FLY QUIET PROGRAM 2015-2017 and GREEN HOUSE GAS Inventory Update

ASPEN/PITKIN COUNTY AIRPORT

Fly Quiet Program Recap

- Ongoing Noise Monitoring and Reporting
- Discussion of Ways to Recognize and Acknowledge Quiet Aircraft Operators

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ASPEN/PITKIN COUNTY AIRPORT

Fly Green/Fly Clean Program Outline

- What is Being Measured
- Annual Results
- Notifications and Acknowledgements
  - Best Operators, Part 135
    - Two Categories
      - More than 30 departures per year
      - Less than 30 departures per year
  - Best Operators, Single Aircraft Owner/Operator
  - Poor Operators

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Definitions

- **DNL –** Day-Night Noise Level, an Average Cumulative Noise Level
- **SEL –** Sound Exposure Level, a Single Noise Event
- **Stage 2/Stage 3 –** Stage 2 are Older, Noisier Aircraft
  Stage 3 Newer, Quieter Aircraft
  Stage 4 Newest, Quietest Aircraft
- **FNQ –** Fleet Noise Quality, How Quiet an Aircraft
  Actually is Compared to Stage 2/3 Certification
- **High Noise Event –** As Measured at the Woody Creek Site, Approximately 3% of All Operations Measured at 90 dBA

Fly Quiet Program Elements

- Fleet Quality
  - Stage 2
  - Fleet Quality Rating
- High Single Event Levels
  - Above 90 SEL
- Most Improved

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ASPEN/PITKIN COUNTY AIRPORT

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Fleet Quality

AIRCRAFT DESCRIPTION

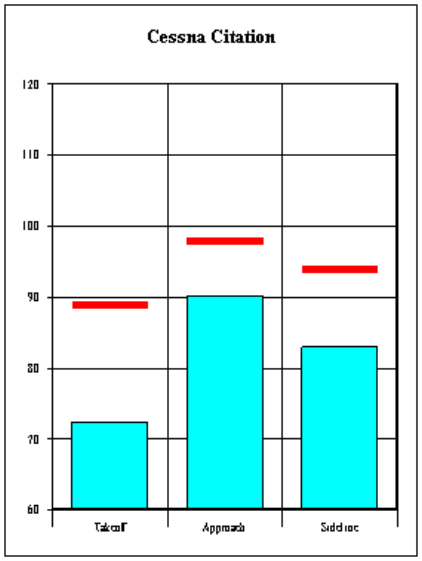
Aircraft:	Cessna Citation
Manufacturer:	CESSNA
ARTS Name:	C750
No. of Engines:	2
Type:	J

AIRCRAFT SERIES DESCRIPTION

			Weight	Flaps
Series:	750 CITATION X			
Engines:	AE3007C	Takeoff:	35,700	15
Bypass Ratio:	5.3	Approach:	31,800	35
Thrust:	5,000			

FAR 36 NOISE LEVELS

	Takeoff	Approach	Sideline
FAR 36 Limit (EPNdB):	89	98	94
Aircraft Level (EPNdB):	72.3	90.2	83
FAR 36 Stage:	3		



AIRCRAFT DE

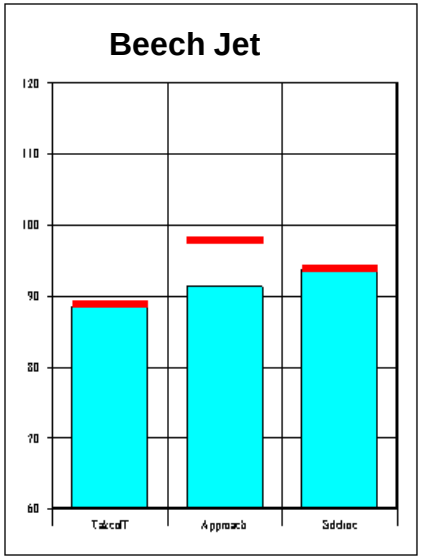
Aircraf	Beech Jet
Manufacturer:	BEECH
ARTS Name:	BE40
No. of Engines:	2
Type:	J

AIRCRAFT SERIES DESCRIPTION

			Weight	Flaps
Series:	BEECHJET 400			
Engines:	JT15D-5	Takeoff:	15,780	10
Bypass Ratio:	2.1	Approach:	14,220	30
Thrust:	2,900			

FAR 36 NOISE LEVELS

	Takeoff	Approach	Sideline
FAR 36 Limit (EPNdB):	89	98	94
Aircraft Level (EPNdB):	88.6	91.4	93.7
FAR 36 Stage:	3		

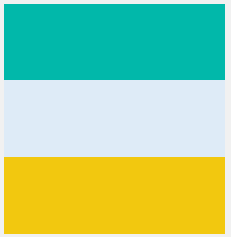


ASPEN/PITKIN COUNTY AIRPORT

Fly Quiet Evaluation

- Report Scoring

Rating	Fleet Quality Score	High Noise Events	Color
Good	9 to 10	0	
Average	4 to 9	0	
Poor	Below 4	More than 1	



- Two categories of aircraft operations
  - Part 135 Operations
    - More than 30 operations per year
    - Less than 30 operations per year
  - Single Aircraft Owner/Operators

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ASPEN/PITKIN COUNTY AIRPORT

Fleet Quality Rating and High Noise Events

- Operators with greater than 30 departures per year

2015

Operator Code	Part 135 Operator	Annual Departures	FNQ Score Current	Delta	High Events
XOJ	XOJet	225	9.9	0.00	0
RSP	Jetsuite Air	77	9.9	0.00	0
XSR	Executive AirShare	109	9.8	0.10	0
BJS	Business Jet Solutions	71	9.7	-0.10	0
LXJ	Bombardier FlexJet	382	9.7	-0.10	0
SBE	Wold Class Aviation	42	9.4	0.20	0
DPJ	Delta Private Jets	159	8.5	-0.40	0
OPT	Flight Options	367	8.4	0.30	0
DCM	FltPlan	35	8.2	-0.30	0
EJA	Executive Jet Aviation	1,558	8.2	0.10	0
LAK	Great Lake Airlines	38	8.1	0.00	0
FTH	Mountain Aviation	56	8.0	-0.10	0
TWY	Sunset Aviation (GA)	45	7.8	-0.30	0
GAJ	Gama Jet	45	7.4	-0.30	0
GTH	General Aviation Flying S...	56	7.2	0.30	0
EJM	Executive Jet Management	148	7.2	-0.20	0
JTL	Jetall	114	5.8	-0.10	0
NSH	Landmark Aviation	34	5.2		0
TMC	Travel Management Com...	208	3.5	0.40	0

Airport Wide: 7.7

2016

Operator Code	Part 135 Operator	Annual Departures	FNQ Score Current	Delta	High Events
XOJ	XOJet	300	9.9	0.00	0
RSP	Jetsuite Air	68	9.9	0.00	0
LXJ	Bombardier FlexJet	577	9.8	0.10	0
XSR	Executive AirShare	132	9.7	0.00	0
OPT	Flight Options	328	9.2	0.80	0
TWY	Sunset Aviation (GA)	64	8.8	1.00	0
DPJ	Delta Private Jets	211	8.5	0.10	0
EDG	Edgartown Air	32	8.3		0
EJA	Executive Jet Aviation	1,772	8.3	0.10	0
JAS	Japan Air System	36	8.2		0
LAK	Great Lake Airlines	31	8.1	0.00	0
FTH	Mountain Aviation	91	7.9	-0.10	0
GAJ	Gama Jet	120	7.8	0.30	1
FWK	FlightWorks	30	7.8		0
EJM	Executive Jet Management	113	7.5	0.30	0
GTH	General Aviation Flying S...	84	6.8	-0.40	0
DCM	FltPlan	44	6.7	-1.50	0
JTL	Jetall	187	5.8	0.00	0
NSH	Landmark Aviation	37	5.8	0.60	0
TMC	Travel Management Com...	151	3.5	0.00	0

Airport Wide: 7.6

2017

Operator Code	Part 135 Operator	Annual Departures	FNQ Score Current	Delta	High Events
XOJ	XOJet	301	9.9	0.00	0
RSP	Jetsuite Air	71	9.9	0.00	0
OPT	Flight Options	308	9.9	0.70	0
XSR	Executive AirShare	125	9.8	0.00	0
LXJ	Bombardier FlexJet	575	9.7	0.00	0
SIS	Saber Airlines	32	9.4		0
TWY	Sunset Aviation (GA)	128	8.9	0.10	0
EDG	Edgartown Air	44	8.5	0.30	0
DPJ	Delta Private Jets	146	8.5	0.00	0
EJA	Executive Jet Aviation	1,689	8.3	0.00	0
FWK	FlightWorks	31	8.2	0.40	0
LAK	Great Lake Airlines	34	8.1	0.00	0
GAJ	Gama Jet	97	8.0	0.20	0
DCM	FltPlan	32	8.0	1.30	0
JAS	Japan Air System	38	7.9	-0.30	0
EJM	Executive Jet Management	138	7.8	0.30	0
FTH	Mountain Aviation	106	7.7	-0.20	0
GTH	General Aviation Flying S...	60	7.2	0.40	0
JTL	Jetall	202	6.8	1.00	1
NSH	Landmark Aviation	30	5.7	-0.10	0
TMC	Travel Management Com...	93	3.6	0.10	0

Airport Wide: 7.9

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ASPEN/PITKIN COUNTY AIRPORT

Fleet Quality Rating and High Noise Events

- Operators between 30 to 6 departures per year

2015

Operator Code	Part 135 Operator	Annual Departures	FNQ Score Current	Delta	High Events
SIS	Saber Airlines	17	10.0	0.00	0
PXT	Pacific Coast Jet	8	9.9		0
GCT	GC Aviation	26	9.8	0.00	0
TKK	Aero Ways Inc	12	9.8	0.20	0
PEG	Pelangi Air	19	9.6	0.30	0
OHC	Jet Select	7	9.6	-0.20	0
ASP	Aspen Airways Inc	9	9.6	0.10	0
PJC	Pittsburgh Jet Center	7	9.5	0.30	0
FWK	FlightWorks	25	9.4	0.40	0
DRL	Omini Air Transport	20	9.4		0
WWI	Worldwide Jet Charter	17	9.3	0.00	0
PWA	Priester Charters (GA)	11	9.2	2.90	0
DJR	Desert Jet	10	8.9	0.30	0
TPJ	Tempus Jets	10	8.7		0
SJJ	Spirit Jets	24	8.6	0.70	0
JAS	Japan Air System	15	8.6	-0.30	0
RJC	Richmor Aviation	7	8.4	6.60	0
PFT	Air Cargo Express International	14	8.2	0.00	0
CNK	Sunwest Home Aviation Ltd	8	8.2	0.90	0
GLT	Aero Charter	7	8.1	0.50	0
TTE	Avcenter	7	8.1	0.00	0
WCC	West Coast Air	16	8.0	-0.90	0
XFL	Executive Fliteways	12	7.9	0.10	0
DBC	Gemini Air	19	7.7		0
LJY	LJ Aviation	14	7.7	-0.20	0
SJE	Sunair 2001	19	7.7	0.20	0
NUS	Northern Illinois Flight Center	10	7.7	0.00	0
EDG	Edgartown Air	27	7.4	0.00	0
TFF	Talon Air	19	7.1	-0.50	0
OKC	Private Jets	19	6.7		0
CJE	Aeroservices Corporate	8	6.3	1.00	0
PJF	Project Aviation	12	5.6	-0.30	0
CYO	Air Transport	14	4.2	-0.50	0
KOW	Baker Aviation	9	3.6	-1.70	0
FJS	Florida Jet Service	20	2.8	1.50	0
CTF	Cutter Aviation	14	2.0	-0.80	0
RGY	Regency Airlines	17	2.0	0.00	0

Total All Part 135 Operators	4,439	7.6	0.1	1
General Aviation Non-Part 135	4,197	7.8	0.2	3
AIRPORT OVERALL	**8,636**	**7.7**	**0.1**	**4**

2016

Operator Code	Part 135 Operator	Annual Departures	FNQ Score Current	Delta	High Events
DRL	Omini Air Transport	21	10.0	0.60	0
LKF	Lion Airlines	6	10.0	0.00	0
RJC	Richmor Aviation	13	9.8	1.40	0
ASP	Aspen Airways Inc	17	9.8	0.20	0
GCT	GC Aviation	25	9.8	0.00	0
TKK	Aero Ways Inc	8	9.8	0.00	0
PXT	Pacific Coast Jet	22	9.8	-0.20	0
KAI	Kaiser Inc. (GA)	15	9.7	-0.10	0
PRD	Presidential Aviation	15	9.7	-0.10	0
DJR	Desert Jet	8	9.5	0.60	0
SBE	Wold Class Aviation	22	9.4		0
SIS	Saber Airlines	25	9.3	-0.60	0
PJC	Pittsburgh Jet Center	7	9.2	-0.30	0
WWI	Worldwide Jet Charter	22	9.1	-0.20	0
PEG	Pelangi Air	22	8.7	-1.00	0
LJY	LJ Aviation	9	8.3	0.60	0
SLH	Silverhawk Aviation	6	8.1	0.00	0
PFT	Air Cargo Express International	11	8.1	0.00	0
GLT	Aero Charter	10	8.1	0.00	0
VET	VietJet	7	8.1	0.00	0
PWA	Priester Charters (GA)	23	8.0	-1.20	0
SJE	Sunair 2001	23	8.0	0.30	0
NUS	Northern Illinois Flight Center	15	7.9	0.20	0
CNK	Sunwest Home Aviation Ltd	7	7.9	-0.30	0
TFF	Talon Air	26	7.6	0.50	0
SJJ	Spirit Jets	20	6.3	-2.30	0
KOW	Baker Aviation	13	6.3	2.60	0
DBC	Gemini Air	29	6.2	-1.60	0
OKC	Private Jets	21	6.1	-0.60	0
WCC	West Coast Air	7	6.0	-2.00	0
PJF	Project Aviation	26	5.9	0.30	0
HRC	Harco Aviation LLC	7	4.5	-3.70	0
CYO	Air Transport	9	4.0	-0.20	0
FJS	Florida Jet Service	25	3.0	0.20	0
RGY	Regency Airlines	13	2.0	0.00	0

Total All Part 135 Operators	5,120	7.3	(0.0)	1
General Aviation Non-Part 135	5,603	7.8	0.1	4
AIRPORT OVERALL	**10,723**	**7.6**	**0.0**	**5**

2017

Operator Code	Part 135 Operator	Annual Departures	FNQ Score Current	Delta	High Events
ASP	Aspen Airways Inc	8	10.0	0.20	0
DRL	Omini Air Transport	19	10.0	0.00	0
RIX	Rectrix	7	10.0	0.00	0
RJC	Richmor Aviation	6	9.8	0.00	0
GCT	GC Aviation	19	9.8	0.00	0
TKK	Aero Ways Inc	8	9.8	0.00	0
KAI	Kaiser Inc. (GA)	13	9.6	0.00	0
PXT	Pacific Coast Jet	27	9.6	-0.20	0
SWD	SOUTHERN WINDS	7	9.5	2.90	0
KFB	STAjets	6	9.5	0.50	0
PRD	Presidential Aviation	12	9.4	-0.20	0
PEG	Pelangi Air	24	9.4	0.70	0
PHJ	Peach Jet	8	9.3	0.60	0
WCC	West Coast Air	8	9.0	3.00	0
PJC	Pittsburgh Jet Center	7	8.9	-0.30	0
SBE	Wold Class Aviation	7	8.9	-0.50	0
WWI	Worldwide Jet Charter	22	8.9	-0.20	0
DJR	Desert Jet	14	8.8	-0.70	0
LJY	LJ Aviation	9	8.3	0.00	0
MMN	Pro Airways	10	8.3	0.00	0
SJE	Sunair 2001	20	8.2	0.20	0
LKF	Lion Airlines	8	8.2	-1.80	0
PFT	Air Cargo Express International	14	8.2	0.00	0
GLT	Aero Charter	8	8.1	0.00	0
SLH	Silverhawk Aviation	13	8.1	0.00	0
DBC	Gemini Air	21	8.0	1.80	0
XFL	Executive Fliteways	6	7.9	0.00	0
MLN	Air Madeleine	9	7.7	-1.20	0
NUS	Northern Illinois Flight Center	23	7.4	-0.50	0
CNK	Sunwest Home Aviation Ltd	11	7.2	-0.60	0
OKC	Private Jets	19	7.0	0.90	0
TFF	Talon Air	28	7.0	-0.60	0
PWA	Priester Charters (GA)	18	6.9	-1.10	0
SCM	American Jet International	8	6.9		0
CYO	Air Transport	21	6.8	2.90	0
WDY	Unknown	6	6.6	0.00	0
KOW	Baker Aviation	12	5.9	-0.40	0

Total All Part 135 Operators	5,001	7.8	0.1	4
General Aviation Non-Part 135	4,824	8.1	0.3	7
AIRPORT OVERALL	**9,825**	**7.9**	**0.2**	**11**

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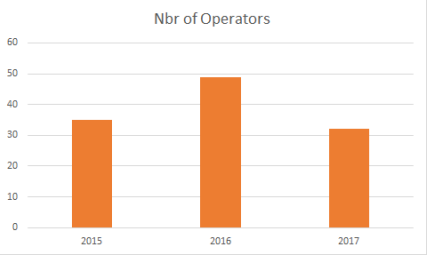
ASPEN/PITKIN COUNTY AIRPORT

Fleet Quality Rating and High Noise Events
Single Aircraft Operators - High Scores

Single Aircraft Operator– High Scores

Year	Nbr of Operators
2015	35
2016	49
2017	32



Single operators had more than 10 operations with a perfect Fly Quiet score of 10

Name	2017	2016	2015
Madrone Advisors LLC	■	■	
AS Aspen LLC	■		
Walton S Rawlings	■		■
Coral Air LLC	■	■	■
Morgans Mach One Machine	■	■	■
Potomac Street Partners LLP	■		
N A Citation LLC	■	■	■
Bemidji Aviation Services Inc	■	■	■
Papa Grande Aviation LLC	■		■
Bank of America NA	■	■	
C510 Aviation LLC	■	■	■
Cho Oyu LLC	■		
Perugia Air LLC	■	■	■
Skybank LLC	■		■
525 CJ LLC		■	■
ARSHE Holdings LLC		■	
Beeson John S		■	■
Central Copters Inc		■	
Halrive Air LLC		■	■
J M Thomas Forest Products Co		■	
Lift Aviation LLC		■	
Lone Trout Mt LLC			■
RBL Aviation LLC			■
SACJ LLC			■
Saturn of Kansas City Inc		■	
SDI Leasing LLC		■	
Songbird LLC		■	
WCAT Management Inc			■

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ASPEN/PITKIN COUNTY AIRPORT

Fleet Quality Rating and High Noise Events

- Single Aircraft Operators with Low Scores

2015

Operators with at least 6 Departures per year with a Fly Quiet Score of 0

Tail Number	Aircraft Type	Registered Owner	State	Dep	FQ Score	High Events
N540EA	GLF2	JETMARK AVIATION LLC		7	0.0	0

Other Operators with a Fly Quiet Score of 0 or High Noise Level Event

N569BW	FA50	BACKFENCE AVIATION FLYI...	4	3.6	1
N700JC	SBR1	OXLEY JOHN C TRUSTEE	4	0.0	0
N36PN	GLF2	B&G LEASING LLC	3	0.0	0
N124EP	GLF3	WHITEHORSE AIR LLC	2	0.0	0
N24YS	GLF2	FRYS ELECTRONICS INC	2	0.0	0
N25HF	LJ25	HHF AVIATION LLC	2	0.0	0
N55ME	GLF3	AJB AVIATION LLC	2	0.0	0
N607BF	FA50	607BF INC	2	3.6	1
N702DM	GLF3	G-III N702DM LLC	2	0.0	0
N868BT	FA50	ALPINE INTERNATIONAL AVI...	2	3.6	1
N196CC	GLF3	CWIE MANAGEMENT RESO...	1	0.0	0
N2000	GLF2	HADID DESIGN & MANAGE...	1	0.0	0
N218MD	GLF3	NE 1 LLC	1	0.0	0
N221CM	GLF3	TRANS-EXEC AIR SERVICE INC	1	0.0	0
N313JS	L29B	SEAGULL AIRCRAFT CORP	1	0.0	0
N360MB	GLF3	N 360 MB LLC	1	0.0	0
N422TK	GLF3	AIR T-B INC	1	0.0	1
N492A	GLF3	SONIC FINANCIAL CORP	1	0.0	0
N511PK	GLF2	SILVERSTAR PARTNERS LLC	1	0.0	0
N57MQ	SBR1	WYATT O S JR	1	0.0	0
N712AS	GLF3	ANDALEX AVIATION II LLC	1	0.0	0
N779CS	SBR1	CENTURION INVESTMENTS ...	1	0.0	0
N77HG	GLF3	CALSPAN CORP	1	0.0	0
N813LS	GLF3	IRISH AIR LLC	1	0.0	0
N888WE	GLF3	MAVERICK 8 TRANSPORTATI...	1	0.0	0
N939KM	GLF3	DOUBLE X LLC	1	0.0	0

2016

Operators with at least 6 Departures per year with a Fly Quiet Score of 0

Tail Number	Aircraft Type	Registered Owner	State	Dep	FQ Score	High Events
N36PN	GLF2	B&G LEASING LLC		9	0.0	0
N750SW	GLF3	SAFEWAY INC		9	0.0	0
N171AM	GLF3	FLORIDA JET SERVICE INC		8	0.0	0

Other Operators with a Fly Quiet Score of 0 or High Noise Level Event

N124EP	GLF3	WHITEHORSE AIR LLC	5	0.0	0
N360MB	GLF3	N 360 MB LLC	5	0.0	1
N540EA	GLF2	JETMARK AVIATION LLC	5	0.0	0
N700JC	SBR1	OXLEY JOHN C TRUSTEE	5	0.0	0
N218MD	GLF3	NE 1 LLC	3	0.0	0
N557JK	GLF3	BANK OF UTAH TRUSTEE	2	0.0	0
N702DM	GLF3	G-III N702DM LLC	2	0.0	0
N77HG	GLF3	CALSPAN CORP	2	0.0	0
N790JR	WW24	INDIGO AIR LLC	2	6.9	1
N323MK	GLF3	MKRE EQUIPMENT LLC	1	0.0	0
N324JW	GLF3	JORDAN AVIATION LLC	1	0.0	0
N380AC	GLF2	ELKHORN AVIATION LLC	1	0.0	0
N450BD	GLF3	BRAMBLEBUSH GIII LLC	1	0.0	1
N465PD	SBR1	SPYGLASS AIR LLC	1	0.0	0
N62MV	GLF3	BANK OF UTAH TRUSTEE	1	0.0	0
N75VC	SBR1	NCI GROUP INC	1	0.0	0
N813LS	GLF3	IRISH AIR LLC	1	0.0	0
N939KM	GLF3	DOUBLE X LLC	1	0.0	0

2017

Operators with at least 6 Departures per year with a Fly Quiet Score of 0

Tail Number	Aircraft Type	Registered Owner	State	Dep	FQ Score	High Events
N540EA	GLF3	JETMARK AVIATION LLC		7	0.0	1

Other Operators with a Fly Quiet Score of 0 or High Noise Level Event

N124EP	GLF3	WHITEHORSE AIR LLC	5	0.0	0
N36PN	GLF2	B&G LEASING LLC	5	0.0	0
N171AM	GLF3	FLORIDA JET SERVICE INC	4	0.0	0
N654YS	SBR1	FRYS ELECTRONICS INC	3	0.0	0
N975RG	GLF3	RG AVIATION LLC	3	0.0	2
N150RJ	FA50	COOK CANYON (GP) LLC	2	3.6	1
N360MB	GLF3	N 360 MB LLC	2	0.0	0
N36JE	GLF3	JEL AVIATION LLC	2	0.0	0
N513SK	FA50	WELLS FARGO BANK NORT...	2	3.6	1
N700JC	SBR1	OXLEY JOHN C TRUSTEE	2	0.0	0
N205JA	FA50	BALLENGEE AVIATION LLC	1	3.6	1
N218MD	GLF3	NE 1 LLC	1	0.0	0
N36PN	GLF3	B&G LEASING LLC	1	0.0	0
N530GA	GLF2	EG AIR LLC TRUSTEE	1	0.0	0
N939KM	GLF3	DOUBLE X LLC	1	0.0	0

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ASPEN/PITKIN COUNTY AIRPORT

Notifications and Acknowledgements
- Charters and Fractional Operators

Best Operator with more than 30 operations

Name	2017	2016	2015
XoJet			
Jetsuite Air			
Flight Options			
Executive AirShare			
Bombardier FlexJet			
Business Jet Solutions			

Most Improved

Name	2017	2016	2015
FltPlan			
West Coast Air			
Sunset Aviation			
Baker Aviation			
Flight Options			
Priester Charters			

Best Operator with less than 30 operations

Name	2017	2016	2015
Aspen Airways Inc			
Omini Air Transport			
Rectrix			
Richmor Aviation			
Lion Airlines			
Saber Airlines			
Pacific Coast Jet			
GC Aviation			
Aero Way Inc			

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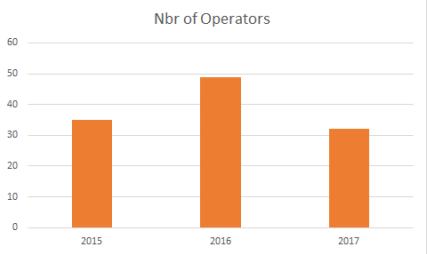
ASPEN/PITKIN COUNTY AIRPORT

Notifications and Acknowledgements

Single Aircraft Operator–High Scores

Year	Nbr of Operators
2015	35
2016	49
2017	32



Single operators had more than 10 operations with a perfect Fly Quiet score of 10

Name	2017	2016	2015
Madrone Advisors LLC	■	■	
AS Aspen LLC	■		
Walton S Rawlings	■		■
Coral Air LLC	■	■	■
Morgans Mach One Machine	■	■	■
Potomac Street Partners LLP	■		
N A Citation LLC	■	■	■
Bemidji Aviation Services Inc	■	■	■
Papa Grande Aviation LLC	■		■
Bank of America NA	■	■	
C510 Aviation LLC	■	■	■
Cho Oyu LLC	■		
Perugia Air LLC	■	■	■
Skybank LLC	■		■
525 CJ LLC		■	■
ARSHE Holdings LLC		■	
Beeson John S		■	■
Central Copters Inc		■	
Halrive Air LLC		■	■
J M Thomas Forest Products Co		■	
Lift Aviation LLC		■	
Lone Trout Mt LLC			■
RBL Aviation LLC			■
SACJ LLC			■
Saturn of Kansas City Inc		■	
SDI Leasing LLC		■	
Songbird LLC		■	
WCAT Management Inc			■

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ASPEN/PITKIN COUNTY AIRPORT

Annual Airport Fly Quiet Performance

- Annual DNL
  - Noise Contours
    - Contour Size
  - Measured Noise Levels
- High Single Event Levels
  - Above 90 SEL
- Fleet Quality
  - Stage 2

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2017 Annual Airport Performance -- Results

- DNL Noise Levels
  - 925 acres (55 DNL)
  - 51.5 DNL (Woody Creek)
- Number of Events Above 90 SEL
  - 0.1 events per day
- Stage 2 Mix
  - 0.4%
- Fleet Quality Rating
  - 7.9

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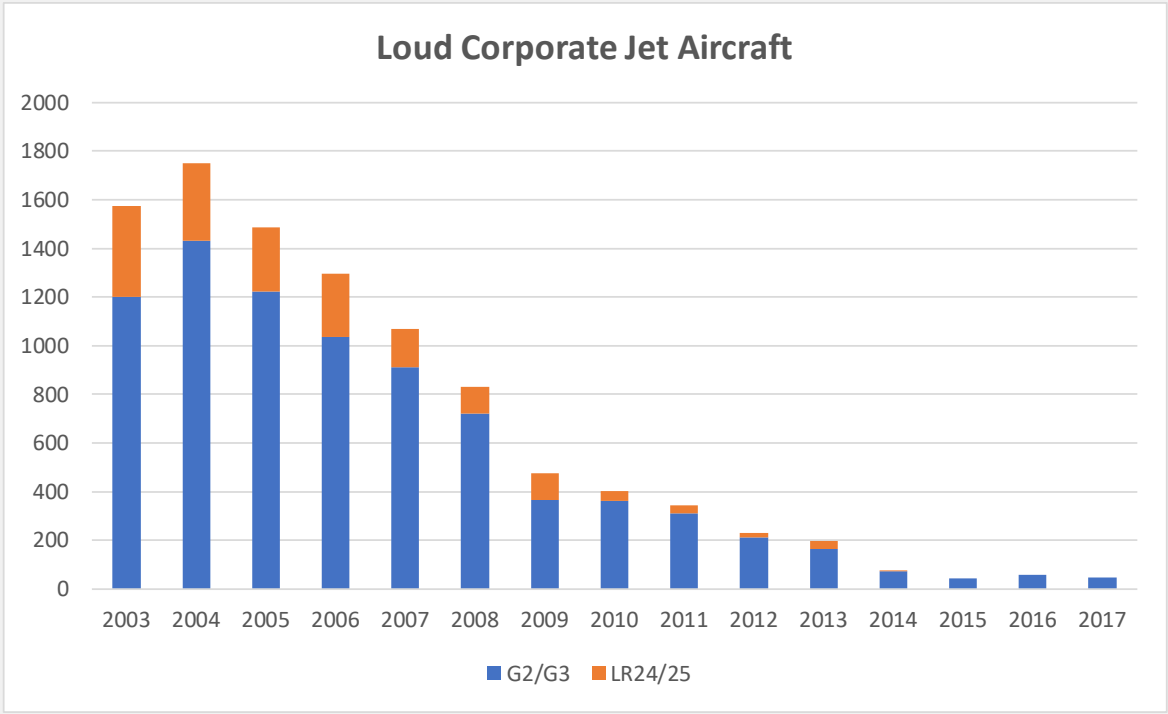
Loud Corporate Jet Aircraft (Annual Operations)

Year	G2/G3	LR24/25
2003	1202	372
2004	1432	319
2005	1221	265
2006	1035	260
2007	913	157
2008	720	112
2009	367	109
2010	362	39
2011	312	33
2012	211	20
2013	166	30
2014	73	2
2015	43	0
2016	57	0
2017	47	0



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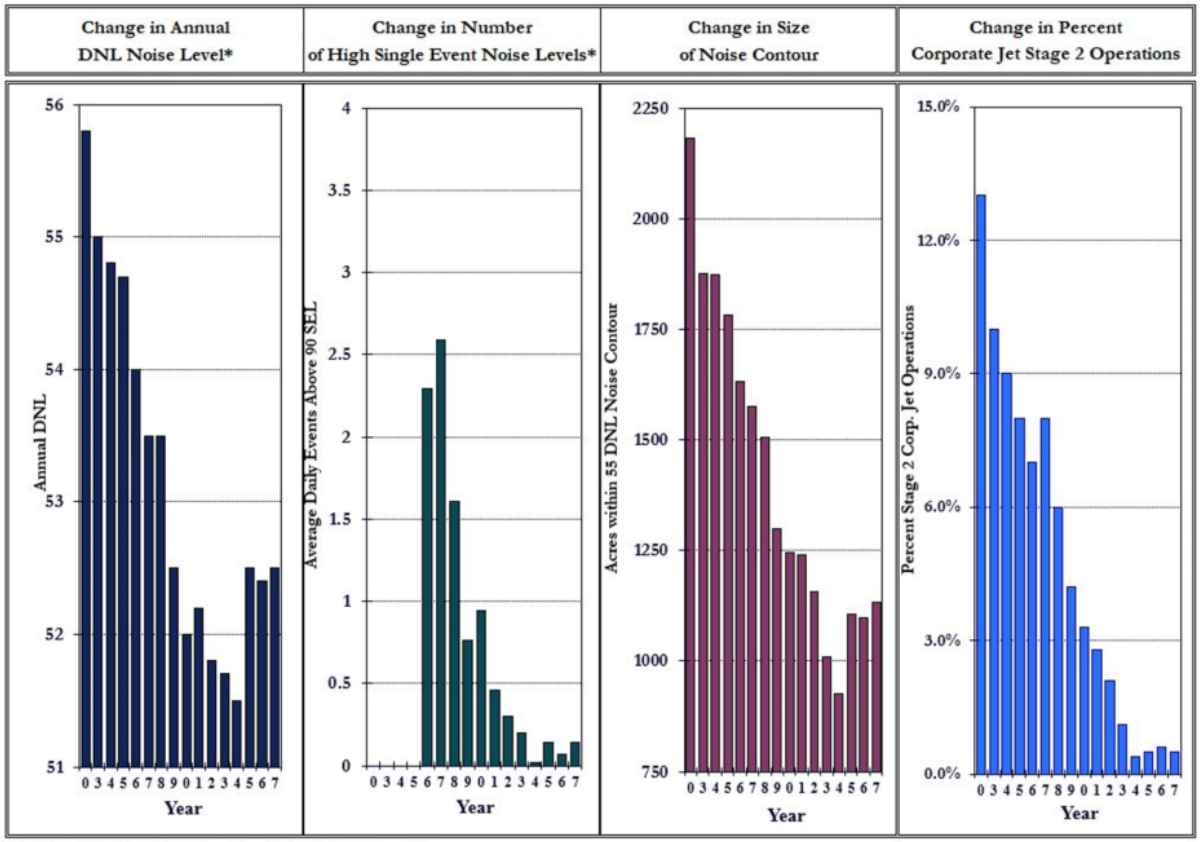
Historical Comparison
DNL – Loud Events – Contour Size – Stage 2



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Future Fly Quiet Report Changes

- Aircraft Stage Mix Classification
  - Eliminate Stage 2 Evaluation
  - Change to Stage 4 Evaluation
- Add Runway Use Evaluation
  - Runway 33 Approaches vs Runway 15 Approaches
- Missed Approaches
  - Missed approaches, go arounds, etc.
- Year Round Measurements at Woody Creek
  - Update High Noise Event Threshold
- Realtime Results
  - Live Radar Display
  - Public Display of Fly Quiet Results

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Green House Gas Inventory Update

- One of first Airport's in Country to do total GHG Inventory
- Approach used is Industry wide, ACRP Report #11
- Dovetails with Canary Initiative
- Emissions separated by Ownership of the Source
  - Airport Ownership or Control
  - Tenant/Users Ownership or Control
  - General Public Ownership that use the Airport

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ASPEN/PITKIN COUNTY AIRPORT

Summary of Results

- **Airport Owned and Controlled Emissions**
  - Represent 2.1% of total
  - Decreased 0.5% since 2014 Inventory
- **Operator/Tenant Controlled Emissions**
  - Represent 94.7% of total
  - Increased 32.5% since 2014 Inventory
  - Ground support emissions decreased 31% since 2015
- **Public Controlled Emissions**
  - Represent 3.2% of total
  - Increased 13.7% over 2014

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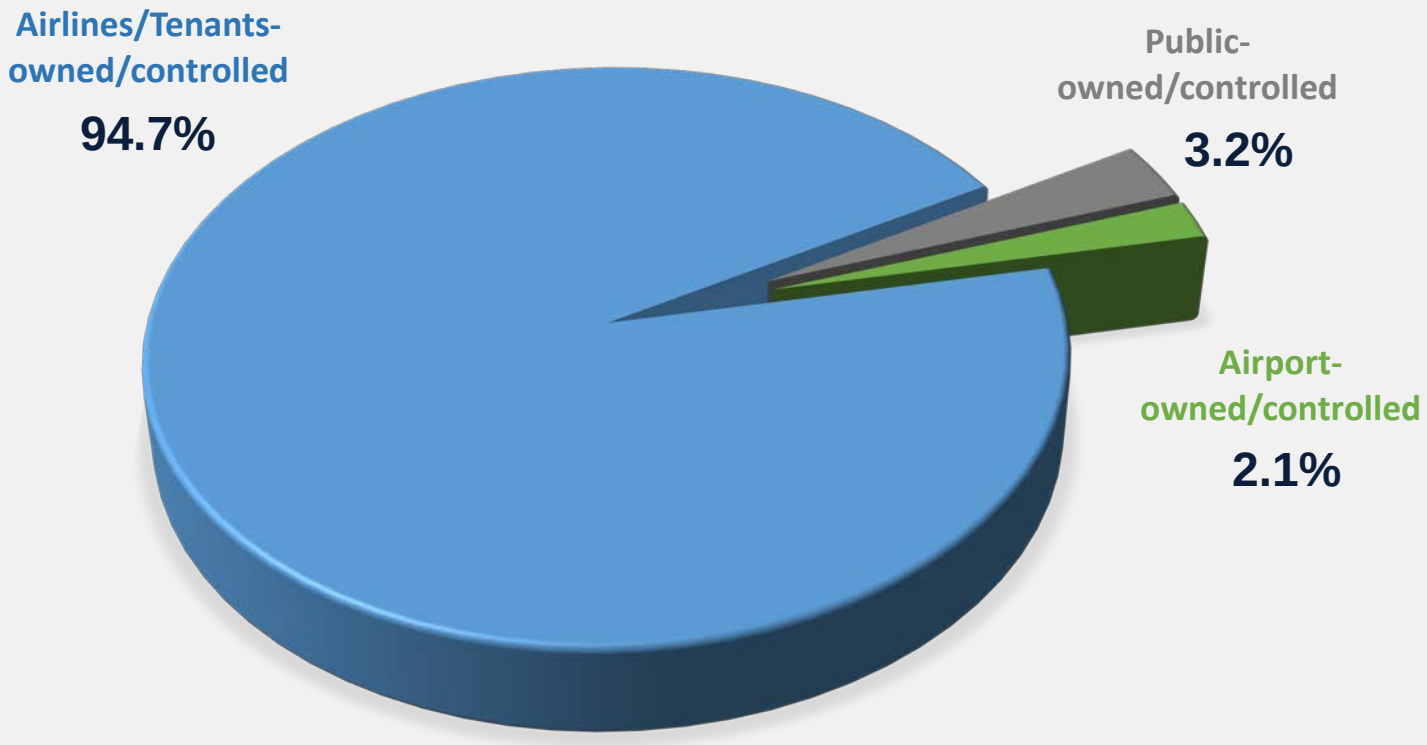
2017 Aspen Pitkin County Airport Total Airport-Related Emissions (81,566 Metric Tons CO_2)



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Canary Initiative Relationship Summary

- Canary Initiative uses a different reporting structure
- Airport Controlled Emissions
  - Represent 256 metric tons (airport maintenance vehicles)
  - Decreased
- Aircraft Emissions
  - Represent 72,879 metric tons—increase in Jet A sold (40%)
  - Increased
- Tenant Ground Support Equipment
  - Represent 4,319 metric tons
  - Decreased

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ASPEN/PITKIN COUNTY AIRPORT

Key Metrics

- Operations Increased 19.8%, Passengers 11.1%
- A 40% Increase in Jet A sold
  - Jet A was 40.6% of total fuel sold
  - Av Gas was 59.4% of total fuel sold
  - Increase in jet fuel tied to 19.8% increase in operations paired with over 20% increase in stage length (distance flown)
- A 3.8% Increase in Av Gas sold
- Rental Car activity increased 16.8%

Mitigation Measures

- Mitigation Measures identified in the Pitkin County Climate Action Plan
- Identified Measures Still Applicable
- Several Mitigation Measures to be incorporated in the overall Airport Development Plan

TABLE 1 Aspen Pitkin County Airport CO2 Emissions (Metric Tons

User/Source Category	2017 CO2 (tons/year)	Percent of User	Percent of Total	2014 CO2 (tons/year)	2011 CO2 (tons/year)	2006 CO2 (tons/year)	% change 2014-2017
Airport-owned/controlled							
Facilities/Stationary Sources	1,334	77.2%	1.6%	1,350	1,529	1,326	-1.2%
Ground Support Equipment	256	14.8%	0.3%	256	147	155	0.1%
Ground Access Vehicles							
Passenger vehicles (on-airport roads)	15	0.9%	0.0%	15	16	15	3.5%
Hotel shuttles (on-airport roads)	6	0.3%	0.0%	6	6	7	0.0%
Rental Cars (on-airport roads)	6	0.4%	0.0%	5	3	1	16.8%
Airport Employee Commute (all roads)	111	6.4%	0.1%	105	80	81	6.3%
Subtotal	**1,728**	**100.0%**	**2.1%**	**1,736**	**1,781**	**1,584**	-0.5%
Airlines/Tenants/Aircraft Operator-owned/controlled							
Aircraft							
Approach	3,357	4.3%	4.1%	2,236	1,852	2,110	50.1%
Taxi/Idle/Delay	2,503	3.2%	3.1%	3,644	3,017	3,433	-31.3%
Takeoff	10,183	13.2%	12.5%	4,110	3,402	3,869	147.8%
Climb out	2,556	3.3%	3.1%	1,069	886	1,009	139.0%
Residual/Cruise/APU	54,281	70.3%	66.5%	40,915	33,877	38,560	32.7%
Sub-total	72,879	94.4%	89.3%	51,974	43,034	48,982	40.2%
Ground Support Equipment	4,319	5.6%	5.3%	6,295	5,210	5,924	-31.4%
Ground Access Vehicles							
Tenant GAV	0	0.0%	0.0%	0	0	0	0.0%
Tenant Employee Commute (all roads)	29	0.0%	0.0%	23	25	25	25.0%
Stationary Sources	0	0.0%	0.0%	0	0	0	0.0%
Subtotal	**77,227**	**100.0%**	**94.7%**	**58,292**	**48,270**	**54,931**	32.5%
Public-owned/controlled							
Passenger Vehicles (off-airport roads)	584	22.4%	0.7%	561	603	557	4.1%
Rental Car Travel (on-airport roads)	2,022	77.4%	2.5%	1,731	1,929	589	16.8%
Hotel Shuttles (off airport roads)	6	0.2%	0.0%	6	6	6	0.0%
Subtotal	**2,612**	**100.0%**	**3.2%**	**2,298**	**2,537**	**1,152**	13.7%
Total	**81,566**		**100%**	**62,326**	**52,588**	**57,667**	30.9%

Note: In 2017, the Airport's aircraft emissions in the LTO were calculated using AEDT, the FAA's new emissions model.

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TABLE 2 Tracking Metrics

User/Source Category	2017	2014	2011
Airport-owned/controlled			
Facilities/Stationary Sources			
- Electricity (kWh)	1,652,578	1,551,872	1,491,019
- Natural Gas (ccf)	42,675	47,688	49,636
Terminal	28,786.0	30,435.0	33,613.0
Airport Main Term-TSA	661.0	305.0	824.0
AOC	13,228.0	16,948.0	15,199.0
Airport Fleet Vehicles (gallons)			
- Fleet Vehicles Gas	8,789.40	5,371.20	4,820.60
- Fleet Vehicles Diesel	17,499.50	20,471.30	10,242.50
Subtotal			
Airlines/Tenants/Aircraft Operator-owned/controlled			
Aircraft (annual Operations)	42,426	35,395	37,671
- Jet A (gallons)	7,587,108	5,403,433	4,472,392
- Avgas (gallons)	33,804	32,559	28,797.00
Subtotal			
Public-owned/controlled			
Passengers (total passengers)	487,287	438,258	432,586
Rental Car Travel (assuming 6- day rental)	21,488	18,398	18,527
Parking Lot (parking exits x 2)	63,072	64,776	69,390

Note: Rental cars - reflect 128,931 rental days in 2017 @ 6 days rental

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