PORT AUTHORITY NY NJ

John F. Kennedy International Airport

Fly Quiet Program

Annual Report

2024

INTRODUCTION

The goal of the program is to encourage aircraft operators to adhere to noise abatement procedures, utilize preferential runway programs, and fly the quietest aircraft at these airports.

The Port Authority of New York and New Jersey (PANYNJ) established Fly Quiet Programs (FQPs) to showcase, along with partners in the airline industry and the Federal Aviation Administration (FAA), on-going efforts to be good neighbors by operating quietly and sustainably. The goal of the FQPs is to encourage aircraft operators to adhere to noise abatement procedures, utilize preferential runway programs, and fly the quietest aircraft at these airports. However, pilot and airline compliance during any given flight operation is voluntary, not mandatory.

STAKEHOLDER COLLABORATION

Fly Quiet Programs were first envisioned during the development of the 14 CFR Part 150 Programs, during which PANYNJ conducted extensive stakeholder engagement with airlines, operators, FAA, and the public. The PANYNJ also studied FQPs at other airports nationwide to determine best practices and lessons learned. Technical Focus Group meetings were held throughout FQP design and development including FAA representatives and airlines from John F. Kennedy International Airport (JFK), LaGuardia Airport (LGA), and Newark Liberty International Airport (EWR). Airline input and feedback was a key point in the development of the program measures, scoring criteria, and ratings system ultimately devised for the program. The PANYNJ continued to engage and communicate with airlines throughout the past year to refine and improve the program.

The overarching message received through airline coordination was to make community engagement, communication, and pilot training the focus of the scoring system. Also, it was recognized that many factors are not typically in an airline or pilot's control (for example, runway selection and flight procedure selection). The PANYNJ wanted to recognize achievements while giving the airlines the ability to show progress and improvement over time, on noise and sustainability performance. The FQPs include airline scoring criteria equally weighted between fleet noise quality (50 points) and engagement (50 points) for a total of 100 points.

UNIQUE OPERATING ENVIRONMENT

The New York/New Jersey airports and airspace are a unique operating environment. This is due to the close proximity of three major airports (JFK, LGA, and EWR), constraints on flight schedules due to slot controls, and the nation's busiest airspace. Accordingly, the Fly Quiet Programs are designed uniquely to fit the requirements of the New York/New Jersey aviation environment.

AIRLINE SCORING

Points are evenly split between aircraft noise ratings and engagement scores.

OVERVIEW

Airline scores are calculated annually based on two categories, and the maximum possible score is 100 points.

- Fleet noise quality – maximum 50 points
- Engagement points – maximum 50 points

FLEET NOISE QUALITY

Noise performance metrics are computed quarterly for each airline and operator at JFK, based on operations reported by the PANYNJ Airport Noise and Operations Monitoring System (ANOMS).

Aircraft "Noise Stages" are defined by the FAA for every model of aircraft when they are first manufactured and entered into service. The FAA classifies aircraft as follows:

- Stage 3 – these are the loudest aircraft currently allowed to operate in the U.S.
- Stage 4 – these aircraft are at least 10 decibels quieter than Stage 3 aircraft.
- Stage 5 – these aircraft are at least 7 decibels quieter than Stage 4 aircraft.
- Stage 5 Plus – this is not a formal noise rating, however the FQP gives extra points to the newest aircraft that are 5 or 10 decibels quieter than Stage 5.

The noise quality score is computed for each airline based on its annual number of operations, the type of aircraft used for each flight, and each aircraft's noise stage. A weighted average is then calculated for the year.

The minimum number of annual operations for an airline is one operation per day (365 operations per year). Airlines with fewer operations are not included in the FQP.

ENGAGEMENT POINTS

Engagement points are earned by an airline when it demonstrates the following categories are met during the calendar year. Attendance records and other documentation from the airlines are collected by the PANYNJ throughout the year.

AIRLINE SCORING

CATEGORY	MAX POINTS
Participate in FQP Focus Group annual virtual briefing(s) – includes 2022 and 2023	10
Participate in Roundtable Meetings (for JFK and LGA only) • Up to four meetings per year, 2.5 points per meeting, 10 points maximum	10
Access and review the FQP Dashboard Reporting site once per quarter • Tracked four times per year, 2.5 points per login, 10 points maximum	10
Provide copies of pilot training/educational materials on noise abatement and Fly Quiet along with the date(s) training was conducted	10
Provide information/documentation on airline fleet noise reductions (vortex generators, etc. installed on the aircraft; pilot operating techniques; NADP; etc.)	5
Provide information/documentation on any annual airline sustainability practices/offsets/etc.	5
TOTAL	**50**

AWARDS

Awards are presented in four operator categories: domestic major air carriers; North American regional air carriers; International air carriers; and, cargo carriers (for JFK and EWR only). Each airline is scored on a scale of 0 to 100 points and the awards are presented based on two tiers:

- Gold tier greater than 85 points – award recognition in the FQP Annual Report
- Silver tier 70 to 85 points – award recognition in the FQP Annual Report

Airlines earning less than 70 points are not recognized in the FQP Annual Report.

CONGRATULATIONS TO THE WINNERS OF THE **JFK FLY QUIET AWARDS** 2024

	GOLD TIER	SILVER TIER
		
DOMESTIC MAJOR AIR CARRIER	NONE	American Airlines, jetBlue AIRWAYS, DELTA
INTERNATIONAL AIR CARRIER	Emirates	NONE
REGIONAL AIR CARRIER	NONE	NONE
CARGO AIRLINE	NONE	UPS

FLY QUIET AWARDS 2024

MOST-IMPROVED FLEET

The fleet noise quality score comprises half of an airline's overall FQP score. Scores are calculated annually for each airline, making it possible to track fleet mix improvements from year to year. This year, the overall airport-wide fleet mix showed a notable improvement (as discussed in the following section). However, two airlines made the largest improvements by greatly increasing their use of newer, quieter aircraft when flying at JFK: JetBlue and Delta Airlines..

jetBlue AIRWAYS

DELTA

MAXIMUM ENGAGEMENT SCORE

The Fly Quiet Program provides airlines with the potential to earn up to 50 points across 6 engagement categories. Each airline that won an FQP award this year earned many of the available points for engagement. However, earning the full 50 points is a notable accomplishment, and this year two airlines achieved this distinction at JFK: American Airlines and UPS Airlines.

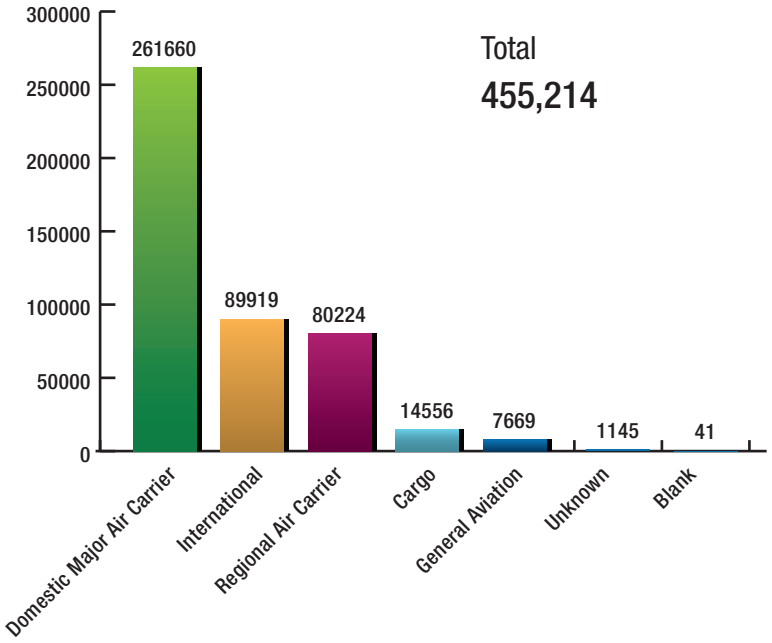
American Airlines

ups

AIRPORT STATISTICS 2024

ANNUAL METRICS

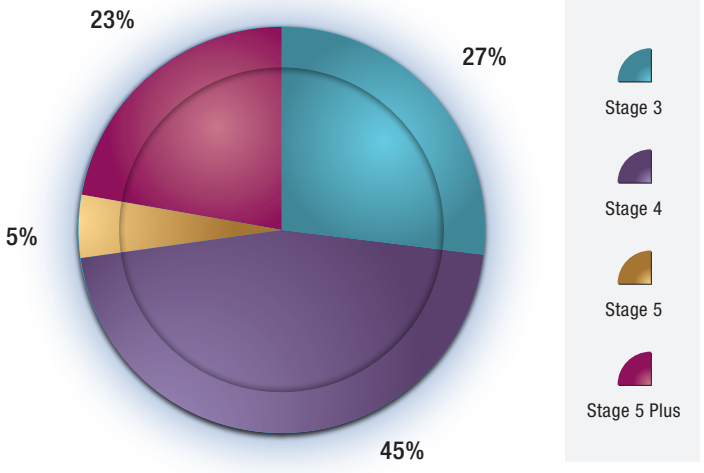
The FQP Annual Reports provide statistics on airport operations, runway selection, and flight procedure utilization. The data is provided quarterly to airline and FAA stakeholders for technical review and progress tracking. The total annual jet operations at the airport are shown below. Included are the annual operations by category of aircraft. These statistics are not a part of an airline's FQP score.



Total
455,214

Year	Total Jets
2022	438,040
2023	464,332
2024	455,214

The Noise Stage is a measurement of how loud an aircraft is, with Stage 3 generating the most noise and Stage 5 Plus being the quietest. The chart below shows the percentage of operations for the year 2024 flown by each Noise Stage aircraft. Compared to 2023, the overall fleet mix in 2024 was an improvement, as the percentage of Stage 5 and Stage 5 Plus aircraft went from 19% to 28%.



Year	Stage 3	Stage 4	Stage 5	Stage 5+
2022	26%	58%	4%	12%
2023	27%	54%	4%	15%
2024	27%	45%	5%	23%

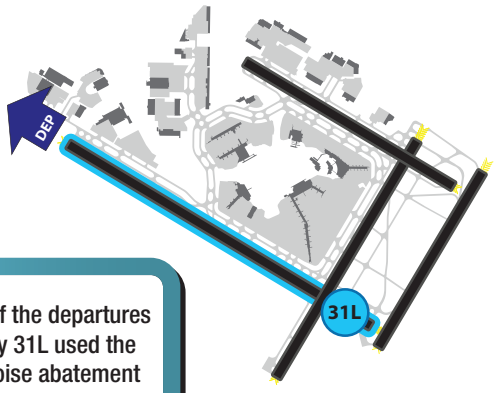
PROCEDURE USE

Flight procedure use is not a part of an airline's FQP score. Instead, the data is provided in the FQP Annual Report to inform the public and airport stakeholders. Flight procedure use captures the annual utilization of the arrival and departure procedures described below. However, the selection of a flight procedure for use by arriving and departing aircraft at the airport is determined by several factors: FAA air traffic control's assignment of a procedure to an aircraft; which runways are in use at the time; operations at nearby airports; wind and weather patterns; efficiency and safety; and, noise abatement when operationally feasible.

The flight procedures tracked at JFK airport are listed below. See the graphics on this page for detailed information on each procedure.

- Runway 31L SKORR Early Turn Departure Procedure – Aircraft make the left turn earlier after departing from Runway 31L, keeping noise over the Jamaica Bay instead of over land to the extent possible. This flight procedure was developed and approved in the JFK Part 150 Noise Compatibility Program. The SKORR procedure is currently under development by the FAA and anticipated to be formally published in April 2025. As an interim measure, the FAA has asked pilots to turn left earlier when safe and feasible.

Year	Percent
2022	12%
2023	10.4%
2024	7.7%



7.7% of the departures from Runway 31L used the early-turn noise abatement procedure

The "Tighten SKORR" departure procedure is proposed to reduce aircraft overflights of Howard Beach, Old Howard Beach, and Hamilton Beach (in Queens)

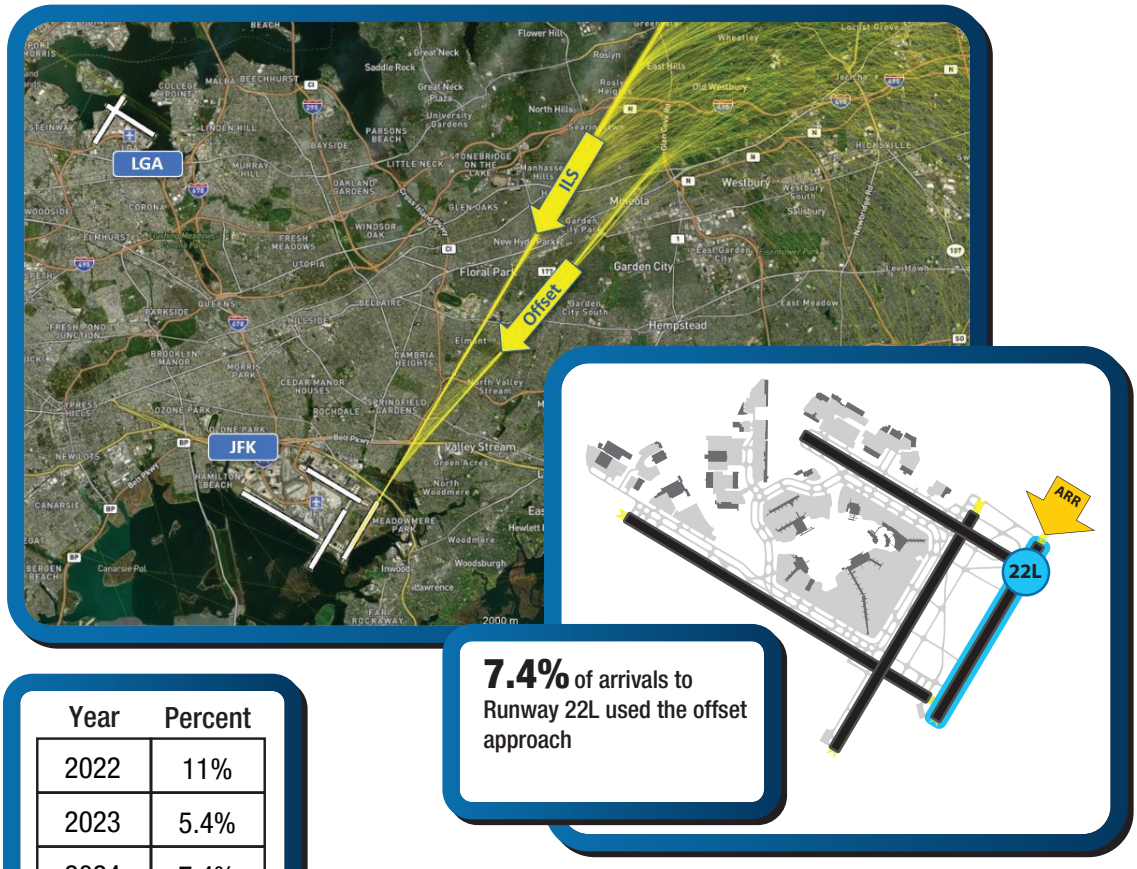
Moves SKORR waypoint to Jamaica Bay

Aircraft depart over the water rather than areas with residential land use

Existing SKORR THREE and Proposed "Tighten SKORR" Notional Tracks - Example for Runway 31L

PROCEDURE USE

- Runway 22L RNAV “Offset” Approach – Aircraft approach the runway at an angle instead of lined up directly with the runway, shifting noise away from the straight-in flight path. This flight procedure was developed to provide an alternate approach path to the runway flying over different areas.



7.4% of arrivals to Runway 22L used the offset approach

Year	Percent
2022	11%
2023	5.4%
2024	7.4%

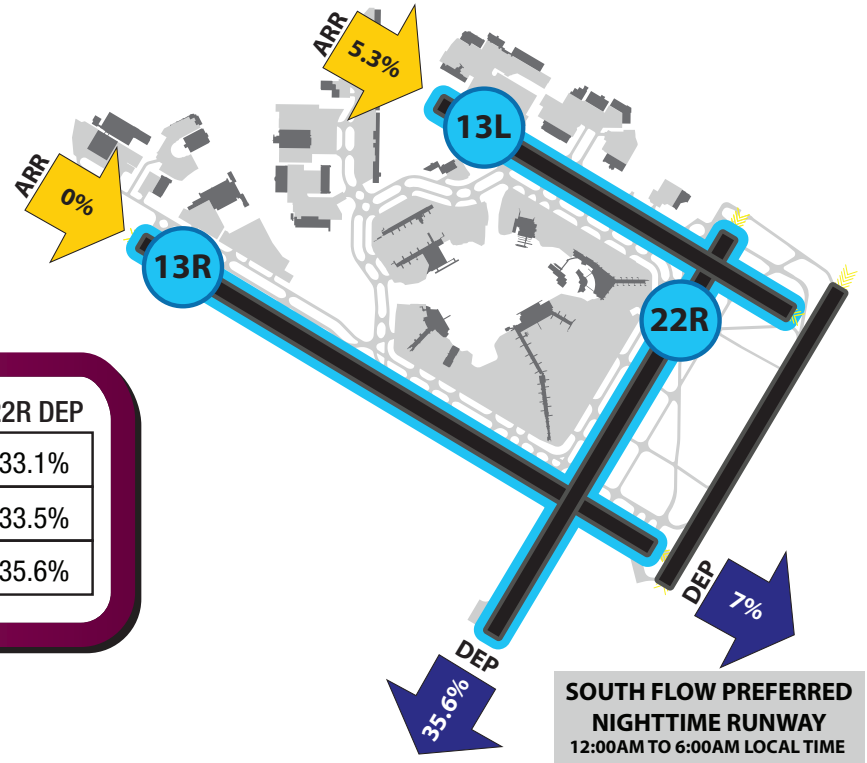
PROCEDURE USE

LATE-NIGHT RUNWAY USE

Runway selection is another factor that can influence community noise levels. It is sometimes possible to use runways that direct noise away from communities during late-night hours when there are fewer operations. “Late-night” hours are defined as 12AM-6AM local time for the FQP. The assignment of a runway to an individual aircraft operation depends on several factors: which runways are available for use; wind direction; weather conditions; air traffic control operational needs; and, runway length versus the weight of the aircraft.

The figures below show the percentage of annual late-night arrivals and departures which used preferential runways. South flow and north flow are presented in separate figures.

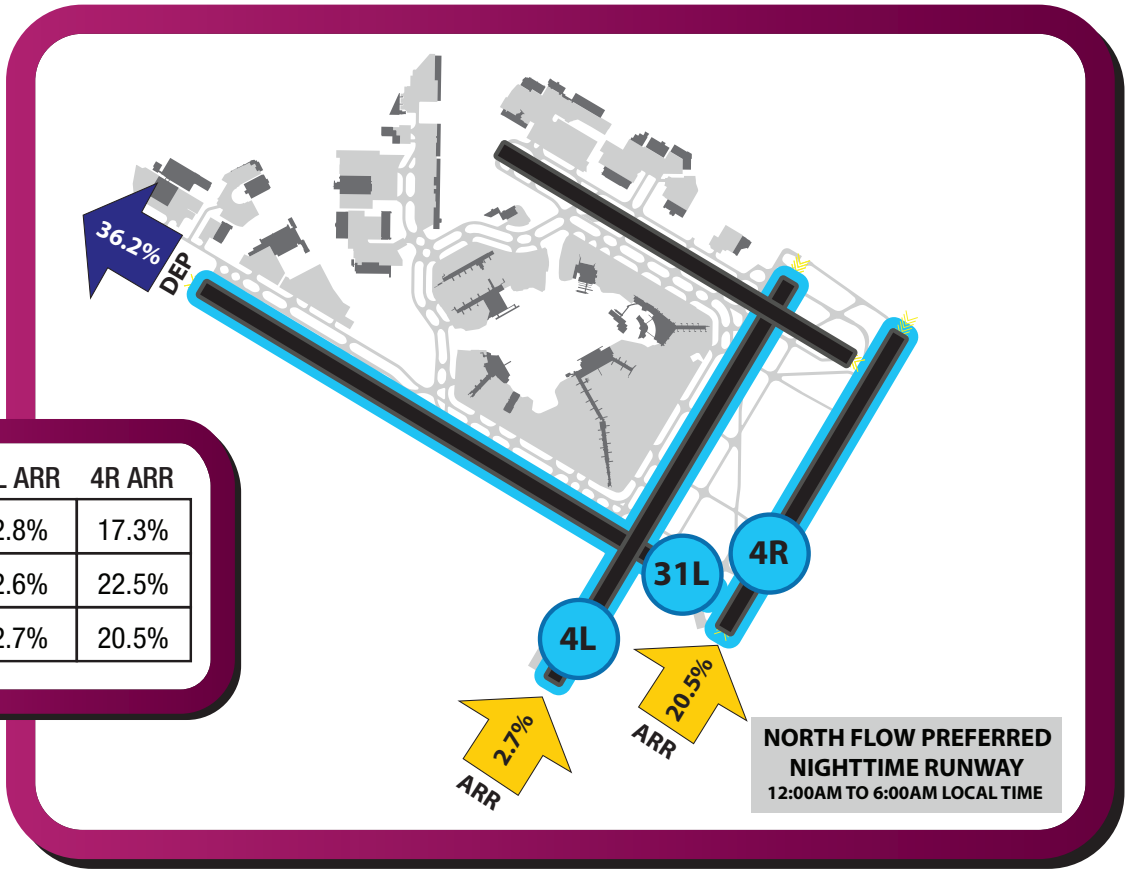
Year	13R ARR	13R DEP	13L ARR	22R DEP
2022	0.1%	10.1%	6.2%	33.1%
2023	0%	5.4%	3.7%	33.5%
2024	0%	7%	5.3%	35.6%



USE OF ANY OF THE HIGHLIGHTED RUNWAYS IS ENCOURAGED FOR NOISE ABATEMENT AND THE FLY QUIET PROGRAM.

PROCEDURE USE

Year	31L DEP	4L ARR	4R ARR
2022	37.8%	2.8%	17.3%
2023	37.4%	2.6%	22.5%
2024	36.2%	2.7%	20.5%



USE OF ANY OF THE HIGHLIGHTED RUNWAYS IS ENCOURAGED FOR NOISE ABATEMENT AND THE FLY QUIET PROGRAM.

At JFK, preferential arrival runways were used for nearly 29% of the annual late-night arrival operations. For departures, preferential runways were used for nearly 79% of the annual late-night departure operations.

FUTURE PROGRAM DEVELOPMENT

The first FQP report was developed for the year 2022. In the future, the JFK FQP will evolve and grow. The FQP is designed to be flexible and adaptable. The participation of airlines, the FAA, and community groups including Roundtables is key to the success of the program.

JFK
FLY QUIET
ANNUAL
REPORT
2024

https://aircraftnoise.panynj.gov