Fly Quiet Report

Calendar Year 2024

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1.0 Summary of the 2024 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 2024. To better align with Airport Noise Advisory Committee (ANAC) reporting periods, the program evaluation period has been adjusted to a calendar year. This will facilitate ANAC's approval of awards in May, followed by coordination of the awards and Board presentation to carriers.

Observations for 2024:

- The usage of Stage 4 [1] aircraft increased by 2% in 2024 compared to 2023, contributing to an improvement in overall fleet composition.
- The use of Stage 5 [2] aircraft increased by 17% in 2024, marking a significant improvement in overall fleet modernization and noise reduction compliance.
- The top five airlines operating Stage 5 aircraft in 2024 are Southwest Airlines, United Airlines, Alaska Airlines, Frontier Airlines, and American Airlines. Stage 5 aircraft are jet-powered airplanes certified to meet the most stringent noise limits specified in 14 CFR Part 36.
- International carriers continue to have overall higher scores compared to other carrier categories.
- The Nighttime Fleet Quality score, implemented in 2023, remains in effect for the 2024 calendar year.

2024 Winners:

- Large domestic carrier – United Airlines
- Small domestic carrier – Breeze Airways
- Cargo carrier – DHL Express USA
- International carrier – Lufthansa

[1] Federal Register, Stage 4 Aircraft Noise Standards: https://www.federalregister.gov/documents/2005/07/05/05-13076/stage-4-aircraft-noise-standards.
[2] Federal Register, Stage 5 Aircraft Noise Standards: https://www.federalregister.gov/documents/2017/10/04/2017-21092/stage-5-airplane-noise-standards.

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 recognizing carriers that operate the quietest fleets and comply with Authority Use Regulations (Curfew) [3]. By ranking air carriers' performance and making the scores publicly available, the program fosters a participatory environment that encourages 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 relying solely on a system that admonishes violations of essentially voluntary procedures.

2.1 Report

The Fly Quiet Report includes three main scoring elements, each rated on a scale from 0 to 10, to communicate annual results for individual categories. These quantitative scores enable 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 "Nighttime Fleet Quality" element in 2023, which is now part of the overall Fleet Quality score, the maximum possible annual score is 40 points.

2.2 Awards

Awards will be presented to carriers in the following categories:

- Large Domestic Carrier – carriers accounting for 10% or more of SAN passenger traffic.
- Small Domestic Carrier – carriers accounting for less than 10% of SAN passenger traffic.
- Air Cargo Carrier – all cargo carriers operating at SAN.
- International Carrier – all international carriers operating at SAN.

[3] San Diego County Regional Airport Authority Code 9.40, Airport Use Regulations at San Diego International Airport: https://www.san.org/DesktopModules/Bring2mind/DMX/API/Entries/Download?EntryId=17828&Command=Core_Download&language=en-US&PortalId=0&TabId=499.

2.3 Scoring Elements

The Fly Quiet Program evaluates air carriers using the following three elements, each of which is described in detail in the sections that follow:

1. Fleet Quality (including the 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 San Diego International Airport (SDIA). Carriers typically operate a variety of aircraft types and schedule them based on operational requirements, passenger or cargo demand, and other strategic considerations. The Fly Quiet Program assigns higher scores to air carriers that operate newer, quieter aircraft.

Historically, airports have evaluated Fleet Quality based on the relative percentage of Stage 2 versus Stage 3 operations [4]. Since the completion of the phaseout of Stage 2 aircraft, which was mandated by the Airport Noise and Capacity Act (ANCA) of 1990, all aircraft in the United States over 75,000 pounds must comply with 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 differentiate between aircraft types within this category.

There are now Stage 4 and Stage 5 aircraft types entering service. A requirement mandates 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 [5] 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 of the Code of Federal Regulations (CFR) Part 36 [6] specifies allowable noise levels at three measurement locations: takeoff, approach, and sideline. According to 14 CFR Part 36, allowable noise limits increase with aircraft weight and number of engines. Consistent with these regulations, Fleet Quality

[4] Stages 1 through 4 were established under Federal Aviation Regulation 14 CFR Part 36, which defines allowable noise limits for aircraft certification. Over time, both Stage 1 and Stage 2 aircraft have been phased out of operation in the United States due to subsequent federal regulations.
[5] Federal Register: https://www.federalregister.gov/documents/2017/10/04/2017-21092/stage-5-airplane-noise-standards
[6] CFR, https://www.ecfr.gov/current/title-14/chapter-I/subchapter-C/part-36.

scoring allows higher noise limits for larger aircraft. It is important to recognize that larger aircraft serving more passengers can deliver greater air service with fewer operations, thereby generating less total noise than multiple flights using smaller aircraft types.

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

Methodology:

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

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

Table 1 – B737-700 Aircraft Example [7]

B737-700 Aircraft	Takeoff (EPNdB)	Approach (EPNdB)	Sideline (EPNdB)	Cumulative Below Stage 3 Limit[1]
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

Note:
1. The cumulative EPNdB value is the sum of the differences between the certification noise levels and the Stage 3 limits at each measurement location.

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

Table 2 illustrates the calculation of the Fleet Quality subscore. For example, consider an airline operating two different aircraft types (B737 and B738). The cumulative noise level for each aircraft type is multiplied by the number of operations for that type. The resulting aggregate values are then summed and divided by the total number of operations for the air carrier, yielding a weighted average that represents the Fleet Quality subscore.

[7] Table 1 presents an example of the cumulative noise level summation. The data shown are for conceptual purposes only.

Table 2 – Example for Computing the Fleet Quality Subscore [8]

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 737 MAX and Airbus A320neo, affects the Fleet Quality subscore for air carriers operating at the airport.

Table 3 – Example of Fleet Quality Improvement Subscore [9]

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

To continue this example, the overall Fleet Quality score for each operator is calculated based on the subscore, using a target cumulative noise level of 39.56 dB. The subscore is divided by 39.56 and then scaled to a 10-point system to determine the Fleet Quality score. As Stage 5 aircraft become more prevalent and quantifiable, the target cumulative noise level may be adjusted accordingly.

In the Table 2 example, the subscore is 13.7, which yields a Fleet Quality score of 3.46 (calculated as 13.7 divided by 39.56, then multiplied by 10). In the Table 3 example, the Fleet Quality score increases to 4.27 (16.9 ÷ 39.56 × 10) following the introduction of newer aircraft. This scenario demonstrates that incorporating quieter Boeing 737 MAX and Airbus A320neo aircraft, while maintaining a total of 150 operations, improves the Fleet Quality score from 3.46 to 4.27, representing an improvement of 0.81 points.

[8] Table 2 presents an example of Fleet Quality subscore calculations. The data shown are for conceptual purposes only.
[9] Table 3 presents an example of Fleet Quality improvement subscore calculations. The data shown are for conceptual purposes only.

2.3.2 Nighttime Fleet Quality

For the 2024 Fly Quiet Report, the nighttime Fleet Quality metric introduced in 2023 has been retained. This metric was developed at the request of ANAC to encourage the use of the quietest available aircraft during nighttime hours [10], defined as 10:00 p.m. to 7:00 a.m., including the early morning departure peak beginning at 6:30 a.m.

Methodology

According to the current FAA Stage 5 Airplane Noise Standards [11], Stage 5–compliant aircraft must achieve a cumulative reduction of 17 EPNdB from the Stage 3 limit. The nighttime Fleet Quality element uses this 17 EPNdB margin as a baseline, rewarding airlines that operate quieter Stage 5 aircraft during nighttime hours from 10:00 p.m. to 7:00 a.m.

Table 4 outlines an example 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. These values total 29.6 EPNdB below the Stage 3 limit. Subtracting the regulatory margin of 17 EPNdB results in a Stage 5 comparison value of 12.6 EPNdB.

Table 4 – Example A321neo [12]

A321neo Aircraft	Takeoff (EPNdB)	Approach (EPNdB)	Sideline (EPNdB)	Cumulative Below Stage 3 Limit[1]	Stage 5 (Difference from Cumulative Stage Limit)[2]
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. The cumulative EPNdB value is the sum of the differences between the certification noise levels and the Stage 3 limits at each measurement location.
2. The Stage 5 difference is calculated by subtracting 17 EPNdB from the cumulative Stage 3 limit.
Sources: 14 CFR Part 36, Airplane Noise Standards; Ricondo and Associates, August 2023.

The nighttime Fleet Quality subscore is calculated by first normalizing the Stage 5 value based on the number of operations, then scaling the result to a 10-point system.

These calculations are presented in Table 5 and Table 6. In the example, Airline #1 receives a nighttime Fleet Quality score of 2.58, while Airline #2 achieves a score of 4.77. Although

[10] FAA, Definition of Nighttime Hours for Noise Assessment, Chapter 17, FAA Environmental Desk Reference: https://www.faa.gov/sites/faa.gov/files/airports/environmental/environmental_desk_ref/desk-ref.pdf#page=237.
[11] Federal Register: https://www.federalregister.gov/documents/2017/10/04/2017-21092/stage-5-airplane-noise-standards
[12] Table 4 presents an example of Stage 5 difference score calculations. The data shown are for conceptual purposes only.

both airlines operate the same number of nighttime flights, the higher score for Airline #2 indicates the use of quieter aircraft during nighttime operations.

Table 5 – Example Fleet Quality Subscore Calculation for Airline #1 [13]

Airline 1 Aircraft Used at Night	Cumulative Noise Level (Total Below Stage 3 Limit)	Stage 5 Difference from Cumulative Stage 3 Limit	Nighttime Operations[1]	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

Note:
1. Nighttime is defined as the period from 10:00 p.m. to 7:00 a.m., consistent with commonly applied FAA noise monitoring and operational standards.
Source: Ricondo & Associates, August 2023.

Table 6 – Example Fleet Quality Subscore Calculation for Airline #2 [14]

Airline 2 Aircraft Used at Night	Cumulative Noise Level (Total Below Stage 3 Limit)	Stage 5 Difference from Cumulative Stage 3 Limit	Nighttime Operations[1]	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

Note:
1. Nighttime is defined as the period from 10:00 p.m. to 7:00 a.m., consistent with commonly applied FAA noise monitoring and operational standards.
Source: Ricondo & Associates, August 2023.

If an airline operates at night using only Stage 3 or Stage 4 aircraft, and the combined cumulative noise level does not meet Stage 5 standards, its nighttime Fleet Quality subscore is zero. Airlines that do not operate during nighttime hours receive the maximum nighttime subscore of 10. This nighttime subscore is then added to the overall Fleet Quality score as part of the final calculation.

[13] Table 5 presents an example of Nighttime Fleet Quality subscore calculations. The data shown are for conceptual purposes only.
[14] Table 6 presents an example of Nighttime Fleet Quality subscore calculations. The data shown are 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 Remote Monitoring Terminal (RMT) [15] 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 (6.5 km) 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 (6.5 km) 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 summing the daytime, evening, and nighttime noise exceedances and adjusting for the number of operations to generate a score of up to ten points. Current Sound Exposure Level (SEL) [16] noise monitor threshold settings are 90 dB for daytime departures (7:00 a.m. to 7:00 p.m.), 85 dB for 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 exceedances for a single departure may be recorded if thresholds are exceeded at both RMT #14 and RMT #24. Threshold levels can be adjusted downward to reflect fleet noise improvements and maintain measurement validity in 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 [17]. Violating this curfew may result in a monetary fine. Departures are restricted between 11:30 p.m. and 6:30 a.m., while aircraft arrivals are permitted at any time.

The departure curfew is mandatory, with exceptions permitted for emergency or mercy flights. Compliance decisions rest with the pilot or operator, and penalties may be waived under specific circumstances. Potential waivers include local maintenance issues occurring near the scheduled departure time, significant weather disruptions, or operational events such as FAA system outages or aircraft maintenance problems. These waivers are intended to encourage flight cancellations rather than departures during the curfew period and may be granted following a thorough case-by-case review.

[15] RMT (Remote Monitoring Terminal) is a component of an Airport Noise and Operations Monitoring System (ANOMS).
[16] SEL (Sound Exposure Level) is a measure of the total sound energy of an event, accounting for its duration.
[17] San Diego County Regional Airport Authority Code 9.40, Airport Use Regulations at San Diego International Airport: https://www.san.org/DesktopModules/Bring2mind/DMX/API/Entries/Download?EntryId=17828&Command=Core_Download&language=en-US&PortalId=0&TabId=499.

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, 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 as follows:

1. Curfew violations: if a carrier violates the curfew, a penalty of one (1) point will be assessed.
2. Curfew violations resulting in fines: if the airport's Curfew Violation Review Panel (CVRP) imposes a fine for a curfew violation, an additional penalty of one (1) point will be applied.

It is possible for a carrier to receive a negative score in this category, based strictly on the number of restricted departures and penalty occurrences. Repeated curfew violations will have an increasingly severe impact on the final score.

3.0 Score Sheets

Table 7 – Fleet Quality Report [18]

Airline		Total Operations	Operations %	Fleet Quality Subscore	Fleet Quality Excluding Night Score	Fleet Quality Night Score	Fleet Quality Score
AAL	American Airlines	18,211	9.0%	16.28	5.00	1.53	6.53
AAY	allegiant air	373	0.2%	17.03	5.23	0.23	5.46
ACA	AIR CANADA	1,289	0.6%	22.66	6.96	4.87	11.83
ASA	Alaska	23,460	11.6%	17.42	5.35	1.77	7.12
BAW	BRITISH AIRWAYS	1,085	0.5%	24.83	7.63	6.22	13.85
CSB	DHL	467	0.2%	15.55	4.78	0.00	4.78
DAL	DELTA	18,945	9.4%	14.07	4.32	1.05	5.37
DLH	Lufthansa	454	0.2%	32.55	10.00	10.00	20.00
FDX	FedEx	1,913	0.9%	16.65	5.12	0.15	5.27
FFT	FRONTIER	6,628	3.3%	25.37	7.79	5.74	13.54
HAL	HAWAIIAN AIRLINES	1,431	0.7%	21.57	6.63	1.94	8.57
JAL	JAPAN AIRLINES	442	0.2%	27.15	8.34	10.00	18.34
JBU	jetBlue AIRWAYS	3,545	1.8%	14.86	4.57	1.31	5.87
JZA	Jazz	1,862	0.9%	16.23	4.99	0.00	4.99
MXY	Breeze	760	0.4%	26.47	8.13	5.65	13.78
NKS	spirit	5,792	2.9%	23.10	7.10	4.41	11.51
POE	porter	30	0.0%	29.40	9.03	10.00	19.03
SCX	sun country airlines	600	0.3%	13.60	4.18	0.00	4.18
SKW	SkyWest	24,569	12.1%	12.52	3.85	0.01	3.85
SWA	Southwest	68,251	33.7%	16.83	5.17	1.11	6.28
UAL	UNITED	20,785	10.3%	18.26	5.61	2.78	8.39
UPS	ups	999	0.5%	16.60	5.10	0.03	5.13
WJA	WESTJET	680	0.3%	16.15	4.96	10.00	14.96

[18] Table 7 presents the scores for each element for a specific carrier, without assigning ranks to individual elements. No preference is given to any operator.

3.0 Score Sheets (continued)

Table 8 – Noise Exceedance Report [19]

Airline		Total Operations	Daytime Exceedances (90+ dB)	Evening Exceedances (85+ dB)	Nighttime Exceedances (80+ dB)	Total Exceedances	Noise Exceedance Score
AAL	American Airlines	18,211	410	2,575	5,625	8,610	5.27
AAY	allegiant air	373	3	18	21	42	8.87
ACA	AIR CANADA	1,289	13	45	303	361	7.20
ASA	Alaska	23,460	1,401	4,334	2,937	8,672	6.30
BAW	BRITISH AIRWAYS	1,085	372	238	17	627	4.22
CSB	DHL	467	12	96	47	155	6.68
DAL	DELTA	18,945	513	2,302	5,890	8,705	5.41
DLH	Lufthansa	454	14	6	0	20	9.56
FDX	FedEx	1,913	122	830	832	1,784	0.67
FFT	FRONTIER	6,628	33	639	604	1,276	8.07
HAL	HAWAIIAN AIRLINES	1,431	237	515	35	787	4.50
JAL	JAPAN AIRLINES	442	3	0	0	3	9.93
JBU	jetBlue AIRWAYS	3,545	68	1,308	371	1,747	5.07
JZA	Jazz	1,862	14	101	57	172	9.08
MXY	Breeze	760	11	1	6	18	9.76
NKS	spirit	5,792	28	448	847	1,323	7.72
POE	porter	30	0	0	0	0	10.00
SCX	sun country airlines	600	75	53	1	129	7.85
SKW	SkyWest	24,569	128	2,032	2,681	4,841	8.03
SWA	Southwest	68,251	928	9,408	5,966	16,302	7.61
UAL	UNITED	20,785	2,128	3,014	2,934	8,076	6.11
UPS	ups	999	24	387	625	1,036	0.00
WJA	WESTJET	680	19	4	0	23	9.66

[19] Table 8 presents the scores for each element for a specific carrier, without assigning ranks to individual elements. No preference is given to any operator.

3.0 Score Sheets (continued)

Table 9 – Curfew Violation Report [20]

Airline		Total Operations	Noise Curfew Violations	Penalized Violations	Curfew Penalty Points	Curfew Violation Score
AAL	American Airlines	18,211	24	0	24	-14
AAY	allegiant air	373	1	1	2	8
ACA	AIR CANADA	1,289	4	2	6	4
ASA	Alaska	23,460	27	5	32	-22
BAW	BRITISH AIRWAYS	1,085	1	0	1	9
CSB	DHL	467	0	0	0	10
DAL	DELTA	18,945	37	13	50	-40
DLH	Lufthansa	454	0	0	0	10
FDX	FedEx	1,913	0	0	0	10
FFT	FRONTIER	6,628	5	1	6	4
HAL	HAWAIIAN AIRLINES	1,431	1	0	1	9
JAL	JAPAN AIRLINES	442	0	0	0	10
JBU	jetBlue AIRWAYS	3,545	19	5	24	-14
JZA	Jazz	1,862	0	0	0	10
MXY	Breeze	760	0	0	0	10
NKS	spirit	5,792	2	2	4	6
POE	porter	30	0	0	0	10
SCX	sun country airlines	600	0	0	0	10
SKW	SkyWest	24,569	15	3	18	-8
SWA	Southwest	68,251	19	1	20	-10
UAL	UNITED	20,785	15	3	18	-8
UPS	ups	999	2	0	2	8
WJA	WESTJET	680	0	0	0	10

[20] Table 9 presents the scores for each element for a specific carrier, without assigning ranks to individual elements. No preference is given to any operator.

3.0 Score Sheets (continued)

Table 10 – Fly Quiet Report [21]

Airline		Total Operations	Nighttime Operations	Fleet Quality Score	Noise Exceedance Score	Curfew Violation Score	Total Fly Quiet Score	Category
AAL	American Airlines	18,211	3,963	6.53	5.27	-14.00	-2.20	Large Carrier
AAY	allegiant air	373	18	5.46	8.87	8.00	22.34	Small Carrier
ACA	AIR CANADA	1,289	281	11.83	7.20	4.00	23.03	International
ASA	Alaska	23,460	2,356	7.12	6.30	-22.00	-8.58	Large Carrier
BAW	BRITISH AIRWAYS	1,085	12	13.85	4.22	9.00	27.07	International
CSB	DHL	467	45	4.78	6.68	10.00	21.46	Cargo
DAL	DELTA	18,945	4,118	5.37	5.41	-40.00	-29.22	Large Carrier
DLH	Lufthansa	454	0	20.00	9.56	10.00	39.56	International
FDX	FedEx	1,913	767	5.27	0.67	10.00	15.94	Cargo
FFT	FRONTIER	6,628	653	13.54	8.07	4.00	25.61	Small Carrier
HAL	HAWAIIAN AIRLINES	1,431	34	8.57	4.50	9.00	22.07	Small Carrier
JAL	JAPAN AIRLINES	442	0	18.34	9.93	10.00	38.27	International
JBU	jetBlue AIRWAYS	3,545	226	5.87	5.07	-14.00	-3.05	Small Carrier
JZA	Jazz	1,862	60	4.99	9.08	10.00	24.06	International
MXY	Breeze	760	7	13.78	9.76	10.00	33.54	Small Carrier
NKS	spirit	5,792	846	11.51	7.72	6.00	25.22	Small Carrier
POE	porter	30	0	19.03	10.00	10.00	39.03	International
SCX	suncountry airlines	600	2	4.18	7.85	10.00	22.03	Small Carrier
SKW	SkyWest	24,569	2,498	3.85	8.03	-8.00	3.88	Small Carrier
SWA	Southwest	68,251	5,370	6.28	7.61	-10.00	3.89	Large Carrier
UAL	UNITED	20,785	2,396	8.39	6.11	-8.00	6.51	Large Carrier
UPS	ups	999	436	5.13	0.00	8.00	13.13	Cargo
WJA	WESTJET	680	0	14.96	9.66	10.00	34.62	International

[21] Table 10 presents the scores for each element for a specific carrier, without assigning ranks to individual elements. No preference is given to any operator.

3.0 Score Sheets (continued)

Table 11 – Rankings Report [22]

Airline		Total Operations	Nighttime Operations	Fleet Quality Score	Noise Exceedance Score	Curfew Violation Score	Total Fly Quiet Score	Category
CSB	DHL	467	45	4.78	6.68	10.00	21.46	Cargo
FDX	FedEx	1,913	767	5.27	0.67	10.00	15.94	Cargo
UPS	UPS	999	436	5.13	0.00	8.00	13.13	Cargo
DLH	Lufthansa	454	0	20.00	9.56	10.00	39.56	International
POE	porter	30	0	19.03	10.00	10.00	39.03	International
JAL	JAL Japan Airlines	442	0	18.34	9.93	10.00	38.27	International
WJA	WestJet	680	0	14.96	9.66	10.00	34.62	International
BAW	British Airways	1,085	12	13.85	4.22	9.00	27.07	International
JZA	Jazz	1,862	60	4.99	9.08	10.00	24.06	International
ACA	Air Canada	1,289	281	11.83	7.20	4.00	23.03	International
UAL	United	20785	2,396	8	6.11	-8.00	6.51	Large Carrier
SWA	Southwest	68,251	5,370	6.28	7.61	-10.00	3.89	Large Carrier
AAL	American Airlines	18,211	3,963	6.53	5.27	-14.00	-2.20	Large Carrier
ASA	Alaska	23,460	2,356	7.12	6.30	-22.00	-8.58	Large Carrier
DAL	Delta	18,945	4,118	5.37	5.41	-40.00	-29.22	Large Carrier
MXY	Breeze	760	7	13.78	9.76	10.00	33.54	Small Carrier
FFT	Frontier	6,628	653	13.54	8.07	4.00	25.61	Small Carrier
NKS	Spirit	5,792	846	11.51	7.72	6.00	25.22	Small Carrier
AAY	Allegiant	373	18	5.46	8.87	8.00	22.34	Small Carrier
HAL	Hawaiian	1,431	34	8.57	4.50	9.00	22.07	Small Carrier
SCX	Sun Country Airlines	600	2	4.18	7.85	10.00	22.03	Small Carrier
SKW	SkyWest	24,569	2,498	3.85	8.03	-8.00	3.88	Small Carrier
JBU	JetBlue	3,545	226	5.87	5.07	-14.00	-3.05	Small Carrier

LEGEND:

– Cargo Carrier Group Winner
– International Carrier Group Winner
– Large Domestic Carrier Group Winner
– Small Domestic Carrier Group Winner

[22] Table 11 presents the total points allocated to each element, along with the rankings assigned to each airline. These rankings determine the award recipients for the top-performing airline in each carrier group.