

# CENTENNIAL AIRPORT COMMUNITY NOISE ROUNDTABLE AGENDA

### March 6, 2024

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

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

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

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

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

### **CACNR Mission:**

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

### A. CALL TO ORDER AND DETERMINATION OF QUORUM:

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

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

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

Alison Biggs/Mark Adams Parker: Ashley Chasez/Bryce Matthews

Aurora: Brad Pierce/Mindy Parnes ACPAA: Michael Fronapfel/Vacant

Castle Pines: Chris Eubanks/Ron Cole AOPA: John Hirshman/Brad Schuster

Castle Rock: Laura Cavev/Sandy Vossler CABA: Don Kuskie/Mike Straka

Centennial: Don Sheehan/Amy Tharp CDOT Aeronautics Div: Todd Green/Vacant

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

Foxfield: Pam Thompson/Frank Lawrence

- B. **CONSENT AGENDA**: (items here may be moved to Agenda Item #3, on the request of any CACNR Representative)
  - A. DRAFT MINUTES, February 7, 2024 Alison Biggs, Secretary
  - B. TREASURER'S REPORT, February 2024 Andy Jones, Treasurer, Samantha Blymyer, ACPAA Staff
  - C. NOISE REPORT, January 2024- Samantha Blymyer, ACPAA Staff
- 3. ITEMS REMOVED FROM CONSENT AGENDA:
- 4. CACNR STUDY GROUP COMMITTEE: 4th Quarter 2023 Report, Brad Pierce, Chris Eubanks, Mike Fronapfel
- 5. PART 150 STUDY UPDATE/PROGRESS:
  - A. Meeting Schedules for CACNR; Study Advisory Committee
  - B. Noised Contours
  - C. Modeling, Evaluation, Refinement
  - D. Advance Notices for Brainstorming
  - E. Other Items for Consideration/Interest
- 6. **EXECUTIVE COMMITTEE:** 
  - A. IDENTIFY DESIRED APRIL CACNR ORIENTATION COMPONENTS; WHO RESPONSIBLE; USE OF JASON SCHWARTZ
  - B. ATTENDANCE AT MARCH 14 ACPAA MEETING Chris Eubanks to represent CACNR
  - C. RETREAT PRIORITIES
- 7. REPRESENTATIVES' COMMENTS:
- 8. OTHER REGULAR REPORTS:
  - A. AIRPORT DIRECTOR Mike Fronapfel
    - 1. Flight School Activity
    - 2. Aviation Fuel How Much Sold/What Kind
    - 3. Community Related Activity
    - 4. Other Airport Activity
    - 5. Legislative
    - 6. Status of Follow Up Items

### 9. OLD BUSINESS:

- A. Election of CACNR Officers Chair, Vice Chair, Secretary, Treasurer
- B. 2023-2024 CACNR Attendance Record

### 10. NEW BUSINESS:

- 11. **PUBLIC COMMENT**: (3 minutes per person time limit):
  - A. RECEIVED BY CACNR
  - B. MEETING ATTENDEES /VIRTUAL ATTENDEES

12.	NEXT MEETINGS:										
	A. CACNR –	April 3, 2024 May 1, 2024 June 5, 2024 July 2024	6:30 p.m. 7565 South Peoria Street, Englewood, CO 80112 6:30 p.m. 7565 South Peoria Street, Englewood, CO 80112 6:30 p.m. 7565 South Peoria Street, Englewood, CO 80112 NO MEETING								
	В. АСРАА –	March 14, 2024 April 11, 2024 May 9, 2024 June 13, 2024 July 2024	3:00 p.m. 7565 South Peoria Street, Englewood, CO 80112 3:00 p.m. 7565 South Peoria Street, Englewood, CO 80112 3:00 p.m. 7565 South Peoria Street, Englewood, CO 80112 3:00 p.m. 7565 South Peoria Street, Englewood, CO 80112 NO MEETING								

C. PART 150 MEETING DATES When and What Meetings, When Available from APA Staff

### 13. **ADJOURN:**



### CENTENNIAL AIRPORT COMMUNITY NOISE ROUNDTABLE **MINUTES**

February 7, 2024 **DRAFT** 

### VISION - QUIETER SKIES FOR OUR COMMUNITIES

MISSION - CACNR WILL BRING TOGETHER AIRPORT, COMMUNITY, FAA, AND AVIATION INDUSTRY REPRESENTATIVES TO COLLABORATIVELY IDENTIFY AND DISCUSS NOISE ISSUES AT CENTENNIAL AIRPORT AND RECOMMEND COURSES OF ACTION THAT COULD REDUCE NOISE OVER AFFECTED COMMUNITIES.

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

1. CALL TO ORDER, ROLL CALL, and QUORUM: The meeting was called to order at 6:41 p.m. by Chair Brad Pierce. The following were in attendance, and a quorum was present:

Douglas County: Dan Avery (virtual) Greenwood Village: Donna Johnston Douglas County: Alison Biggs Highlands Ranch: Andy Jones Lone Tree: Aurora: **Brad Pierce** Mike Anderson Ashley Chasez Castle Rock: Laura Cavey (virtual) Parker: Castle Pines: Chris Eubanks ACPAA: Mike Fronapfel Centennial: Don Sheehan CABA Don Kuskie Foxfield: Pam Thompson Wings Over the Rockies: Bill Wasmund

Others in attendance were Ron Cole, Alternate Representative from Castle Pines; Amy Tharp, Alternate Representative from Centennial; ACPAA staff Samantha Blymyer, Chris Thompson, Lauren Wiarda and Matt Frenette. There were 13 members of the public online, and 6 in attendance.

Those absent were: Arapahoe County: Leslie Summey/Sreenivasan Alakappan AOPA: John Hirshman/Brad Shuster CDOT Aeronautics Div: Todd Green/

CDOT Aeronautics Div: Todd Green/Vacant

Cherry Hills Village: Robert Eber/Randy Weil

Those introduced were Ron Cole, new Castle Pines Alternate Representative, Amy Tharp, and Chad Clifford, Colorado State Representative from House District 37. All were welcomed.

2. CONSENT AGENDA: The Consent Agenda included the Draft CACNR Minutes from January 3, 2024; a Treasurer's Report from February 2, 2023, showing a balance of \$30,317.55; and the Noise Report from December 2023 including 2023 YTD statistics, and including the portable noise monitor at the South Metro Station 31.

Alison Biggs requested the Draft Minutes and the Treasurer's Report be moved to Agenda Item #3, for amendments to typographical errors.

On the motion of Alison Biggs duly seconded, the remainder of the Consent Agenda - the December and Year End Noise Reports - was approved.

The December Noise Report included the following information:

**December Local Operations:** 12,489 **December Total Operations:** 25,959 Year to Date Local Operations: 190,528 Year to Date Total Operations: 362,407

25,959 Total Operations in December resulted in 638 complaints from 42 households.

### **December Noise Events:**

	December 60 - 69	<u>db:</u>	<u>December 70 – 7</u>	9 db:	December 80 - 89	db:
7,678	Meridian	6,306	Golf Course	2,583	Airport East	532
7,363	Golf Course	4,606	Meridian	1,326	Golf Course	169
2,895	Parker	1,964	Airport East	872	Meridian	43
2,188	State Park	1,539	State Park	565	Portable Station	24
2,109	Airport East	1,451	Portable Station	253	Parker	05
1,458	Portable Station	1,181	Parker	219	State Park	04
1,315	Grandview Estates	1,177	Grandview Estate	s 135	Grandview Estates	03
948	Castle Rock	910	Greenwood Villag	e 81	Hunters Hill	02
805	Greenwood Village	723	Castle Rock	38	Greenwood Village	01
615	Lone Tree	579	Lone Tree	36	Castle Pines	00
368	Hunters Hill	344	Hunters Hill	22	Castle Rock	00
213	Castle Pines	196	Castle Pines	17	Lone Tree	00
120	Sagebrush Park	108	Sagebrush Park	12	Sagebrush Park	00
	7,363 2,895 2,188 2,109 1,458 1,315 948 805 615 368 213	7,678 Meridian 7,363 Golf Course 2,895 Parker 2,188 State Park 2,109 Airport East 1,458 Portable Station 1,315 Grandview Estates 948 Castle Rock 805 Greenwood Village 615 Lone Tree 368 Hunters Hill 213 Castle Pines	7,363       Golf Course       4,606         2,895       Parker       1,964         2,188       State Park       1,539         2,109       Airport East       1,451         1,458       Portable Station       1,181         1,315       Grandview Estates       1,177         948       Castle Rock       910         805       Greenwood Village       723         615       Lone Tree       579         368       Hunters Hill       344         213       Castle Pines       196	7,678         Meridian         6,306         Golf Course           7,363         Golf Course         4,606         Meridian           2,895         Parker         1,964         Airport East           2,188         State Park         1,539         State Park           2,109         Airport East         1,451         Portable Station           1,458         Portable Station         1,181         Parker           1,315         Grandview Estates         1,177         Grandview Estate           948         Castle Rock         910         Greenwood Village           805         Greenwood Village         723         Castle Rock           615         Lone Tree         579         Lone Tree           368         Hunters Hill         344         Hunters Hill           213         Castle Pines         196         Castle Pines	7,678         Meridian         6,306         Golf Course         2,583           7,363         Golf Course         4,606         Meridian         1,326           2,895         Parker         1,964         Airport East         872           2,188         State Park         1,539         State Park         565           2,109         Airport East         1,451         Portable Station         253           1,458         Portable Station         1,181         Parker         219           1,315         Grandview Estates         1,177         Grandview Estates         135           948         Castle Rock         910         Greenwood Village         81           805         Greenwood Village         723         Castle Rock         38           615         Lone Tree         579         Lone Tree         36           368         Hunters Hill         344         Hunters Hill         22           213         Castle Pines         196         Castle Pines         17	7,678         Meridian         6,306         Golf Course         2,583         Airport East           7,363         Golf Course         4,606         Meridian         1,326         Golf Course           2,895         Parker         1,964         Airport East         872         Meridian           2,188         State Park         1,539         State Park         565         Portable Station           2,109         Airport East         1,451         Portable Station         253         Parker           1,458         Portable Station         1,181         Parker         219         State Park           1,315         Grandview Estates         1,177         Grandview Estates         135         Grandview Estates           948         Castle Rock         910         Greenwood Village         81         Hunters Hill           805         Greenwood Village         723         Castle Rock         38         Greenwood Village           615         Lone Tree         579         Lone Tree         36         Castle Pines           368         Hunters Hill         344         Hunters Hill         22         Castle Rock           213         Castle Pines         196         Castle Pines         17

December Noise Complaints	and	Numbers of House	eholds:	YTD Complai	nts and	Number of Ho	ouseholds:
(638)		(42)		(11,798)		(422)	-
Greenwood Village	311 (49 %)	UAC	16 (38%)	UAC	4,461 (38%)	UAC	170 (40%)
Unincorporated Arapahoe County	183 (29%)	Greenwood Village	09(21%)	GW Village	3,697 (31%)	GV	100 (24%)
Centennial	71 (11%)	UDC	06 (14%)	Parker	1,221 10%)	Other	32 (8%)
Unincorporated Douglas County	40 (06%)	Castle Rock	03 (6%)	Centennial	1,006 (9%)	Centennial	23 (5%)
Denver	40 (02%)	Other	03 (0.7%)	UDC	487 (4%)	UDC	20 (5%)
Castle Rock	10	Centennial	02 (0.7%)	Castle Rock	438 (4%)	) Parker	20 (5%)
Other	06	Aurora	01	Denver	177	Lone Tree	14
Aurora	02	Denver	01	Other	125	Highlands	12
Parker	01	Parker	01	Aurora	70	Aurora	11
Castle Pines	00	Castle Pines	00	Highlands Rai	nch 51	Castle Roo	k 10
Cherry Hills Village	00	Cherry Hills Village	00	Lone Tree	51	Castle Pine	es 05
Highlands Ranch	00	Highlands Ranch	00	Castle Pines	10	Denver	04
Lone Tree	00	Lone Tree	00	Cherry Hills V	04	Cherry Hills	s 01

### Year to Date, the top five households complaining were:

Household #1 2,073 Greenwood Village
Household #2 1,1093 Parker
Household #3 964 Centennial
Household #3 964 Centennial
Household #4 680 Unincorporated Arapahoe County
Household #5 578 Unincorporated Arapahoe County

In December, 24 responses were requested from 638 noise complaints, with 20 of those requests made by email (83%), and 4 made by telephone (17%). Year to Date, 801 responses had been requested, with 641 made by email (80%), and 160 made by telephone (20%).

In December, 609 complaints were made about daytime flights (7:00 a.m. – 9:59 p.m.) – 95%. **29 complaints** were made about **nighttime flights** (10:00 p.m. – 6:59 a.m.) – 5%.

**Year to Date**, of a total 11,820 complaints, 10,538 complaints had been made about day time flights (89%), and 1,282 complaints had been made about nighttime flights (11%).

In December, props accounted for 87% of the complaints by aircraft type; jets accounted for 10% of the complaints, and helicopters caused 3%.

**In December, training** was responsible for 49% of the complaints, **departures** were responsible for 28% of the complaints, and **arrivals** were responsible for **23**% of the complaints.

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

3. <u>ITEMS REMOVED FROM THE CONSENT AGENDA:</u> On page five of the draft minutes, in the fourth paragraph under 10.B,, the sentence was corrected to read "It was reported the Normandy Group working with Arapahoe County might be raising funds to get the new tower built at the airport."

In the "Notes" section of the February 2, 2024 Treasurer's Report, the second entry was corrected to read "Members not invoiced for 2024 due to amount of carry over available." In the Budget section for Education, 2 Reps to UC Savis Symposium, the budgeted amount was corrected to \$4,000.

It was noted that, although the Regular Members had not been invoiced for 2024, ACPAA would continue contributing \$10,000 to CACNR annually.

On the motion of Alison Biggs, duly seconded, the January 3, 2024 draft minutes and the February 2, 2024 Treasurer's Report were both approved as amended.

4. <u>SPECIAL PRESENTATION</u>: Kate Andrus – Mead & Hunt Project Manager; Hardy Bullock – Mead & Hunt, Aviation Forecasting; and Gene Reindel – Harris Miller Miller & Hanson Inc (HMMH), Noise Modeling & Visualization, were present to discuss the Centennial Airport 14 CFR Part 150 Study being undertaken. The slides utilized during the presentation had been provided in the pre-meeting mailing.

The purposes of the study were to identify and evaluate aircraft noise, and land use, both existing and future. Two portions will include updating the noise exposure maps which have to be accepted by the FAA, and developing a noise compatibility program which would be either approved or disapproved by the FAA. It is anticipated the study would take five years.

Discussion points included:

- the need to address changes in aircraft activity levels and the aircraft fleet mix
- the hope to develop/review solutions to noise problems for possible implementation
- the aim to develop a program to minimize and/or mitigate aircraft noise effects on surrounding communities and land uses
- the creation of a Study Advisory Committee as the major resource for developing the ultimate recommendations to the FAA; ACPAA is the only organization which can submit anything for consideration of the FAA.

- a review of the ASNA the Aviation Safety and Noise Abatement Act of 1979 which directed the FAA to develop a single system of measuring noise (DNL), determining noise exposure, recommend land use compatibility, and set aside Federal funds for noise planning.
- a review of ANCA the Airport Noise and Capacity Act, enacted in 1990 which severely constrained airports' ability to govern themselves or to impose new noise and access restrictions; it promulgated FAR Part 161 which restricts airport ability to regulate airport access based on noise no access restrictions have been adopted by the FAA to date through any Part 161study.
- a notation there are opposing requirements between ASNA and ANCA, with the following being utilized by the FAA
  - > Airports must provide access to all airport users and cannot discriminate, although they can pass reasonable rules that do not affect acc assess to the airport, discriminate or unduly interfere with interstate commerce
  - > Airports cannot control an aircraft in flight
  - Federal funding for noise mitigation is limited and controlled by the FAA
  - > The FAA controls noise emissions at the source
  - > The FAA limits airports' implementation of noise restrictions (although local restrictions adopted before ANCE were "grandfathered" in)
- Much uncertainty re land use, as it is not owned by government, but is usually privately or owned by a developer and governed by local zoning codes; once approval of something has been given accordingly, it cannot be taken away
- If several items from the last Part 150 were not approved, why do we think this one will be any different? Why bother if the FAA will not allow local airports to enact things which will help their citizens with noise?
- Perhaps the Study Advisory Committee might develop items which could be put into place without needing FAA approval.
- County Commissioners and Planners need to hear what is going on and be involved how will that occur?
- The consulting staff will go whenever and wherever necessary to engage local jurisdictions and work to make them care.
- The airport has a goal for all local jurisdictions to adopt the same land use guidelines, although it recognizes that is unlikely to occur.
- With the Study Advisory Committee having the role as the major resource for developing the ultimate recommendations to the FAA, what is the role of CACNR?
- Are the CACNR Representatives who have been appointed to the Study Advisory Committee there to represent CACNR? Unclear. Are they free to tell CACNR what is going on in the Study Advisory Committee? Yes. Is CACNR free to know who they are? Unclear unless they chose to "reveal themselves" as noted below.
- Apparently, CACNR represents the communities, and the new SAC has a membership of 40, similar to CACNR's but is broader, was hand selected by the airport staff and its consultants, to include the FAA Denver ADO, air traffic control, airport management and its consulting team, airport users, aircraft and flight school operators, airport tenants, and local jurisdictions responsible for land use controls, and surrounding jurisdictions.
- There will be much overlap between the CACNR Study Group Committee, the Part 150 Study Advisory Committee, and CACNR. Although it was apparently anticipated all groups would get information about the same things at about the same time, how communications, timing and that situation will actually work was unclear.
- Similar to the CACNR Study Group Committee, the airport would like to keep the identities of the aviation experts, airport users, tenants, pilots, corporate representatives and the outside community members identities confidential unless they choose on their own to reveal themselves.
- The SAC has no chair; the consulting team will create the agenda and run the meetings; there will be no minutes, but a summary of presentations from the meetings will be places on the Part 150 website <a href="https://apa150noisestudy.com/">https://apa150noisestudy.com/</a> and Pam Thompson will assure there is a link included on the CACNR website as well. Anyone can comment on anything throughout this process.
- 5. **CACNR STUDY GROUP COMMITTEE**: The 4<sup>th</sup> quarter report had not yet been cleared for distribution, so it was hoped it would be available for the March CACNR meeting. It will be about 25 pages long and will include an update on what has been accomplished, what has been explored but not included for accomplishment, and how success or failure of the included items was measured. Future reports will come out quarterly. Attendance and active involvement by the FAA has been excellent. One flight school has also been actively involved, with letters from some others; all are notified in advance of meeting dates and times.

### 6. **EXECUTIVE COMMTTEE:**

A. MARCH/APRIL AGENDA – it was anticipated that discussion of the CACNR Study Group Committee report might take time during the March meeting, so there was general agreement to hold CACNR orientation during the April meeting. Jason Schwartz could perhaps do something on Noise 101. He knows CACNR and could likely assist with anything we identify we would like done. The policy on expenditure of CACNR funds would apply to working with him via task orders.

Prior suggestions for orientation had included a study session on Noise 101, an explanation of DNL, a look at the CACNR bylaws and structure, and a tour of the airport. Some prior work in identifying useful documents and background material existed. Other things to be added might include reports from the airport with explanations of what they mean, and how data is collected and used.

Chair Pierce indicated there had been a thought to use Jason Schwartz as a CACNR resource consultant in connection with the Part 150 Study. Kate Andrus indicated that sort of thing was part of the airport's consultants' job, so there should be no need for CACNR to hire someone else to do so. There was no further discussion of the idea.

- B. CACNR REPRESENTATION AT ACPAA MEETINGS Chris Eubanks volunteered to represent CACNR at the March 14 meeting. Someone will be needed for the April 11<sup>th</sup> meeting, so all were asked to check calendars for that and future dates. It might be time for ACPAA to see CACNR Representatives with whom they are not familiar.
- C. RETREAT PRIORITIES The Chair indicated there was still a need for volunteers to address the various priorities identified at the prior retreat. There was general agreement that an annual retreat would be desired.

### 7. REPRESENTATIVES' COMMENTS:

A. GENERAL DISCUSSION – Chris Eubanks introduced Ron Cole, District 2 Council Member from Castle Pines, who would be the new Alternate Representative from Castle Pines.

Don Sheehan introduced Amy Thorp, who was the new Alternate Representative from Centennial.

Andy Jones suggested Sterling Ranch might possibly become a new member of CACNR, with approximately 103,000 residents. Samantha Blymyer was asked to look at the dot map to determine how many complaints come from the residents of that area. Jones indicated he would discuss the idea with residents to determine if there was any interest.

#### 8. OTHER REGULAR REPORTS:

A. AIRPORT DIRECTOR'S REPORT – Mike Fronapfel indicated that with 362,407 operations in 2023, Centennial Airport was the #1 General Aviation Airport in the country, and the 18<sup>th</sup> overall airport in the country.

20% of the total fuel sold at the airport had been unleaded, costing the airport \$150,000 to subsidize and \$15,000 to convert fuel trucks to accommodate it. \$250,000 - \$300,000 had been included in the airport's 2024 budget to continue the subsidy program.

Legislation was being worked on at the state level, with the group that includes a local lobbyist, the airport, Arapahoe County, and Greenwood Village. It would include some state fund subsidy for airports to convert to the use of unleaded fuel, and ideas related to noise, some of which would not be allowed due to the FAA, but other voluntary ideas such as those in place here might be encouraged at other airports in the state. A draft of the airport's response to the legislation would be available soon; it was hoped CACNR might be allowed to see that draft. Although the FAA controls the granting of funds at the Federal level for such kinds of activity, it does not control how funds are allocated at the State level.

The approach being used at the Federal level was similar to that here at the state in terms of support for unleaded fuel and other issues related to noise. A member of the staff of the lobbying group – the Normandy Group – was present at this meeting and was welcomed.

A 5K run was announced for June 1 to benefit the airport's foundation. Both runners and wlakers were welcomed to participate,

Fronapfel introduced Matt Frenette, Planner/Noise Analyst and IT Assistant, the newest airport staff member, hired to meet needs identified by the CACNR Study Group Committee and strongly supported by the full CACNR. His background was outlined, and included experience as an air traffic controller. Frenette had been hired in advance of the April 2024 target date, and was warmly welcomed.

Question was asked if there had been an update of the economic impact of the airport on the local economy; the last was dated 2018. Some other areas involved would include the health care community such as Children's Hospital, organ transplants, and the flight for life type helicopter services.

Question was asked if building a new control tower would add to more traffic. Response was in order to increase operations, there would need to be more runway space, and there is no room for that. A location had been selected for a new control tower, but the airport was short \$15 million to actually build it. Instead, an application had been submitted for \$10 million to improve the current tower, as necessary work had been accumulating over the last 5-7 years. Theoretically, the FAA should build and manage the tower as it has done elsewhere, but it is not interested in doing that at Centennial Airport. It wants to have control over the employees and their work but wants the airport to build and manage the building instead.

MOTION - on the motion of Donna Johnston, duly seconded, CACNR agreed to extend the meeting for 30 minutes.

#### 9. OLD BUSINESS:

A. As required, the Secretary indicated there would be an election at the March CACNR meeting, for the offices of Chair, Vic Chair, Secretary and Treasurer. The job descriptions for each had been provided in the meeting's materials. The Chair again indicated he would not be running for Chair again; Chris Eubanks had indicated an interest in that position but would be at the UC Davis Symposium during the March meeting. Paul Krier had left the Vice Chair position, so there would be a vacancy

there to be filled by a Representative from a Regular Member. Unless there were others interested, both Andy Jones and Alison Biggs had indicated they would serve again if nominated and elected.

- B. An updated 2023-2024 CACNR Attendance Record had been provided with the meeting materials.
- C. Chris Eubanks and Bill Wasmund would be attending the UC Davis Aviation Noise and Emissions Symposium in Palm Springs on March 4 6, 2023.

### 10. **NEW BUSINESS**: None

#### 11. PUBLIC COMMENT:

- A. RECEIVED BY CACNR none
- B. MEETING ATTENDEES Public comment came from Louviers, Greenwood Village, and Centennial. Louviers' comment indicated some flight schools seemed to still be trying to avoid going over his home. There had been 635 planes, but he had only called in 4 complaints. He noted Sterling Ranch seemed to be getting traffic from both Centennial Airport and Rocky Mountain Airport.

A concern from the Greenwood Village area indicated a need for easy access to the current noise contours, to assure proper recognition of the newer residential areas during the Part 150 study. There also needed to be better information sharing as to what the Part 150 was about, when meetings were to be held; it was suggested all affected residents receive an actual letter with that information.

Centennial noted the work of Quiet Skies Over Arapahoe County. It was also noted that any look at the economic benefits of the airport must also include mention of the negative sides, such as the suffering at the schools, increased health concerns of residents including suicides; and the damages caused by leaded fuels.

Kate Andrus commented the Part 150 Study required modeling, so there would be a look at all aspects and how they relate. Modeling typically overestimates the noise monitor data. When complaints come in related to outside the 65 DNL, the consultants look for what might be done to help alleviate those problems. In relation to publicity about the Part 150 Study, she indicated what had been done to date, and noted everyone who attended the January 24<sup>th</sup> meeting would get emails about future meetings. Request was made for CACNR to be added to that email list, and for that information to be included in all future CACNR agendas and minutes.

### 12. **NEXT MEETINGS:**

A.	CACNR - March 6, 2024	6:30 p.m. 7565 South Peoria Street, Englewood, CO 80112
	April 3, 2024	6:30 p.m. 7565 South Peoria Street, Englewood, CO 80112
	May 1, 2024	6:30 p.m. 7565 South Peoria Street, Englewood, CO 80112
	June 5, 2024	6:30 p.m. 7565 South Peoria Street, Englewood, CO 80112
	July 2024	NO MEETING
В.	ACPAA – February 8, 2024	3;00 p.m. 7565 South Peoria Street, Englewood, CO 80112
	March 14, 2024	3:00 p.m. 7565 South Peoria Street, Englewood, CO 80112
	April 11, 2024	3:00 p.m. 7565 South Peoria Street, Englewood, CO 80112
	May 9, 2024	3:00 p.m. 7565 South Peoria Street, Englewood, CO 80112
	June 13, 2024	3:00 p.m. 7565 South Peoria Street, Englewood, CO 80112
	July 2024	NO MEETING

- C. PART 150 MEETING DATES When and What Meetings, When Available from APA Staff
- 13. ADJOURNMENT: The meeting was adjourned at 8:51 p.m.

Alison Biggs, Secretary

	BUE	OGET	ACTUAL	
NCOME:			as of 3/1/24	NOTES
CARRY OVER FROM PRIOR YEAR ACPAA CACNR REGULAR MEMBERS	\$ \$ \$	20,000.00	\$20,317.55 \$10,000.00	Carry over from 2023  Members not invoiced for 2024 due to amount of carry over available
O/ (O/ () ( NEW DEI ()	Ψ			Members her invelocation 2021 due to amount of carry ever available
TOTAL INCOME:	\$	30,000.00	\$30,317.55	
EXPENDITURES:				
WORK PROGRAM:				
COMMUNITY OUTREACH	\$	2,000 5,000		Website Updating and Maintenance  Media Outreach Project
FLY QUIET	\$	1,000		Placeholder for Projects tbd
NOISE MONITOR	\$	1,000		Exploration of desired data and software for 2024
EXECUTIVE/WORK PLAN	\$	500		Orientation Manual, Annual Report
EDUCATION				
EDUCATION  2 Page to UC Davis Symposium	\$	4,000		Symposium to be at UC Davis; estimate based on prior symposiums
2 Reps to UC Davis Symposium 2 Reps to 2 N.O.I.S.E. Conferences	\$	4,000		based on prior years on-site conferences
Z Neps to Z N.O.I.O.L. Conferences	Ψ	4,000		based on phor years on-site conferences
CONSULTATION/	\$	4,000		Projects with Jason Schwartz
TASK SUPPORT		,		
MEMPEDOLUD DUEC	Φ.	1.000		NOICE
MEMBERSHIP DUES	\$	1,000		N.O.I.S.E.
ADMINISTRATIVE	\$	1,000		Part time secretarial assistance
ADMINISTRACTIVE	\$	-		Legal
RESERVE	\$	2,500.00		for presently unidentified and unanticipated expenses and/or work CACNR activities consistent with the approved Work Plan.
TOTAL EXPENDITURES:	\$	26,000.00		
CARRY OVER TO 2024	\$	4,000.00	\$30,317.55	Actual to be determined at the end of 2024
** Usually includes registration, travel, ground trans				

FRAME OF REFERENCE: The MOU Funding Structure adopted 12/13/2018 called for an initial two-year funding mechanism. "Thereafter, CACNR will provide ACPAA and each Regular Member with a report on the previous year's expenditures, and an annual invoice accompanied by a proposed budget indicating how the requested funds would be utilized, so that funds could be appropriated for the coming year."



# Centennial Airport Monthly Noise Report



17. January 2024

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# 1 Definitions

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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.

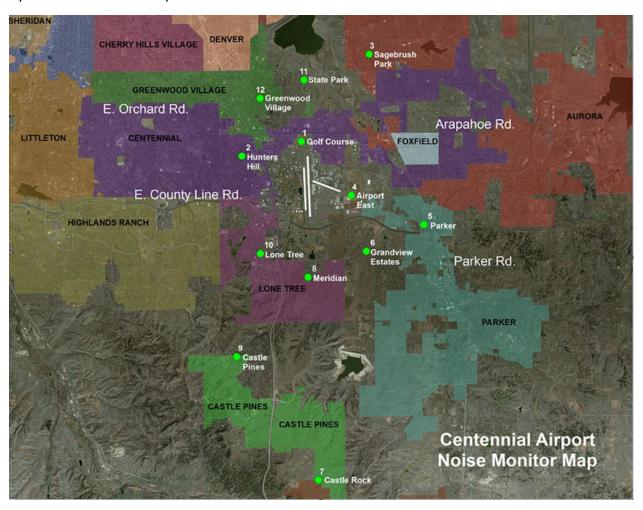
**Visual Flight Rules (VFR)** – A set of regulations under which a pilot operates an aircraft in weather conditions generally clear enough to allow the pilot to see where the aircraft is going. A flight plan is not required when the pilot is operating under Visual Flight Rules.

**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

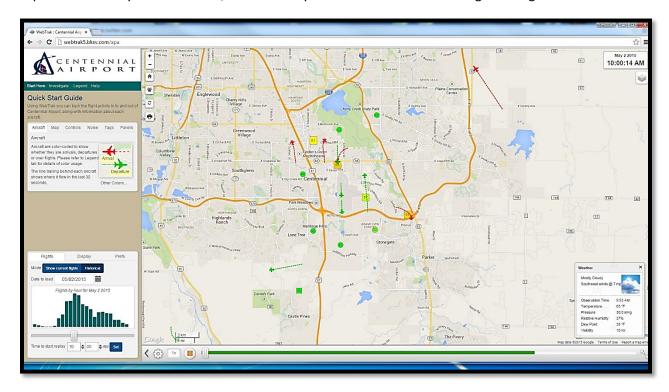
# 3 ABOUT APA'S NOISE MONITORING PROGRAM

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?fbclid=IwAR1xnXwQ2sVwisSZ\_szUAlHFtyYBNIZTACOI1PF7ZSH8PPbBxORnnaidUUE

Centennial Airport Website: <a href="http://www.centennialairport.com">http://www.centennialairport.com</a>

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

**APA Noise Hotline:** 

303-790-4709

# **5** OPERATIONS STATISTICS

		IF	R ITINERAN	T	VFR ITINERANT				LOCAL		
	AIR TAXI	G.A.	MILITARY	TOTAL ITINERANT	AIR TAXI	G.A.	MILITARY	TOTAL	G.A.	MILITARY	TOTAL LOCAL
January	2,483	2,640	172	5,295	1,607	5,408	132	7,147	13,881	2	13,883
February				0				0			0
March				0				0			0
April				0				0			0
May				0				0			0
June				0				0			0
July				0				0			0
August				0				0			0
September				0				0			0
October				0				0			0
November				0				0			0
December				0				0			0
Y-T-D Totals	2,483	2,640	172	5,295	1,607	5,408	132	7,147	13,881	2	13,883
			OVERFLIGH		VFR OVERFLIGHTS						TOTAL
	AIR TAXI	G.A.	MILITARY	TOTAL INTINERANT	AIR TAXI	G.A.	MILITARY	TOTAL			OPERATIONS
January	3	4	4	11	35	61	12	108		January	26,444
February				0				0		February	
March				0				0		March	
April				0				0		April	
May				0				0		May	
June				0				0		June	
July				0				0		July	
August				0				0		August	
September				0				0		September	
October				0				0		October	
November				0				0		November	·
December				0				0		December	·
Y-T-D Totals	3	4	4	11	35	61	12	108		Y-T-D Totals	26,444

# **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.

January 2024 Aircraft Noise Event Decibel Range By Monitor							
Monitor	60-69	70-79	80-89	90+	Totals		
Golf Course- 1*	5320	2721	167	5	8213		
Hunters Hill- 2	388	47	2	0	437		
Sagebrush Park- 3	119	9	1	0	129		
Airport East- 4*	1438	807	499	24	2768		
Parker- 5	1903	238	1	0	2142		
Grandview Estates- 6	1210	133	3	0	1346		
Castle Rock- 7	721	52	0	0	773		
Meridian- 8	6186	1522	62	0	7770		
Castle Pines- 9	221	16	0	0	237		
Lone Tree- 10	781	53	2	0	836		
State Park- 11	1461	746	6	2	2215		
Greenwood Village- 12	732	71	0	0	803		
Portable Station 31	1168	267	10	4	1449		
Totals	21648	6682	753	35	29118		

\*Monitor located on Airport



# 7 JANUARY 2024 NOISE COMPLAINT STATISTICS

In January, Centennial Airport received 760 complaints from 58 households.

January	Noise Comp	Population	
Municipality	Complaints	Households	
Arapahoe			
County	246	17	98,066
Unincorporated			
Aurora	2	1	399,913
Castle Pines	1	1	14,000
Castle Rock	18	2	82,000
Centennial	27	1	108,422
Cherry Hills Village	0	0	6,442
Denver	15	1	715,522
Douglas County Unincorporated	39	4	276,493*
Greenwood Village	389	18	15,691
Highlands Ranch	0	0	103,444
Lone Tree	1	1	14,253
Parker	0	0	68,000
Other	22	12	UNK
Total	760	58	1,867,296

\*Douglas County Unincorporated Population with Highlands Ranch Removed

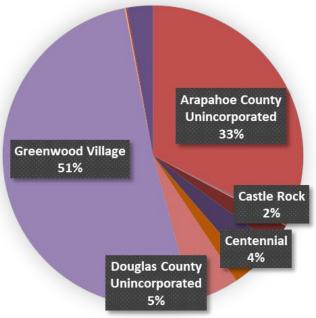
# January 2024 Noise Complaint Responses Completed Email 28 Phone 9

Total

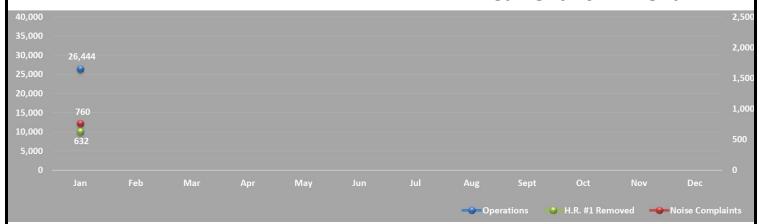
Time Complaint Received	Jan
Day Hours (7:00 am - 9:59pm)	738
Night Hours (10:00 pm - 6:59 am)	22
TOTAL	760

37

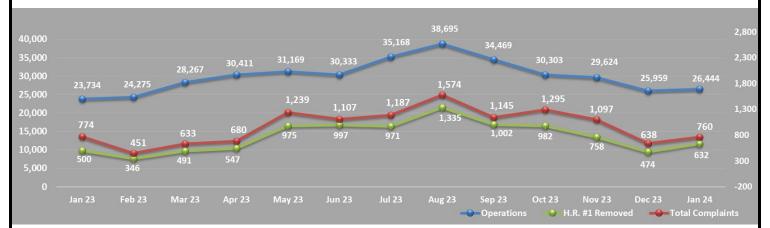
# **Complaints per Municipality**



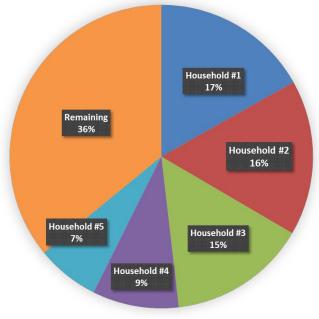
# **Current 2024 Trend**



# **Previous Year 13 Month Trend**





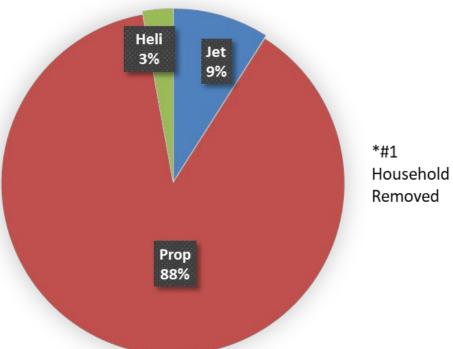


Top 5 Household Complaints YTD						
Household	Complaints	Resides In				
Household #1	128	Greenwood Village				
Household #2	126	Arapahoe County				
Household #3	112	Greenwood Village				
Household #4	70	Greenwood Village				
Household #5	51	Arapahoe County				
Remaining		273				
Total		760				

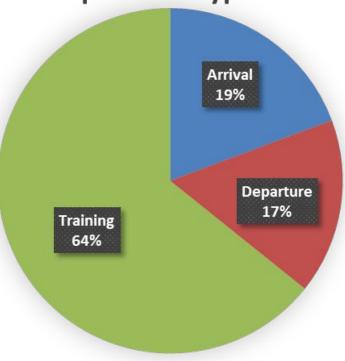
Page **8** of **12** 

January 2024

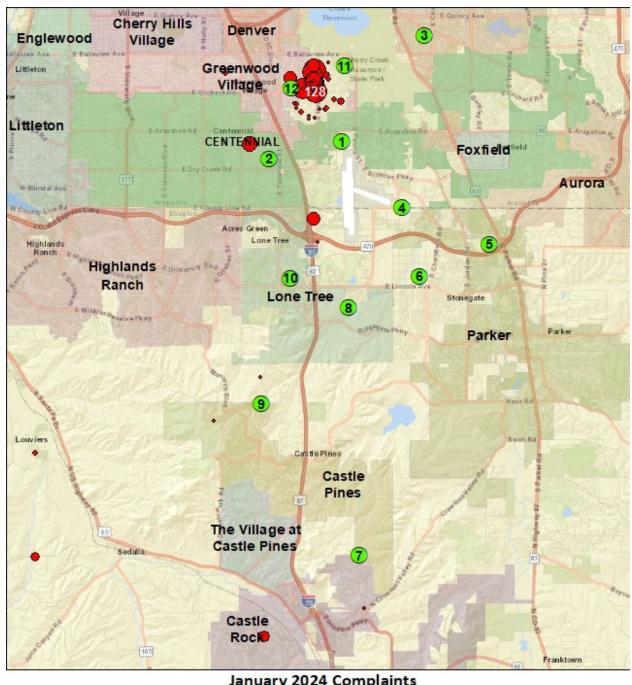
# Complaints by Aircraft Type



# Complaints by Operation Type



# 8 CENTENNIAL AIRPORT COMPLAINT MAP



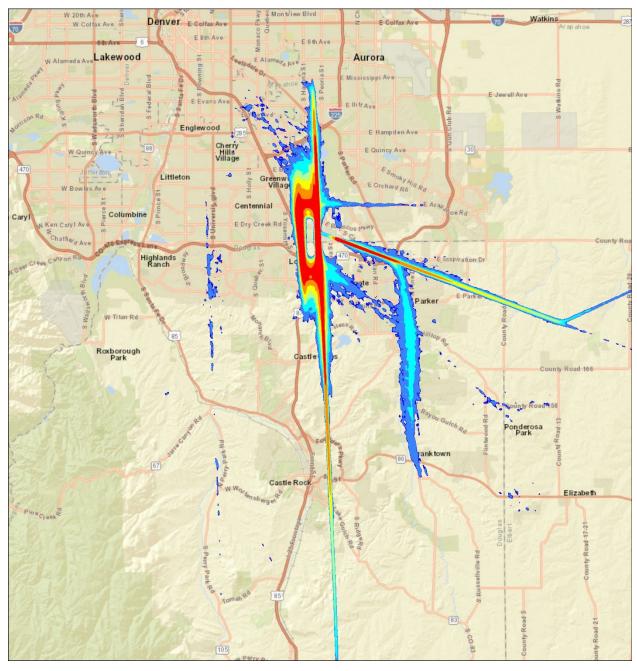




<sup>\*\*</sup>Larger dots equate to more complaints for that particular households

# 9 CENTENNIAL AIRPORT RADAR TRACK DENSITY MAP

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



January 2024 Flight Tracks associated with Centennial Airport

**Lower Density Traffic** 

**Higher Density Traffic** 

# **10 Notes and Disclaimer**

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

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



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

### RECORD OF APPROVAL

# 14 CFR, PART 150 NOISE COMPATIBILITY PROGRAM CENTENNIAL AIRPORT ENGLEWOOD, COLORADO

### **INTRODUCTION**

The Noise Compatibility Program (NCP) for Centennial Airport, Englewood, CO, includes measures to abate aircraft noise, control land development and implement and update the program. The owner/operator of Centennial Airport, the Arapahoe County Public Airport Authority, recommended twelve (12) measures in its NCP to remedy existing noncompatible land uses and prevent future noncompatible land uses.

Title 14 Code of Federal Regulations, Part 150, Airport Noise Compatibility Planning, requires that the Noise Exposure Maps (NEMs) apply to a period of no less than five years into the future, although it may apply to a longer period if the sponsor so desires. The Arapahoe County Public Airport Authority has requested that the program measures be applied to the forecast year 2012 Noise Exposure Map (NEM) (see Figure 5, Future 2012 Noise Exposure Map, Centennial Airport, Noise Contour Map Update, October 2007).

In April 2002, the Executive Director of the Arapahoe County Public Airport Authority asked the FAA to review the NEMs and NCP for Centennial Airport, contained in the "Centennial Airport FAR Part 150 Noise Exposure and Land Use Compatibility Study Program." The FAA requested corrections be made to the NCP and worked with the airport authority to revise the study. The airport authority subsequently submitted to FAA a revised version of the NCP in August 2003. Due to the age of data in the NEMs and the delay in completing the Part 150 study, the FAA required the airport authority to review and update the NEMs to address changes at the airport and in surrounding land uses. In June 2006, the FAA issued a grant to the Arapahoe County Public Airport Authority to update Centennial Airport's noise exposure maps.

This update was completed in October 2007 and submitted to FAA in November 2007. The update, titled *Centennial Airport, Noise Contour Map Update, Noise Contour and Population Analysis*, includes updates to the baseline noise modeling inputs, such as aircraft operations and fleet mix, and revised existing and future NEMs. Based on this update, the Arapahoe County Public Airport Authority has certified that the existing conditions shown in the new 2006 NEM and the future 2012 NEM are representative of the existing and forecast conditions as of the date they were submitted to the FAA.

The objective of the noise compatibility planning process is to improve the compatibility between airport operations and noise-sensitive land uses in the area, while allowing the airport to continue to serve its role in the community, state, and nation. The approval actions listed herein include all those that the airport sponsor recommends be taken by the Federal Aviation

Administration (FAA). It should be noted that the approvals indicate only that the actions would, if implemented, be consistent with the purposes of Part 150. These approvals do not constitute decisions to implement the actions. Subsequent decisions concerning possible implementation of these actions may be subject to applicable environmental procedures, aeronautical study, or other procedures or requirements.

The recommended measures below summarize as closely as possible the airport operator's recommendations and associated benefits in the noise compatibility program and are referenced to the program by page number. The statements contained within the summarized program elements and before the indicated FAA approval, disapproval, or other determination, do not represent the opinions or decisions of the FAA.

### 1- NOISE ABATEMENT ELEMENTS

### 1. Ban Stage 1 Jets (Page G.5)

**Description:** This measure recommends that the Arapahoe County Public Airport Authority prohibit the use of Stage 1 jets at the Centennial Airport. In the NCP, the Airport Sponsor states this can be accomplished without complying with 14 CFR Part 161 regulatory requirements and can be implemented immediately.

FAA Determination: Disapproved for purposes of Part 150 pending submission of additional information to make an informed analysis. The NCP states that, while few Stage 1 aircraft use Centennial Airport, the recommendation "will reduce the noise impact to the local community by eliminating operations by the noisiest aircraft to use the airport." The Arapahoe County Public Airport Authority states the resulting single event noise level reductions by banning Stage 1 aircraft from operating at the airport would benefit residential units north of the airport and provide a noise benefit both in the short term and in the five year planning timeframes. However, this has not been quantified in the NCP.

Besides providing quantified noise benefits data, the analysis of this measure must demonstrate the approval criteria of Part 150 are met. This includes the requirement that the measure not create an undue burden on interstate or foreign commerce, including any unjust discrimination. The FAA will not approve a noise restriction that may violate the airport sponsor's grant assurances, including the assurance requiring access to the airport on reasonable terms and without unjust discrimination. The Arapahoe County Public Airport Authority may submit this additional information to FAA for further evaluation and reconsideration of this measure, after complying with applicable regulatory requirements.

### 2. Ban Stage 2 Jet Aircraft Under 75,000 lbs. At Night (Pages F.4 and G.6)

**Description:** This measure recommends that the Arapahoe County Public Airport Authority prohibit the use of Stage 2 jets at the Centennial Airport between the hours of 10 pm and 7 am. The NCP states that this proposed ban could be adopted only after the completion of required analysis and FAA approval required per 14 CFR Part 161, Notice and Approval of Airport Noise and Access Restrictions.

FAA Determination: Disapproved for purposes of Part 150 pending submission of additional information to make an informed analysis and compliance with 14 CFR

Part 161. This measure recommends that a mandatory curfew, as outlined above, be established subject to the requirements of 14 CFR Part 161. The Arapahoe County Public Airport Authority studied the noise benefit of such a ban and describes this benefit in its NCP. While the NCP demonstrates a noise benefit in compliance with Part 150 requirements, a demonstration of the measure's ability to meet other Part 150 approval criteria are lacking. For example, the analysis does not show how the ban would or would not affect commerce to aircraft operators affected by the ban. All Part 150.35 requirements need to be addressed before the FAA can approve the measure.

Before an airport sponsor can impose a restriction on the operation of Stage 2 aircraft, Part 161 requires the airport sponsor to consult with several parties, including potentially affected aircraft operators, the public and FAA. In addition, the airport sponsor must prepare a costbenefit analysis that meets Part 161 regulatory requirements.

# 3. Implement 010 Degree Departure Heading for Jet Aircraft at Night (Pages F.8 and G.9)

<u>Description:</u> This measure recommends aircraft operators implement a 010 degree departure procedure off of Runways 35R and 35L between 10 pm and 6 am when flying routes to north and west destinations. The intent of this measure is to reduce nighttime noise over neighborhoods just north of Centennial Airport. The departure heading would be flown for a designated distance (2 nautical miles as measured by the DME that is co-located with the localizer north of Runway 17/34) before the aircraft operator would resume a destination heading. This procedure would put north and west departures over the Cherry Creek State Park, allowing aircraft to gain addition altitude before overflying residences.

The Arapahoe County Public Airport Authority modeled the noise benefit of this departure procedure for both day and night, resulting in a reduction from 1,591 persons to 167 persons within NEM noise contours greater than 65 DNL. Based on preliminary FAA testing of this departure procedure, the airport authority also determined that the 65 DNL noise contour did not encompass Cherry Creek State Park.

<u>FAA Determination: Approved as voluntary, subject to weather, operational safety and efficiency.</u> Testing by FAA indicates this measure can be implemented only between the hours of 10:00 pm and 6:00 am and after completion of environmental studies associated with the air traffic procedural change. Implementation of this procedure at any other time poses an adverse impact to the safety and efficiency of FAA air traffic control operations.

## 4. Test 24-Hour Flight Tracks Between 350 and 010 Degree Headings (Pages G.14 – G.15)

<u>Description:</u> This measure recommends that FAA Air Traffic test a flight procedure that would "fan" northern departures between 350 and 010 degree headings on a 24-hour basis, weather and traffic permitting. The intent of this measure is to test the feasibility of spreading the north flow flight tracks over a larger area during times when a 010 departure heading is not feasible due to weather or traffic conditions.

<u>FAA Determination: Disapproved.</u> This proposed measure could have significant adverse impacts to the safety and efficiency of the FAA's Air Traffic Control operations in the Denver metro area because of the complexity of aircraft separation, traffic management and facility coordination issues.

FAA initial safety review of this proposed measure revealed that it would result in numerous adverse impacts to the safety and efficiency of FAA's air traffic control operations. Buckley Air Force Base (BKF) airspace is 3.93 nautical miles from the departure end of Centennial's Runway 34R. Due to the sensitive nature of BKF operations and their mission of national security, FAA cannot accept the proposal that would require complex coordination in BKF airspace between the control towers at Centennial Airport, Denver International Airport and BKF and FAA's Denver Terminal Radar Approach Control Facility (TRACON). Denver International Airport departure and arrival traffic flows in many configurations and also would be adversely impacted by this suggested routing. This, in turn, would cause adverse impacts to the safety and efficiency of FAA Air Traffic operations.

### 5. Eliminate Preferential Runway Use Procedure (Page G.17)

**Description:** This measure proposes to eliminate the voluntary use of nighttime preferential runway procedure that sequenced all arriving and departing aircraft to the southern portion of the airport. This procedure was originally implemented in the 1990's to concentrate aircraft operations over the then sparsely populated areas south of the airport. However, areas south of the airport, including Douglass County, are being developed and the procedure now is rarely used. The airport authority believes eliminating this procedure will help reduce the number of residents south of the airport exposed to aircraft noise. The noise benefit of this recommendation is the reduction from 1,591 persons to 1,190 persons within the 65 DNL NEM noise contour and 143 persons to 103 persons in the 70 DNL NEM noise contour.

<u>FAA Determination: Approved for purposes of Part 150.</u> Any changes to preferential runway procedures shall be coordinated with FAA Air Traffic Control. Airfield signs, airport publications and other pilot guidance must be updated, accordingly.

# 6. Implement 170 Degree Departure to 4 DME or 8,000 MSL (+/- 20 degrees) (Pages F.9, F.14 and G-17)

**Description:** This measure proposes that FAA Air Traffic Control direct pilots departing to the south to fly the runway heading until reaching 4 DME or 8,000 MSL, with a deviation of plus or minus 20 degree heading. This is intended to help maintain departures over areas with compatible land uses and reduce the deviation of such departures over areas with noncompatible land uses, such as residential development. The airport authority believes this departure procedure will reduce the number of residents south of the airport who are exposed to aircraft over flights.

Presently, aircraft departing from Runways 17L and 17R tend to turn away from the runway centerline heading and assume their departure heading as soon as possible. This often results in overflights of residential developments. This proposed departure procedure would utilize a corridor of open space and compatible development south of the airport that aircraft could overfly, as safety and weather permit, until reaching a certain altitude or a certain distance from the airport. This measure also allows for some leeway in course heading assigned by FAA Air Traffic Control so as to avoid conflicts with aircraft on approach during certain wind conditions.

<u>FAA Determination: Disapproved.</u> This proposed measure could have significant impacts to the safety and efficiency of the FAA's Air Traffic Control operations. This flight procedure change does not provide the appropriate minimum separation between those aircraft executing approaches to Runway 35 while aircraft are departing Runway 17. Additionally, the procedure implies Centennial Air Traffic Control Tower would issue radar vectors to aircraft. FAA has not authorized Centennial Tower to conduct such radar operations.

## 7. Development/Implementation of Fly Quiet Program (Pages F.6 and G.23)

<u>Description:</u> This measure proposes the development and implementation of a comprehensive program that combines a number of measures to encourage pilots to operate aircraft as quietly as possible when operating at Centennial Airport. This would be a voluntary program that encourages pilots to use certain flight procedures (some of which are included in the NCP) to minimize the noise impact on local communities. Other potential elements of the Fly Quiet Program could include noise abatement flight tracks and late night departure procedures.

To ensure the effectiveness of the Fly Quiet Program, the airport authority proposes to implement a Noise Monitoring Program (see Recommendation #2 under Program Management Elements Section below) to determine compliance and effectiveness of the Fly Quiet Program. Based on noise data collected, the airport authority proposes to refine program measures and believes the program has the potential of reducing single event noise levels and encouraging greater compliance with preferential flight corridors and procedures.

FAA Determination: Approved as a voluntary measure only. For Part 150 purposes, the only measure approved for inclusion in the Fly Quiet Program is the approved 010 degree, nighttime departure procedure (see above Section 1- NOISE ABATEMENT ELEMENTS, #3 Implement 010 Degree Departure Heading for Jet Aircraft at Night). However, this does not preclude the airport sponsor from analyzing and including in a revised NCP additional Fly Quiet Program measures for FAA review and approval. The airport sponsor must show that such measures meet the requirements of Part 150, including a noise benefit. Also, the appropriate FAA office must review, prior to publication, any airport publication and other pilot guidance encouraging the use of Fly Quiet Program measures.

### 2 - LAND USE PLANNING ELEMENT

### Amend Community Plans and Zoning Ordinances (Pages F.8 and G.18)

<u>Description</u>: Under this recommendation, the airport authority proposes to work with the local municipalities to amend zoning requirements, comprehensive plans and development regulations to minimize new, noncompatible land uses near the airport and to minimize the impact on airspace surrounding the airport, including 14 CFR Part 77 imaginary surfaces. By proposing this measure, the airport authority hopes to discourage noncompatible land uses near the airport, such as the construction of schools, hospitals and residential development, and to require sound attenuation of new construction in existing development that is impacted by aircraft noise.

Municipalities surrounding Centennial Airport have existing zoning requirements and comprehensive plans but they vary and the airport authority intends though this measure to promote consistent land use planning among these jurisdictions. In particular, the airport authority proposes to encourage neighboring municipalities to adopt in land use plans noise contours and other noise criteria specified in 14 CFR Part 150 and require sound attenuation for

any infill development occurring within the 60 day-night average sound level (DNL) noise contour.

<u>FAA Determination: Approved in part.</u> Portions of this recommendation related to noise compatibility planning are approved. Portions related to airspace clearances (14 CFR Part 77) are disapproved for purposes of Part 150. Disapproval for purposes of Part 150 does not prevent the airport sponsor from working with local jurisdictions to implement measures that are not noise-related, in the interest of unified local planning documents.

The Federal government has no authority to control local land use; the local governments have the authority to implement this measure. While the Centennial Airport NCP proposes the DNL 60 dB noise contour as the criterion for preventive land use planning measures, the NCP states the sponsor has adopted the Federal guidelines. As a result, any funding assistance would apply to noise compatibility projects located in areas where aircraft noise exposure is DNL 65 dB or greater. In addition, there is no evidence in the NCP that the local land use jurisdictions have adopted a standard different than the 65 DNL for determining compatible land uses.

### 3 – PROGRAM MANAGEMENT ELEMENTS

1. Update and Establish Environmental/Noise Abatement Liaison/Office (Pages F.7 and G.20)

<u>Description:</u> This measure recommends the airport authority update its existing noise complaint system, establish new procedures for addressing such complaints and establish a new office within the authority to address all environmental concerns, including aircraft noise.

While the airport authority already has taken steps to establish an environmental/noise abatement office, the intent of this measure is to dedicate more resources to this office to better address noise issues, as well as other environmental issues that are of concern to the local public and airport users. In addition, the airport authority intends to direct this office to be responsible for the implementation, administration and maintenance of the recommended noise monitoring system (see Recommendation #2 below) and be responsible for addressing specific aircraft related noise issues.

FAA Determination: Approved.

### 2. Install Noise Monitoring System and Develop Program (Pages F.7 and G.21)

<u>Description:</u> This recommendation would result in the installation of a permanent noise monitoring system to monitor noise levels and compliance with noise abatement measures. This system also would be used to determine changes to aircraft noise and overall noise levels due to seasonal conditions. This system is intended to be used to determine the success of recommended noise abatement procedures and build an electronic database to be used for future updates of the NCP. The airport authority also intends to use such a noise monitoring system to identify aircraft operating in a manner inconsistent with other aircraft to gauge compliance with the airport's Fly Quiet Program (see Recommendation #7 under the Noise Abatement Procedures Section above).

<u>FAA Determination: Approved.</u> For purposes of aviation safety, this approval does not extend to the use of monitoring equipment for enforcement purposes by in-situ measurement of any pre-set noise thresholds or voluntary noise abatement measures.

The NCP proposes to analyze the effectiveness of a Fly Quiet Program using supplemental metrics to compare benefits of alternative corridors, altitudes, etc. It should be understood that compliance with this program only can occur to the extent that safe, efficient aircraft operation and airspace management is not jeopardized and the pilot-in-command has final authority regarding safe operation of an aircraft.

# 3. Operations Review and Part 150 Updates (Page G.25)

**Description:** This measure recommends that the airport authority annually review aircraft operations to determine if actual operations are consistent with projections contained in the NCP. This annual evaluation also would include a review of NCP recommendations to determine their overall effectiveness.

Further, this measure recommends that the airport authority reevaluate the NCP five years after its adoption to determine the extent to which airport operations has changed from that projected in the NCP and as necessary, new mitigation measures will be evaluated.

**FAA Determination: Approved.** This recommendation is consistent with 14 CFR Part 150.23(e)(9).

## 4. Establish Follow-up Roundtable/Committee (Page G.27)

<u>Description</u>: This measure recommends the establishment of an advisory committee to monitor programs implemented as a result of the adoption of this NCP, including the Fly Quiet Program guidelines and the Noise Monitoring Program. The committee membership will be similar to the members that participated on the advisory committee that assisted in the development on the NCP. At the discretion of the airport authority, the advisory committee would be comprised of airport staff, airport user, representatives of the local communities and interested members of the public.

FAA	Deter	mina	tion:	Appr	oved.
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Airports and Environmental Law Division

APPROVED / DISAPPROVED:

DATE 8/12/08

Donna P. Taylor

Manager, Airports Division

Northwest Mountain Region

CONCUR / NONCONCUR:

ERIC ELMORE, AGC-620
CONCURRED VIA EMAIL

ANM-7 Office of Regional Counsel - NW Mountain

### PART 161—NOTICE AND APPROVAL OF AIRPORT NOISE AND ACCESS RESTRICTIONS

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§161.501 Scope.

§161.503 Informal resolution; notice of apparent violation.

§161.505 Notice of proposed termination of airport grant funds and passenger facility charges.

AUTHORITY: 49 U.S.C. 106(g), 47523-47527, 47533.

Source: Docket No. 26432, 56 FR 48698, Sept. 25, 1991, unless otherwise noted.

### Title 14: Aeronautics and Space

PART 161—NOTICE AND APPROVAL OF AIRPORT NOISE AND ACCESS RESTRICTIONS Subpart A—General Provisions

### §161.1 Purpose.

This part implements the Airport Noise and Capacity Act of 1990 (49 U.S.C. App. 2153, 2154, 2155, and 2156). It prescribes:

- (a) Notice requirements and procedures for airport operators implementing Stage 3 aircraft noise and access restrictions pursuant to agreements between airport operators and aircraft operators;
  - (b) Analysis and notice requirements for airport operators proposing Stage 2 aircraft noise and access restrictions;
  - (c) Notice, review, and approval requirements for airport operators proposing Stage 3 aircraft noise and access restrictions; and
- (d) Procedures for Federal Aviation Administration reevaluation of agreements containing restrictions on Stage 3 aircraft operations and of aircraft noise and access restrictions affecting Stage 3 aircraft operations imposed by airport operators.

### 161.3 Applicability.

- (a) This part applies to airports imposing restrictions on Stage 2 aircraft operations proposed after October 1, 1990, and to airports imposing restrictions on Stage 3 aircraft operations that became effective after October 1, 1990.
- (b) This part also applies to airports enacting amendments to airport noise and access restrictions in effect on October 1, 1990, but amended after that date, where the amendment reduces or limits aircraft operations or affects aircraft safety.
- (c) The notice, review, and approval requirements set forth in this part apply to all airports imposing noise or access restrictions as defined in §161.5 of this part.

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### §161.5 Definitions.

For the purposes of this part, the following definitions apply:

Agreement means a document in writing signed by the airport operator; those aircraft operators currently operating at the airport that would be affected by the noise or access restriction; and all affected new entrants planning to provide new air service within 180 days of the effective date of the restriction that have submitted to the airport operator a plan of operations and notice of agreement to the restriction.

Aircraft operator, for purposes of this part, means any owner of an aircraft that operates the aircraft, i.e., uses, causes to use, or authorizes the use of the aircraft; or in the case of a leased aircraft, any lessee that operates the aircraft pursuant to a lease. As used in this part, aircraft operator also means any representative of the aircraft owner, or in the case of a leased aircraft, any representative of the lessee empowered to enter into agreements with the airport operator regarding use of the aircraft.

Airport means any area of land or water, including any heliport, that is used or intended to be used for the landing and takeoff of aircraft, and any appurtenant areas that are used or intended to be used for airport buildings or other airport facilities or rights-of-way, together with all airport buildings and facilities located thereon.

Airport noise study area means that area surrounding the airport within the noise contour selected by the applicant for study and must include the noise contours required to be developed for noise exposure maps specified in 14 CFR part 150.

Airport operator means the airport proprietor.

Aviation user class means the following categories of aircraft operators: air carriers operating under parts 121 or 129 of this chapter; commuters and other carriers operating under part 135 of this chapter; general aviation, military, or government operations.

Day-night average sound level (DNL) means the 24-hour average sound level, in decibels, for the period from midnight to midnight, obtained after the addition of ten decibels to sound levels for the periods between midnight and 7 a.m., and between 10 p.m. and midnight, local time, as defined in 14 CFR part 150. (The scientific notation for DNL is L<sub>dn</sub>).

Noise or access restrictions means restrictions (including but not limited to provisions of ordinances and leases) affecting access or noise that affect the operations of Stage 2 or Stage 3 aircraft, such as limits on the noise generated on either a single-event or cumulative basis; a limit, direct or indirect, on the total number of Stage 2 or Stage 3 aircraft operations; a noise budget or noise allocation program that includes Stage 2 or Stage 3 aircraft; a restriction imposing limits on hours of operations; a program of airport-use charges that has the direct or indirect effect of controlling airport noise; and any other limit on Stage 2 or Stage 3 aircraft that has the effect of controlling airport noise. This definition does not include peak-period pricing programs where the objective is to align the number of aircraft operations with airport capacity.

Stage 2 aircraft means an aircraft that has been shown to comply with the Stage 2 requirements under 14 CFR part 36.

Stage 3 aircraft means an aircraft that has been shown to comply with the Stage 3 requirements under 14 CFR part 36.

[Doc. No. 26432, 56 FR 48698, Sept. 25, 1991, as amended by Amdt. 161-2, 66 FR 21067, Apr. 27, 2001]

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### §161.7 Limitations.

- (a) Aircraft operational procedures that must be submitted for adoption by the FAA, such as preferential runway use, noise abatement approach and departure procedures and profiles, and flight tracks, are not subject to this part. Other noise abatement procedures, such as taxiing and engine runups, are not subject to this part unless the procedures imposed limit the total number of Stage 2 or Stage 3 aircraft operations, or limit the hours of Stage 2 or Stage 3 aircraft operations, at the airport.
- (b) The notice, review, and approval requirements set forth in this part do not apply to airports with restrictions as specified in 49 U.S.C. App. 2153(a)(2)(C):
- (1) A local action to enforce a negotiated or executed airport aircraft noise or access agreement between the airport operator and the aircraft operator in effect on November 5, 1990.
- (2) A local action to enforce a negotiated or executed airport aircraft noise or access restriction the airport operator and the aircraft operators agreed to before November 5, 1990.
  - (3) An intergovernmental agreement including airport aircraft noise or access restriction in effect on November 5, 1990.
- (4) A subsequent amendment to an airport aircraft noise or access agreement or restriction in effect on November 5, 1990, where the amendment does not reduce or limit aircraft operations or affect aircraft safety.

- (5) A restriction that was adopted by an airport operator on or before October 1, 1990, and that was stayed as of October 1, 1990, by a court order or as a result of litigation, if such restriction, or a part thereof, is subsequently allowed by a court to take effect.
- (6) In any case in which a restriction described in paragraph (b)(5) of this section is either partially or totally disallowed by a court, any new restriction imposed by an airport operator to replace such disallowed restriction, if such new restriction would not prohibit aircraft operations in effect on November 5, 1990.
- (7) A local action that represents the adoption of the final portion of a program of a staged airport aircraft noise or access restriction, where the initial portion of such program was adopted during calendar year 1988 and was in effect on November 5, 1990.
- (c) The notice, review, and approval requirements of subpart D of this part with regard to Stage 3 aircraft restrictions do not apply if the FAA has, prior to November 5, 1990, formed a working group (outside of the process established by 14 CFR part 150) with a local airport operator to examine the noise impact of air traffic control procedure changes. In any case in which an agreement relating to noise reductions at such airport is then entered into between the airport proprietor and an air carrier or air carrier constituting a majority of the air carrier users of such airport, the requirements of subparts B and D of this part with respect to restrictions on Stage 3 aircraft operations do apply to local actions to enforce such agreements.
- (d) Except to the extent required by the application of the provisions of the Act, nothing in this part eliminates, invalidates, or supersedes the following:
  - (1) Existing law with respect to airport noise or access restrictions by local authorities;
- (2) Any proposed airport noise or access regulation at a general aviation airport where the airport proprietor has formally initiated a regulatory or legislative process on or before October 1, 1990; and
- (3) The authority of the Secretary of Transportation to seek and obtain such legal remedies as the Secretary considers appropriate, including injunctive relief.

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### §161.9 Designation of noise description methods.

For purposes of this part, the following requirements apply:

- (a) The sound level at an airport and surrounding areas, and the exposure of individuals to noise resulting from operations at an airport, must be established in accordance with the specifications and methods prescribed under appendix A of 14 CFR part 150; and
- (b) Use of computer models to create noise contours must be in accordance with the criteria prescribed under appendix A of 14 CFR part 150.

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### §161.11 Identification of land uses in airport noise study area.

For the purposes of this part, uses of land that are normally compatible or noncompatible with various noise-exposure levels to individuals around airports must be identified in accordance with the criteria prescribed under appendix A of 14 CFR part 150. Determination of land use must be based on professional planning, zoning, and building and site design information and expertise.

### Email to every new CACNR Representative as soon as we have contact information:

Welcome to the Centennial Airport Community Noise Roundtable.

The material listed below is designed to help you become familiar with CACNR and the various aspects of its work. Please feel free to contact any of the Work Plan or Executive Committees if you have questions or would like additional information.

A tour of the airport is recommended for those new to involvement with it. Please contact airport staff member Rachel Keller to make satisfactory arrangements.

rkeller@centennialairport.com 303-218-2923 or 303-790-0598

### **STILL TO BE FINALIZED:**

Content – identification of specific information to be included still to be determined/finalized for several categories

What else is needed? Input is sought and welcomed from any CACNR Representative. Should we include a roster, and a list of the committees' memberships? What else?

How will the file be managed/updated?

# CENTENNIAL AIRPORT COMMUNITY NOISE ROUNDTABLE

(CACNR)

www.centennialairportnoise.com info@centennialairportnoise.com

### ORIENTATION MANUAL

**Draft Table of Contents** 

- 1. Mission, Vision, Values
- 2. Overview

**CACNR Roster** 

Map – Airport Influence Area (do we include if/what any jurisdiction has done within its boundaries to address the airport's recommendations?)

Map – Geographic Locations of Members with Noise Monitor Locations

3. Current Governing Documents

Memorandum of Understanding and Funding Structure

**CACNR Bylaws** 

**CACNR Policies and Procedures** 

CACNR Work Program & Appendices A & B (Ongoing Activities; Completed or Removed Action Items)

### 3. Background

**CACNR History** 

**CACNR Annual Reports** 

Federal Aviation Authority Part 150 Noise Exposure and Land Use Compatibility Study Program

Federal Aviation Authority Part 161

Map - Noise Exposure

Noise 101

**CACNR Accomplishments** 

**CACNR Minutes** 

Work Program Highlights

### 4. Resources

Arapahoe County Public Airport Authority (ACPAA) www.centennialairport.com

Fly Quiet Program

Noise Complaint Hotline 303-790-4709

Federal Aviation Association (FAA) https://www.faa.gov

FAA Community Involvement Program

FAA Denver Metroplex Project

**NextGen Advisory Committee** 

Noise Abatement Guidelines

Other Organizations

Congressional Quiet Skies Caucus https://nqsc.org/Caucus.html

National Business Aviation Association <a href="http://NBAA.org">http://NBAA.org</a>

**NBAA** Noise Abatement Guidelines

N.O.I.S.E. www.aviation-noise.org

Glossary

# **CACNR/ACPAA 2024 MEETING SCHEDULES**

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

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

CACNR MEETINGS	CACNR REPRESENTATIVE	REPORT DUE DATE	ACPAA MEETINGS
	(7	To sblymyer@centennialairport.com	
January 03		due January 31 for Feb 8 meeting	NO ACPAA MEETING
February 07	Brad Pierce	verbal and on dias	February 08
rebruary 07	Diad Fierce	verbar and on dias	1 Ebitially 00
March 06	Chris Eubanks	March 07	March 14
April 03		April 04	April 11
May 01		May 02	May 09
, 02		, 02	
June 05		June 06	June 13
July 02 - NO CACNR MI	EETING	N	O ACPAA MEETING
July 02 - NO CACINE IVII	ETTING	IN	O ACPAA MEETING
August 07		verbal or on dias	August 08
September 04		September 05	September 12
October 02		October 03	October 10
<u> </u>		00.00001 00	0000001 10
November 06		November 07	November 14
Dec 03 – NO CACNR M	1EETING		December 12

### SEPTEMBER 2023 RETREAT PRIORITIES

The Summary Report from Jason Schwartz was received and accepted. Comment was made that the retreat was

useful, and perhaps such meetings should be held more often. Agreed upon as top priorities from that report were:

- 1) Establish training for roundtable members
- 2) Make recommendations to Airport Authority and other than can reduce noise
- 3) Restructure meeting agendas to make meetings more effective and productive (We approved a revised agenda structure)
- 4) Publish annual reports
- 5) Expand community outreach
- 6) Strengthen relationships with FAA
- 7) Expand industry engagement
- 8) Fly Quiet briefings
- 9) Study Noise Monitor data

Correlate complaints to noise levels

Do more to leverage available noise data

### Other Current / High Priority Issues were:

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

Finally, from the Consultant's Observations and Recommendations:

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

### **CACNR Job Descriptions for Officers**

# CHAIR: The Chair of CACNR will

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

### VICE CHAIR: The Vice Chair of CACNR will

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

### SECRETARY: The Secretary of CACNR will

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

### TREASURER: The Treasurer of CACNR will

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

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URORA	Brad Pierce	X	X	X		X	X	X	X		X	X		100%	100%
	Mindy Parnes	-	-	-		-	_	-			-	-		0%	
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ACNR BYLAWS ADOPTED ARTICLE III.c. Members	s' Representatives and/or Alternates of such meetings annually in the		<u> </u>			<u> </u>	<b>.</b>					<u> </u>			