from the easement. They are signatory to the easement. Would not happen to Centennial Airport. Centennial Airport is not signatory to the avigation easement with Douglas County. Rocky Mountain Airport is interested in forming a noise round table.

8. OLD BUSINESS:

A. TO REPRESENT CACNR AT NEXT ACPAA MEETINGS: 1. June 16 – Don Kuskie

August 11

September 8

October 13

November 10

December 8

B. CONGRESSIONAL QUIET SKIES CAUCUS- Brad said he needs one more piece of information to follow up with Congressman Jason Crow.

C. FOLLOW-UP ITEMS FROM PRIOR CACNR MEETINGS

D. OBSERVATIONS FROM UC DAVIS NOISE AND EMISSIONS SYMPOSIUM

1. Comments/Observations from Those Who Attended:

Bill Wasmund submitted a write up. UC Davis hasn't posted reviews (cleaned up versions) of presentations yet. Mike Fronapfel said Bill did a great job and it was hard to have it be a hybrid meeting. Donna Johnston said some people asked good questions, but they couldn't always be heard. Some questions weren't answered. Bill Wasmund asked about them posting presentations online. They did it last year. Wish they would post them sooner.

9. NEW BUSINESS:

A. INFORMATION SHARING -Donna Johnston is putting together a piece about Centennial Airport for Greenwood Village. She asked for any information that could help. Mike Fronapfel stated he has that information for her. She will contact him.

...Brad Pierce mentioned that his Rotary Club had a presentation from DEN. The representative said nothing about noise with all the expansion they have there. They want to get to 100 million passengers by 2030-2035.

Donna Johnston asked about United hiring 30,000 more pilots and training in Denver and how it would or not affect Centennial Airport? Mike Fronapfel stated there would be a ripple effect as more traffic in Denver means less flight tracks at Centennial. Strong demand for pilots with all airlines. More training traffic at Centennial.

Mike Anderson stated that Star Harbor is planning to build an aerospace training facility in Lone Tree. At the agreement phase now. Could potentially be a large campus to interest and train future astronauts. Mike said it could be potential more business for Centennial.

Chris Eubanks said the FAA is considering reducing the number of hours that a pilot would need to get a pilot's license. May drop to 1000 hours. Paul Krier said that it varies with educational level and flight hours.

10. PUBLIC COMMENT: Randy Johnson, Louviers his dog is feeling better. He has a lot less training traffic over his house. When he does get them he notifies Samantha. They do seem quieter and staying further west.

11. NEXT MEETINGS:

A. CACNR – July 6, 2022 6:30 p.m. 7565 S. Peoria Street, Unit 9D -
August 3, 2022 6:30 p.m. 7565 S. Peoria Street, Unit 9D
September 7, 2022 6:30 p.m. 7565 S. Peoria Street, Unit 9D
October 5, 2022 6:30 p.m. 7565 S. Peoria Street, Unit 9D

B. ACPAA – June 16, 2022 3:00 p.m. 7565 S. Peoria Street, Unit 9D
July 2022 NOT MEETING
August 11, 2022 3:00 p.m. 7565 S. Peoria Street, Unit 9D
September 8, 2022 3:00 p.m. 7565 S. Peoria Street, Unit 9D

12. ADJOURN: Meeting adjourned at 7:44 pm.

Melissa Coudeyras, Acting Secretary



CENTENNIAL AIRPORT COMMUNITY NOISE ROUNDTABLE
MINUTES
May 4, 2022

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:** Melissa Coudeyras **Treasurer:** Andy Jones **Secretary:** Alison Biggs

1. **CALL TO ORDER, ROLL CALL, and QUORUM:** The meeting was called to order at 6:34 p.m. by Chair Brad Pierce. The following were in attendance and a quorum was present:

Arapahoe County:	Carrie Warren-Gully (virtual)	Greenwood Village	Donna Johnston
Arapahoe County:	Paul Krier	Lone Tree:	Mike Anderson
Douglas County:	Dan Avery	ACPAA:	Mike Fronapfel
Douglas County:	Alison Biggs	AOPA:	Bob Doubek
Aurora:	Brad Pierce	CABA:	Don Kuskie
Castle Pines:	Chris Eubanks	FAA APA Control Tower:	Ron Curry
Centennial:	Candace Moon	Wings Over the Rockies:	Bill Wasmund
Foxfield:	Pam Thompson		

Others in attendance were John Hirshman, AOPA Alternate Representative; Randy Johnson of Louviers; and ACPAA staff Samantha Blymyer.

Those absent were:

Castle Rock:	Laura Cavey/Sandy Vossler	CDOT Aeronautics Div:	Todd Green/Vacant
Cherry Hills Village:	Al Blum/Afshin Safavi	FAA District Office:	John Bauer/John Sweeney
Highlands Ranch Metro:	Andy Jones/Renee Anderson	FAA TRACON:	Steve Martin/Bill Dunn
Parker:	Amy Holland/Todd Hendreks		

SPECIAL PRESENTATION: Ron Curry, FAA APA Control Tower

Ron Currey of the Centennial Airport Control Tower provided information about how air traffic is handled from center to center, so assure flights are safely handled. The difference between instrument flight rules (IFR) and visual flight rules (VFR) and how pilots flying under each are handled by the air traffic controllers was reviewed.

He noted that Centennial Airport is busier than many large airports in the country, and at times, he personally had had as many as nine aircraft in a pattern at once, which is extremely hard to do. The collision at Centennial had caused the FAA to require staggering arrivals on the two parallel runways there, which means the airport cannot accommodate as many aircraft in a time frame, which causes the pattern to get stretched out more often than it used to, affecting noise in the neighborhoods.

The rising terrain, particularly south of the airport, and the newly installed power lines have presented both old and new challenges for air traffic to and from Centennial Airport. However, the Denver Metroplex Project does not appear to have changed flight patterns here as much as originally feared. Denver's airspace is classes as Bravo, while Centennial's is currently Delta. There is a possibility that could change to Charlie, as one of the requirements is 75,000 IFR flights, which Centennial reached last year. Centennial attracts many flights from fleets of planes, those operated by the very wealthy, businesses, etc.

There was general agreement these kinds of face-to-face meetings and outreach are good and should be continued. As Currey is the Alternate Representative for the CACNR Advisory Member FAA APA Control Tower, he was thanked for coming and for sharing information. IT was hoped he could attend on a more regular basis.

2. **PUBLIC COMMENT:**

A. **VIRTUAL/IN-PERSON MEETING ATTENDEES** – Randy Johnson of Louviers noted there did not seem to be as many flights over his area as usual, which was welcomed. His dog Shelby was also present, and definitely welcomes any lessening of flights.

B. **FROM CACNR EMAIL ADDRESS** – None.

3. **CONSENT AGENDA:**

A. & B. – **DRAFT MINUTES AND TREASURER'S REPORT** - The Consent Agenda included the April 6, 2022 draft CACNR minutes; and a Treasurer's Report from 04/29/22 which showed a balance of \$26,660.75. The Consent Agenda also included the March 2022 Noise Report. On the motion of Donna Johnston, duly seconded, the Consent Agenda was approved.

C. **NOISE REPORT** – The March 2022 Noise Report included the following information:

March Total Operations: 25,048 March Total Local Operations: 10,485
 Year to Date Total Operations: 70,053 Year to Date Local Operations: 29,654

517 Complaints from 25,048 Total Operations in March

Noise Events:

<u>March Totals:</u>	<u>March 60 – 69 db:</u>	<u>March 70 – 79 db:</u>	<u>March 80 – 89 db:</u>
9,329 Golf Course	5,411 Golf Course	3,663 Golf Course	515 Airport East
6,858 Meridian	5,271 Meridian	1,524 Meridian	246 Golf Course
2,993 Airport East	1,819 State Park	884 Airport East	54 Meridian
2,493 State Park	1,567 Airport East	605 State Park	14 State Park
1,605 Parker	1,427 Parker	176 Parker	6 Greenwood Village
1,445 Castle Rock	1,350 Castle Rock	146 Greenwood Village	5 Grandview Estates
1,346 Grandview Estates	1,203 Grandview Estates	138 Grandview Estates	4 Castle Rock
1,155 Greenwood Village	1,003 Greenwood Village	91 Castle Rock	2 Lone Tree
669 Lone Tree	644 Lone Tree	53 Lone Tree	2 Parker
473 Hunters Hill	446 Hunters Hill	27 Hunters Hill	- Castle Pines
128 Sagebrush Park	117 Sagebrush Park	11 Sagebrush Park	- Castle Rock
91 Castle Pines	84 Castle Pines	7 Castle Pines	- Sagebrush Park

March Noise events in the 90+ decibel range were: Airport East – 27 Golf Course – 9 State Park - 1

March Noise Complaints(517) and Numbers of Households (38)

YTD Complaints & Number of Households

<u>Noise Complaints:</u>	<u>Number of Households:</u>	<u>Complaints:</u>	<u>Households:</u>
190 Greenwood Village (37%)	7 Greenwood Village (18%)	445 Greenwood Village	8 UAC
110 Centennial (21%)	7 UAC (18%)	233 Centennial	7 Greenwood Village
84 Unincorporated Arapahoe Cnty (16%)	5 Centennial (13%)	200 UAC	6 Other
59 Castle Rock (11%)	5 Other (13%)	124 Castle Rock	5 Centennial
25 Other (5%)	3 Castle Rock (8%)	85 Other	4 Castle Rock
18 Unincorporated Douglas County (3%)	3 Parker (8%)	39 UDC	4 Parker
12 Aurora (2%)	2 Aurora (5%)	35 Aurora	3 UDC
10 Denver (2%)	2 UDC (5%)	25 Parker	2 Aurora
4 Highlands Ranch	2 Lone Tree (5%)	10 Denver	2 Highlands Ranch
3 Parker (0.6%)	1 Denver (3%)	7 Highlands Ranch	2 Lone Tree
2 Lone Tree (0.4%)	1 Highlands Ranch (3%)	4 Lone Tree	1 Denver

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

Greenwood Village – 380 (31%)	UAC – 82 (7%)
Centennial – 182 (15%)	UAC – 81 (7%)
Castle Rock – 107 ((9%)	

In March, 37 responses were requested from 517 noise complaints, with 14 of those requests made by email (38%), and 23 made by telephone (62%).

Of the 517 complaints in March 2022, 474 were about flights during day hours (92%); 43 were about night flights (8%).

In March, props accounted for 79% of the complaints by aircraft type; jets accounted for 18% of the complaint; and 3% were about helicopters.

In March, departures were responsible for 47% of the complaints. Arrivals were responsible for 25% of the complaints, and Training was responsible for 28% of the complaints.

The Year to Date complaint maps were not provided with this report, and a Radar Track Density Map was also not available. Staff continues to work to provide this information.

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

5. **COMMITTEE REPORTS:**

A. **EXECUTIVE /WORK PLAN COMMITTEES** – Meeting with ACPAA Staff re Structure of Reports to ACPAA.

Brad Pierce indicated the Executive Committee had met with airport staff to determine the most efficient way for CACNR to submit reports for the ACPAA meetings. Complete reports can be written which will be shared with the ACPAA Board in its Board Packets, and those reports will then be placed in a more condensed, bulleted format to placement in the slide deck that is shown during the meeting. Both versions of the reports will carry the CACNR logo. Paul Krier, who had attended the meeting, would be submitting reports for the May ACPAA meeting in this fashion and would be willing to show anyone in the future how to create them.

B. **COMMUNITY OUTREACH** – Mike Anderson indicated the committee had met, and had Invited Melissa Coudeyras to help. Unfortunately, Amy Holland had not kept up with placing information on the website, so the plan was to contact Trish Coberly to see if she would be willing/able to work with the Committee in bringing things back as they should be. Mike Fronapfel indicated the airport perhaps could help once its new communications director is on board as well.

C. **FLY QUIET** –Bill Wasmund presented a written report and highlighted some portions of it. Information about the use of climb propellers was shared. Wasmund had spoken with Christine Chipman of Aspen Flying Club. A new practice box was

being developed to the east which would be accessed by flying east from Centennial. It would generally be north and east of Kiowa and north of the Elbert County Fairgrounds. It was being tested now and would show up on the club's website soon; all flight schools would be able to use it.

D. **NOISE MONITORS** – Candace Moon noted that Bette Todd had given her information and a handbook from when the noise monitors were first being considered. She considered it very helpful, and distributed extra copies to those who were interested. Some data was available from the portable noise monitor which had been placed in Highlands Ranch, although technical difficulties had prevented obtaining a full picture of the noise during the time it was there. There is a possibility it can be placed there again in the near future. Moon had gone to Buckley Air Force Base, where the National Guard had indicated more planes would be returning to the area in mid-May, for rest and then additional training.

E. **WORK PLAN** – The Committee had not met

6. **FAA REPORTS:**

A. **CENTENNIAL (APA) AIR TRAFFIC CONTROL TOWER** – See the Special Presentation.

7. **OTHER REGULAR MONTHLY REPORTS:**

A. **ACPAA** – The report Donna Johnston had submitted to the April ACPAA meeting for CACNR was included with the emailed meeting documents.

B. **AIRPORT DIRECTOR'S REPORT** –

1. Flight School Engagement Meeting Summary - Mike Fronapfel reported three of the flight schools had been at the April 15, 2022 engagement meeting, and it had gone well. A meeting summary and proposed initiatives had been distributed, and were reviewed by Fronapfel and Samantha Blymyer. The next similar meeting would be held in June, with possibly the air traffic control tower and the FAA involved.

2. Airport Activity - Fronapfel indicated the airport had been busy, with a 20% increase in jet fuel sales. Growth indicates there are 6 hangars now, with 18 more planned to come in June.

3. Legislation – The grant to improve the touch and go runway is still being awaited.

8. **OLD BUSINESS:**

A. **TO REPRESENT CACNR AT 2022 ACPAA MEETINGS** – Paul Krier would handle the May 12 meeting. Still to be filled were June 9, August 11, September 8, October 13, November 10, and December 8.

B. **CONGRESSIONAL QUIET SKIES CAUCUS** – Brad Pierce was close to being ready to address this topic with Jason Crow's staff.

C. **FOLLOW-UP ITEMS FROM PRIOR CACNR MEETINGS** – All were asked to utilize the list in relation to their committee work.

D. **PRELIMINARY OBSERVATIONS FROM UC DAVIS NOISE AND EMISSIONS SYMPOSIUM** -

1. Aviation Noise and Its Impact on Community Health: Research and Proposed Legislation - Brad Pierce provided the handout from this session, which was presented by the National Organization to Insure a Sound Controlled Environment (N.O.I.S.E.), of which he is President.

2. Comments/Observations from Those Who Attended - There had only been 90 individuals on-site at the meeting, with 100 attending virtually. That had affected the overall satisfaction level, as it had been hard to do follow-up. Some general themes included concern that vertical take-off aircraft could present noise problems; frustration with how the FAA handles complaints – and a general feeling that the FAA is not doing anything to address the many concerns being expressed by the public; better forecasting is needed; and the need to measure the duration of noise, not just the location and time. There had apparently been few FAA people there, demonstrating the disconnect between the FAA and those they are supposed to serve. It was suggested the only way to reach the FAA is through Congress. More would be reported at the next meeting.

9. **NEW BUSINESS:**

A. **INFORMATION SHARING** – None

10. **PUBLIC COMMENT:** None

11. **NEXT MEETINGS:**

A. **CACNR** – June 1, 2022 6:30 p.m. 7565 S. Peoria Street, Unit 9D
July 6, 2022 6:30 p.m. 7565 S. Peoria Street, Unit 9D

B. **ACPAA** – May 12, 2022 3:00 p.m. hybrid in-person/virtual meeting
June 16, 2022 3:00 p.m. hybrid in-person/virtual meeting
July 2022 NOT MEETING

12. **ADJOURNMENT:** The meeting was adjourned at 8:31 p.m.

Alison Biggs, Secretary

CENTENNIAL AIRPORT COMMUNITY NOISE ROUNDTABLE



2022 BUDGET - Approved October 6, 2021

updated to reflect carryover from 2021

	CACNR 2022 BUDGET	ACTUAL TO DATE	NOTES
INCOME:		as of 05/26/2022	
CARRY OVER FROM 2021	\$ 4,765.75	\$ 4,765.75	carry over from 2021
ACPAA	\$ 10,000.00	\$ 10,000.00	
CACNR REGULAR MEMBERS	\$ 13,250.00	\$ 13,250.00	
TOTAL INCOME:	\$ 28,015.75	\$ 28,015.75	
EXPENDITURES:			
WORK PROGRAM:			
COMMUNITY OUTREACH	\$ 2,000.00	\$ -	Website maintenance and various projects tbd
FLY QUIET	\$ 1,000.00	\$ -	Various Projects tbd
NOISE MONITOR	\$ 1,000.00	\$ -	Various Projects tbd
WORK PLAN	\$ 500.00	\$ -	Orientation manual, annual report, other projects tbd
EDUCATION			
2 Reps to UC Davis Symposium	\$ 5,000.00	\$ 2,180.45	Symposium to be at UC Davis; estimate based on prior on-site symposiums
2 Reps to 2 N.O.I.S.E. Conferences	\$ 4,000.00	\$ -	Based on prior years' on-site conferences
		\$ -	
CONSULTATION/ TASK SUPPORT	\$ 2,000.00	\$ 525.00	Projects with Jason Schwartz
MEMBERSHIP DUES	\$ 1,000.00	\$ 1,000.00	N.O.I.S.E.
ADMINISTRATIVE	\$ 1,000.00	\$ -	Part time secretarial assistance
	\$ 1,000.00	\$ -	Legal
RESERVE	\$ 9,515.75	\$ -	for presently unidentified and unanticipated expenses and/or additional CACNR activities consistent with the approved Work Plan.
TOTAL EXPENDITURES:	\$ 28,015.75	\$ 3,705.45	
CURRENT BALANCE		\$ 24,310.30	
CARRY OVER TO 2023	\$ -		Actual to be determined at the end of 2022
** Usually includes registration, travel, ground transportation, lodging, meals.			

FRAME OF REFERENCE: MOU Funding Structure adopted 12/13/2018 calls for initial funding to generate \$22,250, with \$10,000 from ACPAA and \$12,250 to come from CANR's Regular Members. "This funding would be in place for the next two years, subject to annual appropriations. 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."

PLEASE NOTE FUNDING FROM ACPAA AND REGULAR MEMBERS WAS NOT REQUESTED FOR 2020 and 2021 DUE TO THE ECONOMIC IMPACT OF THE CORONAVIRUS PANDEMIC. IT IS ANTICIPATED THE SECOND YEAR OF THE FUNDING STRUCTURE OUTLINED ABOVE WILL BE RESUMED FOR 2022



Centennial Airport Monthly Noise Report



May 2022

Item 14

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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_{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.

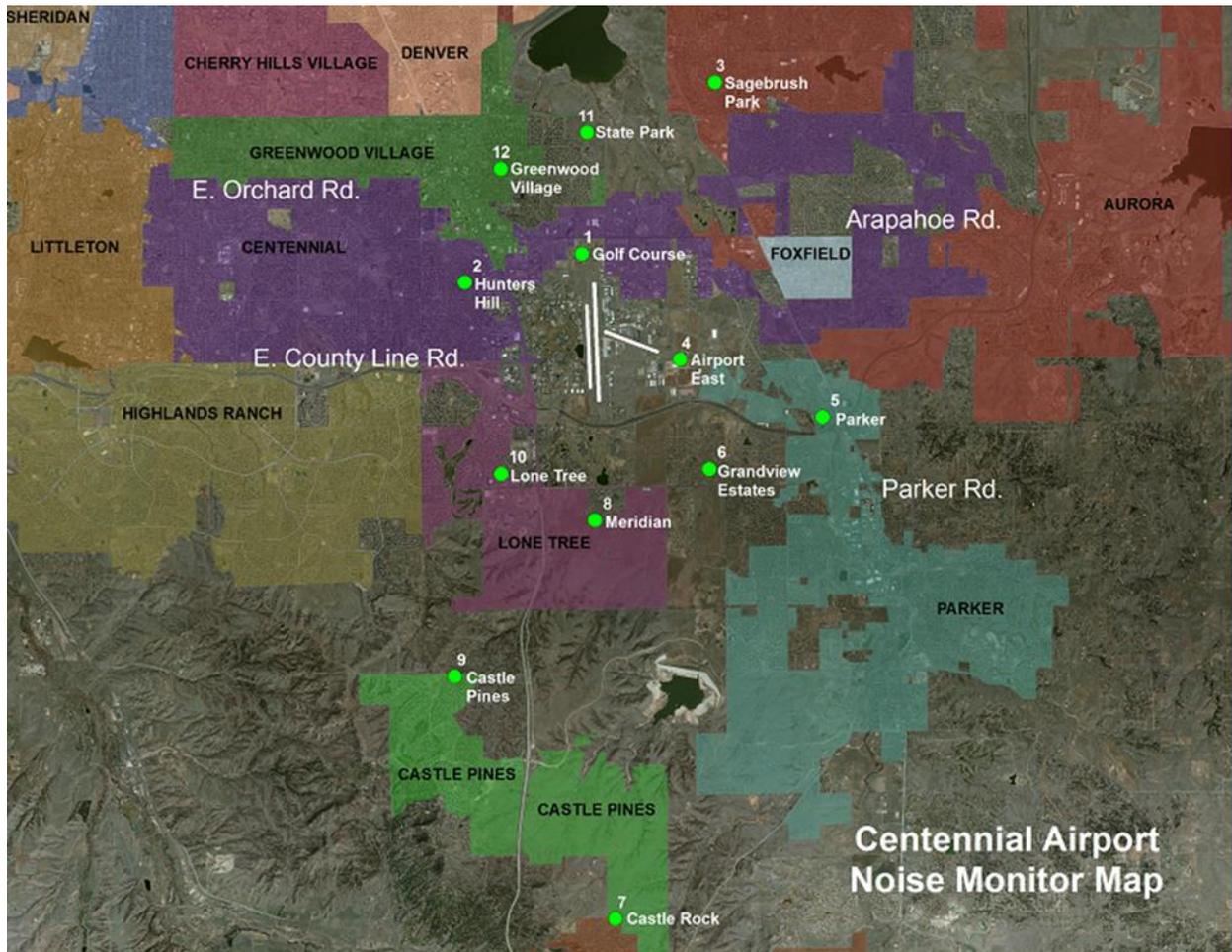
Visual Flight Rules (VFR) – A set of regulations under which a pilot operates an aircraft in weather conditions generally clear enough to allow the pilot to see where the aircraft is going. A flight plan is not required when the pilot is operating under Visual Flight Rules.

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

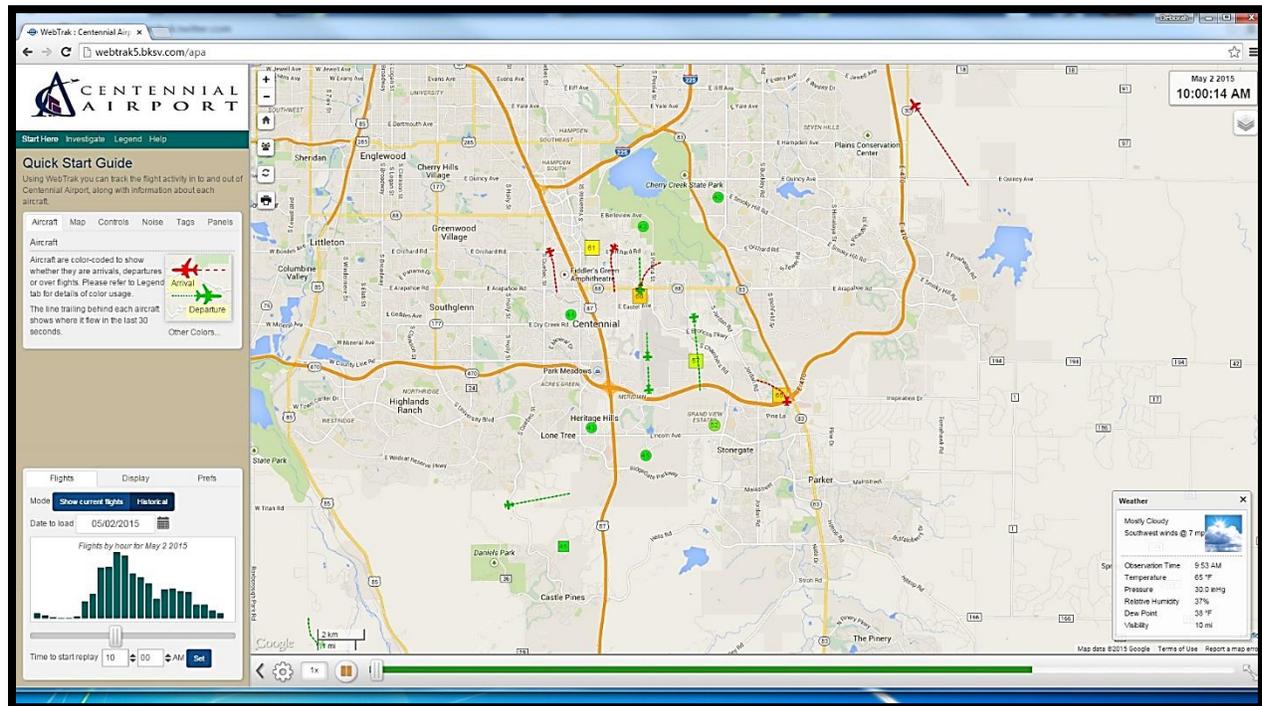
3 ABOUT APA'S NOISE MONITORING PROGRAM

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://viewpoint.emsbk.com/apa8>

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				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
Y-T-D Totals	12,711	17,809	808	31,328	6,245	28,369	523	35,137	52,655	219	52,874

	IFR OVERFLIGHTS				VFR OVERFLIGHTS				TOTAL OPERATIONS	
	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				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	
Y-T-D Totals	15	21	3	39	210	645	56	911	Y-T-D Totals	120,289

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:

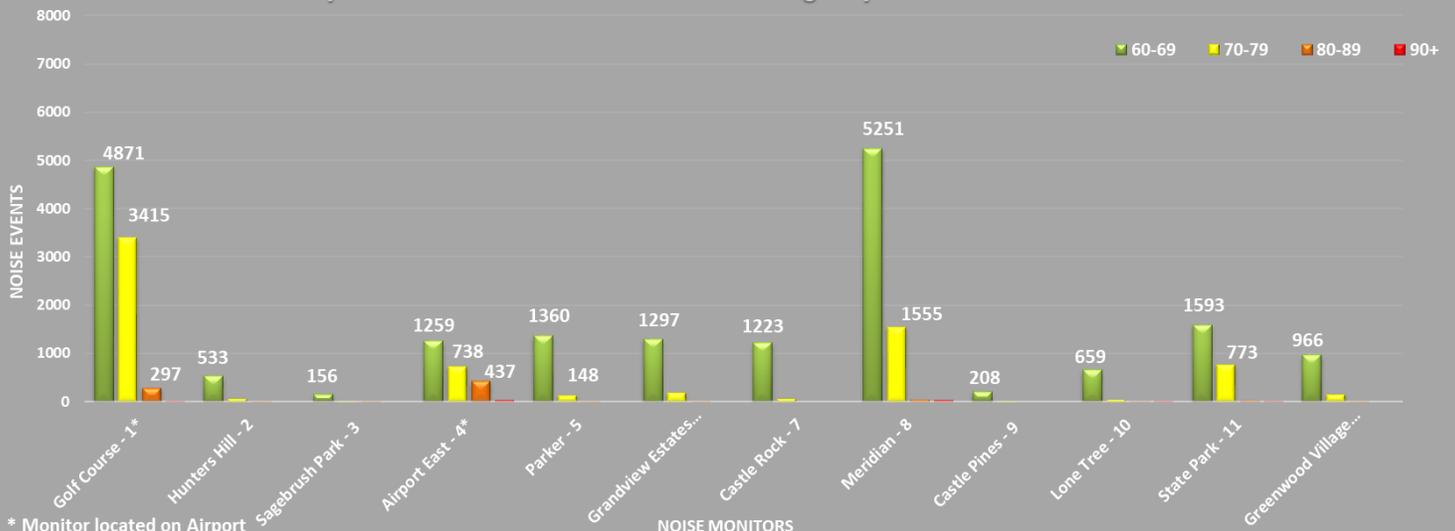
First, the noise event must exceed the ambient noise level. This number varies at every monitor but is generally greater than 50-55db. Secondly, the noise event must last longer than 5 seconds. Lastly, using radar data, the system must correlate an aircraft with the noise event. This ensures that the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

May 2022 Aircraft Noise Event Decibel Range By Monitor					
Monitor	60-69	70-79	80-89	90+	Totals
Golf Course- 1*	4871	3415	297	9	8592
Hunters Hill- 2	533	70	5	0	608
Sagebrush Park- 3	156	20	1	0	177
Airport East- 4*	1259	738	437	37	2471
Parker- 5	1360	148	3	0	1511
Grandview Estates- 6	1297	193	10	0	1500
Castle Rock- 7	1223	82	0	0	1305
Meridian- 8	5251	1555	56	43	6905
Castle Pines- 9	208	23	0	0	231
Lone Tree- 10	659	63	18	20	760
State Park- 11	1593	773	33	3	2402
Greenwood Village- 12	966	163	4	0	1133
Totals	19376	7243	864	112	27595

*Monitor located on Airport

May 2022 Aircraft Noise Event dB Range by Monitor



* Monitor located on Airport

NOISE MONITORS

7 MAY 2022 NOISE COMPLAINTS

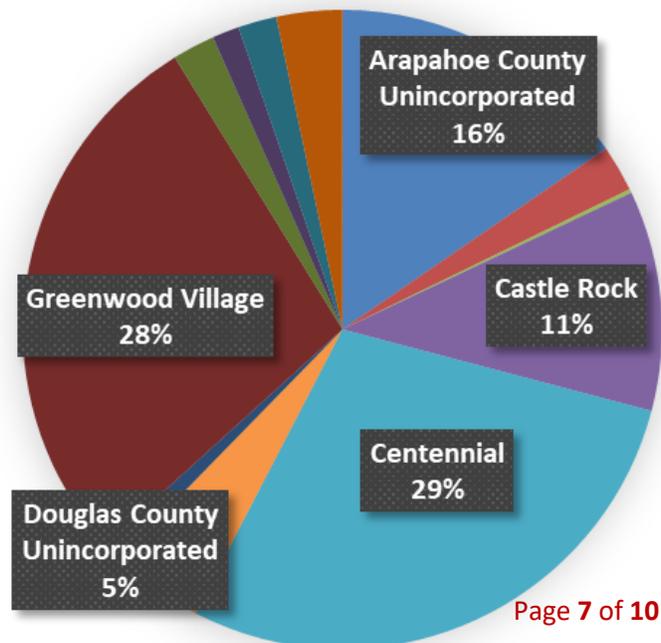
In May, Centennial Airport received 512 complaints from 48 households.

May Noise Complaints			YTD		Population	% Of Population Issuing Complaints YTD
Municipality	Complaints	Households	Complaints	Households	Census 2018	
Arapahoe County Unincorporated	79	7	349	13	83,764	0.015%
Aurora	12	3	65	4	374,114	0.001%
Castle Pines	1	1	2	1	10,507	0.009%
Castle Rock	57	4	223	5	64,827	0.007%
Centennial	146	3	456	5	110,831	0.004%
Cherry Hills Village	0	0	0	0	6,650	0%
Denver	0	0	15	1	716,492	0.0001%
Douglas County Unincorporated	24	7	78	8	100,536*	0.007%
Greenwood Village	143	7	630	13	15,801	0.08%
Highlands Ranch	11	2	26	3	105,264	0.002%
Lone Tree	10	4	16	5	14,653	0.03%
Parker	0	0	25	4	55,636	0.007%
Other	29	10	133	17	UNK	UNK
Total	512	48	2,018	79	1,659,075	>0.004%

*Douglas County Unincorporated Population with Highlands Ranch Removed

*Other: Littleton, Englewood, Boulder

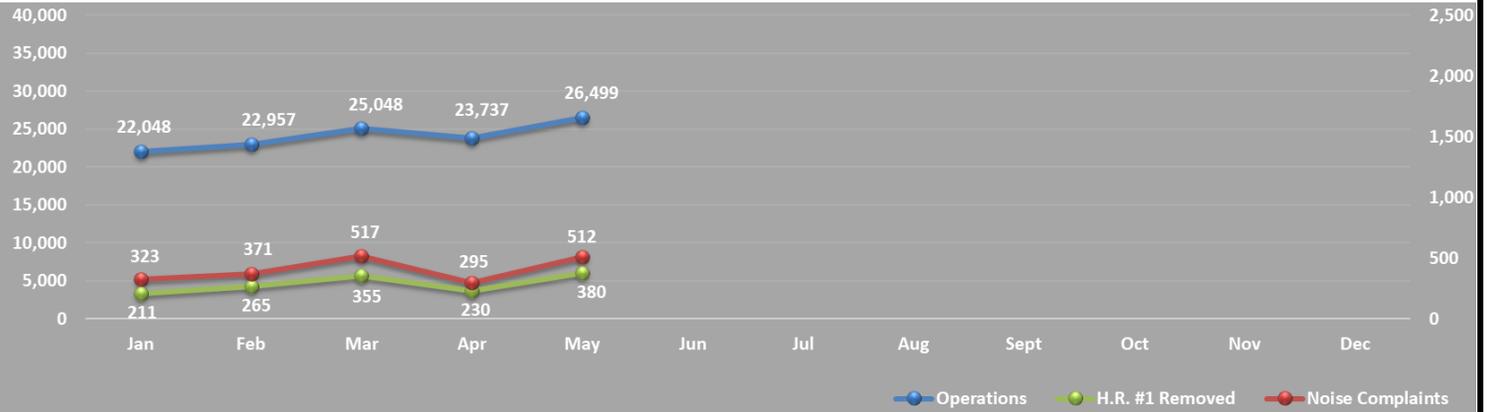
Complaints per Municipality



Noise Complaints Response Requested	
Email	15
Phone	18
Total	33

Time Complaint Received	May
Day Hours (7:00 am - 9:59pm)	484
Night Hours (10:00 pm - 6:59 am)	28
TOTAL	512

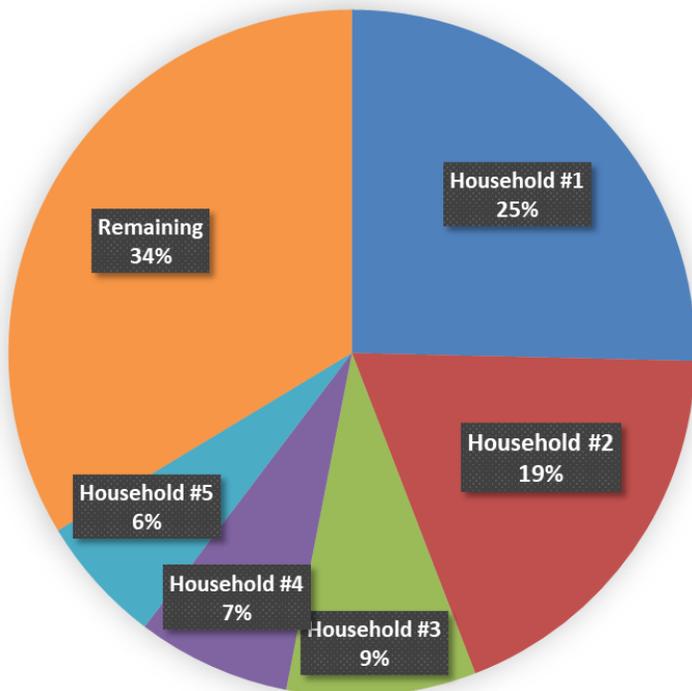
Current 12 Month Trend



Previous Year 13 Month Trend



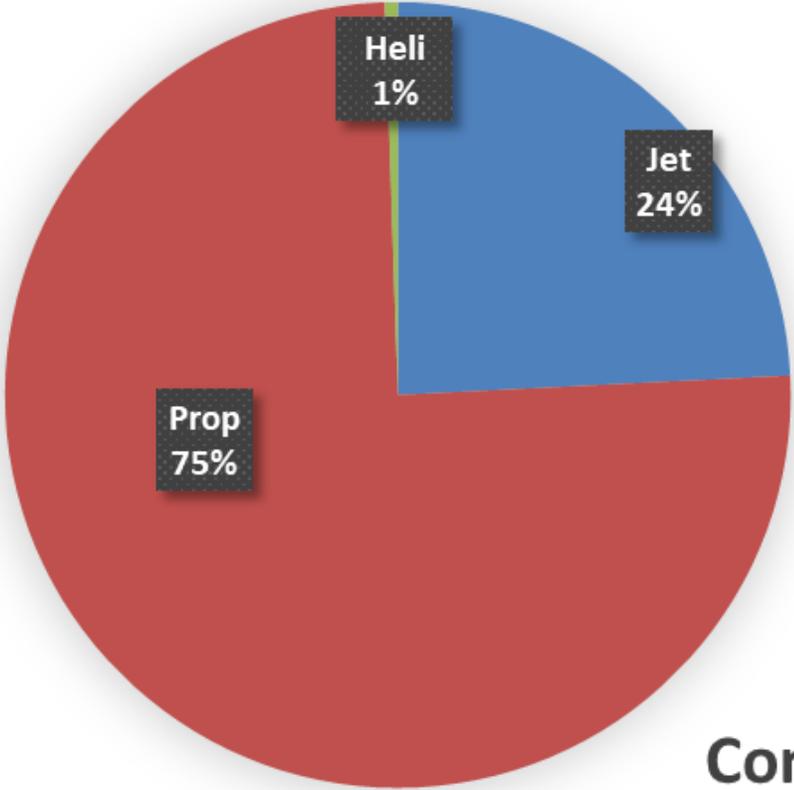
Top 5 Household Complaints YTD



Top 5 Household Complaints YTD		
Household	Complaints	Households
Household #1	512	Greenwood Village
Household #2	379	Centennial
Household #3	180	Castle Rock
Household #4	146	Arapahoe County Unincorporated
Household #5	122	Arapahoe County Unincorporated
Remaining		679
Total		2,018

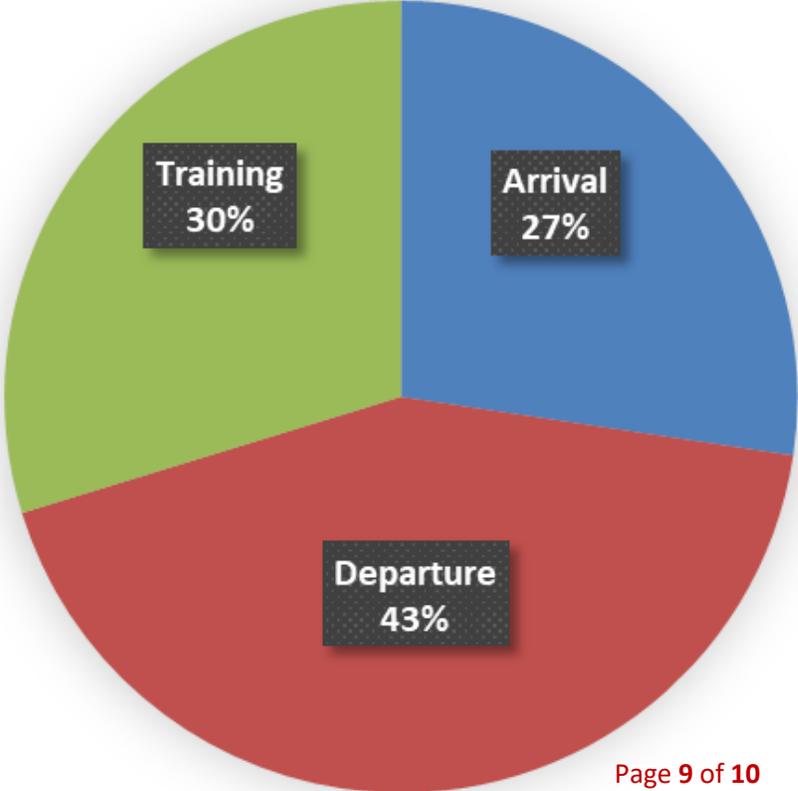
Complaints by Aircraft Type

May 2022



*#1 Household Removed

Complaints by Operation Type



*#1 Household Removed

8 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

FOLLOW UP ITEMS FOR INDIVIDUALS and EXECUTIVE/WORK PLAN COMMITTEE

BRAD PIERCE AND OTHERS

1. Follow up to be done with Jason Crow re Congressional Quiet Skies Caucus. **Brad Pierce/Emily Tranter (N.O.I.S.E.) 03/03/21 In progress**
2. Provide link to the report from the U.S. Department of Transportation, Office of Inspector General to Colorado members of Congressional Quiet Skies Caucus. **Brad Pierce/Emily Tranter 05/05/21**
3. Provide information re the town of Elizabeth becoming CACNR member to Kim Hellweg **Brad Pierce 12/01/21**
4. Make additional appointment to committees. **Brad Pierce 04/06/22**

EXECUTIVE COMMITTEE

1. More meetings to be held with flight schools (one held). Information being gathered from flight schools to see if there is any consistency. **EC with Fly Quiet/Airport Staff 05/05/21**

WORK PLAN COMMITTEE

1. Continue work on CACNR Orientation materials for placement on CACNR website. **Work Plan and Community Outreach Committees 06/02/21**
2. Review maps to be used in Orientation materials, to provide more detail as appropriate **WP/Staff 11/03/21**
3. Consider possible need for 'outside' assistance in such things as getting the orientation material on the website **WP and Community Outreach Committees 11/03/21**

ALL COMMITTEES

1. Review recommendations from the Flight Schools Engagement Summary Report and Recommendations to see how they mesh with each committee's current work; outline how to proceed. **04/06/22**
2. See if any jurisdiction has any technological expertise it might 'donate' to CACNR. **04/06/22**
3. Review and address items on this list – it is getting too long. **04/06/22**

OTHER

1. Follow-up possibly making the Good Neighbor Procedure an official procedure. **Liam Clark 05/05/21**
2. Determine feasibility and cost of adding a permanent monitor to the system. **10/06/21**
3. Ask control tower to attend the meeting under development and referenced in #7 above *(CACNR to determine what, if any, additional information about noise and its effect on the public the public would like to regularly receive, and how that would be used; explore capabilities of current noise monitor system to generate that information; explore capabilities and costs of other systems if appropriate.)* **04/07/21**
4. Request was made for a completion date to be added for each item, so CACNR needs to identify its expectations in that regard. Dates need to be established at the time needed action is identified. **ALL**

5. Could NAG be formally incorporated into flight school best practices – consult with flight schools.
02/03/21

6. Include the impacts of flight noise in immediate proximity to the airport. **04/07 21** (From the minutes, during discussion of the training areas – “Comment was made that In addition to working with the flight schools and attention to the training boxes, the impacts of flight noise in the immediate proximity to the airport should not be lost, and perhaps should be included in the discussions. It was also noted the FAA’s APA control tower should be asked to participate in any such meeting as well.”)

FOLLOW UP ITEMS FOR COMMUNITY OUTREACH COMMITTEE

COMMUNITY OUTREACH COMMITTEE

1. Explore ways to utilize social media to reach the public. **Community Outreach Committee** 10/06/21
2. Provide information to the public about the anticipated demand for more flight training as the need for new pilots is increasing. **Community Outreach Committee** 04/07/21
3. Contact Trish Coberly to see if she would be willing to provide more assistance with maintaining the website. **Community Outreach Committee** 04/06/22

ALL COMMITTEES

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FOLLOW UP ITEMS FOR FLY QUIET COMMITTEE

FLY QUIET COMMITTEE

1. Continue work to identify location of 2nd noise abatement sign. **Fly Quiet Committee 08/04/21 in progress**
2. Continue exploring incentives for voluntary use of fly quiet procedures; **Fly Quiet Committee 09/01/21 in progress**
 - a. exploring how hotline information is collected and used at other airports
 - b. possibly pursue inviting those high on the complaint list to learn more about how their actions affect the communities.
3. If appropriate, share information about carbon fiber composite materials and how propeller upgrades might take advantage of reduced power settings, resulting in less noise, weight reduction, longer service life, and possibly increased cruise speed with pilots and with flight schools. **10/06/21 in progress**
4. Fly Quiet reconsidering approach to recognizing pilots who fly quiet. **Fly Quiet Committee 11/03/21**
5. See if Noise Abatement Guidelines (NAG) should be updated **Fly Quiet Committee 02/03/21**
6. Staff updates awaited for adding Noise Abatement Guidelines to Whispertrack's electronic tablet application. **Fly Quiet Committee with Rachel Keller now Mike Fronapfel and/or Samantha Blymyer 6/02/21**

ALL COMMITTEES

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Fly Quiet Committee – June 2022 Monthly Report

Bill Wasmund, Chair

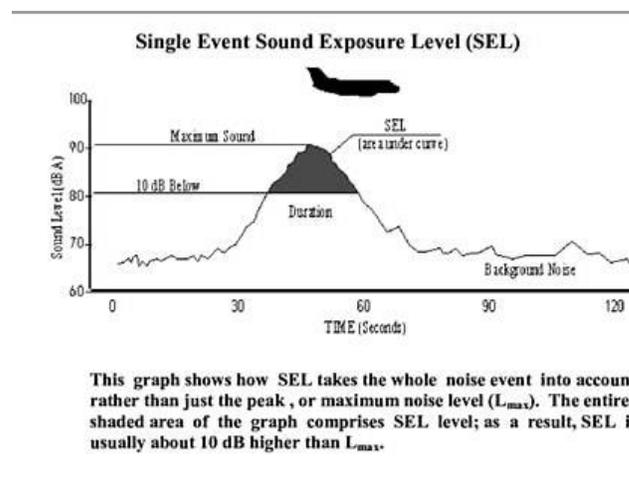
Highlights from the UC Davis Aviation Noise and Emissions Symposium

Noise Metrics and Impacts: Thinking Beyond DNL

Recommendations to Improve FAA Outreach Through Enhanced Noise Metrics

Government Accountability Office – “Congressional Watchdog”. Recommendations to the FAA regarding the use of several Alternative Metrics in combination to define noise impacts in addition to DNL to improve FAA outreach as PBN becomes more commonplace.

Sound Exposure Level SEL – Tracking of a noise event in its entirety caused by a single aircraft overhead



Number Above – Number of events that exceed a selected sound level threshold such as 65 DNL over a 24-hour period

Time Above – Total time that aircraft noise levels exceed a selected sound level

Recommendations

- Recommended Further defining Enhanced Noise Alternative Metrics and circumstances for their use to aid in FAA internal assessments of noise impacts related to PBN
- Recommended the incorporation of additional communication tools that more clearly convey expected impacts such as use of the Enhanced Noise Alternative Metrics above and enhanced visualization applications.
- The FAA agreed with the GAO recommendations and plan to **take steps** to implement them by the end of 2022. Reality – Implementation not expected for 2-3 years. Updates will be posted at www.gao.gov/products/GAO-21-103933

A Framework for the Analysis of Alternative Metrics for Aviation Noise Impacts (What should they be?)

Stanford University Aerospace Design Laboratory

MONA - (Metroplex Overflight Noise Analysis) Using ADS-B, sound monitoring, and AEDT to collect data on position, speed, type of aircraft. Can be deployed around the world. Use as a tool to determine scientifically derived metrics that can be used to measure noise annoyance in a post PBN world.

- Many elements comprise what a good alternative metric should be and DNL alone is not a good predictor of annoyance measurement in 2020s. Stopped short of revealing what metrics in addition to DNL, Counts, Nabove60 etc. should be used. A one size fits all set of metrics is not valid due to the variety of aircraft and background noise level by area as well as vicinity to an airport and developing Metroplex PBN routes.

Airport Electronic Sign – Requested permission to add noise abatement statements to the KAPA electronic sign on Peoria. A re-visit of this request is pending with Manager of Communications/PIO Chris Thompson.

Flight School Practice Area Update - Two additional practice boxes located East of Kiowa are being developed by Aspen Flying Club in collaboration with the other flight schools.

FOLLOW UP ITEMS FOR NOISE MONITORS COMMITTEE

NOISE MONITOR COMMITTEE

1. Hold education session about capabilities of the noise monitoring system, to include ambient thresholds which are adjusted annually, additional types of data available which CACNR would find useful, Information of how locations of current monitors were selected, etc. **Noise Monitor Committee/EC**
08/04/21
2. Provide future in depth look at capabilities of the noise monitoring software. **Noise Monitor Committee**
12/01/21
3. Consider using someone such as Eugene Reindel of Harris Miller Miller & Hanson, Inc. (HMMH) who was instrumental in the placement and workings of the monitors available for a future meeting as appropriate.
05/05/21

ALL COMMITTEES

1. Review recommendations from the Flight Schools Engagement Summary Report and Recommendations to see how they mesh with each committee's current work; outline how to proceed. **04/06/22**
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CENTENNIAL AIRPORT COMMUNITY NOISE ROUNDTABLE
POLICIES AND PROCEDURES

(Suggested Revisions to Policies and Procedures Originally Approved 9/4/19 and 10/2/19)

The following policies were approved September 4, 2019 and October 2, 2019:

1. Expenditures of CACNR funds not to exceed \$500 may be approved by the Executive Committee (EC).
2. Expenditures of CACNR funds exceeding \$500 will be submitted to CACNR for approval.
3. ~~Those wishing to utilize services under the Consulting Services Agreement with Jason Schwartz through ABCx2, LLC (to come separately) will complete a Task Order and submit it to the EC which will confer with the Consultant regarding the request and the amount of time and funding needed.~~
4. Those wishing to utilize CACNR funds for a purpose not involving Schwartz/ABCx2, LLC will complete a form (to come separately) similar to the Task Order and **shall submit a request in writing** submit it 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.**
5. Expenses **will be paid** for two (2) CACNR Representatives to attend the UC Davis symposium **annually**, ~~will be grandfathered and not need special action as this is a long-standing CACNR policy.~~
6. ~~The long-standing policy to cover expenses for one (1) CACNR Representative to attend the Fall N.O.I.S.E. conference was amended to cover expenses~~ **Expenses will be paid** for up to 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. ~~Expenses for the additional personnel will fall under the same grandfathering policy as previously approved~~

The following procedure was approved September 4, 2019

1. ~~When invoicing the CACNR Members for 2020, CACNR will send a reminder of the language included in the approved MOU funding structure document as shown below, and although it is not~~ date, and plans for 2020.
 2. ~~The WP Committee will draft a 2020 budget, expanding on the sample budget included in the funding structure document. Moving forward, the Work Plan~~ **The Executive** Committee will draft an annual budget for CACNR, **to be** approval by the October meeting of each year.
- ** This funding structure would be in place for the next two years, subject to annual appropriations. 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 COMMUNITY NOISE ROUNDTABLE
POLICIES AND PROCEDURES

(What P & P would look like if above revisions are adopted)

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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.



CACNR Report to ACPAA for June 1, 2022

Don Kuskie, CABA, representing CACNR

Our June 1, 2022 meeting started off with Public Comment. We received one email sent to the CACNR email address. It was from a person who lives in South meridian area about a loud plane that went over her house at 8:05 am that sounded like it was going to crash land in her neighborhood. Samantha Blymer looked into it and stated it wasn't flying low. She also mentioned an antique type plane that flew over that was loud. This was probably the B-29 fighter plane that was in town. A resident from said he has a lot less training traffic over his house.

Consent agenda was approved.

The Community Outreach Committee has been focusing on our website to update it. One of the committee members contacted our website designer. The process would be in two parts: 1) to post our agendas, minutes and Noise Reports that have not been updated 2) ongoing maintenance to keep our website fresh and up to date. The website designer is willing to perform both tasks. We will hire her to accomplish that. The committee will coordinate with airport staff to obtain the necessary documents and make sure efforts are not duplicated.

The Fly Quiet Committee reported on the follow up items-committee is working on follow up items such as working on second noise sign, fly quiet procedures update, and propeller materials.

Bob Doubek, ACPAA Treasurer gave the following updates from the May Board meeting Hotel status update-conditional approval granted for a new lease, Signature purchased all assets of TAC, board approved change of FBO from TAC Air to Signature, approval was given to purchase more snow removal equipment. \$350,000. Bob mentioned Paul Krier, CACNR Vice Chair, gave a report summarizing our May meeting.

Mike Fronapfel gave the Airport Director's Report on these items: Flight School Engagement Meeting Summary & Proposed Initiatives-next meeting will be June 20, 2022, fuel sales 20% higher than this time last year, breaking ground for 18 new hangars this month, airport was

approved for Federal grant for touch and go runway and taxiway Bravo, and midfield run up. \$9 million grant.

One of our representative's asked about flight operations as defined in the Noise Report. Airport staff clarified that dB and DNL are different ways of measuring noise. Another representative asked what is done when a plane is say 90 decibels from a few noise monitors? Mike stated those were on airport property. Those that take place outside the airport would be actionable to follow up on. A representative asked about Highlands Ranch. They do still have a portable noise monitor. Staff is working on gathering the data collected from that noise monitor.

A representative asked about the HOA suing Rocky Mountain Metropolitan Airport. How does that affect us?

Avigation easements there warned HOA about air traffic and limited what aircraft could be at airport, and type of lights etc. Rocky Mountain Airport violated this and wants to be released from the easement. They are signatory to the easement. Would not happen to Centennial Airport. Centennial Airport is not signatory to the avigation easement with Douglas County. Rocky Mountain Airport is interested in forming a noise round table.

We had two representatives attend the UC Davis Aviation and Noise Symposium (1 attended in person and 1 attended virtually). Staff also attended the symposium. They all talked about their experiences at the Symposium.

Information Sharing:

A representative is putting together a piece about Centennial Airport for Greenwood Village.

A representative mentioned that his Rotary Club had a presentation from DEN. The representative said. Nothing about noise with all the expansion they have there. They want to get to 100 million passengers in the next year or so.

A representative asked about United hiring 30,000 more pilots and training in Denver and how it would or not affect Centennial Airport? Mike Fronapfel stated there would be a ripple effect as more traffic in Denver means less flight tracks at Centennial. Strong demand for pilots with all airlines. More training traffic at Centennial.

A representative stated that Star Harbor is planning to build an aerospace training facility in Lone Tree. At the agreement phase now. Could potentially be a large campus to interest and train future astronauts.

A representative said the FAA is considering reducing the number of hours that a pilot would need to get a pilot's license could drop to 1000 hours. Another representative mentioned that it varies with educational level and flight hours.



CACNR Report to ACPAA for June 1, 2022

Don Kuskie, Colorado Aviation Business Association (CABA)

- Public comments included an email sent to our email address that mentioned a very loud plane flying over her house. Staff investigated and determined it was probably a B-29 fighter plane. A resident from Louviers said he has a lot less training traffic over his house.
- Community Outreach committee is focusing on updating our website update.
- Fly Quiet committee is working on their follow-up items from previous meetings.
- Noise monitor committee received an update to the status of the mobile noise monitor.
- The next Flight School Engagement Meeting Summary & Proposed Initiatives-next meeting will be June 20, 2022
- Committee members and staff who attended the UC Davis Aviation and Noise Symposium discussed their experiences.
- Mike Fronapfel mentioned the lawsuit filed by an HOA against Rocky Mountain Metropolitan Airport and if whether it affects Centennial Airport.

ACPAA BOARD MEETING NOTES

JUNE 16,2022

Robert Doubek, Treasurer

The Consent Agenda comprised ten non -controversial items which were approved.

The Business Agenda included the Audit, Presentation, Hotel status update, a Pre-Concept Plan for One Flight International, and Approval of the SRE Building Expansion.

The Audit of the ACPAA Financial Statements for the years ending December 31, 2021 and 2020 was presented by BKD,LLP, CPAS with “no matters reportable”. A motion was made and approved to accept the Financial Statements.

A recommendation and motion was made and approved to conditionally approve the proposed sale of the Hotel and Lease to K & K Hotels as a Four Points by Sheraton with the buyer/operator, Nupen Patel . The K & K proposal included a letter of interest, a property improvement plan, draft copy of the Marriott franchise agreement, and renderings of the exterior and interior room improvements and cost.

A Pre-concept Plan, for information only, for One Flight International was presented. The plan includes. their corporate offices, a large hangar, and elevated restaurant. The design envisioned is very unique with the structure of the building influenced by the Concorde supersonic aircraft, on a large scale. The restaurant portion of the structure is envisioned to be as high as 120' above ground level. One Flight plans to submit their concept plan at the August board meeting.

A motion was presented, and approved, to award a bid to expand the SRE snow removal equipment building.

Rjd/7/3/22

FOLLOW UP ITEMS FOR AIRPORT STAFF

AIRPORT STAFF

1. Request was made for CACNR to receive a summary or informational report about results from portable noise monitors when they were utilized. **Rachel Keller – now Mike/Samantha** 01/06/21
2. Had John Kocon from northwest of Castle Pines provided more information to airport staff for further exploration of dramatic change in flight paths affecting his area? **Rachel Keller – now Mike/Samantha** 04 07 21
3. Send CACNR information about numbers and types of complaints or requests for information received from the public, and the information provided accordingly. **Airport Staff** 04/07/21
4. Develop spreadsheet with nighttime data – 10:00 p.m. -6:00 a.m. **Airport Staff** 5/5/21
5. Add CACNR email address and website to the airport's website home page under the listing for the Roundtable. **Rachel Keller – now Mike/Samantha** 11/3/21 **In Progress**
6. Staff analysis of recent flight tracks and updated heat maps to be shared with CACNR **Rachel Keller – now Mike/Samantha and Fly Quiet Committee** 11/03/21
7. CACNR to be provided with current ambient noise levels for each noise monitor. **Rachel Keller – now Mike/Samantha** 11/3/21
8. Provide separate noise data for Elizabeth area, due to increased complaints from that area. **Airport staff – now Mike/Samantha** 12/01/21
9. Make information about air space classifications and their effects easily available to the public. **Rachel Keller – now Mike/Samantha** 11/03/21
10. Ask FAA representative such as Ron Curry to attend a future meeting to provide more specific information about how traffic patterns are managed **Samantha** 03/02/22
11. Develop something to alert the public about the runway and run up area repair, when it is scheduled, which can be shared with CACNR Representatives for their communities. **Staff** 03/02/22
12. Return radar density maps and maps of locations of year-to-date and monthly noise complaints **Samantha** 03/02/22 **In progress**
13. Look to see what past information about the installation and programming of the noise monitors might still be available and useful. **Mike Fronapfel** 04/06/22
14. Provide CACNR with latest ambient noise levels. **Mike/Samantha** 04/06/22
15. If possible, Include CACNR Representatives when meetings are held with jurisdictions about establishing parallel noise contours. **Mike Fronapfel** 04/06/22

ALL COMMITTEES

1. Review recommendations from the Flight Schools Engagement Summary Report and Recommendations to see how they mesh with each committee's current work; outline how to proceed. 04/06/22
2. See if any jurisdiction has any technological expertise it might 'donate' to CACNR. 04/06/22
3. Review and address items on this list – it is getting too long. 04/06/22

OTHER

1. Follow-up possibly making the Good Neighbor Procedure an official procedure. **Liam Clark 05/05/21**
2. Determine feasibility and cost of adding a permanent monitor to the system. **10/06/21**
3. Ask control tower to attend the meeting under development and referenced in #7 above *(CACNR to determine what, if any, additional information about noise and its effect on the public the public would like to regularly receive, and how that would be used; explore capabilities of current noise monitor system to generate that information; explore capabilities and costs of other systems if appropriate.)*
04/07/21
4. Request was made for a completion date to be added for each item, so CACNR needs to identify its expectations in that regard. Dates need to be established at the time needed action is identified. **ALL**
5. Could NAG be formally incorporated into flight school best practices – consult with flight schools.
02/03/21
6. Include the impacts of flight noise in immediate proximity to the airport. **04/07 21** (From the minutes, during discussion of the training areas – “Comment was made that In addition to working with the flight schools and attention to the training boxes, the impacts of flight noise in the immediate proximity to the airport should not be lost, and perhaps should be included in the discussions. It was also noted the FAA’s APA control tower should be asked to participate in any such meeting as well.”)

Flight School Engagement Meeting 2 Agenda

June 20th 11:00am – 12:30pm

Purpose: to schedule a follow-up meeting between all the major flight schools to continue our discussion of possible solutions to the surrounding community's exposure to noise from training activity associated with flight school aircraft from Centennial Airport.

- 1. Introductions**
- 2. Elected Officials Discuss Recent Community Concerns**
- 3. Flight Schools Discuss Recent Operations**
 - a. Number of Students
 - b. Noise Abatement Efforts
 - c. Challenges
- 4. Airport Authority Update**
- 5. Re-visit/discuss implementation of proposed initiatives for the surrounding community's exposure to noise from training activity associated with flight school aircraft from Centennial Airport**

Flight School Engagement Meeting Summary

June 20th 11:00am – 12:30pm

In Attendance

- a. Nancy Sharpe – Arapahoe County Public Airport Authority (ACPAA) Board Commissioner – Chair/Arapahoe County Commissioner (*Attended Virtually*)
- b. Abe Laydon – ACPAA Board Commissioner/Douglas County Commissioner (*Attended Virtually*)
- c. Dan Avery – Douglas County Special Projects Manager (*Attended Virtually*)
- d. Michael Fronapfel – ACPAA Executive Director
- e. Samantha Blymyer – ACPAA Noise & Environmental Specialist
- f. Chris Thompson – ACPAA Public Information Officer
- g. Brad Pierce – Centennial Airport Community Noise Roundtable (CACNR) - Chair
- h. Mike Underriner – Flights Inc. – Chief Pilot
- i. Kimber Bauer – Flights Inc. – Operations Manager
- j. Will Rummell – ATP – Flight Instructor
- k. Ian Howells – Independence Aviation – Chief Flight Instructor (*Attended Virtually*)

Further Discussion on Proposed/New Initiatives:

1. ACPAA to assist the 4 major flights schools that operate at Centennial Airport – Flights Inc., ATP Flight School, Independence Aviation, and Aspen Flying Club – to, together, redraw the flight training boxes favoring areas with least amount of residential development (note: flight training boxes are voluntary and flight instructors/students are not required to limit their flights within these designated areas)

Discussion: *ACPAA to encourage training traffic to fly east of airport. Attendees discussed new informal flight training boxes to the east of Airport proposed by Aspen Flying Club, but no recent news had been shared among the 3 flight schools in attendance (Flights Inc., ATP Flight School, Independence Aviation) of this proposal.*

2. ACPAA to work with CACNR to discuss if/what updates need to be made to Centennial Airport's Voluntary Noise Abatement Procedures brochure and posters and distribute the updated materials to all Fixed Base Operators, flight schools, flying clubs and the Air Traffic Control Tower (ATCT)

Discussion: *ACPAA will send current Voluntary Noise Abatement Guidelines to attendees of Flight School Engagement Meeting, as well as attach it to upcoming July CACNR Meeting packet to collect feedback. A new copy for distribution will be finalized at a later date.*

3. ACPAA staff to contact the Planning staff at the surrounding municipalities and ask that they adopt Centennial Airport's most recent noise contour maps into their planning and zoning documents (Arapahoe County, Douglas County, City of Centennial, City of Lone Tree, Greenwood Village, Castle Pines North, Town of Castle Rock, Aurora, Parker, Foxfield, etc...)

Discussion: *GIS files of latest noise contours (2016) have been forwarded to the planning department of the surrounding municipalities. ACPAA will be applying for a federal grant for a new Part 150 study next year to update noise contours.*

4. ACPAA and CACNR to request the attendance of ATP Flight School and Independence Aviation at future Centennial Airport Community Noise Roundtable (CACNR) meetings – as Aspen Flying Club and Flights Inc. have recently attended

Discussion: *ATP Flight School may attend August CACNR meeting. All flight schools are welcome and encouraged to join whenever available.*

5. ACPAA and CACNR to plan a follow up Flight School Engagement Meeting in early June to discuss the implementation of our proposed initiatives

Discussion: *Completed. ACPAA to plan another meeting in August.*

6. ACPAA and CACNR to encourage/incentivize flight schools to convert their aircraft to quieter props that allow better climb performance

Discussion: *Diverted conversation to discuss technological advances and the future of electric aircraft. Further discussion was had on incentivizing graduating student-pilots for flying "friendly"; this may include small gift cards if budget allows.*

7. ACPAA and CACNR to engage with FAA ATCT to inquire if they can adjust their management of training traffic to help reduce noise exposure to the Community

Discussion: *Current ATCT Manager, Jeff Holmes, is departing APA. Discussed inviting new ATCT Manager or current Air Traffic Control Specialist, Ron Curry, attend next Flight School Engagement Meeting.*

NEW

8. Explore ways to quantify "improvements" of community exposure to training traffic

Discussion: *Airport Authority created a 13 Month Operation vs. Complaint Trend graph highlighting training related complaints during past 13 months. Last May (2021) we had a ratio*

of 16.6 Training Complaints per 1,000 Operations – this May (2022) that ratio had significantly improved to 4.7 Training Complaints per 1,000 Operations.



- Discuss benefits of ACPAA attending in-person flight school briefings by invitation of the flight schools.

Discussion: Flight schools agreed that they would benefit from having ACPAA Staff attend and present fly-quiet procedures at their student-pilot briefings which take place, on average, once per quarter.

Final Thoughts

Unanimous discussion that the collaboration of ACPAA and the major flights schools will be beneficial to surrounding communities' exposure the noise associated with flight training traffic.

Adjourn
