



Aspen/Pitkin County Airport Fly Green/Fly Clean

Annual 2015 Report *(November 1, 2014 – October 31, 2015)*



This Page Intentionally Left Blank

Table of Contents

| | | |
|-------|--|----|
| 1. | Introduction | 4 |
| 2. | Program Overview and Goals | 5 |
| 2.1 | Definition | 5 |
| 2.2 | Program Elements | 5 |
| 2.2.1 | Fleet Noise Quality Rating Methodology | 6 |
| 2.2.2 | High Noise Events Methodology | 7 |
| 3. | Program Results | 13 |
| 3.1 | Fleet Quality Results. | 14 |
| 3.2 | High Noise Event Results. | 15 |
| 4. | 2015 Annual Awards – Fly Green/Fly Clean | 22 |
| 4.1 | Part 135 Operators | 22 |
| 5. | Overall Fly Green/Fly Clean Airport Evaluation | 23 |

Table of Figures

| | |
|---|-------------------------------------|
| Figure 1 - FAR Stage 3 Limits and Certificated Noise Levels | 7 |
| Figure 2 - Noise Monitoring Locations | 9 |
| Figure 3 - Loudest Noise Events, Winter 2015– Woody Creek | 11 |
| Figure 4 - Loudest Noise Events, Summer 2015 – Woody Creek | 12 |
| Figure 5 - Fleet Quality Rating, FAR Part 135 Operations with more than 30 departures per day | 16 |
| Figure 6 - Fleet Quality Rating, FAR Part 135 Operations | 17 |
| Figure 7 - Low Score Fleet Quality Rating, Single Operators | 18 |
| Figure 8 - High Score Fleet Quality Rating, Single Operators, Part 1 | Error! Bookmark not defined. |
| Figure 8 - High Score Fleet Quality Rating, Single Operators, Part 2 | 20 |
| Figure 8 - High Score Fleet Quality Rating, Single Operators, Part 3 | 21 |
| Figure 9 - Historic Overall Airport Comparison | 24 |

Aspen/Pitkin County Airport Fly Green/Fly Clean

Annual 2015 Report

(November 1, 2014 through October 31, 2015)

1. Introduction

Aspen/Pitkin County Airport's Fly Green/Fly Clean 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.

Fly Green/Fly Clean is intended to grow and change as new procedures and new technologies for aircraft and airspace are available. Initially, the Fly Green/Fly Clean Program will evaluate two categories:

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

In order to fairly and accurately evaluate the operators, they are divided into two groups; those operators with more than 30 operations a year, and those with less than 30 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 base period of evaluation for Fly Quiet is a past 2-year period prior to the start of the Fly Quiet Program (from November 1, 2005 – October 31, 2007). This base period will allow the Airport to compare future Fly Green/Fly Clean documents to measure improvements. The program can be expanded as additional radar and noise monitoring capabilities are available. Scores are computed, and reports are generated once a year, including both reporting season. The reporting seasons are; winter, November 1 – April 30, and summer, May 1 – October 31.

This report presents the annual 2015 results. This includes both the winter and summer season results. This is for the winter period of November 1, 2014 through April 30, 2015 and summer period of May 1, 2015 through October 31, 2015. Fly Green/Fly Clean 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.

2. Program Overview and Goals

The goal of the Aspen/Pitkin County Airport's Fly Green/Fly Clean 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 Green/Fly Clean Program can be expected to reduce both single event and total noise levels around the Airport. Fly Green/Fly Clean data is quantified and translated into bi-annual reports, or scorecards, for individual operators and fractional operators. A summary of the scorecard will be published for the winter and summer periods, and a full report will be published for public distribution for the same time period.

2.1 Definition

The purpose of the Fly Green/Fly Clean 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 Green/Fly Clean Program uses current available information, and may be expanded to include additional information. Existing data sources include third party radar data, seasonal 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 – 10 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 Green/Fly Clean Program covers two areas: fleet quality and high noise events, but will be expanded over time to cover other issues, both in the air and on the ground. The bi-annual report scorecard grades each Fly Green/Fly Clean category on a 10 point scale, awarding the best operator in each category the highest possible score, 10 points. 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 10 points for the given analyzed time period.

It is important to emphasize that the primary purpose of the Fly Green/Fly Clean report is to motivate operators by rewarding good noise abatement procedures, thus reducing noise intrusion. By providing this information publicly, Fly Green/Fly Clean 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 Green/Fly Clean Program consists of two elements: the overall noise quality of all aircraft operating at ASE and an evaluation of single overflight noise levels. As stated previously, the base period reporting period for these elements is average of the historical period of November 1, 2005 through October 31, 2008. All subsequent annual Fly Green/Fly Clean reports will then be 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 Green/Fly Clean Program Fleet Noise Quality Rating (FNQ) evaluates the noise contribution of each operator's fleet as it actually operates at ASE.

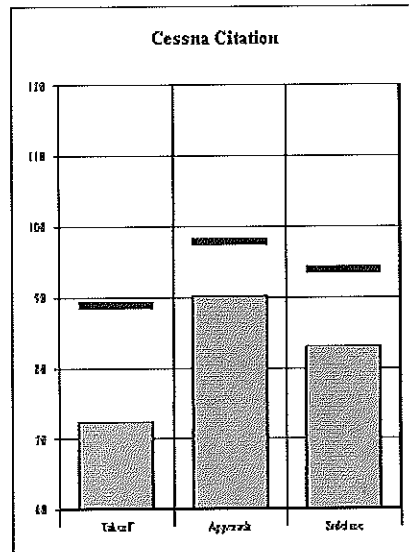
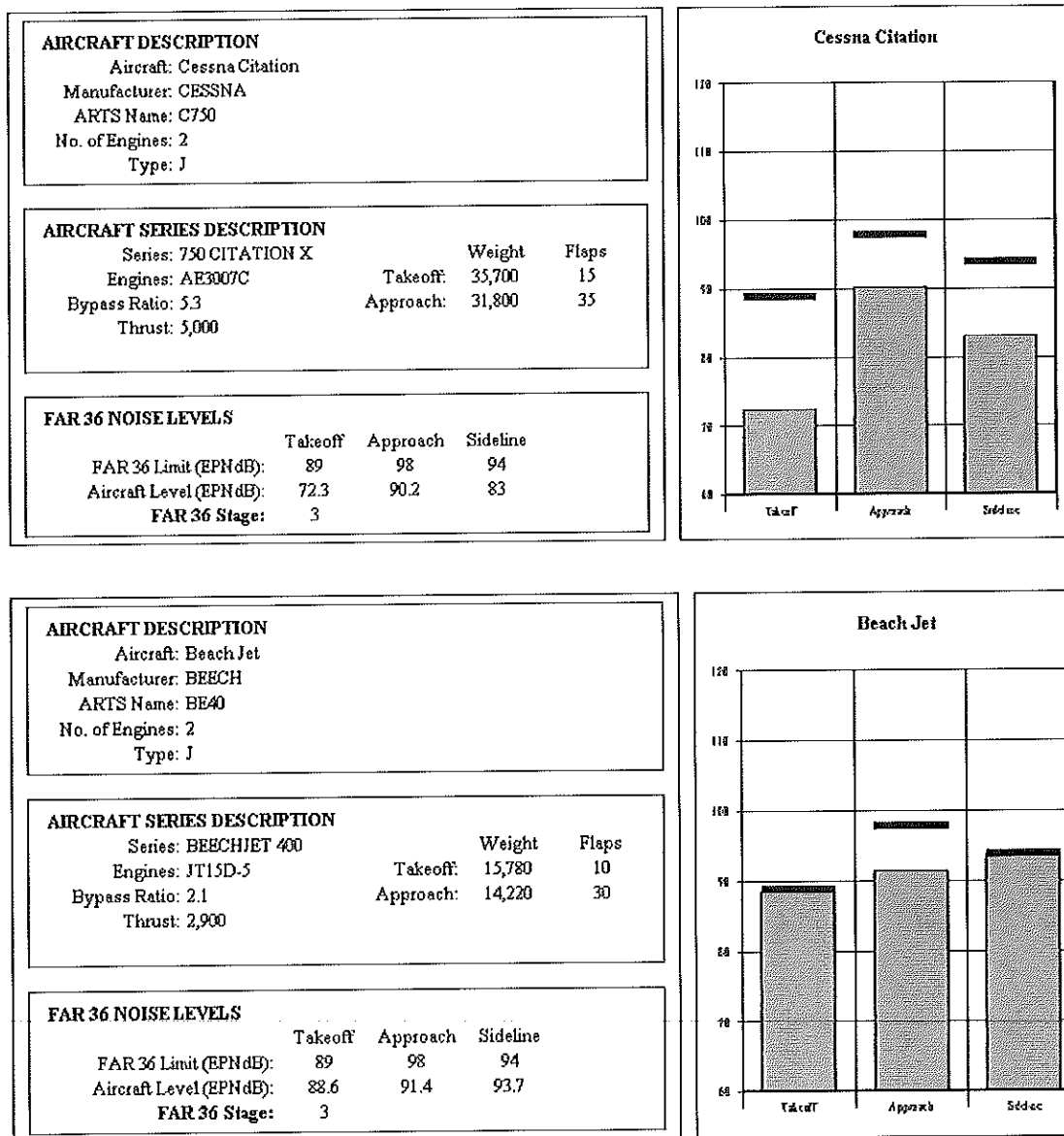
Methodology

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 and 3 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.

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 if it is Stage 2 or Stage 3.

The rating method for the FNQ totals the difference between each aircraft's certified noise levels at all three measuring points and the Stage 3 and Stage 2 standard for that weight and number of engines. Aircraft with the lowest (i.e. quietest) noise levels are rated the best. An operator with aircraft certified close to borderline Stage 3 limits is rated low, while an operator with aircraft certificated noise levels quieter than Stage 3 limits rated higher. For Aspen/Pitkin County Airport, the departure value is weighted heavier than the approach and sideline noise due to the more widespread and intrusive nature of departure noise. **Figure 1** depicts the noise characteristics of two aircraft types: a Cessna Citation and a Beech Jet. Both aircraft are certified as Stage 3, yet the combined noise levels at all three Part 36 measuring points for the Cessna Citation 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.

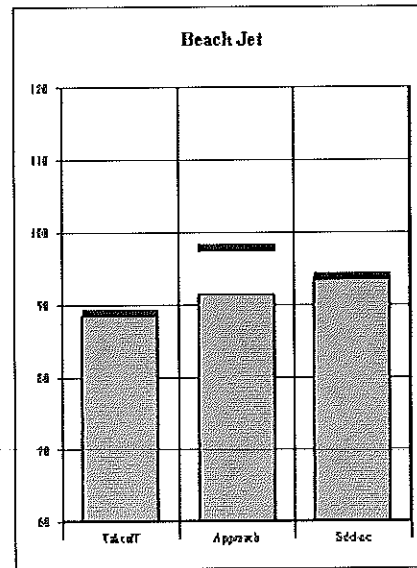
Figure 1 - FAR Stage 3 Limits and Certificated Noise Levels
Aspen/Pitkin County Airport Fly Green/Fly Clean



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

| AIRCRAFT SERIES DESCRIPTION | | | |
|-----------------------------|------------------|-------|--|
| Series: BEECHJET 400 | Weight | Flaps | |
| 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 | | |



Source: BridgeNet International, 2015

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 Airport is served by a variety of business jet aircraft, with a percentage certified as Stage 2 and louder “marginal” Stage 3. 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.

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 (SEL) noise levels, which are a convenient method for describing noise from individual aircraft events. An 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 Green/Fly Clean 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 twice per year, two weeks in the winter and two weeks in the summer. The winter measurements are during the peak Christmas period and the summer period is around the peak 4th of July period. **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 Green/Fly Clean measurement periods, the Woody Creek RMS was used to measure high noise events. Future Fly Green/Fly Clean 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 year around noise monitor has been placed to continuously measure the aircraft noise levels throughout the year. This location is now being 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.

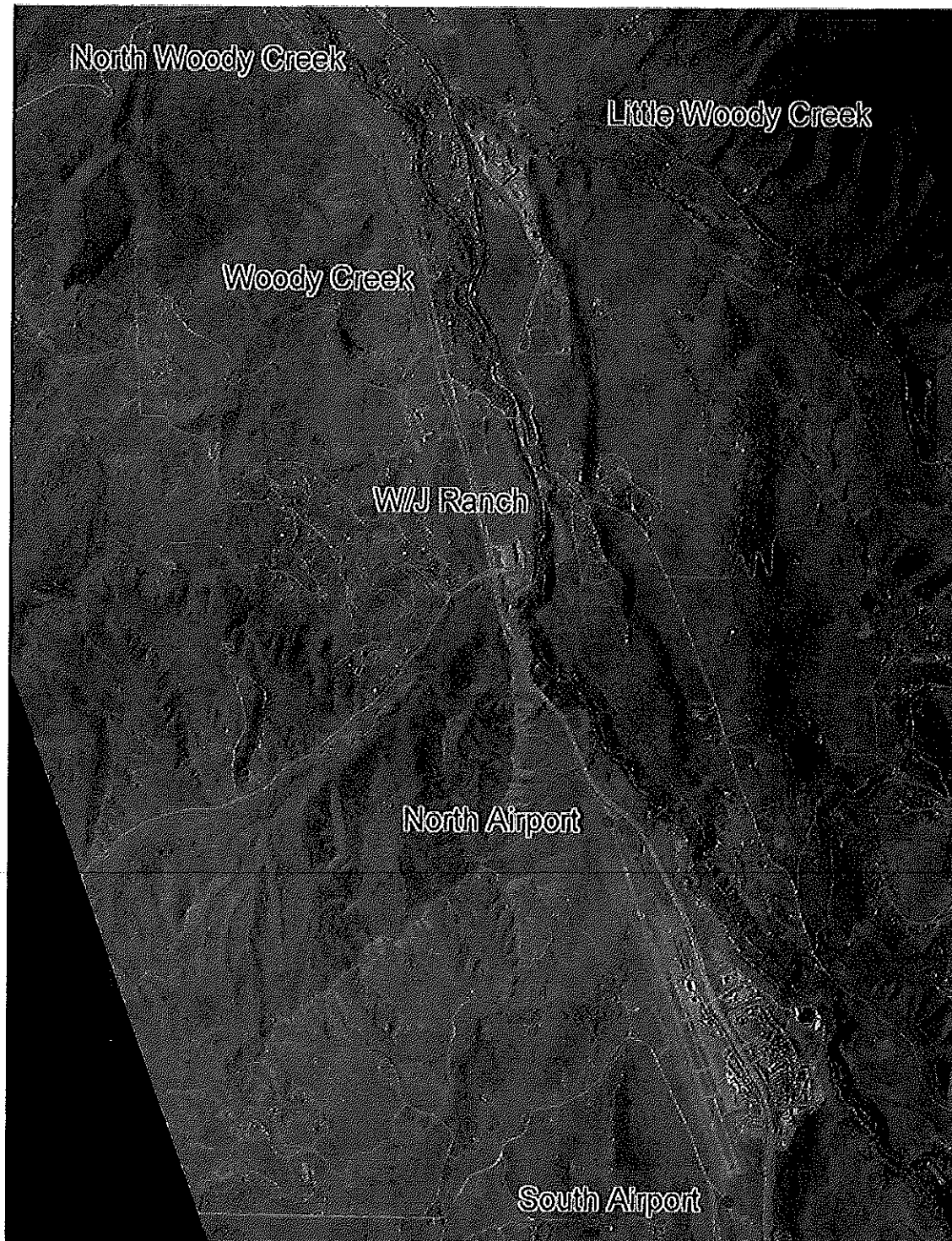
Table 1

Noise Monitoring Locations

Aspen/Pitkin County Airport Fly Green/Fly Clean

| Sites | Name | Location | Longitude | Latitude |
|-------|-----------|---------------------------------|--------------|------------|
| 1 | S Airport | South Airport Boundary | -106.8647666 | 39.2121166 |
| 2 | N Airport | North Airport Boundary | -106.8744833 | 39.2349166 |
| 3 | W/J | W/J Ranch | -106.8784500 | 39.2537000 |
| 4 | WC | Woody Creek – 262 Woods Rd. | -106.8878330 | 39.2668000 |
| 5 | LWC | Little Woody Creek | -106.8779167 | 39.2769167 |
| 6 | NWC | Woody Creek – 240 Doc Henry Rd. | -106.8935666 | 39.2797330 |

Figure 2 - Noise Monitoring Locations
Aspen/Pitkin County Airport Fly Green/Fly Clean



Historic single event noise data was used to help identify high noise level thresholds at the Woody Creek monitoring site. The historical data was used set 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 3% 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 90 dBA or greater is considered a high noise event.

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.

Figure 3 shows the Loudest Noise Events results for the 2015 winter period, November 1, 2014 – April 30, 2015. The high noise threshold is 90 SEL. **Figure 4** shows the Loudest Noise Events for the 2015 summer measurement period, May 1, 2015 – October 31, 2015. Both of the measurement period Loudest Noise Events are shown for the Woody Creek RMS, located north of the Airport. While there were additional noise events above 90 SEL, these were the Top 25 for the measurement period.

These events were nearly all generated by the older generation built Stage 2 aircraft such as the Gulfstream II/III and Lear 24/25s and the higher noise level Stage 3 jets such as the Falcon 50.

Figure 3 - Loudest Noise Events, Winter 2015– Woody Creek
Aspen/Pitkin County Airport Fly Green/Fly Clean
 Period November 1, 2014 – April 30, 2015

| ACBody | DATETIME_DA | ACTYPE | ALCODE | DAO | RUNWAY | SEL | SelBar |
|----------|------------------------|--------|--------|-----|--------|------|--------|
| Business | 12/25/2014 10:02:26 AM | GLF2 | GA | D | 33 | 95.3 | |
| Business | 12/27/2014 4:49:17 PM | GLF3 | GA | D | 33 | 94.6 | |
| Business | 12/23/2014 1:00:29 PM | FA50 | GA | D | 33 | 89.5 | |
| Business | 12/26/2014 11:41:03 AM | FA50 | GA | D | 33 | 88.6 | |
| Business | 12/22/2014 5:40:40 PM | FA50 | GA | D | 33 | 87.9 | |
| Unknown | 12/27/2014 4:26:06 PM | U | U | D | 33 | 87.5 | |
| Business | 12/27/2014 2:47:17 PM | BE40 | CTF | D | 33 | 85.1 | |
| Business | 12/22/2014 3:13:14 PM | ASTR | GA | D | 33 | 84.9 | |
| Business | 12/23/2014 4:28:07 PM | H25B | GA | D | 33 | 84.8 | |
| Business | 12/24/2014 11:32:47 AM | FA50 | GA | A | 15 | 84.4 | |
| Unknown | 12/27/2014 9:28:50 AM | U | U | D | 33 | 84.3 | |
| Business | 12/25/2014 2:15:18 PM | BE40 | GA | D | 33 | 84.0 | |
| Unknown | 12/27/2014 1:58:57 PM | U | U | D | 33 | 83.5 | |
| Business | 12/22/2014 10:01:32 AM | ASTR | GA | D | 33 | 83.4 | |
| Business | 12/24/2014 9:06:36 AM | LJ45 | GA | D | 33 | 83.1 | |
| Business | 12/27/2014 3:28:31 PM | GLF3 | GA | A | 15 | 83.0 | |
| Business | 12/22/2014 4:57:14 PM | H25B | GA | D | 33 | 82.8 | |
| Business | 12/25/2014 11:07:11 AM | F900 | GA | D | 33 | 82.7 | |
| Unknown | 12/27/2014 3:39:13 PM | U | U | A | 15 | 82.7 | |
| Business | 12/22/2014 4:38:43 PM | FA50 | GA | D | 33 | 82.6 | |
| Business | 12/26/2014 12:22:23 PM | FA50 | GA | A | 15 | 82.6 | |
| Unknown | 12/27/2014 10:46:18 AM | U | U | A | 15 | 82.6 | |
| Unknown | 12/23/2014 2:51:27 PM | U | U | D | 33 | 82.4 | |
| Unknown | 12/26/2014 12:44:44 PM | U | U | D | 33 | 82.3 | |
| Business | 12/23/2014 3:28:09 PM | ASTR | GA | D | 33 | 82.1 | |

Figure 4 - Loudest Noise Events, Summer 2015 – Woody Creek

Aspen/Pitkin County Airport Fly Green/Fly Clean

Period: May 1, 2015 – October 31, 2015




| ACBody | DATETIME_DA | ACTYPE | ALCODE | DAO | RUNWAY | SEL | SelBar |
|----------|-----------------------|--------|--------|-----|--------|------|--------|
| Business | 7/11/2015 11:05:00 AM | GLF3 | GA | D | 33 | 96.4 | |
| Business | 7/11/2015 2:19:58 PM | FA50 | GA | A | 15 | 90.9 | |
| Unknown | 7/8/2015 2:26:23 PM | U | U | D | 33 | 89.7 | |
| Business | 7/6/2015 12:38:22 PM | GLF2 | GA | A | 15 | 89.6 | |
| Business | 7/7/2015 3:40:51 PM | FA50 | GA | D | 33 | 89.5 | |
| Unknown | 7/11/2015 3:59:32 PM | U | U | D | 33 | 89.3 | |
| Business | 7/6/2015 12:31:05 PM | GLF3 | GA | A | 15 | 88.5 | |
| Prop | 7/1/2015 12:40:00 PM | P180 | NOJ | A | 15 | 88.4 | |
| Unknown | 7/8/2015 11:54:24 AM | U | U | D | 33 | 88.3 | |
| Business | 7/13/2015 6:08:20 PM | FA50 | U | D | 33 | 88.1 | |
| Prop | 7/2/2015 5:58:35 PM | P180 | U | A | 15 | 87.8 | |
| Business | 7/5/2015 4:34:42 PM | FA50 | GA | D | 33 | 87.7 | |
| Unknown | 7/5/2015 2:02:52 PM | U | U | D | 33 | 87.7 | |
| Unknown | 7/2/2015 5:21:42 PM | U | U | A | 15 | 87.4 | |
| Business | 7/9/2015 2:21:08 PM | FA50 | U | D | 33 | 87.3 | |
| Business | 7/5/2015 10:40:58 AM | H25B | JTL | A | 15 | 87.2 | |
| Business | 7/14/2015 4:36:39 PM | FA50 | GA | A | 15 | 87.1 | |
| Business | 7/4/2015 12:14:05 PM | BE40 | TMC | D | 33 | 87.1 | |
| Prop | 7/2/2015 11:32:52 AM | P180 | GA | A | 15 | 87.0 | |
| Unknown | 7/8/2015 9:33:45 AM | U | U | D | 33 | 86.8 | |
| Unknown | 7/7/2015 12:00:12 PM | U | U | D | 33 | 86.8 | |
| Business | 7/5/2015 4:16:07 PM | BE40 | DPJ | D | 33 | 86.7 | |
| Prop | 7/5/2015 8:32:14 AM | P180 | GA | D | 33 | 86.7 | |
| Business | 6/28/2015 12:22:22 PM | BE40 | GA | D | 33 | 86.6 | |
| Business | 6/29/2015 12:12:49 PM | C525 | DPJ | A | 15 | 86.4 | |

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 Green/Fly Clean 2015 program results are presented in **Figures 5 through 8**. **Figures 5 and 6** graphically shows the operations for FAR Part 135 operations that include fractional jet ownership and charters. **Figure 7** graphically shows the operations for single operators, or aircraft not operated as part of a fractional jet ownership program for the low scoring operators. **Figure 8** presents the corresponding data for the high scoring single operators.

In all of the figures, those operators with high scoring values are highlighted in **GREEN**. This is a Fleet Quality rating of 9 or better with no High Noise Level events (on a 0 to 10 scale with 10 being the highest rating). Average values are shown in **BLUE**. This is a Fleet Quality Rating between 4 and 9 and no high noise events. Low scoring values are shown in **YELLOW**. This is a Fleet Quality Rating of below 4 and at least one High Noise Level event. Operators with less than four operations per year were not included in the Program unless they generated a high noise event. If they generated a high noise event during the year, then they are included. All operations are compared back to the base period levels. The base period is the two years prior to the start of the Fly Quiet program (November 1, 2005 through October 31, 2007). The color codes for the different scores are shown below.

| Rating | Fleet Quality Score | High Noise Events | Color |
|---------|---------------------|-------------------|--|
| Good | 9 to 10 | 0 |  |
| Average | 4 to 9 | 0 |  |
| Poor | Below 4 | >=1 |  |

3.1 Fleet Quality Results.

FAR Part 135 Operators

The fleet quality results for the Part 135 operators are presented in **Figures 5 and 6**. The graphic shows the operations for FAR Part 135 operations that include fractional jet ownership and charters. The figures show the aircraft Fleet Noise Quality (FNQ) scored on a 0-10 scale, with 10 being the best possible in the available fleet and 0 being a Stage 2 or marginal Stage 3 aircraft.

For each operator, the first two columns in the figure shows their base period number of departures and their corresponding FNQ score. The next columns show the number of departures during the winter, summer and annual periods along with the corresponding FNQ. Any score above 9 is considered good (green). Any score between 4 and 9 is average (blue). Any score less than 4 is considered poor (yellow).

For the operators with more than 30 departures per year, Xojet and Jetsuite Air had the highest FNQ scores of 9.9. For the smaller operators with less than 30 departures per year, the top operators earned a FNQ score of 10, Saber Airlines.

The second to last column in the figure also show the change in the 2015 annual FNQ relative to the prior year score. Any improvement in FNQ of 1 or more is considered good (green). Any decrease in FNQ of 1 or more is considered poor (yellow). For the operators with more than 30 departures per year, Citation Air had the most improvement. For operators with less than 30 departures, Priester Charters and airline code RJC had the most improvements. The last column is the number of high events, which will be covered in the next section.

The operators are shown in descending order, with aircraft that operated above the airport wide average on the top. The middle blue line marks the average overall score for the Airport, which for the 2015 reporting period is 7.9 out of 10. This is an improvement 1.2 FNQ over the historical base period of 6.7, and a 0.1 increase over the previous year's FNQ.

Single Operators

Figure 7 shows the results for single aircraft operators that scored on the bottom of the FNQ. These aircraft had at least 6 departures per year, and a FNQ score of 0. The 0 score is a result of flying older, louder Stage 2 and marginal Stage 3 aircraft. The figure shows the tail number, type of plane, registered owner, the number of departures in the winter, summer and annual period along with the FNQ score. The number of high noise events is also shown. In addition to those operators that had 6 or more departures per year, any aircraft that generated a high noise event is also listed.

Figure 8 shows the results for single aircraft that scored on the top of the FNQ. These aircraft had at least 6 departures per year, and a FNQ score of greater than 9. The 9 or greater score is a result of flying new generation Stage 3 and Stage 4 aircraft. The figure shows the tail number, type of plane, registered owner, the number of departures for the annual period along with the FNQ score. There were no high noise events generated by these aircraft. The operator with the most number of operations flying an aircraft with a FNQ

of 9 or greater was registered to Terrapin Aircraft, LLC. There were 76 single aircraft operators with aircraft with a FNQ of 9 or more and had at least 6 departures per year. This is down from last year's high of 101 aircraft with a FNQ score of 9 or higher.

3.2 High Noise Event Results.

The high noise events were incorporated into the Fly Green/Fly Clean program with the results presented in **Figures 5** through **7**. The Part 135 Operators data in the last column of **Figures 5** and **6** shows that there were nine Part 135 operators that generated high noise events throughout the year, with a total of eleven events.

These results for the single aircraft operator's high noise events are presented in the last column of **Figure 7**. The results show that the majority of the high noise events are as a result of operations by the older louder Stage 2 and marginal Stage 3 aircraft that are flown by single aircraft owner/operators. It is an important observation that there were no high noise event associated with aircraft that had a good FNQ.

Figure 5 - Fleet Quality Rating, FAR Part 135 Operations (more than 30 dept per day)
Aspen/Pitkin County Airport Fly Green/Fly Clean

| Operator | | Annual FNQ Score | | Delta | High Events |
|----------|------------------------------|------------------|---------|-------|-------------|
| Code | Part 135 Operator | Departures | Current | | |
| 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 Average FNQ Score 7.7

Figure 6 - Fleet Quality Rating, FAR Part 135 Operations
Aspen/Pitkin County Airport Fly Green/Fly Clean

| 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 |

Figure 7 - Low Score Fleet Quality Rating, Single Operators
Aspen/Pitkin County Airport Fly Green/Fly Clean

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 FLYL... | | 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 |

Figure 8 - High Score Fleet Quality Rating, Single Operators, Part 1
Aspen/Pitkin County Airport Fly Green/Fly Clean

| Aircraft | | Registered Owner | State | Dep | FQ Score |
|----------|------|-------------------------------|-------|-----|----------|
| Tail Nbr | Type | | | | |
| N108JA | E50P | TERRAPIN AIRCRAFT LLC | CO | 97 | 9.8 |
| N569DM | C25A | WALTON S RAWLINGS | CO | 55 | 10.0 |
| N471MD | C525 | 525 CJ LLC | TX | 31 | 10.0 |
| N930LS | GLF4 | SADIE AVIATION LLC | TX | 22 | 9.8 |
| N751MM | C750 | MORGANS MACH ONE MACHINE LLC | CA | 21 | 10.0 |
| N1963N | GLF4 | WATER FORCE ONE LLC | CA | 19 | 9.8 |
| N779AZ | GLF4 | PITTCO AVIATION LLC | TN | 18 | 9.8 |
| N358JJ | C25B | CORAL AIR LLC | AR | 17 | 10.0 |
| N409VP | C25A | LONE TROUT MT LLC | MT | 17 | 10.0 |
| N858Z | E55P | DAT-II LLC | CO | 16 | 9.8 |
| XAGPR | CL30 | Mexico | MX | 16 | 9.8 |
| N160BP | LJ60 | BEESON JOHN S | TX | 15 | 10.0 |
| N505BC | LJ45 | WCAT MANAGEMENT INC | TX | 14 | 10.0 |
| N800BD | CL30 | KONFARA COMPANY LLC | AZ | 14 | 9.8 |
| N1EG | PRM1 | MALIBU LEASING CORP | CO | 13 | 9.7 |
| N510EE | C510 | C510 AVIATION LLC | CO | 12 | 10.0 |
| N95LL | C25B | BEMIDJI AVIATION SERVICES INC | MN | 12 | 10.0 |
| N104RJ | LJ60 | HALRIVE AIR LLC | FL | 11 | 10.0 |
| N238RM | C525 | SACJ LLC | TX | 11 | 10.0 |
| N450AB | GLF4 | BLUE VISTA LLC | CA | 11 | 9.8 |
| N750NA | C750 | N A CITATION (2012) LLC | FL | 11 | 10.0 |
| N819CW | C25B | SKYBANK LLC | NE | 11 | 10.0 |
| N858SD | C25A | RBL AVIATION LLC | CO | 11 | 10.0 |
| N302K | CL30 | CORPORATE JET LEASING CO LLC | KS | 10 | 9.8 |
| N318JS | CL30 | U S BANK NA | MN | 10 | 9.8 |
| N32PM | C25C | PERUGIA AIR LLC | CA | 10 | 10.0 |
| N57HA | CL30 | MBI LEASING LLC | ND | 10 | 9.8 |
| N618KG | CL30 | AIRKRAFT TWO TRUST | MA | 10 | 9.8 |
| N703DM | C750 | PAPA GRANDE AVIATION LLC | TX | 10 | 10.0 |
| N913MK | GLF4 | GR AIRCRAFT ACQUISITION LLC | TX | 10 | 9.8 |
| N108DU | GLF4 | TUTOR PERINI CORP | CA | 9 | 9.8 |
| N206AH | E50P | BUFFALO SPINE SURGERY PLLC | NY | 9 | 9.8 |
| N268EM | EA50 | TOTAL ECLIPSE II LLC | CO | 9 | 9.8 |
| N345AW | LJ45 | SATURN OF KANSAS CITY INC | MO | 9 | 10.0 |

Figure 9 - High Score Fleet Quality Rating, Single Operators, Part 2
Aspen/Pitkin County Airport Fly Green/Fly Clean

| Aircraft | | Registered Owner | State | Dep | FQ Score |
|----------|------|---|-------|-----|----------|
| Tail Nbr | Type | | | | |
| N354WG | CL30 | AUTOMATIC PRESS LLC | TX | 9 | 9.8 |
| N390JV | PRM1 | JSV AVIATION LLC | AZ | 9 | 9.7 |
| N459SF | LJ60 | PHILLIPS AVIATION COMPANY LLC | DE | 9 | 10.0 |
| N513RV | C525 | WOOD PAUL R | IL | 9 | 10.0 |
| N525MR | C25A | AVIATION LP | TX | 9 | 10.0 |
| N53NW | C25B | FOXY AIR LLC | OH | 9 | 10.0 |
| N750GB | C750 | CESSNA AIRCRAFT COMPANY | KS | 9 | 10.0 |
| CGMRX | GLF4 | Canada | CN | 8 | 9.8 |
| N22NJ | EA50 | 2#@VIATION LLC | IL | 8 | 9.8 |
| N500SD | C25A | SDI LEASING LLC | TX | 8 | 10.0 |
| N71BD | GLF4 | GENERAL ELECTRIC CREDIT CORP OF TENNESSEE | CT | 8 | 9.8 |
| N752M | CL30 | CIRRUS GAS 4 LLC | TX | 8 | 9.8 |
| N952SP | PRM1 | SCANNELL CITATION LLC | IN | 8 | 9.7 |
| N145EA | EA50 | TOTAL ECLIPSE LLC | CO | 7 | 9.8 |
| N21SB | E50P | SOUTHERN BLEACHER CO INC | TX | 7 | 9.8 |
| N23SEE | E55P | TCN TRANSPORT 300 LLC | TX | 7 | 9.8 |
| N270SC | GLF4 | TRANS-EXEC AIR SERVICE INC | CA | 7 | 9.8 |
| N369MN | C25B | WELLS FARGO BANK NORTHWEST NA TRUSTEE | UT | 7 | 10.0 |
| N450EF | GLF4 | NDM AVIATION LLC | FL | 7 | 9.8 |
| N454N | LJ45 | BANK OF AMERICA NA | NC | 7 | 10.0 |
| N45NM | LJ45 | HM INTERNATIONAL LLC | OK | 7 | 10.0 |
| N65BZ | C25A | DAT-II LLC | CO | 7 | 10.0 |
| N80FK | C25B | RED ROCK ENTERPRISES INC | KY | 7 | 10.0 |
| N825TB | CL30 | DB AVIATION LLC | CO | 7 | 9.8 |
| N959RC | LJ70 | HY CITE CORPORATION | WI | 7 | 10.0 |
| N142TL | E50P | FLYING CATS AIR LLC | CA | 6 | 9.8 |
| N163EG | GLF4 | C.DOT AVIATION LLC | DE | 6 | 9.8 |
| N198HB | LJ60 | UNITED FURNITURE EQUIPMENT RENTAL INC | MS | 6 | 10.0 |
| N363AL | C25B | PATHFINDER AVIATION INC | AK | 6 | 10.0 |
| N402FT | GLF4 | EJS EXECUTIVE JET SHARES II INC | DE | 6 | 9.8 |
| N404TC | GLF4 | TC EQUIPMENT LLC | CT | 6 | 9.8 |
| N450TR | C25A | SIERRA AVIATION LLC | CA | 6 | 10.0 |
| N510SP | GLF4 | BLUE SKY 1183 LLC | FL | 6 | 9.8 |
| N570DC | GLF4 | CANAL AIR LLC | CT | 6 | 9.8 |

Figure 10 - High Score Fleet Quality Rating, Single Operators, Part 3
Aspen/Pitkin County Airport Fly Green/Fly Clean

| Aircraft | | Registered Owner | State | Dep | FQ Score |
|----------|------|---------------------------------------|-------|-----|----------|
| Tail Nbr | Type | | | | |
| N570DC | GLF4 | CANAL AIR LLC | CT | 6 | 9.8 |
| N605WG | E135 | WELLS FARGO BANK NORTHWEST NA TRUSTEE | UT | 6 | 9.8 |
| N67WG | E55P | WINGATE AVIATION ENTERPRISES LLC | FL | 6 | 9.8 |
| N763DB | GLF4 | TRANS EXEC AIR SERVICE INC | CA | 6 | 9.8 |
| N773RC | CL30 | RCM AVIATION LLC | GA | 6 | 9.8 |
| N816BL | C25B | FLIGHT DYNAMICS LLC | VA | 6 | 10.0 |
| N823M | C510 | RAPTOR AVIATION LLC | OK | 6 | 10.0 |
| N909TT | E135 | TRANSCON INTERNATIONAL INC | DE | 6 | 9.9 |
| N95BQ | LJ60 | KONFARA CO LLC | AZ | 6 | 10.0 |

4. 2015 Annual Awards – Fly Green/Fly Clean

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.

4.1 Part 135 Operators

- Operators that flew the quietest fleet without any high noise events (30 or more departures per year)

| Operator Code | Operator | Departures |
|---------------|--------------|------------|
| XOJ | XOJet | 225 |
| RSP | Jetsuite Air | 77 |

- Operators that flew the quietest fleet without any high noise events (less than 30 departures per year)

| Operator Code | Operator | Departures |
|---------------|----------------|------------|
| SIS | Saber Airlines | 17 |

- Operators that were most improved from previous year

OPT Flight Options (30 or more departures per year)
PWA Priester Charters (less than 30 departures per day)

- Honorable Mention of those Operators with a better than airport average fleet with no high noise events

30 or more Departures per year

| Operator Code | Operator | Departures |
|---------------|------------------------|------------|
| XSR | Executive AirShare | 109 |
| BJS | Business Jet Solutions | 71 |
| LXJ | Bombardier FlexJet | 382 |
| SBE | World Class Aviation | 42 |

Less than 30 departures per year

| Operator Code | Operator | Departures |
|---------------|-------------------|------------|
| PXT | Pacific Coast Jet | 8 |
| GCT | GC Aviation | 26 |
| TKK | Aero Ways Inc | 12 |
| PEG | Pelangi Air | 19 |
| OHC | Jet Select | 7 |

5. Overall Fly Green/Fly Clean Airport Evaluation

The Fly Green/Fly Clean Program presents the Airport's overall score, and compares it to historical data. **Figure 9** shows historical data for four categories:

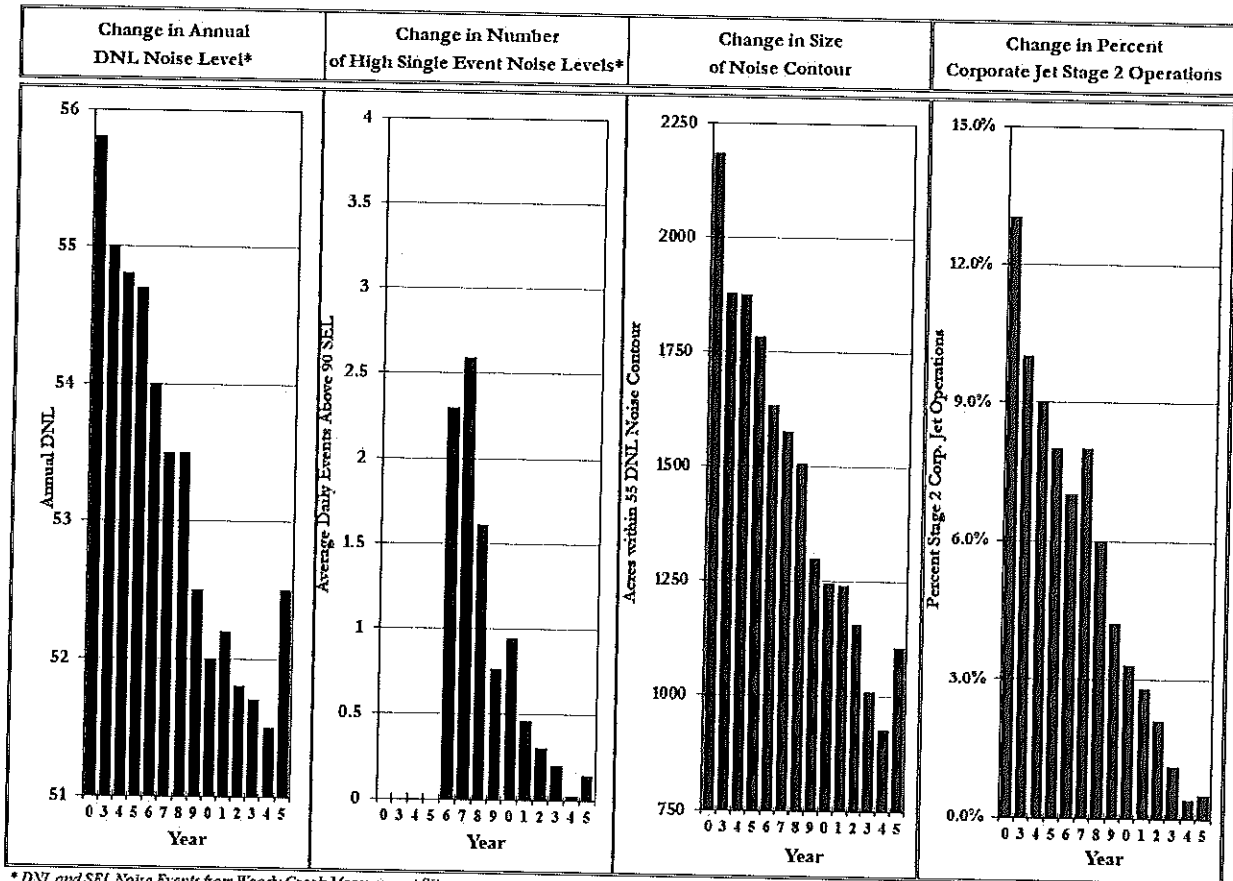
- Change in Annual DNL Noise Level
- Change in Number of Average Daily Number of High Single Event Noise Levels
- Change in Size of Noise Contour
- Change in Percentage of Corporate Jet Stage 2 Operations

Historical data for these categories is show for the years 2000 and 2003 – 2014. Each of the four categories shows significant improvement year over year. This report focuses on the 2014 Fly Green/Fly Clean Airport Reporting period.

During the reporting period, the Airport experienced its lowest annual DNL noise level, lowest percentage of Stage 2 corporate jet operations, and smallest 55 DNL noise contour.

Stage 2 operations accounted for 1.1% of all corporate jet operations. The number of High Single Event Noise Levels average less than one per day. The lower number of high noise events can be directly correlated with the continued reduction of Stage 2 corporate jet aircraft. Specifically the older Gulfstreams (II and III) and older Lear Jets (24 and 25). It is anticipated that these levels will continue to lower. As with the other airport rating categories, the size of the noise contour was the smallest at less than 1,010 acres in the 55 DNL. This can also be attributed to reduction of Stage 2 operations as well as an overall reduction in operations.

Figure 11 - Historic Overall Airport Comparison
Aspen/Pitkin County Airport Fly Green/Fly Clean



* DNL and SEL Noise Events from Woody Creek Measurement Site
 Year Around Measurements of High Noise Events at Wood Creek Started in 2006