Aspen/Pitkin County Airport
Fly Quiet Program
Draft
Annual 2021 Report

(January 1, 2021 – December 31, 2021)

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Figures & Tables

Executive Summary

This report summarizes operations for calendar year 2021; this is the first year that the reporting period is for the calendar year. Previously, the reporting period was from November 1 – October 31; the reporting period was switched to the calendar year to be consistent with other operational reports published by the airport.

The Fly Quiet Program analyzed three categories:

1. Fleet/Aircraft Stage Quality,
2. High Noise Events, and
3. Runway 33 Arrivals.

For the Fly Quiet Report, the following business jet operators are noted for adhering to the Fly Quiet goals and scored the highest results.

Highest Score – Part 135 Operators

More than 60 Operations

- Air Transport Inc (CYO) had the best overall Fly Quiet Score

Between 12 - 60 Operations

- AB Jets (FTD) had the best overall Fly Quiet Score

Highest Score – Single Operators

More than 60 Operations

- Terrapin Aircraft, LLC (N108JA) had the best overall Fly Quiet Score (151 Operations)

Lowest Score – Part 135 Operators

Between 12 – 60 Operations

- Aircharters Worldwide (MJS)

Lowest Score – Single Operators

Single Operators, more than 60 Operations

- N4EA (Operated by Woodhill Aviation)

Single Operators, between 12 - 60 Operations

- N4200K (Operated by Throne Petroleum LLC)
- N400WF (Operated by Two Rivers Aviation, LLC)

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Aspen/Pitkin County Airport
Fly Quiet Program

Annual 2021 Report

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1. Introduction

Aspen/Pitkin County Airport's Fly Quiet Program is an initiative implemented by Pitkin County for the purpose of encouraging operators to operate as quietly as possible at the Airport. The program promotes a voluntary participatory approach in complying with noise abatement procedures and objectives by grading an operator's performance and by making the scores available to the users of the Airport and the public via newsletters, publications, and public meetings.

The Fly Quiet Program is intended to grow and change as new procedures and new technologies for aircraft and airspace are available. Initially, the Fly Quiet Program evaluated two categories; a new category was added in 2020 to monitor Runway 33 arrivals.

1. Fleet Quality of the entire fleet at ASE,
2. High Noise Events, and
3. Runway 33 Arrivals.

In order to fairly and accurately evaluate the operators, they are divided into two groups; those operators with more than 60 operations a year, and those with between 12 – 60 operations per year. Within these two groups, operators are categorized based on the type of operators; either Part 135, which incorporates fractional and charter operations, and single owners or small fleets (single aircraft).

The historical base period of evaluation for Fly Quiet was a 2-year period prior to the start of the Fly Quiet Program (from November 1, 2005 – October 31, 2007). This base period allowed the Airport to compare future Fly Quiet Program documents to measure improvements. The program can be expanded as additional radar and noise monitoring capabilities are available; for example, year-round noise monitoring at the Woody Creek Remote Noise Monitoring Site was added in 2020. Scores are computed, and reports are generated once a year that includes both reporting seasons.

This report presents the **Annual 2021** results. Periods during the peak winter and peak summer seasons are also presented in order to illustrate the peak activity during each season. Fly Quiet Program is a dynamic venue for implementing noise abatement procedures by praising and publicizing active participation rather than a system that admonishes violations from essentially voluntary procedures. While many airports throughout the United States experienced drastic reduction of operations in 2020 due to the global pandemic; however, ASE operations remain at approximately the same level as previous years.

2. Program Overview and Goals

The goal of the Aspen/Pitkin County Airport's Fly Quiet Program is to influence operators to operate as quietly as possible at Aspen/Pitkin County Airport. Monitoring, collecting, and analyzing comprehensive amounts of operational and noise data highlights both Airport trends and individual operator performance for specific noise abatement issues. A successful Fly Quiet Program can be expected to reduce both single event and total noise levels around the Airport. Fly Quiet Program data is quantified and translated into bi-annual reports, or scorecards, for individual operators and fractional operators.

2.1 Definition

The purpose of the Fly Quiet Program is to, through positive reinforcement, communicate to the aircraft operators the accepted noise abatement procedures and request that pilots fly them as efficiently as possible.

The Fly Quiet Program uses current available information and may be expanded to include additional information as was done for this reporting period to include arrivals on Runway 33 and year-round noise monitoring. Existing data sources include third party radar data, seasonal and year-round noise monitoring, and observations of operations by Airport and consultant staff. This information is organized and analyzed in a software program to reveal a variety of comparative patterns showing the relative noise contribution of operators and aircraft types. These results are then processed into a 0 – 100 rating system so that it is easy to show which operator is the best in each category and how each operator rates overall.

The Fly Quiet Program covers three areas: fleet quality, high noise events, and Runway 33 arrivals; this can be expanded over time to cover other issues, both in the air and on the ground. The grading system is based on a percentage of compliance, with 100% being the best possible overall score. Any operator that does not participate or have a documented occurrence or performance in any category, with the exception of the high noise event category, will receive a not applicable rating. Operators that have no recorded or documented high noise events, however, will be automatically awarded 100% for the given analyzed time period.

It is important to emphasize that the primary purpose of the Fly Quiet Program report is to motivate operators by rewarding good noise abatement procedures, thus reducing noise intrusion. By providing this information publicly, Fly Quiet Program enables operators to engage in informed self-evaluation and improvement. Positive reinforcement and good publicity is expected to be a strong incentive for operator performance.

2.2 Program Elements

Currently, the Fly Quiet Program consists of three elements: the overall noise quality of all aircraft operating at ASE, an evaluation of single overflight noise levels, and Runway 33 Arrivals. As stated previously, the base period reporting period for these elements was an average of November 1, 2005 through October 31, 2007. All subsequent Fly Quiet Program reports have been compared to this initial reporting period to determine the effectiveness of the program.

2.2.1 Fleet Noise Quality Rating Methodology

Goal

The goal of fleet noise quality rating is to have aircraft operators schedule their quietest aircraft at the Airport and be acknowledged for doing so. The Fly Quiet Program Fleet Noise Quality Rating (FNQ) evaluates the noise contribution of each operator's fleet as it actually operates at ASE.

Methodology

This category rates single aircraft owners as well as fractional jet operations. The Fleet Noise Quality Rating score presents an overall Airport score and a list of operators that performed above average. The method for quantifying a fleet noise quality rating at Aspen is based on established federal noise certification data for each aircraft. Stages 2, 3, 4 and 5 were established by Federal Aviation Regulation Part 36, which mandated the allowable noise levels for the manufacture of aircraft at three measurement locations. For each aircraft type, Part 36 specifies allowable noise levels at three measurement locations: approach, departure, and sideline. Stage 2 is the loudest, oldest type of aircraft; there are very few Stage 2 aircraft still operating. Stage 2 aircraft without physical or operational modifications are not allowed to operate in the United States as of December 31, 1999 for commercial operators and December 31, 2015 for business jets. There are some Stage 2 aircraft in the nationwide fleet that are certificated to operate as Stage 3 with modifications. These aircraft still generate noise similar to a Stage 2 aircraft and for the purposes of the Fly Quiet program are considered Stage 2. For example, the Gulfstream III business jet is in this category that still operates at ASE. Stage 5 is the newest generation of aircraft which provide a cumulative reduction of 17 dB over Stage 3; the cumulative reduction is the total reduction at the three measurement locations described above.

The majority of commercial and business jet aircraft in the current fleet are Stage 3. Any newly designed aircraft must be type certificated to meet the Stage restrictions in place at the time of the original type certification. The newly published Stage 5 represents the most technologically advanced and quietest aircraft with some of the newer business jet aircraft meeting this Stage 5 level. Any aircraft that are type certificated after 2018 would need to meet the Stage 5 standard. Note that the only regulation regarding the retirement of aircraft Stages are for Stage 1 and 2; there are no regulations or phases for retirement of Stage 3 and newer aircraft.

The FNQ rating uses third party radar data to determine the aircraft type for each operation at ASE. The radar data provides a list of each operation that occurs at ASE, including the aircraft type, time of operation and type of operation (VFR or IFR). The aircraft information will be used to determine the type of aircraft and FAR Part 36 Stage.

Figure 1 depicts the noise characteristics of two aircraft types: a Beech Jet and a Cessna Citation X. Both aircraft are certified as Stage 3, yet the combined noise levels at all three Part 36 measuring points for the Cessna Citation X is 35.5 dB lower than the Stage 3 requirements, while the Beech Jet falls only 7.3 dB below the requirements. The red line at the top of each column represents Stage 3 limits; the blue portions of the columns indicate actual monitored certificated noise values. Because there is a range of aircraft noise levels within each certificated Stage, the Fly Quiet Report methodology includes organizing aircraft types into each Stage as well as a "half" Stage; i.e. Stage 4 and 4.5 to recognize aircraft that are quieter than the minimum Stage requirements.

The aircraft fleet at Aspen/Pitkin County Airport is primarily composed of commercially operated regional jets, business jets, high performance turbo-prop aircraft, and general aviation propeller aircraft.

The fleet noise quality rating pertains to the general aviation fleet; both based aircraft and frequent users of the Airport are scored through this system. Note that military, turbo propeller, propeller aircraft and helicopters do not fall under this regulation and are also not measured as part of the Fleet Noise Quality Rating. Military aircraft are exempt from aircraft Stage regulations. While there are FAA defined stages for helicopters that are separate from fixed wing aircraft stages, helicopters are not part of the Fly Quiet Program.

Figure 1 - FAR Stage 3 Limits and Certificated Noise Levels

Aspen/Pitkin County Airport Fly Quiet Program

Cessna Citation X C750

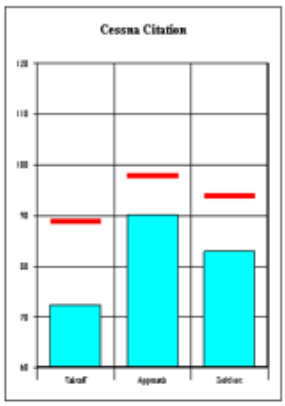
AIRCRAFT DESCRIPTION
Aircraft: Cessna Citation
Manufacturer: CESSNA
ARTS Name: C750
No. of Engines: 2
Type: J

AIRCRAFT SERIES DESCRIPTION
Series: 750 CITATION X
Engines: AE3007C
Bypass Ratio: 5.3
Thrust: 5,000

	Weight	Flaps
Takeoff:	35,700	15
Approach:	31,800	35

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		



Beech Jet BE40

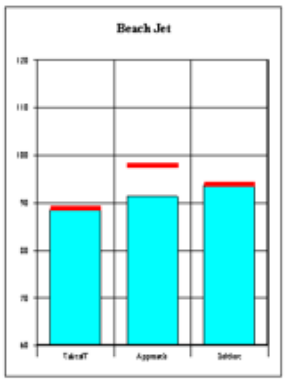
AIRCRAFT DESCRIPTION
Aircraft: Beech Jet
Manufacturer: BEECH
ARTS Name: BE40
No. of Engines: 2
Type: J

AIRCRAFT SERIES DESCRIPTION
Series: BEECHJET 400
Engines: JT15D-5
Bypass Ratio: 2.1
Thrust: 2,900

	Weight	Flaps
Takeoff:	15,780	10
Approach:	14,220	30

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		



Source: BridgeNet International

2.2.2 High Noise Events Methodology

Goal

The goal of the Loudest Noise Event category is to reduce and eliminate the highest single event noise levels of aircraft operating at Aspen/Pitkin County Airport.

Methodology

The Loudest Noise Events score rates arriving and departing aircraft for excessive single event noise levels, which are a convenient method for describing noise from individual aircraft events. A Sound Exposure Level (SEL) is calculated by summing the decibel (dB) level for each second during a noise event and compressing that noise into one second. A noise event is defined as a takeoff or landing for the purpose of the Fly Quiet Program. It is the level the noise would be if it all occurred in one second. The SEL value is the integration of all the acoustic energy contained within the event. This metric takes into account the maximum noise level of the event and the duration of the event. For aircraft flyovers, the SEL value is numerically about 10 dBA higher than the maximum noise level.

Whenever an aircraft operation surpasses a high noise event threshold established for a remote noise monitoring site (RMS), a "loud single event" occurs. Loud noise events are measured by the Airport's RMS's situated in the communities surrounding the airport. **Table 1** shows the address and latitude/longitude of each RMS, and **Figure 2** shows the locations of the RMS sites used to determine historical single event noise levels at each of the sites. For the Fly Quiet Program measurement periods, the Woody Creek RMS was used to measure high noise events. Future Fly Quiet Program reports will be expanded to include high noise event calculations at multiple RMS sites.

At the Woody Creek measurement location (Site 4), since 2006, a noise monitor has been placed seasonally to measure the aircraft noise levels in the winter and summer. This location is capable of year-round noise monitoring; this data is used in the Fly Quiet program to determine when high noise events occur anytime throughout the year, not just the peak summer and winter monitoring period. Past measurements were for just the peak summer and winter periods.

Table 1 - Noise Monitoring Locations

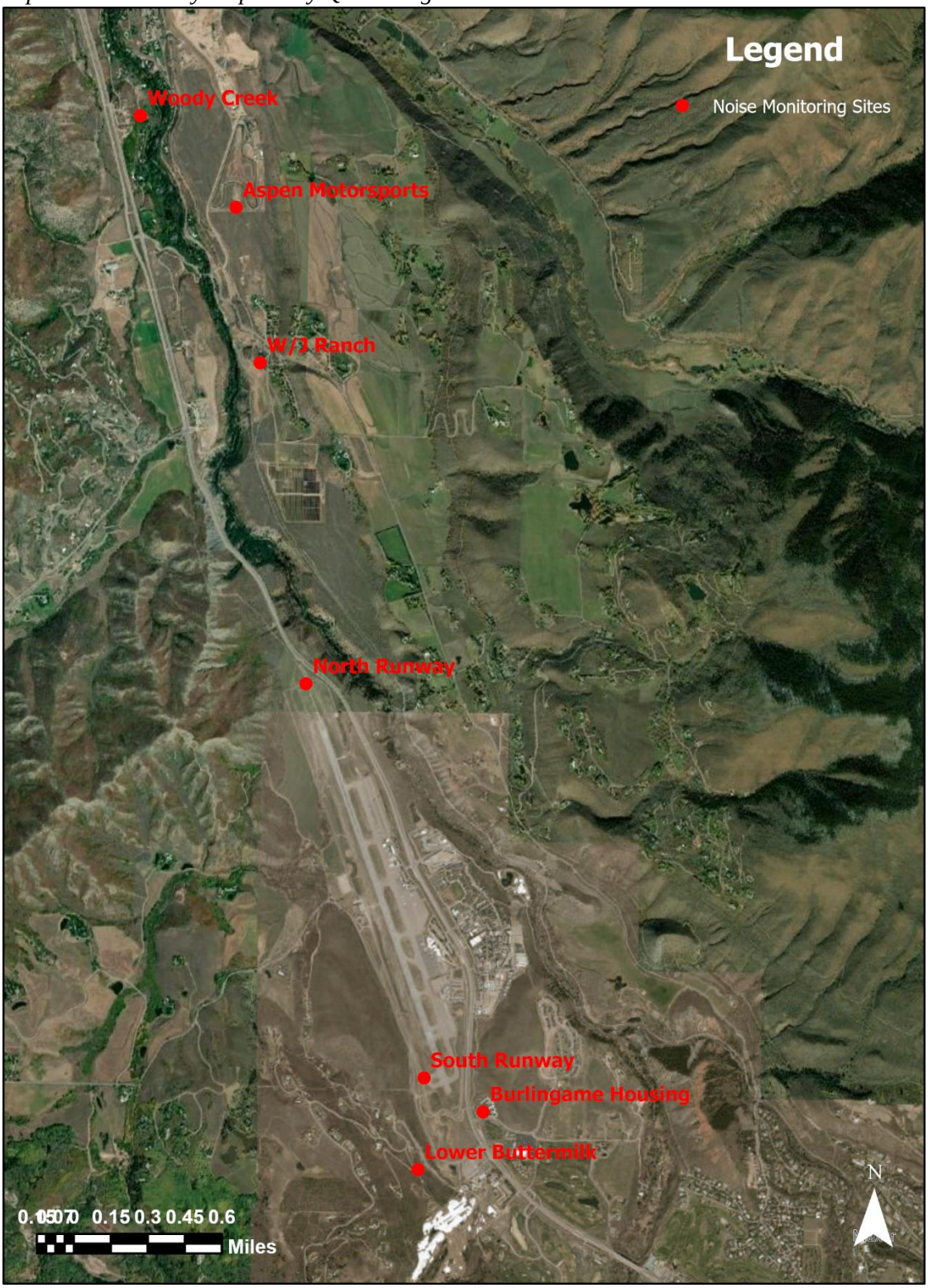
Aspen/Pitkin County Airport Fly Quiet Program

Name	Location	Latitude	Longitude
South Airport	South Airport Boundary	39.21191	-106.86497
North Airport	North Airport Boundary	39.23492	-106.8744833
W/J	W/J Ranch	39.2537	-106.87845
WC	Woody Creek	39.26808	-106.887874
LBMA	Lower Buttermilk	39.2065	-106.8652667
HM	Burlingame Housing	39.20998	-106.860433
AMP	Aspen Motorsports Park	39.2628	-106.880518

Source: BridgeNet International, 2022

Figure 2 - Noise Monitoring Locations

Aspen/Pitkin County Airport Fly Quiet Program



Source: BridgeNet International, 2022

Historic single event noise data was used to help identify high noise level thresholds at the Woody Creek monitoring site. The historical data set was used to identify a high noise level threshold for aircraft producing noise levels higher than are typical for the majority of operations.

To determine the recommended Loudest Aircraft Noise Event at the Woody Creek site, the standard deviations were calculated. The resulting number equates to approximately 1% of all operations that are anticipated to be above the high noise level threshold. For the High Noise Level threshold, any noise event that generates an SEL of 85 dBA or greater is considered a high noise event. Historically the SEL for the Fly Quiet Program was 90 SEL. With older Stage 2 aircraft retiring and being replaced by quieter Stage 3, 4 and 5 aircraft, an SEL of 85 dBA is a more accurate representation of the fleet mix. Older generation Stage 3 aircraft typically generate the loudest events.

Whenever an aircraft overflight produces noise levels higher than the maximum allowable decibel value established for a particular monitoring site, the noise threshold is surpassed and a high noise event occurs. This category will be expanded over time to include additional RMS measurements of high noise events.

2.2.3 Runway 33 Arrival Methodology

Goal

The goal of the Runway 33 Arrival category is to have aircraft use the preferred, primary arrival runway at Aspen/Pitkin County Airport, which is Runway 15.

Methodology

The Runway 33 Arrival score rates arriving aircraft that use this runway instead of the preferred runway, which is Runway 15. Due to rising terrain to the south of the airport and noise abatement procedures that avoid the town, the airport generally operates with aircraft arriving and departing the airport in the same direction from the northwest on Runway 15. This category counts the number of Runway 33 arrivals that are reported as part of the Fly Quiet Program but are not calculated in the overall score.

2.3 Bonus Categories

In addition to the three categories listed above, The Fly Quiet Program includes two bonus categories; Quiet Fleet and Sustainability, described below. These categories go beyond the voluntary noise abatement program and rate advanced items including using the most modern aircraft that are equipped to fly new generation procedures and have a sustainability program in place. Fly Quiet Program is meant to be a dynamic program that adapts to advancements in technology; these bonus categories allow the Airport to look to the future and recognize operators that have committed to sustainable practices.

2.3.1 Quiet Fleet

The Quiet Fleet bonus category rates operators that have the newest Stage 5 aircraft, which were type certificated per CFR 14 Part 36 in 2018 or later. These aircraft represent the newest and quietest in the fleet. Based on the aircraft certification noise levels, operators earn points based on the number of aircraft in their fleet that are at least 10 dB quieter than Stage 5 limits, for a maximum of five points.

2.3.2 Sustainability

The Sustainability bonus category rates operators for their environmental practices, namely if the operator has a carbon offset program in place. Operators can earn up to five points by offsetting emissions for all of their operations; those that offset procedures at Aspen can earn up to 2.5 points.

3. Program Results

The results are presented in two categories. One category is the operations for FAR Part 135 aircraft that include fractional jet ownership and charters (operators that fly a fleet of different aircraft similar to an airline). The second category is operations for single owners or small fleets (single aircraft). These aircraft are not operated as part of a fractional jet ownership program or charter, and normally fly under a tail number not an airline operator code. Note that this is not an exact method of categorizing the aircraft, in that some charters will fly different aircraft both under an airline operator code and by its tail number. Where possible, charters that operate as a tail number were assigned their respective airline operator code. The intent is to separately evaluate those operators that fly a fleet of aircraft and those that operate just one aircraft or a small fleet. In order to fairly and accurately report how aircraft performed, the two categories of operators noted above are grouped into those operators with more than 30 operations per year and those operators with less than 30 operations per year.

The Fly Quiet Program 2021 program results are presented in **Figures 3** through **7.** In all of the figures, those operators with high scoring values are highlighted in green; this is a score that is 90% or better and labeled "FQ Top Tier." Aircraft with scores between 89-70% are shown in light green and labeled "FQ Complaint" and operators with scores below 70% are shown in yellow with the label "FQ Low Tier."

FLY QUIET RATING	SCORE
FQ Top Tier	**90-100+**
FQ Compliant	**70 – 89.9**
FQ Low Tier	**69.9 – 0**

3.1 Part 135 Operators

3.1.1 FAR Part 135 Business Jets – 60 Operations or greater

The results for business jets that operated more than 60 flights are presented in **Figure 3**. The operator with the highest score is Air Transport Inc (CYO), scoring 100%; this score included a bonus for flying a quiet fleet of a Learjet 60 aircraft. There were 32 operators in this category; 12 scored in the FQ Top Tier, 15 earned an average score of FQ Compliant and five were in the FQ Low Tier, scoring below 70%. Aircraft that scored highest not only had the quietest fleet, but also most closely followed the noise abatement flight procedures and had minimum landings on Runway 33. Many operators also earned bonus points for operating the newest, quietest aircraft. Two operators, Air Transport Inc and Freedom Air, scored an additional 5 points each for their quiet fleets.

3.1.2 FAR Part 135 Business Jets – Between 12 and 60 operations per year

The results for business jets that operated between 30 and 12 flights are presented in **Figure 4.** In this group of operators, three scored 100% and earned additional bonus points. The three top operators were AB Jets, Hera Flight, and Baker Aviation; these operators all earned the additional five bonus points for operating a new generation aircraft. There were 23 operators in the FQ Top Tier that scored over 90% by adhering to noise abatement procedures, no landings on Runway 33 and flew newer, quieter aircraft.

The lowest scoring operators in the FQ Low Tier included 10 operators; aircraft that fly older generation aircraft that generate high noise events and had landings on Runway 33.

3.2 Single Operators

3.2.1 Single Owner/Operator – 60 Operations or greater

The results for single owner/operator are presented in **Figure 5**. In this group, the top operator was Terrapin Aircraft, LLC with a score of 98.3; it was the only operator in the FQ Top Tier for single operators with more than 60 operations. There were seven operators in the FQ Compliant tier and four in the FQ Low Tier. Aircraft in the FQ Compliant tier had minimal loud events but lost points for flying older aircraft and landing on Runway 33. For the FQ Low Tier operators, those that scored in this tier lost the most points in the quiet fleet and Runway 33 arrivals categories.

3.2.2 Single Owner/Operator – Between 12 and 60 operations per year

This category contains the largest number of operators; the results are focused on the FQ Top Tier and FQ Low Tier operators in **Figures 6** and **7**. There were 33 operators that all scored 100% and also received five bonus points for flying the newest, quietest aircraft. For the FQ Low Tier operators, Figure 9b shows the 33 lowest operators; aircraft in this category lost the most points in the Fleet Quality category; however, the majority of the operators had few to no arrivals on Runway 33.

Figure 3 - FAR Part 135 Operators with greater than 60 operations per year

Aspen/Pitkin County Airport Fly Quiet Program

OPERATOR						FLY QUIET ELEMENTS			BONUSES		OVERALL	
Code	Operator	Primary Aircraft Type	Total Ops	Number of High Events	Number of RWY 33 Arrivals	Quiet Fleet Score (50 Points)	Quieter Events Score (25 Points)	Minimum Rwy 33 Arrivals Score (25 Points)	Quiet Fleet Bonus (5 pts)	Sustainability Bonus (5 pts)	Total Fly Quiet Score	Fly Quiet Rating Expectation
CYO	Air Transport Inc (ATI Je	LJ60	87	0	0	45.0	25.0	25.0	5.0	0.0	100.0	FQ Top Tier
XSR	Airshare	E55P	246	0	0	44.8	25.0	25.0	4.1	0.0	98.9	FQ Top Tier
JTZ	Nicholas Air	E55P	74	0	0	45.0	25.0	25.0	3.6	0.0	98.6	FQ Top Tier
FDJ	Freedom Air	EA50	82	0	1	45.0	25.0	22.0	5.0	0.0	97.0	FQ Top Tier
XOJ	XOJet	C750	584	1	0	43.8	24.6	25.0	2.5	0.0	95.9	FQ Top Tier
EJA	NetJets Aviation	C68A	3,665	10	0	43.4	24.2	25.0	3.0	0.0	95.6	FQ Top Tier
FFL	Foreflight	C25M	86	0	1	43.8	25.0	22.1	4.5	0.0	95.4	FQ Top Tier
TIV	Thrive Aviation	C25B	168	0	0	43.5	25.0	25.0	1.8	0.0	95.3	FQ Top Tier
FTH	Mountain Aviation	C750	506	3	1	43.2	23.4	24.5	4.0	0.0	95.0	FQ Top Tier
GAJ	Wheels Up Gama Aviation	C56X	192	0	0	43.6	25.0	25.0	1.3	0.0	94.9	FQ Top Tier
LXJ	Bombardier FlexJet	CL35	1,936	5	0	43.2	24.4	25.0	2.0	0.0	94.6	FQ Top Tier
SVL	Sun Devil Aviation	C25B	108	1	0	44.2	22.9	25.0	0.1	0.0	92.2	FQ Top Tier
DPJ	Wheels Up Private Jets	C56X	142	2	0	40.2	21.7	25.0	0.9	0.0	87.8	FQ Compliant
PXT	Pacific Coast Jet	E55P	117	2	3	44.6	21.6	18.6	2.6	0.0	87.4	FQ Compliant
SIS	Silver Air Airlines	GALX	133	1	0	37.7	23.5	25.0	0.9	0.0	87.1	FQ Compliant
EJM	Executive Jet Management	GLF5	403	3	0	36.7	23.6	25.0	0.4	0.0	85.7	FQ Compliant
BLK	Aero Black (USAC Airways)	E35L	121	1	0	36.4	23.0	25.0	0.0	0.0	84.4	FQ Compliant
IJA	International Jet Aviatio	LJ60	137	0	1	33.2	25.0	23.2	2.7	0.0	84.1	FQ Compliant
JTL	Jet Linx	C56X	550	7	0	35.8	21.9	25.0	0.6	0.0	83.4	FQ Compliant
TFF	Talon Air	HA4T	88	2	0	36.7	20.5	25.0	0.0	0.0	82.2	FQ Compliant
TWY	Sunset Aviation	G280	501	4	1	34.1	23.3	24.5	0.1	0.0	81.9	FQ Compliant
EDG	Jet Edge	GLF4	224	0	1	32.9	25.0	23.9	0.0	0.0	81.8	FQ Compliant
CWG	Clear Wing	E35L	112	2	0	33.3	21.3	25.0	0.8	0.0	80.4	FQ Compliant
KPO	NXT Jet	GLF4	82	2	0	31.5	20.8	25.0	0.0	0.0	77.3	FQ Compliant
DCM	FltPlan.com	F2TH	144	4	1	33.2	18.8	23.3	0.5	0.0	75.7	FQ Compliant
OKC	Private Jets	BE40	119	0	1	25.6	25.0	22.9	0.0	0.0	73.5	FQ Compliant
JAS	Jet Aviation Flight Servi	FA7X	90	3	0	28.2	19.6	25.0	0.0	0.0	72.8	FQ Compliant
NSH	Gama Aviation	H25B	63	0	0	18.6	25.0	25.0	0.8	0.0	69.4	FQ Low Tier
SJJ	Spirit Jets	H25B	64	1	0	16.5	22.0	25.0	0.0	0.0	63.5	FQ Low Tier
COL	SC Aviation	H25B	71	1	0	12.0	22.5	25.0	0.0	0.0	59.5	FQ Low Tier
RAX	Royal Air Freight	FA50	65	6	0	9.0	5.8	25.0	0.0	0.0	39.8	FQ Low Tier
RGY	Regency Airlines	BE40	98	17	0	6.6	0.0	25.0	0.0	0.0	31.6	FQ Low Tier

Figure 4 - FAR Part 135 Operators with between 12 and 60 operations per year, Top Tier and Low Tier

Aspen/Pitkin County Airport Fly Quiet Program

OPERATOR						FLY QUIET ELEMENTS			BONUSES		OVERALL	
Code	Operator	Primary Aircraft Type	Total Ops	Number of High Events	Number of RWY 33 Arrivals	Quiet Fleet Score (50 Points)	Quieter Events Score (25 Points)	Minimum Rwy 33 Arrivals Score (25 Points)	Quiet Fleet Bonus (5 pts)	Sustainability Bonus (5 pts)	Total Fly Quiet Score	Fly Quiet Rating Expectation
FTD	AB Jets	LJ60	55	0	0	45.0	25.0	25.0	5.0	0.0	100.0	FQ Top Tier
HER	Hera Flight	C750	51	0	0	45.0	25.0	25.0	5.0	0.0	100.0	FQ Top Tier
KOW	Baker Aviation	C750	12	0	0	45.0	25.0	25.0	5.0	0.0	100.0	FQ Top Tier
SCM	American Jet Internationa	LJ60	19	0	0	45.0	25.0	25.0	3.4	0.0	98.4	FQ Top Tier
CHR	Chairman Airmotive	C25B	34	0	0	45.0	25.0	25.0	2.2	0.0	97.2	FQ Top Tier
ASP	AirSprint	E545	18	0	0	44.3	25.0	25.0	2.2	0.0	96.5	FQ Top Tier
ACW	Fly Across	E550	26	0	0	45.0	25.0	25.0	0.8	0.0	95.8	FQ Top Tier
DLX	Dreamline Aviation	LJ60	49	0	0	43.1	25.0	25.0	2.3	0.0	95.4	FQ Top Tier
CHN	Channel Island Aviation	C25B	18	0	0	45.0	25.0	25.0	0.0	0.0	95.0	FQ Top Tier
PHJ	Peach Jet	C56X	20	0	0	45.0	25.0	25.0	0.0	0.0	95.0	FQ Top Tier
PJC	Pittsburgh Jet Center	C25B	29	0	0	45.0	25.0	25.0	0.0	0.0	95.0	FQ Top Tier
SJA	Sawyer Aviation	C525	15	0	0	42.1	25.0	25.0	2.7	0.0	94.8	FQ Top Tier
DRL	Omini Air Transport	LJ75	49	0	0	42.7	25.0	25.0	1.4	0.0	94.1	FQ Top Tier
LKF	Aviation Advisor	C680	21	0	0	42.2	25.0	25.0	1.4	0.0	93.6	FQ Top Tier
CTF	Cutter Aviation	HDJT	17	0	0	40.2	25.0	25.0	3.2	0.0	93.4	FQ Top Tier
LJY	LJ Aviation	CL30	24	0	0	41.9	25.0	25.0	1.3	0.0	93.2	FQ Top Tier
MAD	Malone Air Charter	CL30	23	0	0	42.3	25.0	25.0	0.7	0.0	93.0	FQ Top Tier
NJM	Northern Jet Management	LJ45	16	0	0	42.7	25.0	25.0	0.0	0.0	92.7	FQ Top Tier
FWR	FlightAware	C25A	24	0	0	42.2	25.0	25.0	0.4	0.0	92.6	FQ Top Tier
EGC	First Wing Aircraft	C56X	24	0	0	41.2	25.0	25.0	1.3	0.0	92.5	FQ Top Tier
HPJ	Hop-a-Jet Inc.	CL60	18	0	0	40.7	25.0	25.0	1.7	0.0	92.4	FQ Top Tier
VTE	Corporate Flight Manageme	C56X	12	0	0	40.8	25.0	25.0	0.0	0.0	90.8	FQ Top Tier
FWK	Flightworks	CL30	46	0	0	39.6	25.0	25.0	0.4	0.0	90.0	FQ Top Tier
MJS	Aircharters Worldwide	FA50	12	2	0	8.6	0.0	25.0	0.0	0.0	33.6	FQ Low Tier
WDY	Phoenix Airline Services	FA50	43	10	0	13.6	0.0	25.0	0.0	0.0	38.6	FQ Low Tier
TTE	Avcenter	C56X	24	2	2	38.3	5.8	4.2	0.2	0.0	48.4	FQ Low Tier
LAK	Red Wing	C560	41	3	0	24.6	6.2	25.0	0.0	0.0	55.9	FQ Low Tier
GDS	Steelman Aviation	PC24	14	0	2	31.4	25.0	0.0	0.0	0.0	56.4	FQ Low Tier
PPJ	Premier Private Jets	H25B	14	0	0	9.7	25.0	25.0	0.0	0.0	59.7	FQ Low Tier
RLJ	Empyreal Jet	H25B	43	0	0	12.9	25.0	25.0	0.6	0.0	63.5	FQ Low Tier
FJS	Florida Jet Service	LJ60	14	0	1	32.0	25.0	7.1	2.9	0.0	67.0	FQ Low Tier
SLH	Silverhawk Aviation	C56X	38	2	0	34.3	8.3	25.0	0.3	0.0	67.9	FQ Low Tier
SJE	Sun Air Jets	GLF5	26	2	0	33.6	9.4	25.0	0.8	0.0	68.7	FQ Low Tier

Figure 5 - Single Operators with greater than 60 operations per year
Aspen/Pitkin County Airport Fly Quiet Program

OPERATOR						FLY QUIET ELEMENTS			BONUSES		OVERALL	
Code	Operator	Primary Aircraft Type	Total Ops	Number of High Events	Number of RWY 33 Arrivals	Quiet Fleet Score (50 Points)	Quieter Events Score (25 Points)	Minimum Rwy 33 Arrivals Score (25 Points)	Quiet Fleet Bonus (5 pts)	Sustainability Bonus (5 pts)	Total Fly Quiet Score	Fly Quiet Rating Expectation
N108JA	Terrapin Aircraft, LLC	E50P	151	0	1	45.0	25.0	23.3	5.0	0.0	98.3	FQ Top Tier
N76PW	Walmart, Inc.	GA6C	109	0	0	38.9	25.0	25.0	0.0	0.0	88.9	FQ Compliant
N448LL	Cho Oyu, LLC	C525	63	0	3	45.0	25.0	13.1	5.0	0.0	88.1	FQ Compliant
N970DB	DB AVIATION HOLDINGS LLC	CL60	60	0	0	37.6	25.0	25.0	0.0	0.0	87.6	FQ Compliant
N925EM	AS Aspen, LLC	C25B	200	0	8	45.0	25.0	15.0	0.0	0.0	85.0	FQ Compliant
N692L	USH LEASING LLC	GL5T	107	0	1	34.9	25.0	22.7	0.0	0.0	82.6	FQ Compliant
N451BH	Ty-Tex Exploration, Inc.	GLF4	75	2	0	32.6	21.3	25.0	0.0	0.0	78.9	FQ Compliant
N711SX	LEWIS JONATHAN D	GLEX	62	0	2	32.3	25.0	16.9	0.0	0.0	74.2	FQ Compliant
N1886S	ONE CAMPUS DRIVE SERVICES	GLEX	128	1	6	32.3	23.7	13.3	0.0	0.0	69.3	FQ Low Tier
N18MZ	SP Leasing, LLC	F900	65	0	3	25.1	25.0	13.5	0.0	0.0	63.6	FQ Low Tier
N217MS	GS 150-217, LLC	G150	102	16	0	25.7	0.0	25.0	0.0	0.0	50.7	FQ Low Tier
N4EA	Woodhill Aviation	LJ35	70	2	4	20.8	13.1	10.7	0.0	0.0	44.6	FQ Low Tier

Figure 6 - Single Operators with between 12 and 60 operations per year, Top Tier
Aspen/Pitkin County Airport Fly Quiet Program

Code	Operator	Primary Aircraft Type	Total Ops	Number of High Events	Number of RWY 33 Arrivals	Quiet Fleet Score (50 Points)	Quieter Events Score (25 Points)	Minimum Rwy 33 Arrivals Score (25 Points)	Quiet Fleet Bonus (5 pts)	Sustainability Bonus (5 pts)	Total Fly Quiet Score	Fly Quiet Rating Expectation
N110LE	Platinum Air, LLC	C680	14	0	0	45.0	25.0	25.0	5.0	0.0	100.0	FQ Top Tier
N124MV	RC Aviation, LLC	C750	18	0	0	45.0	25.0	25.0	5.0	0.0	100.0	FQ Top Tier
N160BP	Beeson, John S.	LJ60	20	0	0	45.0	25.0	25.0	5.0	0.0	100.0	FQ Top Tier
N17XR	Peregrinus, LLC	C750	16	0	0	45.0	25.0	25.0	5.0	0.0	100.0	FQ Top Tier
N18KS	Ten One, LLC	C750	24	0	0	45.0	25.0	25.0	5.0	0.0	100.0	FQ Top Tier
N211BD	CAZ Aviation Holdings, LL	LJ60	14	0	0	45.0	25.0	25.0	5.0	0.0	100.0	FQ Top Tier
N214LV	Pronto, LLC	C680	24	0	0	45.0	25.0	25.0	5.0	0.0	100.0	FQ Top Tier
N232CF	Aero X Aviation, LLC	C750	18	0	0	45.0	25.0	25.0	5.0	0.0	100.0	FQ Top Tier
N259CA	Kansas, LLC	C680	12	0	0	45.0	25.0	25.0	5.0	0.0	100.0	FQ Top Tier
N300MG	EON Management, LLC	E55P	14	0	0	45.0	25.0	25.0	5.0	0.0	100.0	FQ Top Tier
N314GV	IBW Air Services, LLC	E55P	22	0	0	45.0	25.0	25.0	5.0	0.0	100.0	FQ Top Tier
N316GV	IBW Air Services, LLC	E55P	16	0	0	45.0	25.0	25.0	5.0	0.0	100.0	FQ Top Tier
N323KP	Tobarths, LLC	E55P	16	0	0	45.0	25.0	25.0	5.0	0.0	100.0	FQ Top Tier
N333KG	TKG Aviation, LLC	C680	17	0	0	45.0	25.0	25.0	5.0	0.0	100.0	FQ Top Tier
N38EA	N38EA Aviation, LLC	SF50	26		0	45.0	25.0	25.0	5.0	0.0	100.0	FQ Top Tier
N459SF	Phillips Aviation Company	LJ60	26	0	0	45.0	25.0	25.0	5.0	0.0	100.0	FQ Top Tier
N48PW	MADRONE AVIATION LLC	C750	41	0	0	45.0	25.0	25.0	5.0	0.0	100.0	FQ Top Tier
N510BE	C510 Aviation, LLC	C510	22	0	0	45.0	25.0	25.0	5.0	0.0	100.0	FQ Top Tier
N510EM	Venrich, LLC	C510	12	0	0	45.0	25.0	25.0	5.0	0.0	100.0	FQ Top Tier
N550LV	Pronto, LLC	C68A	38	0	0	45.0	25.0	25.0	5.0	0.0	100.0	FQ Top Tier
N680GR	K Equipment, LLC	C680	18	0	0	45.0	25.0	25.0	5.0	0.0	100.0	FQ Top Tier
N709SP	Scannell Citation, LLC	C68A	20	0	0	45.0	25.0	25.0	5.0	0.0	100.0	FQ Top Tier
N7403	American Promotional Even	C680	14	0	0	45.0	25.0	25.0	5.0	0.0	100.0	FQ Top Tier
N750NA	N.A. Citation (2012), LLC	C750	48	0	0	45.0	25.0	25.0	5.0	0.0	100.0	FQ Top Tier
N751MM	Morgan's Mach One Machine	C750	55	0	0	45.0	25.0	25.0	5.0	0.0	100.0	FQ Top Tier
N755LL	Sovereign Asset Company,	C680	14	0	0	45.0	25.0	25.0	5.0	0.0	100.0	FQ Top Tier
N75EG	Kirby-Smith Machinery, In	C750	12	0	0	45.0	25.0	25.0	5.0	0.0	100.0	FQ Top Tier
N7ZM	Zapata Moran, Isaias	SF50	15	0	0	45.0	25.0	25.0	5.0	0.0	100.0	FQ Top Tier
N813FM	Kevin Parra Aviation, LLC	C25M	14	0	0	45.0	25.0	25.0	5.0	0.0	100.0	FQ Top Tier
N83PM	Perugia Air, LLC	C68A	22	0	0	45.0	25.0	25.0	5.0	0.0	100.0	FQ Top Tier
N858EE	RBL Aviation, LLC	E55P	35	0	0	45.0	25.0	25.0	5.0	0.0	100.0	FQ Top Tier
N862LG	Cornerstone Aviation, LLC	E55P	13	0	0	45.0	25.0	25.0	5.0	0.0	100.0	FQ Top Tier
N917FH	Global Transport Four, LL	C68A	39	0	0	45.0	25.0	25.0	5.0	0.0	100.0	FQ Top Tier

Figure 7 - Single Operators with between 12 and 60 operations per year, Low Tier
Aspen/Pitkin County Airport Fly Quiet Program

Code	Operator	Primary Aircraft Type	Total Ops	Number of High Events	Number of RWY 33 Arrivals	Quiet Fleet Score (50 Points)	Quieter Events Score (25 Points)	Minimum Rwy 33 Arrivals Score (25 Points)	Quiet Fleet Bonus (5 pts)	Sustainability Bonus (5 pts)	Total Fly Quiet Score	Fly Quiet Rating Expectation
N4200K	THRONE PETROLEUM LLC	C560	18	5	1	19.5	0.0	11.1	0.0	0.0	30.6	FQ Low Tier
N400WF	Two Rivers Aviation, LLC	BE40	26	4	0	6.6	0.0	25.0	0.0	0.0	31.6	FQ Low Tier
N151PW	Talon Tactical Management	G150	14	2	1	25.7	0.0	7.1	0.0	0.0	32.8	FQ Low Tier
N136MV	Transnet Aviation Group,	FA50	21	6	0	8.5	0.0	25.0	0.0	0.0	33.5	FQ Low Tier
N299PR	Business Aircraft Corpora	FA50	16	7	0	8.5	0.0	25.0	0.0	0.0	33.5	FQ Low Tier
N56LN	N740CJ, LLC	FA50	17	5	0	8.5	0.0	25.0	0.0	0.0	33.5	FQ Low Tier
N777ZL	V1VR, LLC	FA50	14	4	0	8.5	0.0	25.0	0.0	0.0	33.5	FQ Low Tier
N92CJ	Skyview, LLC	FA50	14	6	0	8.5	0.0	25.0	0.0	0.0	33.5	FQ Low Tier
N950H	Island Aviation, Inc.	FA50	12	3	0	8.5	0.0	25.0	0.0	0.0	33.5	FQ Low Tier
N987CF	Peekey Lumbus, LLC	FA50	46	10	0	8.5	0.0	25.0	0.0	0.0	33.5	FQ Low Tier
N888TX	888TX, LLC	C650	54	13	0	10.7	0.0	25.0	0.0	0.0	35.7	FQ Low Tier
N7MR	SCB Falcon, LLC	FA7X	20	1	2	21.4	16.1	0.0	0.0	0.0	37.5	FQ Low Tier
N831RW	Apogee Finance, LLC	FA50	12	0	1	8.5	25.0	4.2	0.0	0.0	37.7	FQ Low Tier
XBFNX	U	FA50	12	2	0	8.5	4.2	25.0	0.0	0.0	37.7	FQ Low Tier
N228SB	Jet Shares, LLC	BE40	34	1	1	6.6	16.1	17.6	0.0	0.0	40.3	FQ Low Tier
N44MQ	C-7, LLC	C650	27	3	0	10.7	10.0	25.0	0.0	0.0	45.7	FQ Low Tier
N257PL	Loyd House Aviation, LLC	H25B	16	1	0	8.7	12.5	25.0	0.0	0.0	46.2	FQ Low Tier
N888AR	Acorn Advisory Capital, L	FA7X	27	4	0	21.4	2.3	25.0	0.0	0.0	48.7	FQ Low Tier
N484FM	Falcon 81 Corp.	F900	17	3	0	25.1	0.0	25.0	0.0	0.0	50.1	FQ Low Tier
N787BN	Omninet Capital, LLC	G150	22	3	0	25.7	0.0	25.0	0.0	0.0	50.7	FQ Low Tier
N14GD	GG Aircraft, LLC	F2TH	14	1	0	26.4	0.0	25.0	0.0	0.0	51.4	FQ Low Tier
N9997X	Mariposa Capital, LLC	FA7X	22	1	1	21.4	18.1	13.6	0.0	0.0	53.1	FQ Low Tier
N221H	D.G. Leasing, LLC	FA20	14	0	0	4.6	25.0	25.0	0.0	0.0	54.6	FQ Low Tier
N91FE	516SM, LLC	F900	13	0	1	25.1	25.0	5.8	0.0	0.0	55.9	FQ Low Tier
N812SH	Simon Air, LLC	C560	14	1	0	22.1	9.4	25.0	0.0	0.0	56.5	FQ Low Tier
N302TB	Moser Aviation, LLC	BE40	20	0	0	6.6	25.0	25.0	0.0	0.0	56.6	FQ Low Tier
N390SB	400XP Shares, LLC	BE40	35	0	0	6.6	25.0	25.0	0.0	0.0	56.6	FQ Low Tier
N727KB	Pumpjack Aviation, LLC	BE40	19	0	0	6.6	25.0	25.0	0.0	0.0	56.6	FQ Low Tier
N959CR	Pumpjack Aviation, LLC	BE40	16	0	0	6.6	25.0	25.0	0.0	0.0	56.6	FQ Low Tier
N557PK	Sion Aviation LLC	FA7X	52	0	3	21.8	25.0	10.6	0.0	0.0	57.4	FQ Low Tier
N528MX	Max Air, LLC	H25B	14	0	0	8.7	25.0	25.0	0.0	0.0	58.7	FQ Low Tier
N585VC	Varsity Aviation II, LLC	H25B	12	0	0	8.7	25.0	25.0	0.0	0.0	58.7	FQ Low Tier
N681SC	SMAIR Holdings, LLC	H25B	21	0	0	8.7	25.0	25.0	0.0	0.0	58.7	FQ Low Tier

4. 2021 Annual Awards – Fly Quiet Program

The following is a list of those operators that have achieved the goals of working towards improving the noise environment around Aspen/Pitkin County Airport. These awards are divided into the Part 135 operators that fly a fleet of corporate jets and the single aircraft operators that fly one or a small number of corporate jets operating under a tail number.

Table 1: Fly Quiet Operator Categories, Highest Scoring Operators

Category of Operator	Operators
Part 135 Business Jets more than 60 Operations	• Air Transport Inc (CYO) • Airshare (XSR) • Nicholas Air (JTZ)
Part 135 Business Jets Between 60 and 12 Operations	• AB Jets (FTD) • Hera Flight (HER) • Baker Aviation (KOW)
Single Owner/Operator more than 60 Operations	• Terrapin Aircraft, LLC (N108JA) E50P
Single Owner/Operator Between 60 and 12 Operations	• 33 Operators met the criteria

Table 2: Fly Quiet Operator Categories, Lowest Scoring Operators

Category of Jet Operator	Operators
Part 135 Business Jets more than 60 Operations	• SC Aviation (COL) • Royal Air Freight (RAX) • Regency Airlines (RGY)
Part 135 Business Jets Between 60 and 12 Operations	• Aircharters Worldwide (MJS) • Phoenix Airline Service (WDY) • Avcenter (TTE)
Single Owner/Operator more than 60 Operations	• SP Leasing, LLC (N18MZ) F900 • GS 150-217, LLC (N217MS) G160 • Woodhill Aviation (N4EA) LJ35
Single Owner/Operator Between 60 and 12 Operations	• Throne Petroleum LLC (N4200K) C560 • Two Rivers Aviation, LLC (N400WF) BE40 • Talon Tactical Management (N151PW) G150

5. Overall Fly Quiet Airport Evaluation

The Fly Green/Fly Clean Program presents the Airport's overall score and compares it to historical data. **Figure 8** shows historical data for four categories:

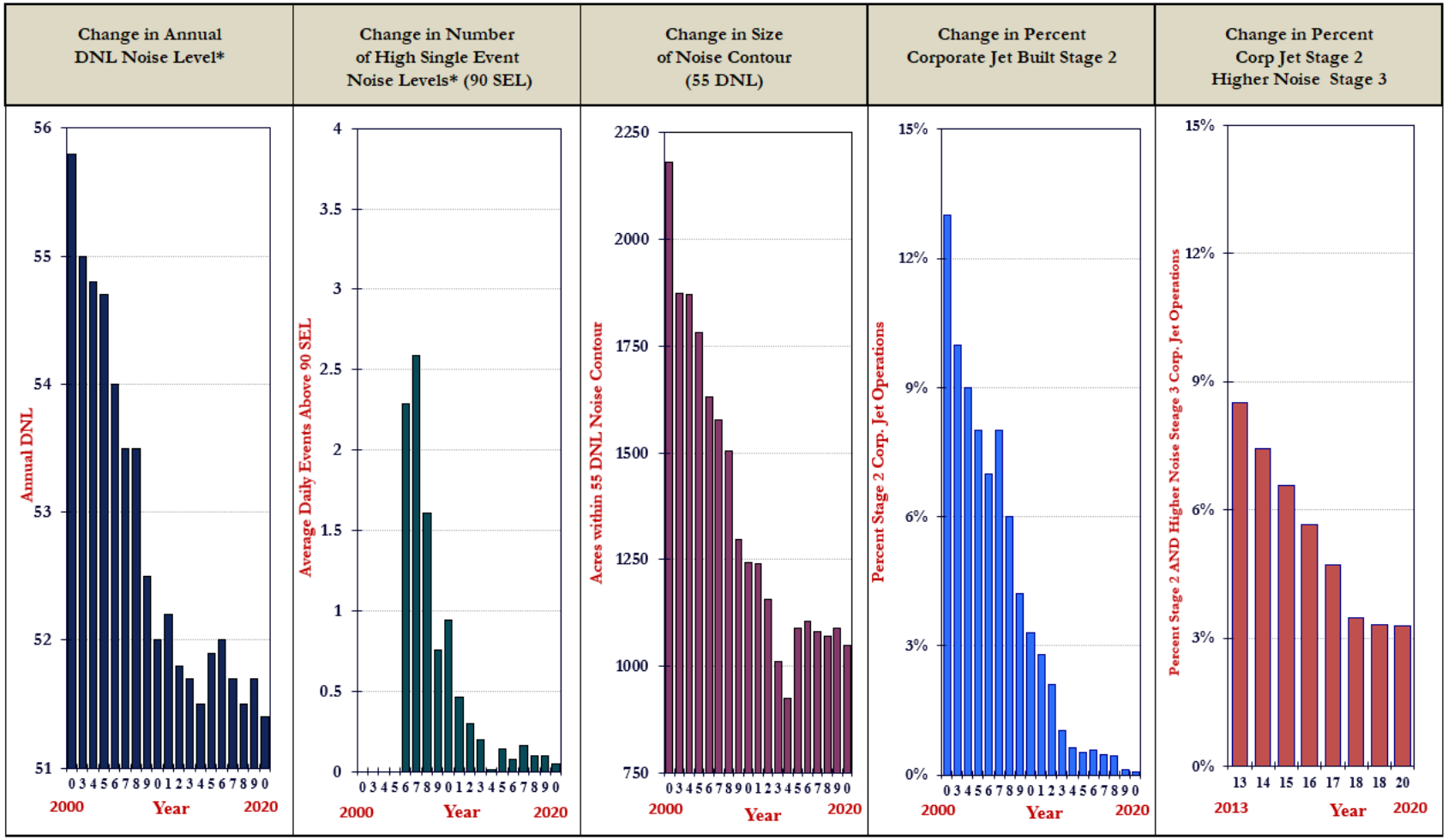
- Change in Annual DNL Noise Level
- Change in Number of Average Daily Number of High Single Event Noise Levels
- Change in Size of Noise Contour
- Change in Percentage of Corporate Jet hush kit Stage 2 Operations

Historical data for these categories is show for the years 2000 and 2003 – 2021. Each of the four categories shows significant improvement year over year. This report focuses on the 2020 Fly Quiet reporting period.

The number of Stage 2 operations accounted for 0.1% of all corporate jet operations. The number of High Single Event Noise Levels average well less than one per day (0.1 events per day). The lower number of high noise events can be directly correlated with the continued reduction of Stage 2 corporate jet aircraft and the louder Stage 3. Specifically, the older Gulfstream's (II and III) and the louder Stage 3 jets (Beach 400 and Falcon 50). It is anticipated that these levels will continue to lower as these aircraft retire from the fleet. As with the other airport rating categories, the size of the noise contour was slightly decreased with a total of 1,050 acres in the 55 DNL; this is 40 acres smaller than last year.

Figure 8 - Historic Overall Airport Comparison (2021)

Aspen/Pitkin County Airport Fly Quiet Program



** DNL and SEL Noise Events from Woody Creek Measurement Site*