



CENTENNIAL AIRPORT COMMUNITY NOISE ROUNDTABLE
MINUTES

June 1, 2022

Approved July 6, 2022

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 last 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

June 1, 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

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, May 4, 2022 – Alison Biggs, Secretary~~
- B. TREASURER'S REPORT, May 2022 – Andy Jones, Treasurer
- C. NOISE REPORT, April 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. 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

7. **OTHER REGULAR REPORTS:**

- A. ACPAA – Robert Doubek, ACPAA Treasurer; Donna Johnston/CACNR-Report to April 2022 ACPAA Meeting
- B. AIRPORT DIRECTOR'S REPORT – Mike Fronapfel
 - 1. Flight School Engagement Meeting Summary & Proposed Initiatives
 - 2. Airport Activity
 - 3. Legislative
 - 4. Other

8. **OLD BUSINESS:**

A. TO REPRESENT CACNR AT NEXT ACPAA MEETINGS:

1. June 16 - TBD August 11 September 8 October 13 November 10 December 8

B. CONGRESSIONAL QUIET SKIES CAUCUS

C. FOLLOW-UP ITEMS FROM PRIOR CACNR MEETINGS

D. OBSERVATIONS FROM UC DAVIS NOISE AND EMISSIONS SYMPOSIUM

1. Comments/Observations from Those Who Attended

9. **NEW BUSINESS:**

A. INFORMATION SHARING

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

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12. **ADJOURN**



Centennial Airport Monthly Noise Report



April 2022

Item 13

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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.

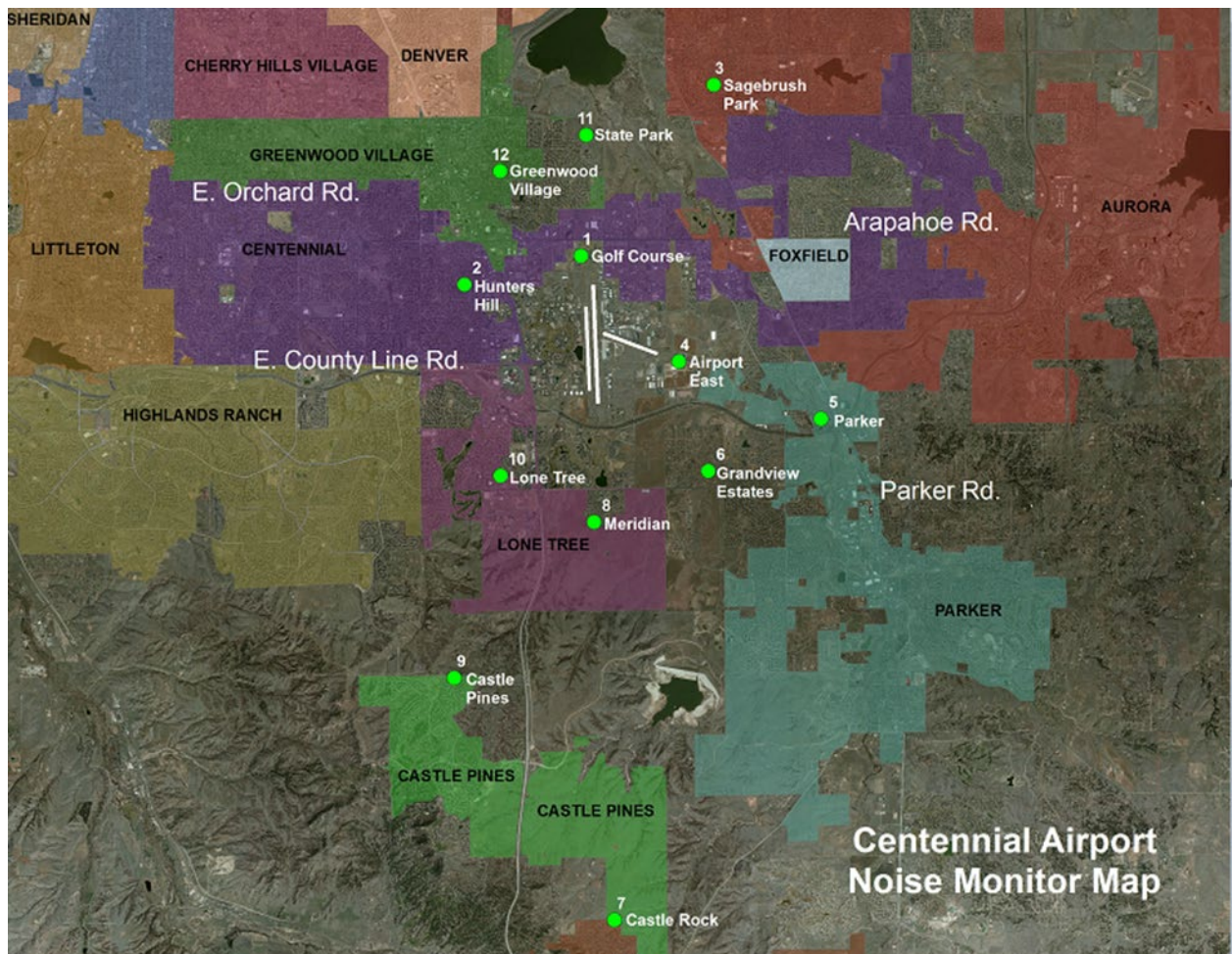
Visual Flight Rules (VFR) – A set of regulations under which a pilot operates an aircraft in weather conditions generally clear enough to allow the pilot to see where the aircraft is going. A flight plan is not required when the pilot is operating under Visual Flight Rules.

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

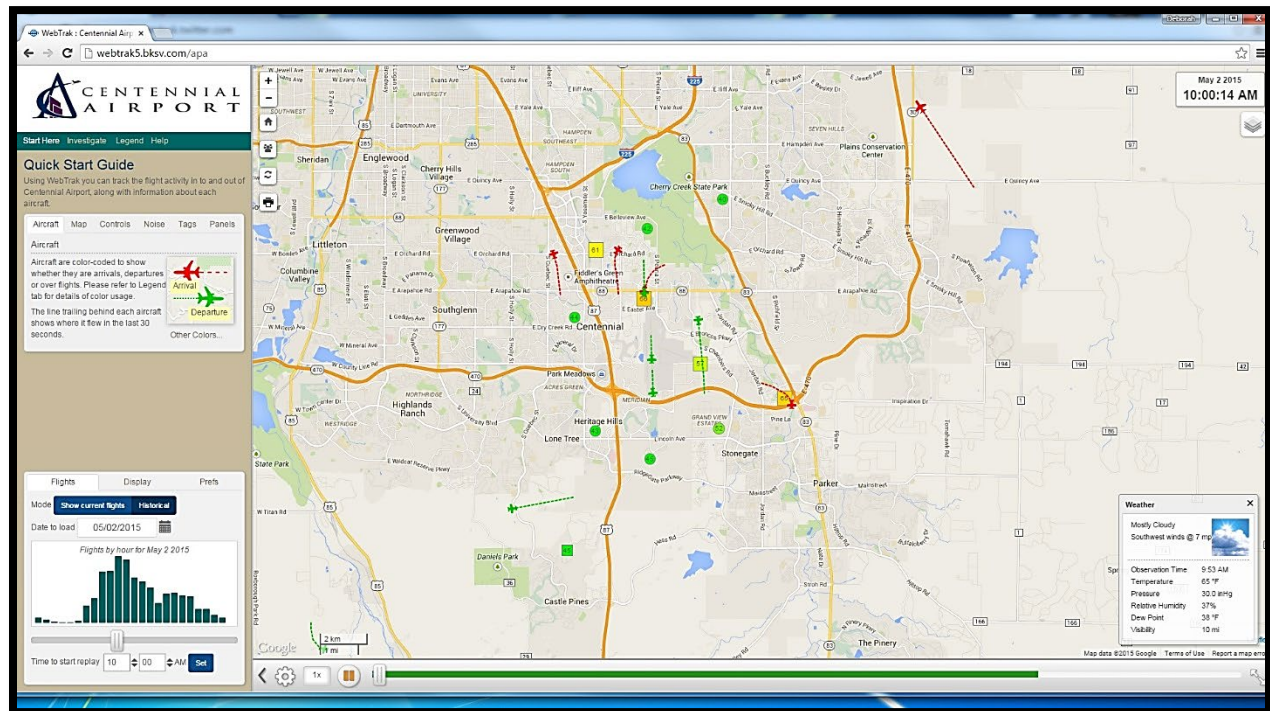
3 ABOUT APA'S NOISE MONITORING PROGRAM

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				0				0			0
June				0				0			0
July				0				0			0
August				0				0			0
September				0				0			0
October				0				0			0
November				0				0			0
December				0				0			0
Y-T-D Totals	10,056	14,370	573	24,999	4,930	22,439	389	27,758	40,099	201	40,300

	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				0				0	May	
June				0				0	June	
July				0				0	July	
August				0				0	August	
September				0				0	September	
October				0				0	October	
November				0				0	November	
December				0				0	December	
Y-T-D Totals	13	15	3	31	163	489	50	702	Y-T-D Totals	93,790

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:

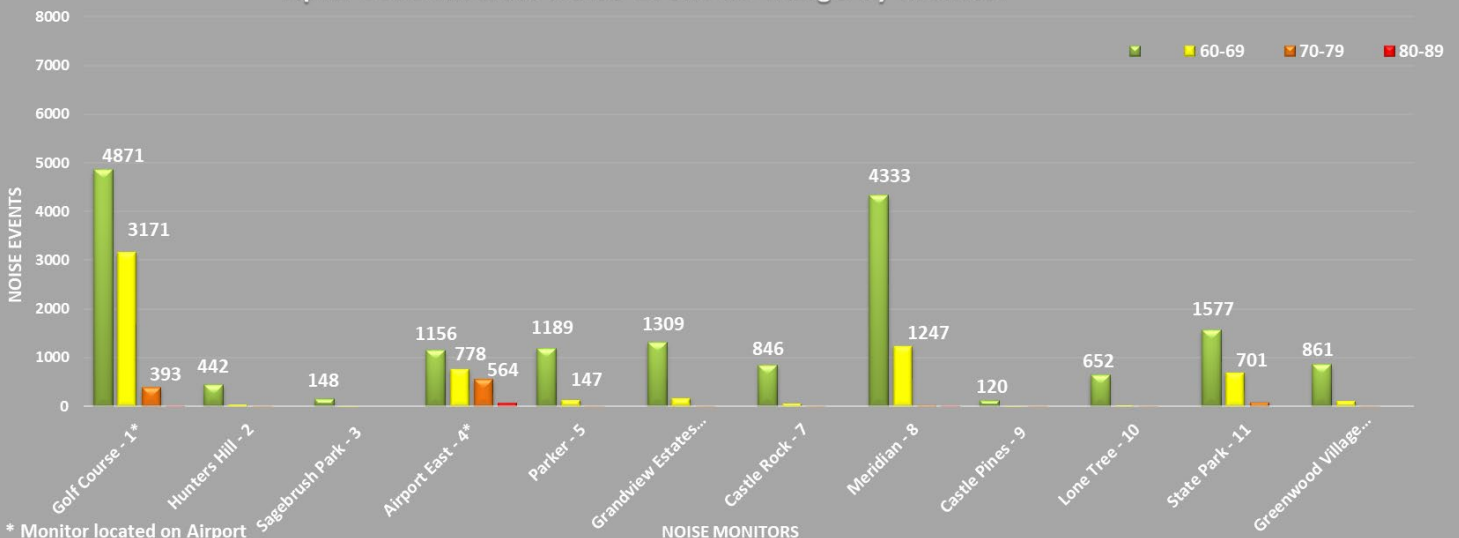
First, the noise event must exceed the ambient noise level. This number varies at every monitor but is generally greater than 50-55db. Secondly, the noise event must last longer than 5 seconds. Lastly, using radar data, the system must correlate an aircraft with the noise event. This ensures that the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

April 2022 Aircraft Noise Event Decibel Range By Monitor					
Monitor	60-69	70-79	80-89	90+	Totals
Golf Course- 1*	4871	3171	393	10	8445
Hunters Hill- 2	442	54	2	0	498
Sagebrush Park- 3	148	8	0	0	156
Airport East- 4*	1156	778	564	66	2564
Parker- 5	1189	147	4	0	1340
Grandview Estates- 6	1309	184	3	0	1496
Castle Rock- 7	846	82	7	0	935
Meridian- 8	4333	1247	46	20	5646
Castle Pines- 9	120	17	1	0	138
Lone Tree- 10	652	44	4	0	700
State Park- 11	1577	701	93	0	2371
Greenwood Village- 12	861	135	3	0	999
Totals	17504	6568	1120	96	25288

*Monitor located on Airport

April 2022 Aircraft Noise Event dB Range by Monitor



* Monitor located on Airport

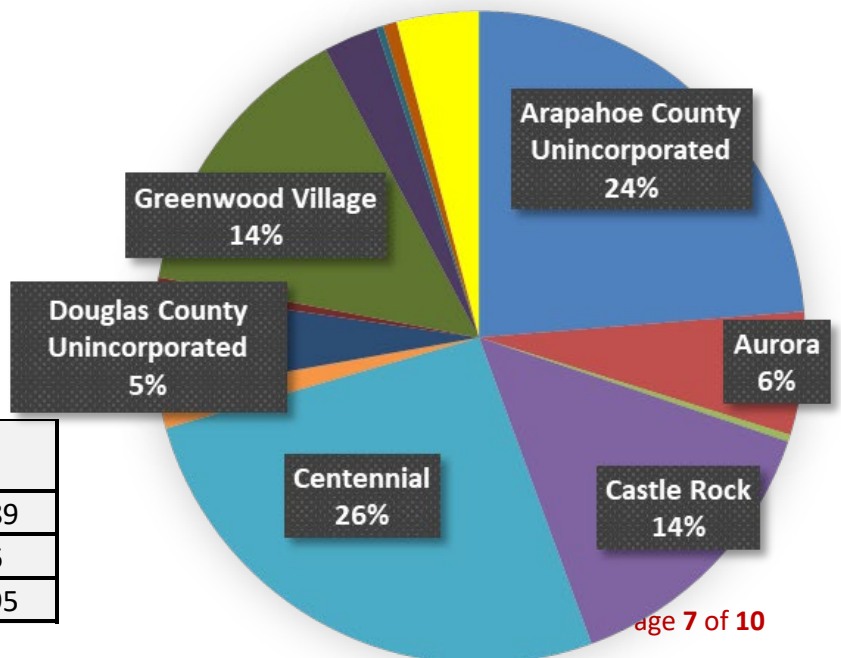
7 APRIL 2022 NOISE COMPLAINTS

In April, Centennial Airport received 295 complaints from 32 households.

April Noise Complaints			YTD		Population	% Of Population Issuing Complaints YTD
Municipality	Complaints	Households	Complaints	Households	Census 2018	
Arapahoe County Unincorporated	70	7	270	10	83,764	0.01%
Aurora	18	2	53	2	374,114	0.0005%
Castle Pines	1	1	1	1	10,507	0.009%
Castle Rock	42	2	166	4	64,827	0.006%
Centennial	77	3	310	5	110,831	0.004%
Cherry Hills Village	0	0	0	0	6,650	0%
Denver	5	1	15	1	716,492	0.0001%
Douglas County Unincorporated	15	4	54	4	100,536*	0.003%
Greenwood Village	42	4	487	8	15,801	0.05%
Highlands Ranch	8	1	15	2	105,264	0.001%
Lone Tree	2	1	6	3	14,653	0.02%
Parker	0	0	25	4	55,636	0.007%
Other	15	6	104	7	UNK	UNK
Total	295	32	1,506	51	1,659,075	>0.003%

*Douglas County Unincorporated Population with Highlands Ranch Removed

Complaints per Municipality



Noise Complaints Response Requested	
Email	11
Phone	16
Total	27

Time Complaint Received	APR
Day Hours (7:00 am - 9:59pm)	289
Night Hours (10:00 pm - 6:59 am)	6
TOTAL	295

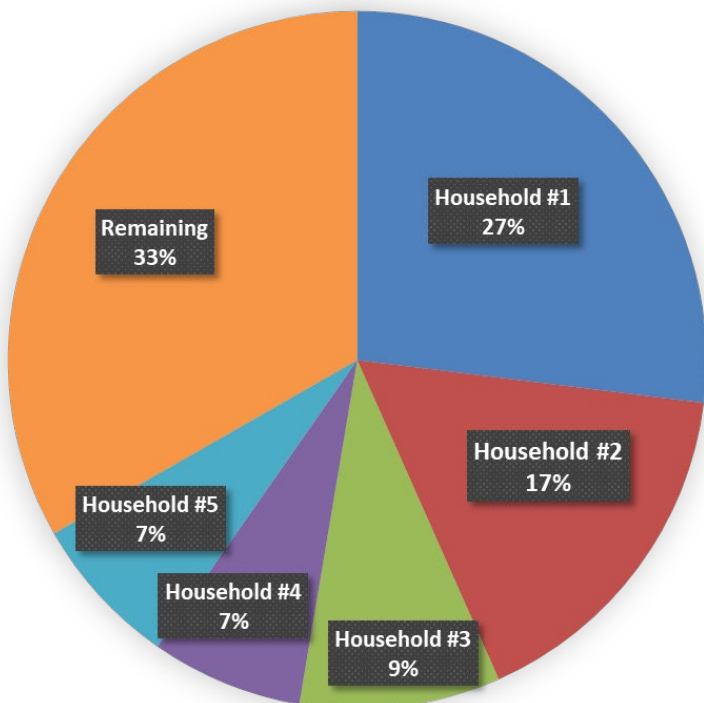
Current 12 Month Trend



Previous Year 13 Month Trend



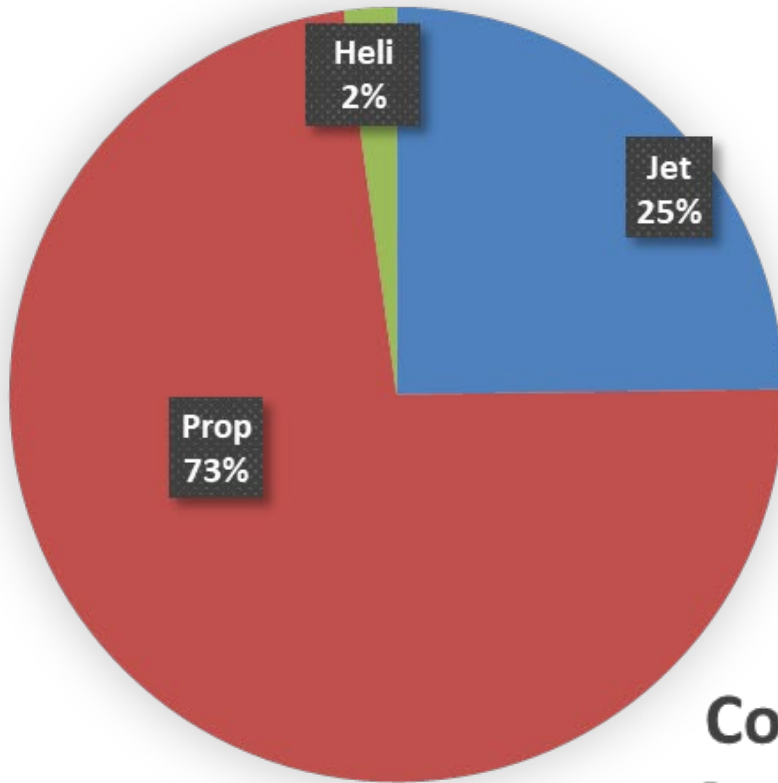
Top 5 Household Complaints YTD



Top 5 Household Complaints YTD		
Household	Complaints	Households
Household #1	406	Greenwood Village
Household #2	247	Centennial
Household #3	140	Castle Rock
Household #4	106	Arapahoe County Unincorporated
Household #5	106	Arapahoe County Unincorporated
Remaining		501
Total		1,506

Complaints by Aircraft Type

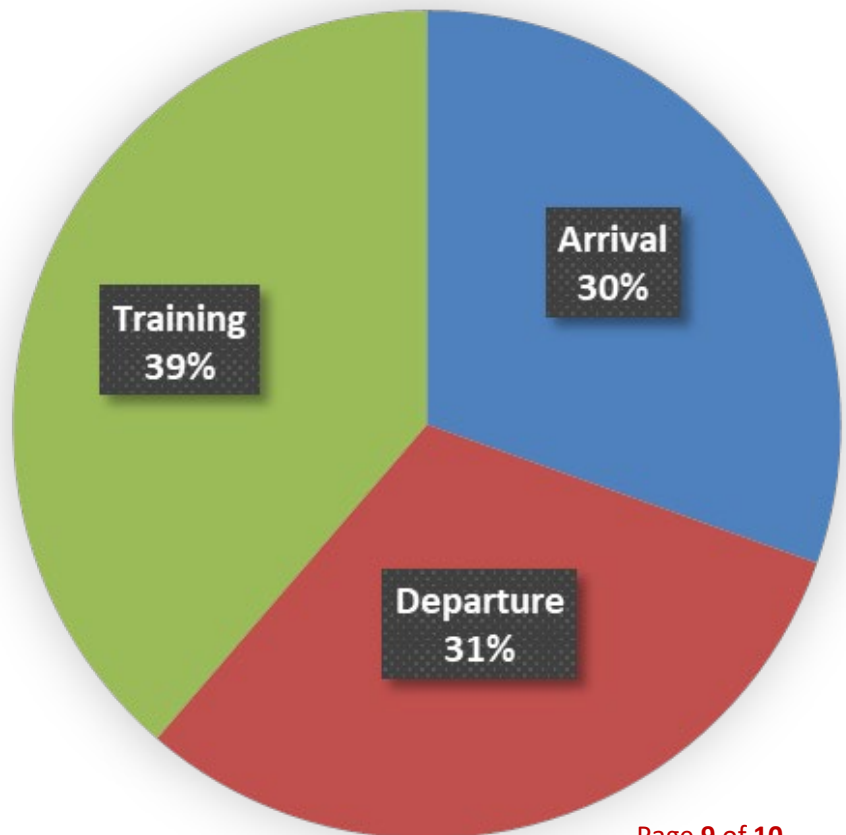
April 2022



*#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					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	\$ -	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	\$ 2,705.45		
CURRENT BALANCE			\$ 25,310.30		
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					



Fly Quiet Committee – May 2022 Monthly Report

Airport Noise and Operations Reports – The committee selected several items from our research that may be adopted into KAPA noise abatement efforts.

KVNY Van Nuys airport

- Pilots research complaints from local residents regarding individual flights.
- Van Nuys implemented a program to reward pilots for compliance.

KFOK Francis S Gabreski Airport Westhampton Beach, New York, USA

- FAQ section included on website for the general public and residents designed to educate them regarding noise abatement procedures

KFRG Republic Airport Farmingdale, New York, USA

- Occasional memos are written to airport tenants/users/flight schools regarding subjects ranging from engine run-ups, noise abatement procedures etc.

KORL Orlando Executive Airport

- Preferential runway use favoring south flow operations
- Nighttime noise abatement headings
- Designated engine run-up areas

KPDK Peachtree Airport Atlanta

- KPDK voluntary curfew operations occur between 2300 and 0600 (All Aircraft)
- Rules regarding use of reverse thrust
- Dekalb Peachtree Airport (PDK) publishes the name and address of each hotline caller via their monthly noise reports on their website. Information only.
- Dekalb Peachtree Airport (PDK) publishes the name and tail number of violation aircraft compiled by their noise monitoring system. Information only

KSEE Gillespie Field San Diego

- Encourage training operations at other airports

Airport Electronic Sign – Requested permission from KAPA operations to add noise abatement statements to the KAPA electronic sign on Peoria. KAPA operations will re-visit request after a PIO has been selected.

KAPA Whispertrack Update – Requested several updates to the KAPA Whispertrack information. Airport Contact, Preferential Runway, Preferential Instrument procedures, and Noise Ordinance.



CACNR Report to ACPAA for May 4, 2022

Paul Krier, Unincorporated Arapahoe County representing CACNR

Meeting was started with a presentation from Ron Curry from the KAPA air traffic control tower. Ron explained to the Roundtable various operations of the air traffic control facility such as the difference between IFR (instrument flight rules) and VFR (visual flight rules) with separation and coordination of the traffic between the two rules for efficient operations. He described the altitudes and distances the control tower controls and does not control and the basics of Class D airspace. There was discussion about how the runways are numbered using cardinal headings from magnetic North to how the traffic patterns are derived. Ron explained the changes in separation brought down from the regional FAA ATC office (located in Seattle) after the midair collision and how controllers deal with the new rules. Before the incident, aircraft would be paired up visually between the two parallel runways, now the aircraft are required to be staggered on final approach which increases controller separation workload potentially decreasing VFR operations for a given timeframe. Interesting point was the number of IFR operations has increased to the point (>75,000) that the Class D airspace could potentially be upgraded to a larger Class C airspace offering more controller options.

The meeting had one community member attend and speak during the public comment period. Randy Johnson of Louviers also graced the roundtable with his dog Shelby. Shelby has been incidentally trained to literally point out single engine aircraft flying overhead. Randy did report that traffic directly over his residence has seemed to decrease over the last month.

The Community Outreach Committee is working on updating the CACNR website. The CACNR website has not been updated for quite sometime and the committee with the roundtable is working on ideas for a more stable update schedule in the future.

The Fly Quiet Committee reported on several ongoing topics including Airport Noise and Operational Reports, Airport Electronic Signage, KAPA Whispertrack Updates, and Aircraft Noise Mitigation. Bill Wasmund explained the difference between fixed pitch propeller designs and the noise impacts. One design is a climb propeller which takes a smaller "bite" of air but increases climb rate which helps aircraft gain altitude quicker. The quicker climb does not necessarily decrease noise but the greater distance above housing does decrease DBs heard on the ground. The other is a cruise propeller which takes a greater "bite" of air and increases cruise speed and fuel economy. The drawback is a slower rate of climb verses a climb propeller and lower altitudes for a given climb potentially increasing the

perceived noise impact on the ground. Bill reported that just over half of the training aircraft based at KAPA have climb propellers due to operational differences. There is discussion with one of the flight schools who is developing a new training area South of the Aurora Reservoir near Kiowa/Elbert.

The Noise Committee was presented a printed PowerPoint from HMMH from 2009 from Candace Moon showing multiple noise diagrams and maps from various similar airports. The Committee was discussing obtaining an updated version for reference to capabilities of KAPA's current noise monitors. We received an update from Samantha Blymyer regarding the mobile noise monitor that was positioned in the Highlands Ranch area. The noise monitor was intermittent but has since been repaired and is planned for reestablishing the location for ongoing data gathering.

The Flight School Engagement meeting in April was discussed. I attended the meeting and look forward to further partnership with the local flight schools. I am happy to report the four flight schools that have engaged the Roundtable are very concerned with the noise impacts their operations have on the local community and actively seek to employ noise abatement tactics. With the help of the Roundtable and KAPA Airport Authority I believe we can find solutions for common issues. Flights Inc., Independence Aviation, and ATP flight schools were in attendance. Aspen Flying Club and Flights Inc. have presented at the Roundtable earlier this year. We plan to have another Flight School Engagement meeting in June.

The Roundtable was presented with a preliminary report/discussion of the recent UC Davis Airport Noise Conference. The Conference was in hybrid format with the majority of participants being online. There will be a more detailed report in the June meeting.

Concerns for future meetings is the return of the Buckley Guard squadron from deployment and the increased activity in military traffic and the closure and resurfacing of 17R/35L in the coming months.

CACNR/ACPAA 2022 MEETING SCHEDULES

CACNR REPRESENTATIVES TO 2022 MEETINGS OF THE ARAPAHOE COUNTY PUBLIC AIRPORT AUTHORITY

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

<u>CACNR MEETINGS</u>	<u>ACPAA MEETINGS</u>	<u>CACNR REPRESENTATIVE</u>	<u>REPORT DUE DATE</u> (To centennialairport.com)
January 05	ACPAA not meeting	-----	include with Feb CACNR report
February 02	February 10	Brad Pierce	February 04 (see above)
March 02	March 10	Candace Moon	March 04
April 06	April 14	Donna Johnston	April 08
May 04	May 12	Paul Krier	May 05 3:00 p.m.
June 01	June 16 (note 3 rd Thursday)	TBD	June 10
July 06	ACPAA not meeting		include with Aug CACNR report
August 03	August 11		August 04 (see above) 3:00 p.m.
September 07	September 08		Write 09/07 To Be Placed on Dias
October 05	October 13		October 06 3:00 p.m.
November 02	November 10		November 03 3:00 p.m.
December 07	December 08		Write 12/07 to be placed on dais



ITEMS FOR FOLLOW-UP

For Review on May 4, 2022
Covers Calendar Year 2021 to date

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**

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. Reach out to Elbert County to ascertain its interest in becoming a CACNR member. **Dan Avery 12/01/21**
5. Make additional appointment to committees. **Brad Pierce 04/06/22**

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**

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**

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**

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**

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**

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 FLY QUIET COMMITTEE AS OF 5/23/22

FLY QUIET COMMITTEE

1. Continue work to identify location of 2nd noise abatement sign. **Fly Quiet Committee 08/04/21**
5/2022 - Requested permission from KAPA operations to add noise abatement statements to the KAPA electronic sign on Peoria. KAPA operations will re-visit request after a PIO has been selected.
2. Continue exploring incentives for voluntary use of fly quiet procedures; **Fly Quiet Committee 09/01/21**
 - a. Explore how hotline information is collected and used at other airports.
5/2022 - The committee selected several items from our research that may be adopted into KAPA noise abatement efforts.
 - b. Possibly pursue inviting those high on the complaint list to learn more about how their actions affect the communities. *No progress*
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**
4/2022 – Targeted lower hanging fruit. Researched climb prop vs cruise prop utilization among the KAPA flight schools.
4. Fly Quiet reconsidering approach to recognizing pilots who fly quiet. **Fly Quiet Committee 11/03/21**
2/2022 – It is difficult to assess this due to the difference in aircraft, weather conditions, current airport conditions etc. *No further progress.*
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**



Centennial Airport Monthly Noise Report



June 2022

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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.

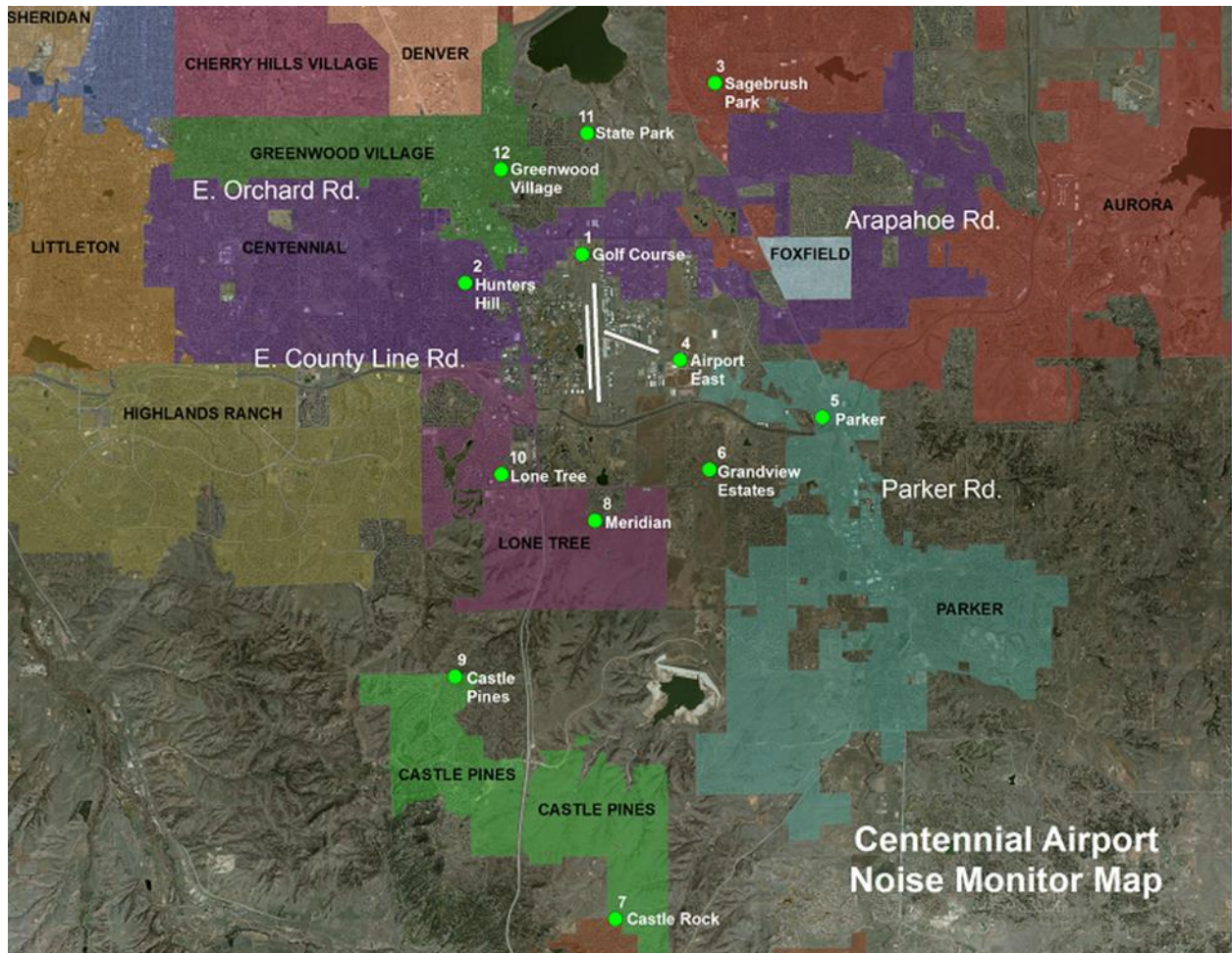
Visual Flight Rules (VFR) – A set of regulations under which a pilot operates an aircraft in weather conditions generally clear enough to allow the pilot to see where the aircraft is going. A flight plan is not required when the pilot is operating under Visual Flight Rules.

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

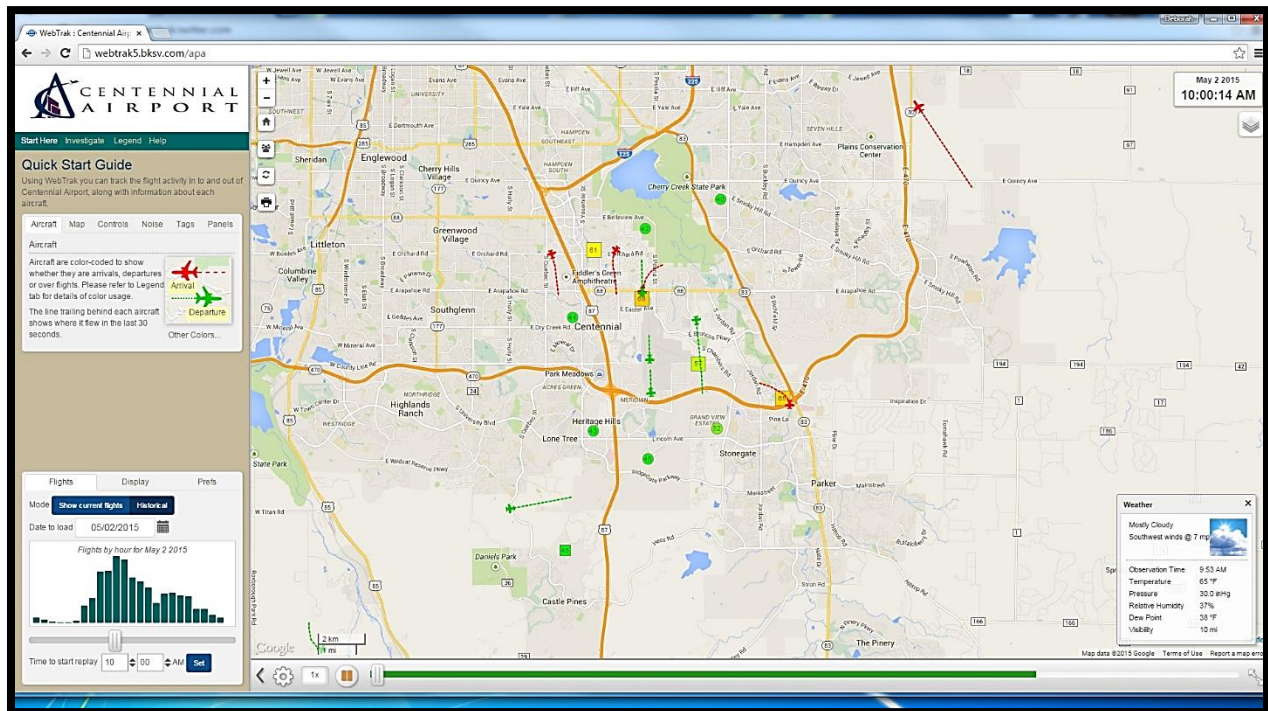
3 ABOUT APA'S NOISE MONITORING PROGRAM

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	2,660	3,881	190	6,731	1,227	6,808	158	8,193	10,608	71	10,679
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	15,371	21,690	998	38,059	7,472	35,177	681	43,330	63,263	290	63,553

	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				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	16	30	4	50	257	777	63	1,097	Y-T-D Totals	146,089

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:

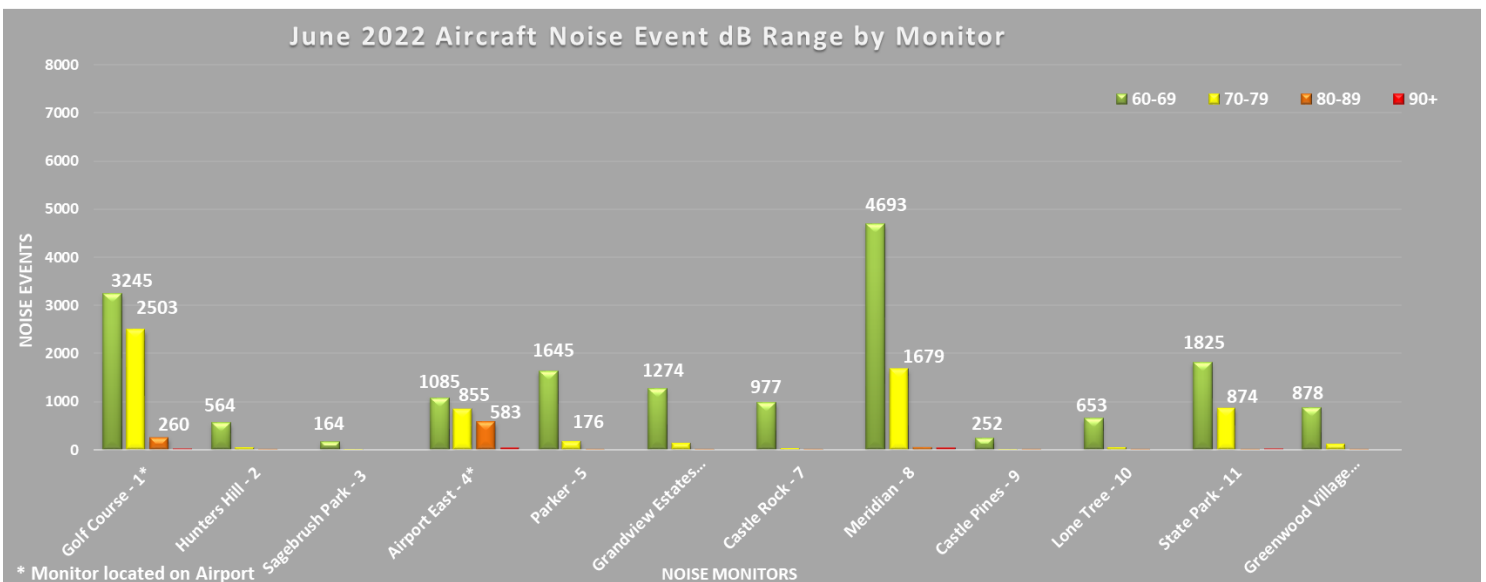
First, the noise event must exceed the ambient noise level. This number varies at every monitor but is generally greater than 50-55db. Secondly, the noise event must last longer than 5 seconds. Lastly, using radar data, the system must correlate an aircraft with the noise event. This ensures that the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

June 2022 Aircraft Noise Event Decibel Range By Monitor					
Monitor	60-69	70-79	80-89	90+	Totals
Golf Course- 1*	3245	2503	260	12	6020
Hunters Hill- 2	564	57	1	0	622
Sagebrush Park- 3	164	12	0	0	176
Airport East- 4*	1085	855	583	31	2554
Parker- 5	1645	176	2	0	1823
Grandview Estates- 6	1274	137	1	0	1412
Castle Rock- 7	977	41	1	0	1019
Meridian- 8	4693	1679	57	41	6470
Castle Pines- 9	252	22	1	0	275
Lone Tree- 10	653	52	4	0	709
State Park- 11	1825	874	10	1	2710
Greenwood Village- 12	878	129	8	0	1015
Totals	17255	6537	928	85	24805

*NMT 1 was down from June 20th to June 30th

*Monitor located on Airport



7 JUNE 2022 NOISE COMPLAINTS

In June, Centennial Airport received 502 complaints from 46 households.

June Noise Complaints			YTD		Population
Municipality	Complaints	Households	Complaints	Households	Census 2018
Arapahoe County Unincorporated	120	9	469	15	83,764
Aurora	18	2	83	5	374,114
Castle Pines	5	2	14	3	10,507
Castle Rock	47	3	270	5	64,827
Centennial	118	5	574	7	110,831
Cherry Hills Village	0	0	0	0	6,650
Denver	1	1	16	2	716,492
Douglas County Unincorporated	19	8	97	10	100,536*
Greenwood Village	133	6	763	15	15,801
Highlands Ranch	11	3	37	4	105,264
Lone Tree	4	2	20	6	14,653
Parker	1	1	26	5	55,636
Other	25	4	151	19	UNK
Total	502	46	2520	96	1,659,075

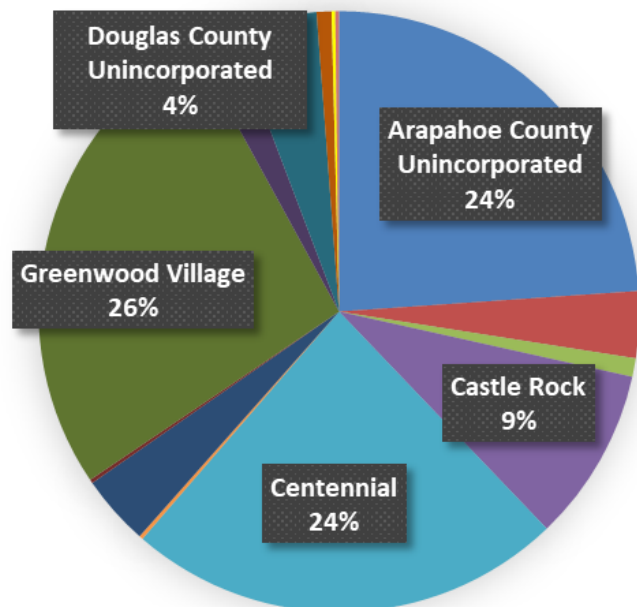
*Douglas County Unincorporated Population with Highlands Ranch Removed

*Other: Littleton, Englewood, Boulder

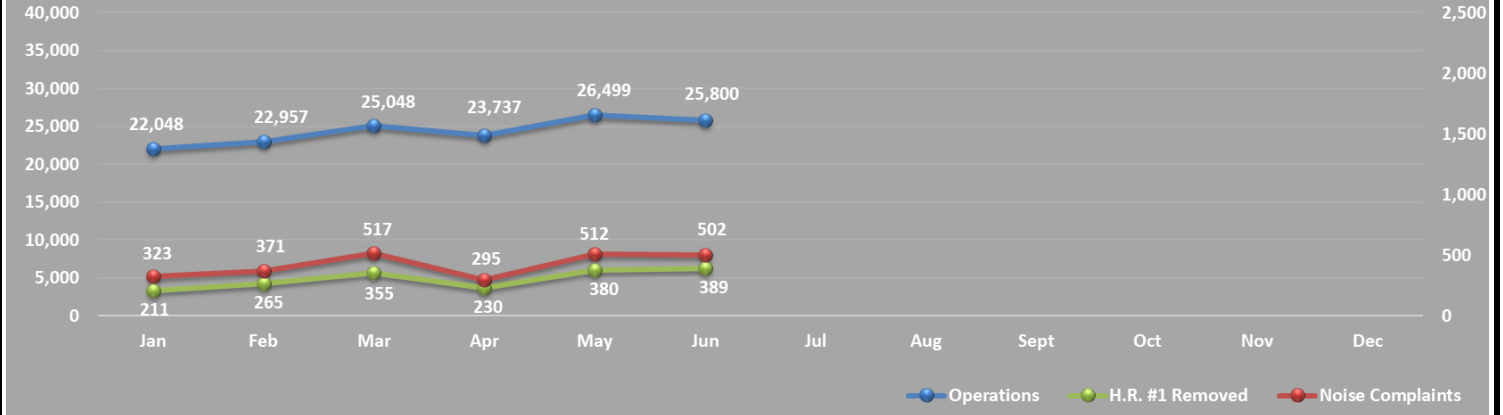
Noise Complaints Response Requested	
Email	18
Phone	20
Total	38

Time Complaint Received	June
Day Hours (7:00 am - 9:59pm)	458
Night Hours (10:00 pm - 6:59 am)	44
TOTAL	502

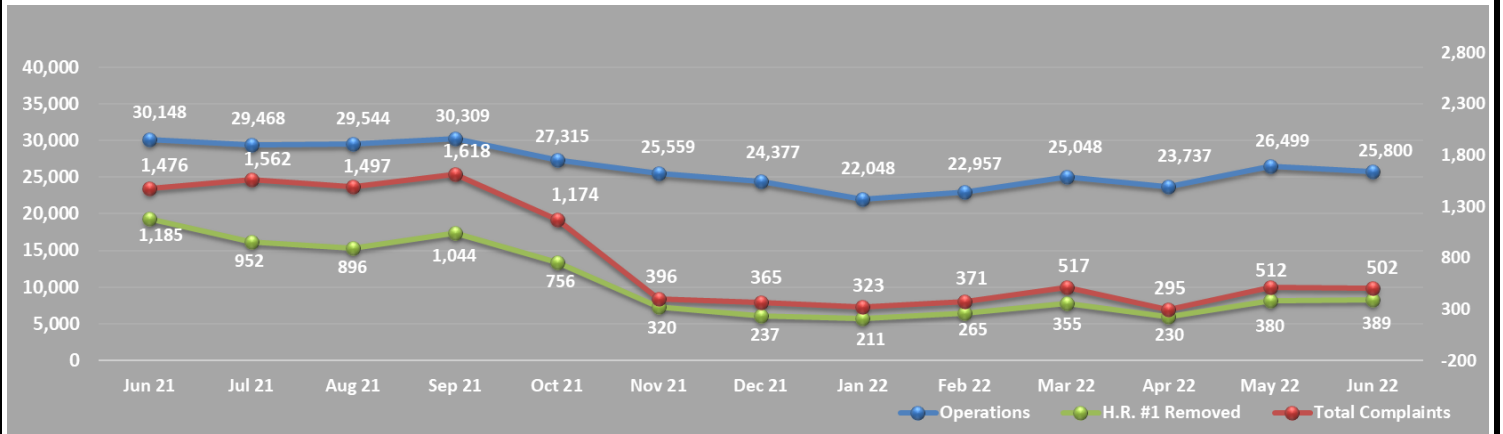
Complaints per Municipality



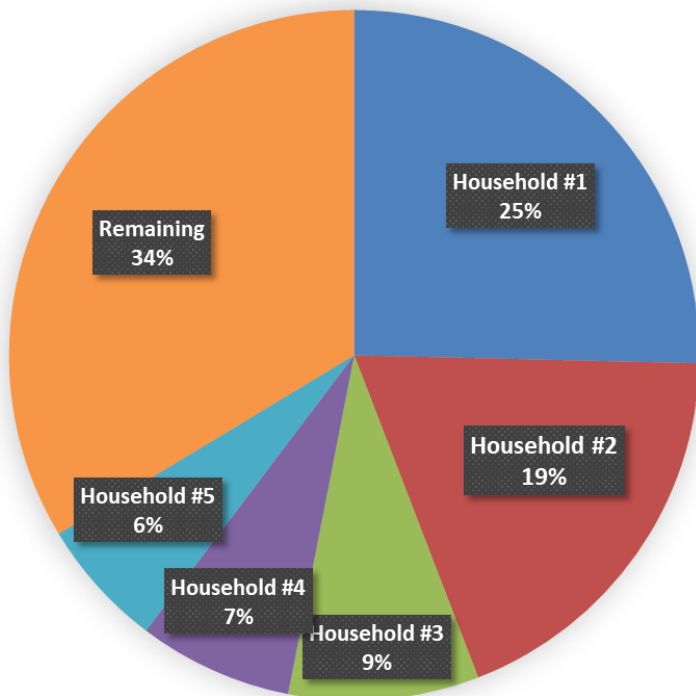
Current 12 Month Trend



Previous Year 13 Month Trend



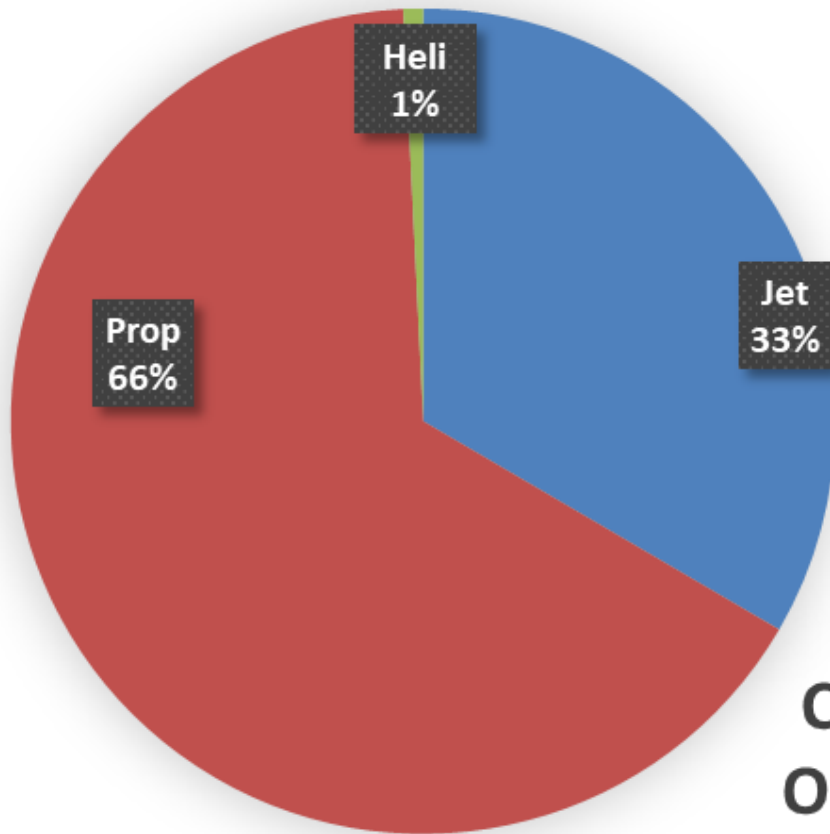
Top 5 Household Complaints YTD



Top 5 Household Complaints		
Household	Complaints	Households
Household #1	625	Greenwood Village
Household #2	484	Centennial
Household #3	225	Castle Rock
Household #4	189	Arapahoe County Unincorporated
Household #5	142	Arapahoe County Unincorporated
Remaining	855	
Total	2,520	

Complaints by Aircraft Type

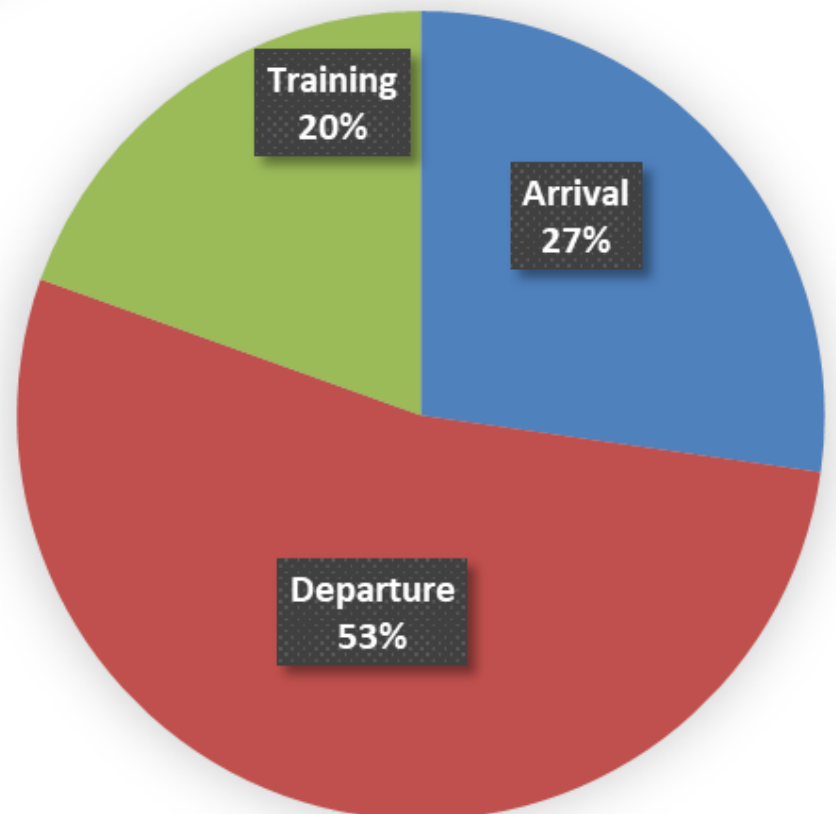
June 2022



*#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

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