



# **Fly Quiet Report**

## Calendar Year 2023

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## 1.0 Summary of the 2023 Report

The Fly Quiet Report is an annual publication by Planning, Noise, & Environment (Aircraft Noise Office), which outlines trends regarding how quietly each airline operates at San Diego International Airport (SDIA). This document serves as a summary of the Fly Quiet Report for 2023. To better align with Airport Noise Advisory Committee (ANAC) reporting periods, the program evaluation period has been adjusted to a calendar year. This will enable the facilitation of awards approval by ANAC in May, and the coordination of awards and Board presentation to carriers in June of each year.

### Observations for 2023:

- A new element, "Nighttime Fleet Quality," has been introduced for 2023.
- The usage of Stage 4 aircraft has significantly expanded, leading to improved overall fleet quality scores.
- New Airbus A220-100/300 aircraft, compliant with Stage 5 noise standards, have been introduced.
- Lufthansa and British Airways continued to use Stage 5 aircraft for their operations at SDIA.
- The impacts of Noise Curfew Violations were significant in 2023, resulting in seven airlines receiving negative scores for Curfew Compliance.

### 2023 Winners:

- Large domestic carrier – Southwest Airlines.
- Small domestic carrier – Hawaiian Airlines.
- Cargo carrier – DHL Express USA.
- International carrier – Lufthansa.

## 2.0 Fly Quiet Program Description

The purpose of the SDIA Fly Quiet Program is to encourage individual air carriers to operate as quietly as possible in the San Diego area. This is achieved by acknowledging carriers that operate the quietest fleets and adhere to Authority Use Regulations (Curfew)<sup>1</sup>. By ranking air carrier's performance and making the scores available to the public, the program fosters a participatory atmosphere, encouraging carriers to actively reduce noise impacts.

The Fly Quiet Program provides a dynamic platform for reviewing noise abatement initiatives by rewarding and promoting active participation, rather than employing a system that solely admonishes violations of essentially voluntary procedures.

### 2.1 Report

The Fly Quiet Report includes three scoring elements, each rated on a scale of 0 to 10, to communicate annual results for individual categories. These quantitative scores allow air carrier management and flight personnel to accurately assess their performance relative to other carriers and understand how their proactive efforts can effectively reduce noise in the San Diego area. With the addition of the new "Nighttime Fleet Quality" element, which contributes to the overall Fleet Quality score, the maximum possible score each year is now 40 points.

### 2.2 Awards

Awards will be presented to the carriers in the following categories:

- Large Domestic Carrier – 10% of SAN passengers or more.
- Small Domestic Carrier – Less than 10% of SAN passengers.
- Air Cargo Carrier – All cargo carriers operating at SAN.
- International Carrier – All international carriers operating at SAN.

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<sup>1</sup> San Diego County Regional Airport Authority Code 9.40, Airport Use Regulations:  
[https://www.san.org/DesktopModules/Bring2mind/DMX/API/Entries/Download?EntryId=12229&Command=Core\\_Download&language=en-US&PortalId=0&TabId=499](https://www.san.org/DesktopModules/Bring2mind/DMX/API/Entries/Download?EntryId=12229&Command=Core_Download&language=en-US&PortalId=0&TabId=499)

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## 2.3 Scoring Elements

The Fly Quiet Program scores air carriers on the following three elements, which will be described in detail in the next section. The elements are:

1. Fleet Quality (includes Nighttime Fleet Quality score).
2. Noise Exceedance.
3. Curfew Compliance.

### 2.3.1 Fleet Quality

The Fleet Quality score evaluates the noise contribution of each operator's fleet mix as it operates at SDIA. Carriers typically own a variety of aircraft types and schedule them based on operational needs, passenger/cargo demand, and other marketing considerations. The Fly Quiet Program assigns a higher score to carriers operating quieter, newer aircraft.

Historically, airports have rated Fleet Quality based on the relative percentage of Stage 2 versus Stage 3 operations<sup>2</sup>. Since the completion of the phase-out of Stage 2 aircraft mandated by the Airport Noise and Capacity Act (ANCA) of 1990, all aircraft in the U.S. over 75,000 pounds must meet the more stringent Stage 3 noise standards. However, within the allowable Stage 3 criteria, there is a wide range of noise levels, and the Federal Aviation Administration (FAA) does not distinguish between these aircraft types.

There are now Stage 4 and Stage 5 aircraft types entering service. A requirement mandated that all new aircraft designs over 12,500 pounds seeking type certification after January 1, 2006, must adhere to Stage 4 noise standards. The recently introduced Stage 5 noise standard<sup>3</sup> applies to any new airplane type design seeking certification with a Maximum Certificated Takeoff Weight (MTOW) of 121,254 pounds or more on or after December 31, 2017. Additionally, it applies to designs with an MTOW of less than 121,254 pounds seeking certification on or after December 31, 2021.

The method used here bases an operator's Fleet Quality Score on aircraft manufacturer noise certification data. For each aircraft type, Title 14 Code of Federal Regulations (CFR) Part 36 (14 CFR Part 36)<sup>4</sup> specifies allowable noise levels at three measurement locations: takeoff, approach, and sideline. According to 14 CFR Part 36, allowable noise limits increase with weight, ensuring that larger aircraft serving more passengers are not penalized compared to smaller types.

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<sup>2</sup> Stages 1-4 were established by a Federal Aviation Regulation called 14 CFR Part 36, which mandated allowable noise levels for aircraft manufacture. Over time, both Stage 1 and Stage 2 aircraft have been phased out of operation in the U.S. as a result of subsequent federal regulations.

<sup>3</sup> Federal Register, <https://www.federalregister.gov/documents/2017/10/04/2017-21092/stage-5-airplane-noise-standards>

<sup>4</sup> CFR, <https://www.ecfr.gov/current/title-14/chapter-I/subchapter-C/part-36>

The scoring method for Fleet Quality totals the difference between each aircraft’s certified noise levels at all three measuring points (takeoff, approach, and sideline) and the Stage 3 standard for that aircraft type, weight, and engine type.

Consistent with 14 CFR Part 36, Fleet Quality Scoring allows for higher noise levels for larger aircraft. It is important to credit larger aircraft serving more passengers, as they provide more air service in fewer flights and generate less total noise than multiple operations with smaller aircraft types.

Methodology:

The Fleet Quality score is calculated by subtracting the maximum takeoff, approach, and sideline noise levels of each airplane from the maximum permitted noise levels (Part 36 Stage 3 limit) for airplanes as defined in 14 CFR Part 36 of the Federal Aviation Regulations.

For example, consider a B737-700 aircraft, where differences of 4.1 dB, 3.8 dB, and 6.8 dB are observed for takeoff, approach, and sideline noise, respectively. The cumulative Fleet Quality subscore for this aircraft is calculated as 14.7 decibels (dB).

Table 1 – B737-700 Aircraft Example<sup>5</sup>

B737-700 Aircraft	Takeoff (EPNdB)	Approach (EPNdB)	Sideline (EPNdB)	Cumulative Below Stage 3 Limit <sup>1</sup>
Part 36 Stage Limit	91.2	99.7	96.6	
Part 36 Certification Level	87.1	95.9	89.8	
Difference	4.1	3.8	6.8	14.7

NOTES:

1 Cumulative EPNdB value is the summation of certification levels subtracted from the Stage 3 limit at each of the measuring locations.

The Part 36 certification database for commercial aircraft contains extensive listings of various noise values, accounting for differences in aircraft type, weight, flap settings, engine types, and other specifications. The Fleet Quality scoring methodology assesses each operator at SDIA and their specific aircraft fleet. Certification values for each aircraft type are averaged per operator.

Table 2 illustrates how to calculate the Fleet Quality subscore. For example, consider an airline with two different aircraft types (B737 and B738) operating at SDIA. The cumulative

<sup>5</sup> Table 1 contains an example of the sum of cumulative noise levels calculation. Data in this table is for conceptual purposes only.

noise level of each aircraft type is multiplied by the total number of operations for that aircraft. The product (number) is then divided by the total operations for the air carrier, to create the Fleet Quality subscore.

Table 2 – Example for Computing the Fleet Quality Subscore<sup>6</sup>

Aircraft Type	Cumulative Noise Level	Operations	Product of Cumulative Noise Level and Operations
B737	14.3	75	1073
B738	13.1	75	983
Fleet Average (total cumulative noiselevel divided by total operations):			13.7

Table 3 illustrates how incorporating quieter aircraft, such as the Boeing 737MAX and Airbus A320neo, affects a specific Fleet Quality subscore for air carriers operating at the airport.

Table 3 – Example of Fleet Quality Improvement Subscore<sup>7</sup>

Aircraft Type	Cumulative Noise Level	Operations	Product of Cumulative Noise Level and Operations
B737	14.3	70	1001
B737MAX	25.2	20	504
B738	13.1	40	524
A320neo	25.3	20	506
Fleet Average (total cumulative noiselevel divided by total operations):			16.9

The overall Fleet Quality score for each operator is calculated based on the subscore, aiming for a cumulative noise level target of 32.6 dB. The subscore is divided by 32.6 and then grossed up to a 10-point scale to determine the Fleet Quality score. As Stage 5 aircraft become more prevalent and measurable, we may adjust the target cumulative noise level to 40 dB.

In the Table 2 example, the subscore is 13.7, resulting in the operator's Fleet Quality score of  $(13.7/32.6*10) = 4.20$ . In Table 3, the final Fleet Quality score increases to 5.18  $(16.9/32.6*10 = 5.18)$  with the introduction of newer aircraft. In this scenario, incorporating quieter B737MAX and A320neo aircraft with the same total 150 operations, improves the total Fleet Quality score from 4.20 to 5.18.

<sup>6</sup> Table 2 contains an example of Fleet Quality subscore calculations. Data in this table is for conceptual purposes only.

<sup>7</sup> Table 3 contains an example of Fleet Quality improvement subscore calculations. Data in this table is for conceptual purposes only.

### 2.3.2 Nighttime Fleet Quality

For the 2023 Fly Quiet Report, a new nighttime fleet quality element has been introduced. This metric has been implemented at the request of ANAC to encourage the use of the quietest aircraft available in the industry between 10:00 p.m. and 7:00 a.m., including the departure peak that begins at 6:30 a.m.

#### Methodology

According to the current FAA Stage 5 Airplane Noise Standards<sup>8</sup>, Stage 5 compliant aircraft require a cumulative reduction of 17 EPNdB from the Stage 3 limit. The nighttime fleet quality element uses this 17 EPNdB difference as a basis, rewarding airlines that use quieter Stage 5 aircraft during nighttime operations from 10:00 p.m. to 7:00 a.m.

Table 4 outlines an example of a calculation for an Airbus A321neo. Compared to Stage 3 limits, this aircraft is 10.6 EPNdB quieter during takeoff, 8.1 EPNdB quieter during approach, and 10.9 EPNdB quieter for sideline noise. This adds up to 29.6 EPNdB below Stage 3 limit. Subtracting the limit margin of 17 EPNdB gives us the Stage 5 value of 12.6 EPNdB.

Table 4 – Example A321neo<sup>9</sup>

A321neo Aircraft	Takeoff (EPNdB)	Approach (EPNdB)	Sideline (EPNdB)	Cumulative Below Stage 3 Limit <sup>1</sup>	Stage 5 (Difference from Cumulative Stage Limit) <sup>2</sup>
Part 36 Stage 3 Limit	91.3	100.4	96.7		
Part 36 Certification Level	80.7	92.3	85.8		
Difference	10.6	8.1	10.9	29.6	12.6

NOTES:

1 Cumulative EPNdB value is the summation of certification levels subtracted from the Stage 3 limit at each of the measuring locations.

2 Stage 5 difference is calculated by subtracting 17 from the cumulative Stage 3 limit.

SOURCES: 14 CFR Part 36, Airplane Noise Standard; Ricondo and Associates, August 2023.

The nighttime fleet quality subscore is calculated by first normalizing the Stage 5 value to operations, and then adjusting it to a 10-point scale.

These calculations are outlined in Table 5 and Table 6. A nighttime fleet quality score of 2.58 is obtained by Airline 1, while Airline 2 achieves a score of 4.77, indicating that Airline 2

<sup>8</sup> Federal Register, <https://www.federalregister.gov/documents/2017/10/04/2017-21092/stage-5-airplane-noise-standards>

<sup>9</sup> Table 4 contains an example of Stage 5 difference score calculations. Data in this table is for conceptual purposes only.

employs quieter fleets during nighttime operations, despite both airlines having the same number of nighttime flights.

Table 5 – Example Fleet Quality Subscore Calculation for Airline 1 10

Airline 1 Aircraft Used at Night	Cumulative Noise Level (Total Below Stage 3 Limit)	Stage 5 Difference from Cumulative Stage 3 Limit	Nighttime Operations <sup>1</sup>	Product of Noise Level and Operations
A320-272N	29.6	12.6	40	504
B777-200ER	18.8	1.8	90	162
A330-300	19.5	2.5	50	125
Fleet Average (total cumulative noise level divided by total operations)				4.39
Nighttime Fleet Quality sub-score (4.39/17)*10				2.58

NOTES:

1 Nighttime is from 10:00 p.m. to 7:00 a.m.

SOURCE: Ricondo & Associates, August 2023.

Table 6 – Example Fleet Quality Subscore Calculation for Airline 2<sup>11</sup>

Airline 2 Aircraft Used at Night	Cumulative Noise Level (Total Below Stage 3 Limit)	Stage 5 Difference from Cumulative Stage 3 Limit	Nighttime Operations <sup>1</sup>	Product of Noise Level and Operations
A320-272N	29.6	12.6	45	567
B777-200ER	18.8	1.8	50	90
A330-300	19.5	2.5	40	100
A350-900	32.6	15.6	45	702
Fleet Average (total cumulative noise level divided by total operations)				8.11
Nighttime Fleet Quality sub-score (8.11/17)*10				4.77

NOTES:

1 Nighttime is from 10:00 p.m. to 7:00 a.m.

SOURCE: Ricondo & Associates, August 2023.

If an airline operates at night using only Stage 3 or Stage 4 aircraft and their combined noise level does not meet the Stage 5 standards, their nighttime fleet quality subscore is zero (0). Airlines that do not operate during the night will receive a maximum nighttime fleet quality subscore of 10. This nighttime bonus subscore is then added to the overall Fleet Quality score.

<sup>10</sup> Table 5 contains an example of Nighttime Fleet Quality subscore calculations. Data in this table is for conceptual purposes only.

<sup>11</sup> Table 6 contains an example of Nighttime Fleet Quality subscore calculations. Data in this table is for conceptual purposes only.



### 2.3.3 Noise Exceedance

Noise exceedance captures the actual arrival and departure noise events during daytime, evening, and nighttime hours. To facilitate this measurement, three (3) Remote Monitoring Terminal (RMT)<sup>12</sup> locations have been established:

- RMT #2 – approximately 4 nautical miles (6.5 km) from the start of Runway 9 takeoff roll, along the departure path to the east of the airport.
- RMT #14 – approximately 4 nautical miles (6.5km) from the start of Runway 27 takeoff roll, along the departure path to the west of the Airport (straight out departures).
- RMT #24 – approximately 4 nautical miles (6.5km) from the start of Runway 27 takeoff roll, along the departure path to the west of the airport (right-turn departures).

#### Methodology

The noise exceedance score for each operator is determined by adding together the daytime, evening, and nighttime noise exceedance and adjusting them based on the number of operations to generate a score of up to ten (10) points. Current Sound Exposure Level (SEL)<sup>13</sup> threshold settings are 90 dB for daytime departures (7:00 a.m. to 7:00 p.m.), 85 dB in the shoulder hours (7:00 p.m. to 10:00 p.m.), and 80 dB for nighttime departures (10:00 p.m. to 7:00 a.m.). Multiple noise exceedance for a single departure may be captured if they exceed the thresholds at both RMT #14 and RMT #24. Threshold levels can be adjusted (reduced) to reflect the noise improvements of the fleet and maintain measurement validity in fleet comparisons as Stage 4 and 5 aircraft use increases.

### 2.3.4 Curfew Compliance

Since 1976, a curfew has been enforced at SDIA as part of the Airport Use Regulations. Violating this curfew may result in a monetary fine. Departures are restricted between 11:30 p.m. and 6:30 a.m., while aircraft are allowed to arrive at any time.

The departure curfew is obligatory, with exceptions made for Emergency/Mercy flights. The decision to comply rests with the pilot or operator, and penalties may be waived under certain circumstances. These circumstances include local maintenance issues found near departure time, significant weather disruptions, or operational issues such as FAA system outages or aircraft maintenance issues. These waivers aim to encourage cancellations rather

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<sup>12</sup> RMT – Remote Monitoring Terminal is a component of an Airport Noise and Operations Monitoring System (ANOMS).

<sup>13</sup> SEL – Sound Exposure Level is a measure of the total sound energy of an event, accounting for its duration.

than departures during the curfew window, and they are determined based on a review of individual situations.

Penalties for curfew violations consist of administrative fines, starting at \$2,000 for the first violation within a compliance period, escalating to \$6,000 for the second violation, and \$10,000 for the third. Additionally, a multiplier is applied based on the number of violations from the previous compliance period. The Fly Quiet Program formalizes efforts to collaborate with carriers to reduce curfew violations.

### Methodology

















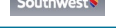




An operator will receive a score of ten (10) points if no curfew violations are recorded. The score is adjusted according to the following:

1. Curfew violations: if a carrier breaks the curfew, they will be assessed a penalty of one (1) point.
2. Curfew violations resulting in fines: if the airport's Curfew Violation Review Panel (CVRP) decides to fine a curfew violation, an additional penalty of one (1) point will be given.

It is possible for a carrier to get a negative score in this category. If a carrier keeps violating the curfew, the number of violations will have a more severe impact on the final score.






















### 3.0 Score Sheets

 Table 7 – Fleet Quality Report<sup>14</sup>

Airline	Operations	Total Operations %	Fleet Quality Sub Score	Fleet Quality without Night Score	Fleet Quality Night Score	Fleet Quality Score
AAL 	16,776	8.7%	15.99	4.90	1.57	6.47
AAY 	849	0.4%	17.55	5.38	0.50	5.89
ACA 	1,332	0.7%	25.44	7.80	5.27	13.07
ASA 	20,745	10.8%	16.31	5.00	1.23	6.23
BAW 	715	0.4%	26.60	8.16	10.00	18.16
DAL 	18,704	9.7%	15.08	4.63	0.77	5.39
DLH 	347	0.2%	32.60	10.00	10.00	20.00
FDX 	2,434	1.3%	14.92	4.58	0.15	4.73
FFT 	4,988	2.6%	27.28	8.37	6.15	14.52
HAL 	1,432	0.7%	21.55	6.61	4.09	10.70
JAL 	454	0.2%	28.10	8.62	10.00	18.62
JBU 	3,912	2.0%	14.45	4.43	0.81	5.24
JZA 	1,619	0.8%	15.86	4.87	0.00	4.87
NKS 	3,840	2.0%	23.98	7.36	6.24	13.59
SCX 	532	0.3%	13.26	4.07	0.00	4.07
SKW 	20,375	10.6%	13.13	4.03	0.00	4.03
SWA 	71,538	37.1%	17.50	5.37	1.16	6.53
SWQ 	782	0.4%	13.24	4.06	0.00	4.06
UAL 	20,179	10.5%	18.05	5.54	2.34	7.87
UPS 	842	0.4%	16.58	5.09	0.02	5.10
WJA 	492	0.3%	20.00	6.14	10.00	16.14

<sup>14</sup> Table 7 shows the scoring in each element for a specific carrier, without assigning ranks to individual elements. There is no preference for any operator.

Table 8 – Noise Exceedance Report<sup>15</sup>

Airline	Operations	Daytime Exceedances (90+ dB)	Evening Exceedances (85+ dB)	Nighttime Exceedances (80+ dB)	Total Exceedances	Noise Exceedance Score
AAL 	16,776	299	2,327	5,667	8,293	5.06
AAY 	849	16	46	20	82	9.03
ACA 	1,332	8	193	206	407	6.94
ASA 	20,745	1,172	4,087	3,145	8,404	5.95
BAW 	715	66	274	0	340	5.24
DAL 	18,704	662	2,014	5,913	8,589	5.41
DLH 	347	15	5	0	20	9.42
FDX 	2,434	165	621	1,041	1,827	2.49
FFT 	4,988	19	514	1,121	1,654	6.68
HAL 	1,432	155	554	110	819	4.28
JAL 	454	4	0	0	4	9.91
JBU 	3,912	90	1,049	827	1,966	4.97
JZA 	1,619	12	36	232	280	8.27
NKS 	3,840	26	432	427	885	7.70
SCX 	532	65	44	3	112	7.89
SKW 	20,375	140	1,178	1,856	3,174	8.44
SWA 	71,538	1,035	8,778	7,394	17,207	7.59
SWQ 	782	50	266	58	374	5.22
UAL 	20,179	2,015	3,220	3,673	8,908	5.59
UPS 	842	36	281	494	811	0.37
WJA 	492	13	0	0	13	9.74






















<sup>15</sup> Table 8 shows the scoring in each element for a specific carrier, without assigning ranks to individual elements. There is no preference for any operator.

Table 9 – Curfew Violation Report<sup>16</sup>

Airline	Operations	Violations	Penalized Violations	Curfew Penalty Points	Curfew Violation Score
AAL 	16,776	20	0	20	-10.00
AAY 	849	2	2	4	6.00
ACA 	1,332	6	6	12	-2.00
ASA 	20,745	17	4	21	-11.00
BAW 	715	0	0	0	10.00
DAL 	18,704	17	8	25	-15.00
DLH 	347	0	0	0	10.00
FDX 	2,434	3	0	3	7.00
FFT 	4,988	24	21	45	-35.00
HAL 	1,432	0	0	0	10.00
JAL 	454	0	0	0	10.00
JBU 	3,912	22	9	31	-21.00
JZA 	1,619	0	0	0	10.00
NKS 	3,840	4	4	8	2.00
SCX 	532	0	0	0	10.00
SKW 	20,375	7	1	8	2.00
SWA 	71,538	0	0	0	10.00
SWQ 	782	0	0	0	10.00
UAL 	20,179	15	2	17	-7.00
UPS 	842	0	0	0	10.00
WJA 	492	0	0	0	10.00









<sup>16</sup> Table 9 shows the scoring in each element for a specific carrier, without assigning ranks to individual elements. There is no preference for any operator.

Table 10 – Fly Quiet Report<sup>17</sup>





Airline	Total Operations	Night Operations	Fleet Quality Score	Noise Exceedance Score	Curfew Violation Score	Total Fly Quiet Score	Category
AAL 	16,776	4,094	6.47	5.06	-10.00	1.53	Small Carrier
AAY 	849	14	5.89	9.03	6.00	20.92	Small Carrier
ACA 	1,332	183	13.07	6.94	-2.00	18.02	International
ASA 	20,745	2,635	6.23	5.95	-11.00	1.18	Large Carrier
BAW 	715	0	18.16	5.24	10.00	33.40	International
DAL 	18,704	4,085	5.39	5.41	-15.00	-4.20	Small Carrier
DLH 	347	0	20.00	9.42	10.00	39.42	International
FDX 	2,434	865	4.73	2.49	7.00	14.22	Air Cargo
FFT 	4,988	1,161	14.52	6.68	-35.00	-13.80	Small Carrier
HAL 	1,432	108	10.70	4.28	10.00	24.98	Small Carrier
JAL 	454	0	18.62	9.91	10.00	38.53	International
JBU 	3,912	632	5.24	4.97	-21.00	-10.79	Small Carrier
JZA 	1,619	237	4.87	8.27	10.00	23.14	International
NKS 	3,840	419	13.59	7.70	2.00	23.29	Small Carrier
SCX 	532	3	4.07	7.89	10.00	21.96	Small Carrier
SKW 	20,375	1,777	4.03	8.44	2.00	14.47	Large Carrier
SWA 	71,538	6,739	6.53	7.59	10.00	24.13	Large Carrier
SWQ 	782	53	4.06	5.22	10.00	19.28	Air Cargo
UAL 	20,179	2,784	7.87	5.59	-7.00	6.46	Large Carrier
UPS 	842	367	5.10	0.37	10.00	15.47	Air Cargo
WJA 	492	0	16.14	9.74	10.00	35.87	International

<sup>17</sup> Table 10 shows the scoring in each element for a specific carrier, without assigning ranks to individual elements. There is no preference for any operator.

Table 11 – Rankings Report<sup>18</sup>

Airline	Number of Operations	Night Operations	Fleet Quality Score	Noise Exceedance Score	Curfew Violation Score	Total Fly Quiet Score	Category
SWQ 	782	53	4.06	5.22	10.00	19.28	Air Cargo
UPS 	842	367	5.10	0.37	10.00	15.47	Air Cargo
FDX 	2,434	865	4.73	2.49	7.00	14.22	Air Cargo
DLH 	347	0	20.00	9.42	10.00	39.42	International
JAL 	454	0	18.62	9.91	10.00	38.53	International
WJA 	492	0	16.14	9.74	10.00	35.87	International
BAW 	715	0	18.16	5.24	10.00	33.40	International
JZA 	1,619	237	4.87	8.27	10.00	23.14	International
ACA 	1,332	183	13.07	6.94	-2.00	18.02	International
SWA 	71,538	6,739	6.53	7.59	10.00	24.13	Large Carrier
SKW 	20,375	1,777	4.03	8.44	2.00	14.47	Large Carrier
UAL 	20,179	2,784	7.87	5.59	-7.00	6.46	Large Carrier
ASA 	20,745	2,635	6.23	5.95	-11.00	1.18	Large Carrier
HAL 	1,432	108	10.70	4.28	10.00	24.98	Small Carrier
NKS 	3,840	419	13.59	7.70	2.00	23.29	Small Carrier
SCX 	532	3	4.07	7.89	10.00	21.96	Small Carrier
AAY 	849	14	5.89	9.03	6.00	20.92	Small Carrier
AAL 	16,776	4,094	6.47	5.06	-10.00	1.53	Small Carrier
DAL 	18,704	4,085	5.39	5.41	-15.00	-4.20	Small Carrier
JBU 	3,912	632	5.24	4.97	-21.00	-10.79	Small Carrier
FFT 	4,988	1,161	14.52	6.68	-35.00	-13.80	Small Carrier

LEGEND:

-  – Cargo carrier group winner.
-  – International carrier group winner.
-  – Large domestic carrier group winner.
-  – Small domestic carrier group winner.

<sup>18</sup> Table 11 displays the total points allocated to each element and the rankings assigned to carrier groups, used to identify the recipients of awards for the best carrier within each operating category.