LGA COMMITTEE/NYCAR AGENDA – September 27, 2023

- WELCOME Maria Becce
 - Announcements
- VIDEO Presentation: Voice of America featuring Dr. Arline Bronzaft
 - o Study: Up to One-Third of Americans Exposed to Dangerous Noise Levels
- PORT AUTHORITY UPDATES:
 - o Fly Quiet Program: LGA Clint Murrow-BridgeNet
 - o Runway Utilization and Noise Complaints
 - o TNNIS Climb Usage Data
 - LGA flight procedure and runway configurations Ralph Tamburro
- FAA UPDATES: Final Reminder Deadline: September 29, 2023
 - O Noise Policy Review: Public Comments https://www.regulations.gov/commenton/FAA-2023-0855-0001
- PUBLIC COMMENT
- ADJOURNMENT Next Meeting Date: To be announced

REMINDER TO ALL LGA COMMITTEE/NYCAR MEMBERS

Recognizing the profound impact that the increase in airplane noise had on the quality of life for Queens residents, Governor Andrew Cuomo formed The New York Community Aviation Roundtable (NYCAR). It is comprised of two Airport Committees-- JFK and LaGuardia who meet separately to address concerns at each airport. The Roundtable is a working group comprised of stakeholders affected by area airport operations. The primary goal of NYCAR is to work collaboratively with the Port Authority airport management, Federal Aviation Administration (FAA), and other relevant agencies and government entities in an effort to protect the environmental health, safety and quality of life of the residents of local communities while ensuring the continued efficient and safe operation of the airport. NYCAR members include representatives from the surrounding communities--elected and appointed officials, community boards, relevant federal/state/city agencies, relevant airlines, etc.

NYCAR members bring all airport stakeholders together to focus on negatively impacted residential communities – it is an opportunity to interact directly with the Port Authority and FAA. The overall goal is to reduce the negative effects of airport operations over and in proximity to residential communities. NYCAR wants to improve the quality of life of people on the ground. Relief has been slow, but progress has been made. Please plan ahead to attend each NYCAR and Airport Committee meeting or designate a representative. Your participation is VITAL – a quorum is required. The Committee needs your recommendations, ideas and support of actions taken by NYCAR and its Airport Committees.

Port Authority of New York and New Jersey

Fly Quiet Program
Update Briefing for the
LGA Committee of NYCAR

September 2023











Agenda

- Background
- Status and Updates
- Q&A



Background



Background on PANYNJ Fly Quiet Programs

- Recommended program management measure in the Part 150s for all four PANYNJ airports
- Establishing new programs at LGA, JFK, and EWR Airports
- Enhance and update the existing TEB Quiet Flying Program

What is a Fly Quiet Program?

• A **voluntary collaboration** of Port Authority, Airlines, aircraft operators and FAA air traffic controllers that **encourages** them to use suggested quieter aircraft, noise abatement flight procedures, and preferential runways



5

Examples of longstanding FQPs





Benchmarking and Development for LGA

- Benchmarking conducted in 2022
 - Surveys and interviews of other airports with FQPs nationwide
 - Review of LGA Part 150 comments, suggestions, and recommendations in the NCP Appendices
- Technical Focus Groups 2022-2023
 - Involving airlines, operators, airports and the FAA
 - Working together to develop the FQPs

Airports interviewed:

San Francisco Intl.
San Diego Intl.
Seattle-Tacoma Intl.
Aspen/Pitkin County
Teterboro Airport

7

Status and Updates



Focus Group Meetings and Progress

Meeting #1
Generate Ideas

October 2022

- Overview of FQPs at other airports & Benchmarking Study
- Summary of PANYNJ Part 150's
- Brainstorm and share ideas
- Generate a list of potential measures

Meeting #2 Review/Refine

February 2023

- Review measures developed at first meeting
- Prioritize measures
- Discuss scoring criteria

Meeting #3
Draft FQP

May 2023

- Draft scoring system
- Includes measures and scoring criteria and points system
- Includes other draft measures (e.g., Preferential Runway Use, Flight Procedure Use)

Meeting #4
Final FQP

September 2023

FQP Report November 2023

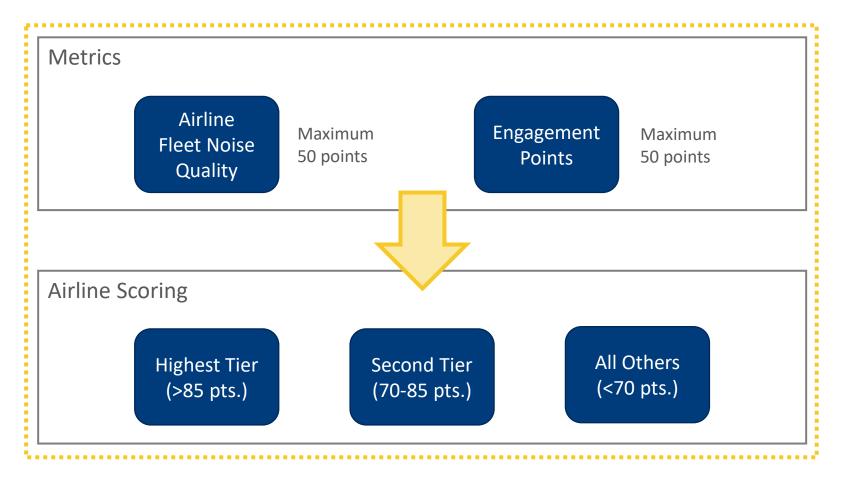
- Our team will present the "Final FQPs"
- Final scorecards design and actual rankings for 2022
- Information about the upcoming FQP Annual Report

LGA Roundtable Briefings conducted in January, March, June, and September 2023

Airline Coordination and Input

- Several Focus Group meetings were held with Airlines and FAA in 2023
- A Preliminary Fly Quiet scoring system was discussed
- Airlines provided initial feedback about the scoring, metrics, and measures to be tracked as well as the proposed awards categories
- Over the summer 2023, the scoring system was developed and finalized in collaboration with the Airlines

Scoring System Overview



A Database has been developed using ANOMS data to categorize airlines and determine scores based on airline fleet mix (i.e., Noise Stage data)

Top Tiers will be recognized in the FQP Annual Report:

- ✓ Awarded in each airline category (Air Carrier, Regional, Int'l., Cargo)
- ✓ Scored on a scale of 0 to 100

Airline Scoring Details

- Fleet Noise Quality maximum 50 points:
 - Weighted average of an airline's operations and the certificated "Noise Stage" of each aircraft
 - For airlines with minimum of 365 operations per year (note, an operation is one arrival or one departure)
- Engagement points maximum 50 points across multiple categories:
 - Focus Group participation
 - Roundtable participation
 - Pilot training and education
 - Fleet noise reductions
 - Sustainability efforts

Noise Standards Regulations (14 CFR Part 36)

- Every type of aircraft, when first manufactured, is certification-tested by the FAA
- Noise certification levels have become more stringent over time:

```
• 1970's - 1990's Noise Stages 1, 2, and 3 in effect
```

2006 Noise Stage 4 (10 dB quieter than Stage 3)

2018 Noise Stage 5 (7 dB quieter than Stage 4)

- Noise Stages 1 and 2 have been phased-out of the U.S. commercial fleet
- Noise Stages for currently-operating aircraft at LGA are Stages 3, 4, and 5
- Some of the newest aircraft can be as much as 10 dB quieter than Stage 5

Airport-wide Statistics for Annual FQP Report

- Provide statistics on noise and operations that are reported airport-wide (not a part of airline's score)
 - Airport-wide fleet mix by Noise Stage
 - Runway use including late-night hours
 - Flight procedure use
- Recognizes the FAA's participation and role in runway selection and flight procedure selection

Details on Airport-wide Statistics

Flight procedure utilization for tracking and reporting purposes

- Part 150 NCP Measures for LGA:
 - NA3 Implement Offset Approach to Runway 22 to Reduce Noise Over Clason Point
 - NA4 Reduce Runway 4 Departure Noise Over Clason Point
 - NA5 Reduce Runway 13 Departures at Night
- Additional flight procedures:
 - Runway 22 RNAV (X) offset approach
 - Runway 13 departure procedures (TNNIS, GLDMN, NTHNS)
- Runway use including late-night hours

Summary



Opportunities for Communication and Outreach

- FQP Annual Report will recognize the highest-scoring airlines at LGA under each category
- FQP Annual Report will publish airport-wide statistics on runway use and flight procedure use (not used for FQP scoring)
- Future opportunities to engage with Airlines and FAA
 - Airline participation in Roundtable Meetings
 - Data sharing with airlines and FAA on quarterly basis
 - FQP Annual Reports
 - Briefings, communications, and meetings throughout the year







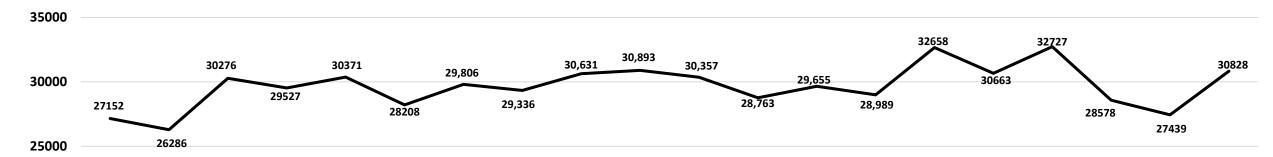
LaGuardia Airport (LGA) Operations and Noise Complaints

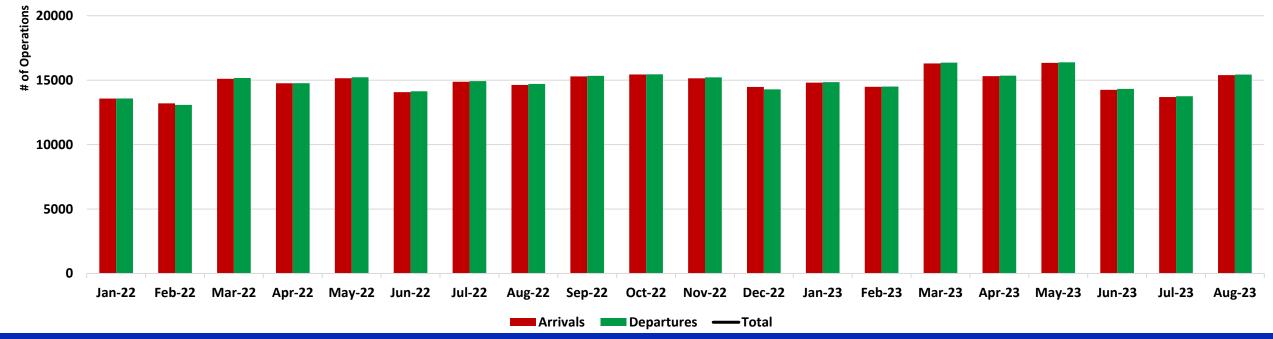
September 27, 2023



LGA 2022 to 2023 Operations Overview

All Arrivals and Departures: Jan 2022 to August 2023







Factors in Runway Selection

Runway Selection is determined by FAA based on the following criteria (in order of decreasing priority):

- Runway availability
- Prevailing wind and weather patterns
- Operational efficiency
- Community noise concerns

Flying into the wind provides the greatest margin of safety when landing or departing at any airport

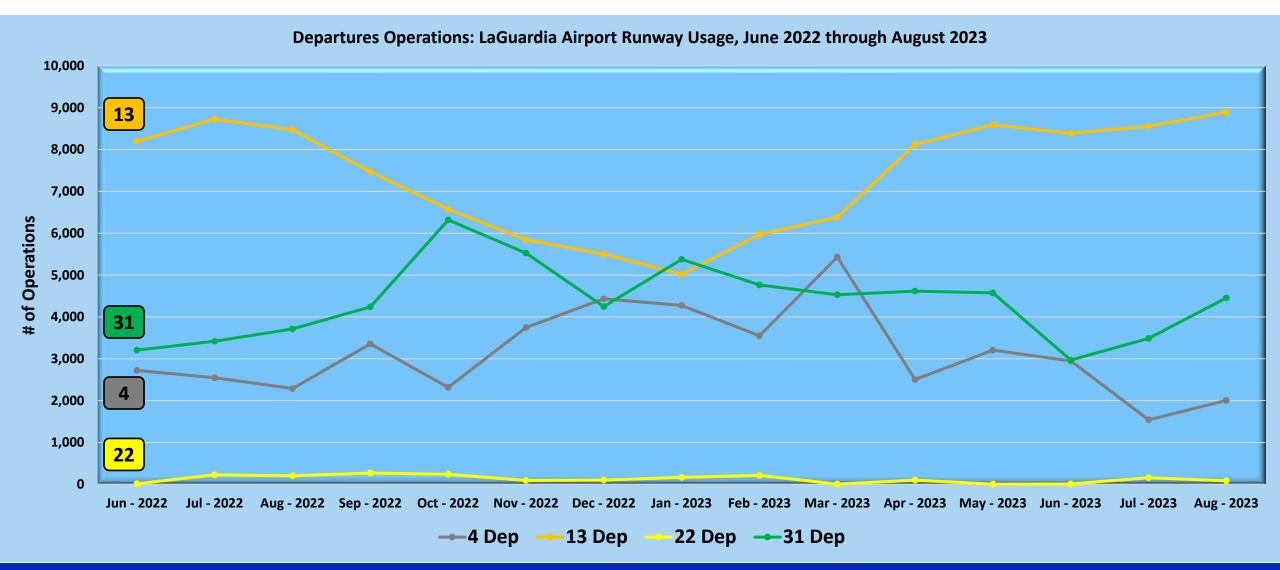


Operations By Runway for Past 13 Months

Month	Total Operations	4 Arr	4 Dep	13 Arr	13 Dep	22 Arr	22 Dep	31 Arr	31 Dep	Unk Arr	Unk Dep
Aug - 2022	29,336	2,850	2,290	243	8,474	9,213	205	2,285	3,712	38	26
Sep - 2022	30,631	3,556	3,355	308	7,467	7,952	269	3,474	4,239	5	6
Oct - 2022	30,893	5,199	2,316	65	6,572	8,677	239	1,494	6,318	4	9
Nov - 2022	30,357	1,522	3,747	125	5,844	9,402	93	4,087	5,525	6	6
Dec - 2022	28,763	3,105	4,432	3	5,501	6,813	102	4,544	4,247	10	6
Jan - 2023	29,655	3,361	4,275	154	5,017	7,690	167	3,595	5,375	8	13
Feb - 2023	28,989	2,472	3,548	0	5,968	8,548	212	3,464	4,763	2	12
Mar - 2023	32,658	3,206	5,430	11	6,379	7,450	6	5,628	4,529	3	16
Apr - 2023	30,663	3,624	2,504	400	8,119	9,284	100	2,002	4,616	2	12
May - 2023	32,727	3,673	3,206	1	8,588	9,182	4	3,483	4,575	4	11
Jun - 2023	28,578	4,121	2,947	5	8,388	7,368	10	2,752	2,969	5	13
Jul - 2023	27,439	1,681	1,541	21	8,556	10,294	157	1,687	3,487	5	10
Aug - 2023	30,828	3,106	2,006	180	8,891	9,297	84	2,807	4,453	0	4

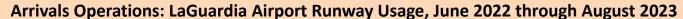


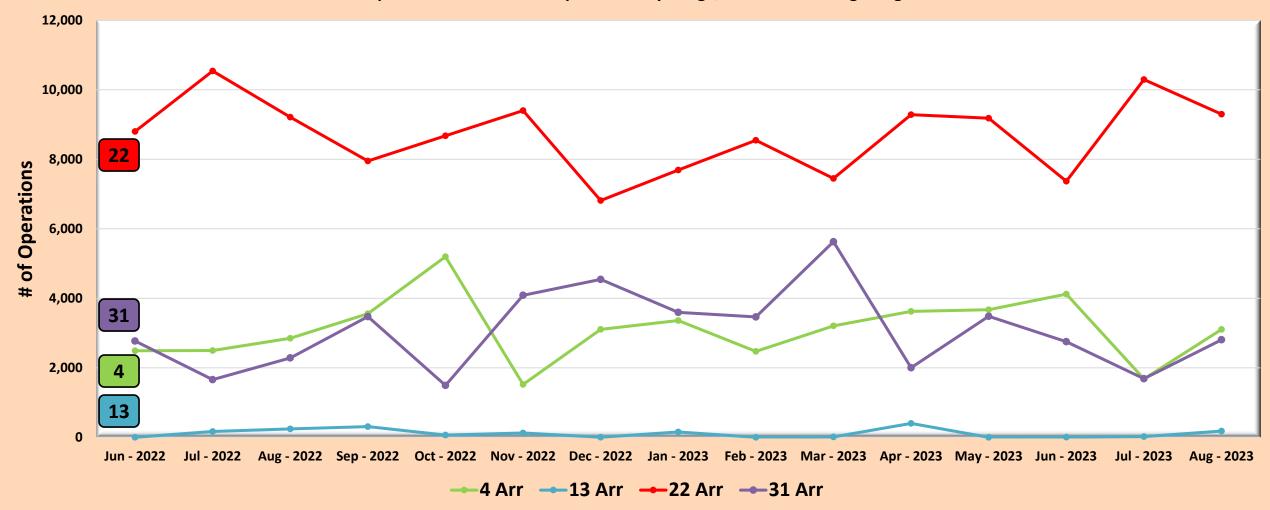
Departures Overview Jun 2022 to Aug 2023





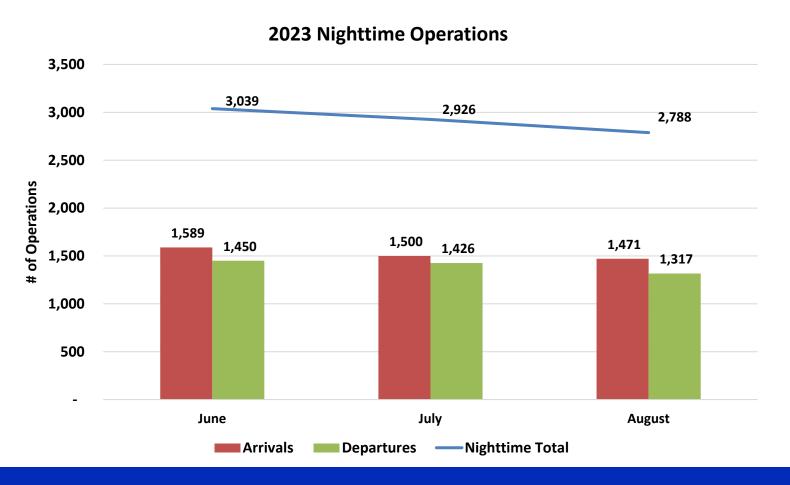
Arrivals Overview – Jun 2022 to Aug 2023



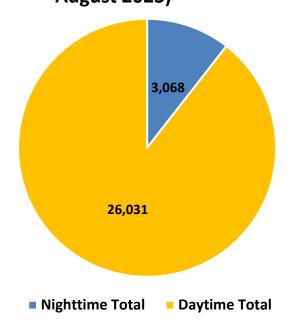




LGA Nighttime Operations Overview Jun to Aug 2023 (10 PM to 7 AM)



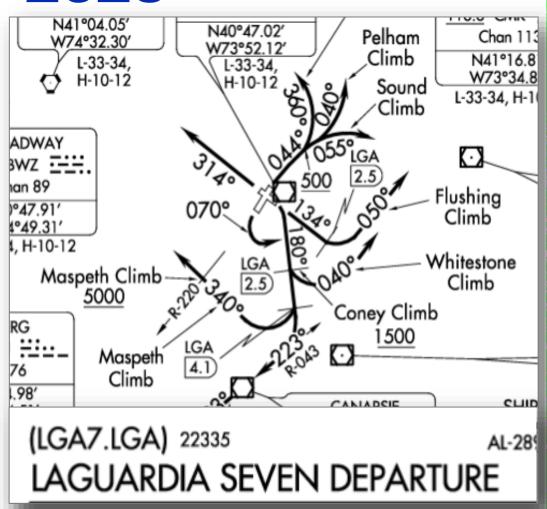
Comparison of Daytime to Nighttime Operations (monthly average – June to August 2023)

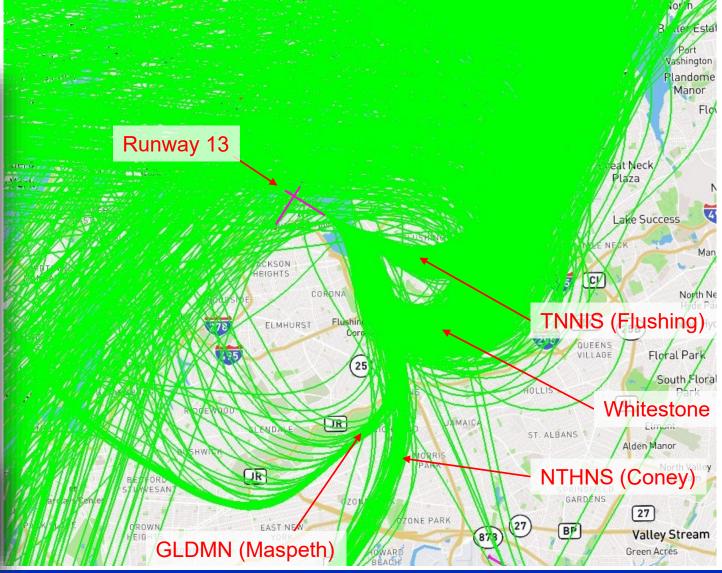




Runway 13 Departures – August 2nd – 5th

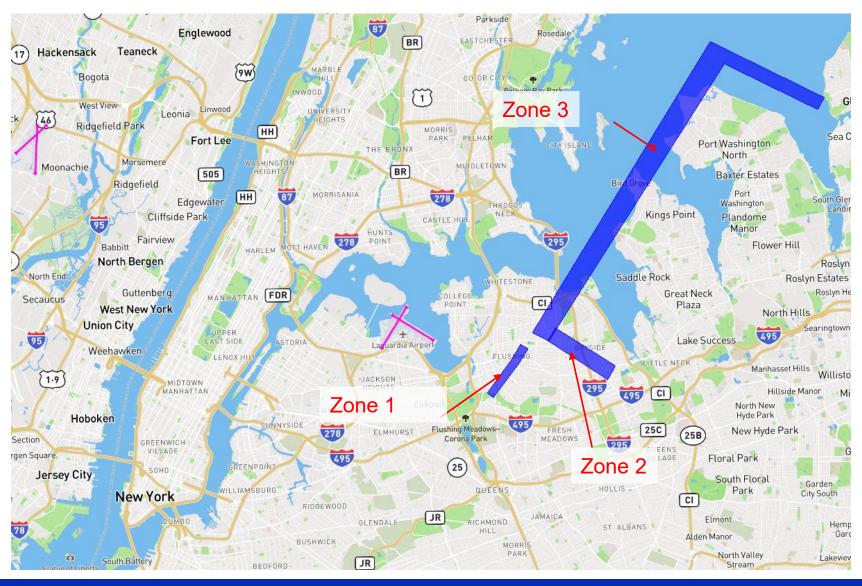
2023







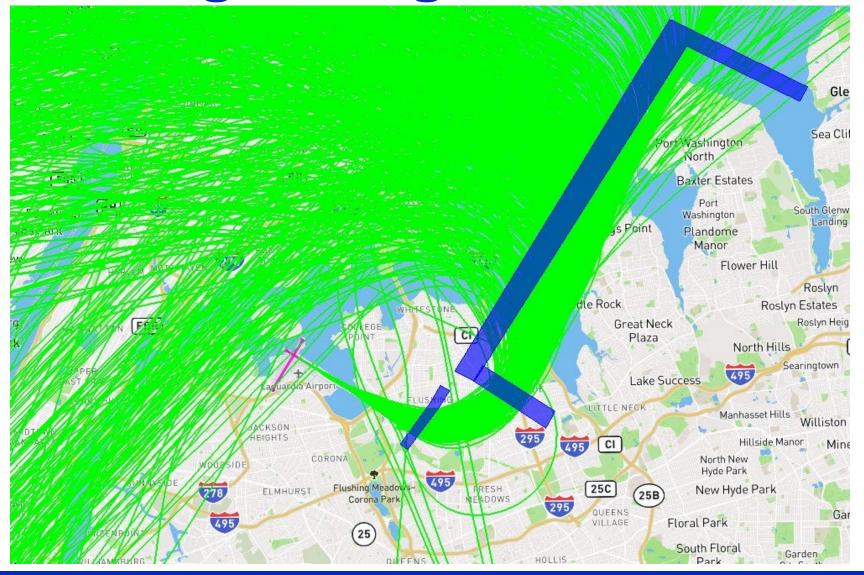
TNNIS Zones



Tracks going through the all three zones are designated as TNNIS departures



TNNIS Usage – August 2nd – 5th 2023





LGA TNNIS Operations Overview

	Total Departures	Total Runway 13	No. of TNNIS	Percent of TNNIS
Month	(All Runways)	Departures	Procedures	Departures
Jun-22	14,141	8,194	2,123	26%
Jul-22	14,927	8,724	2,431	28%
Aug-22	14,707	8,474	4,016	47%
Sep-22	15,336	7,467	4,512	60%
Oct-22	15,454	6,572	2,308	35%
Nov-22	15,215	5,844	2,266	39%
Dec-22	14,288	5,501	1,520	28%
Jan-23	14,847	5,017	1,619	32%
Feb-23	14,503	5,968	1,685	28%
Mar-23	16,360	6,379	1,085	17%
Apr-23	15,351	8,119	3,046	38%
May-23	16,384	8,588	1,799	21%
Jun-23	14,327	8,388	3,599	43%
Jul-23	13,751	8,556	6,330	74%
Aug-23	15,438	8,891	4,145	47%



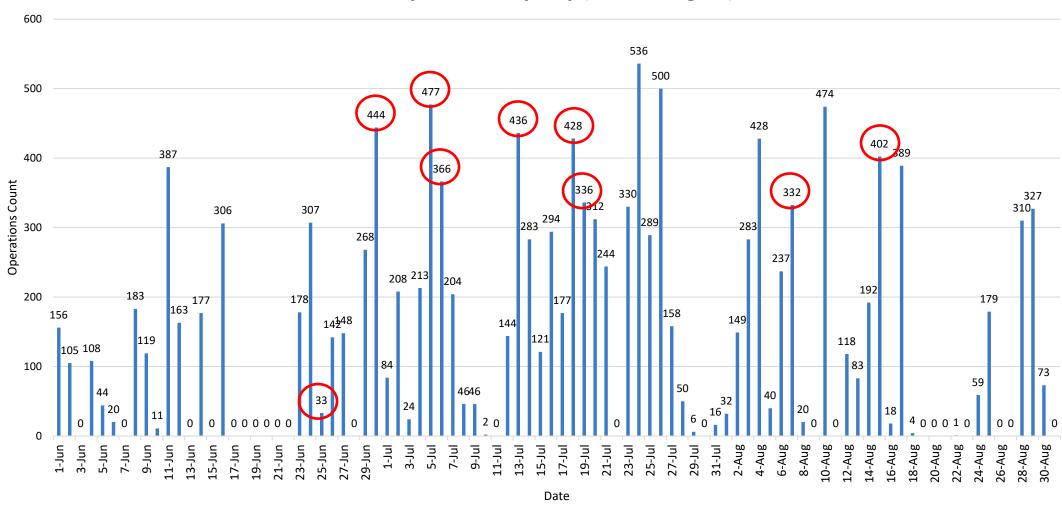
Daily Operations (Specific Days as Requested)

Date	Total No. of Operations	04		13		22		31		UNK	
		Arr	Dep								
6/25/2023	697	107	2	0	347	239	1	0	0	1	0
6/30/2023	1,088	146	1	0	545	392	1	0	0	0	3
7/5/2023	1,042	320	3	0	523	194	2	0	0	0	0
7/6/2023	1,063	0	0	0	525	537	0	0	0	0	1
7/13/2023	1,063	4	1	0	532	525	0	0	1	0	0
7/18/2023	912	0	0	0	453	454	0	0	5	0	0
7/19/2023	1,068	18	0	0	457	510	0	4	79	0	0
8/7/2023	814	0	0	0	410	399	3	0	0	0	2
8/15/2023	1,076	494	30	1	506	18	0	26	0	0	1



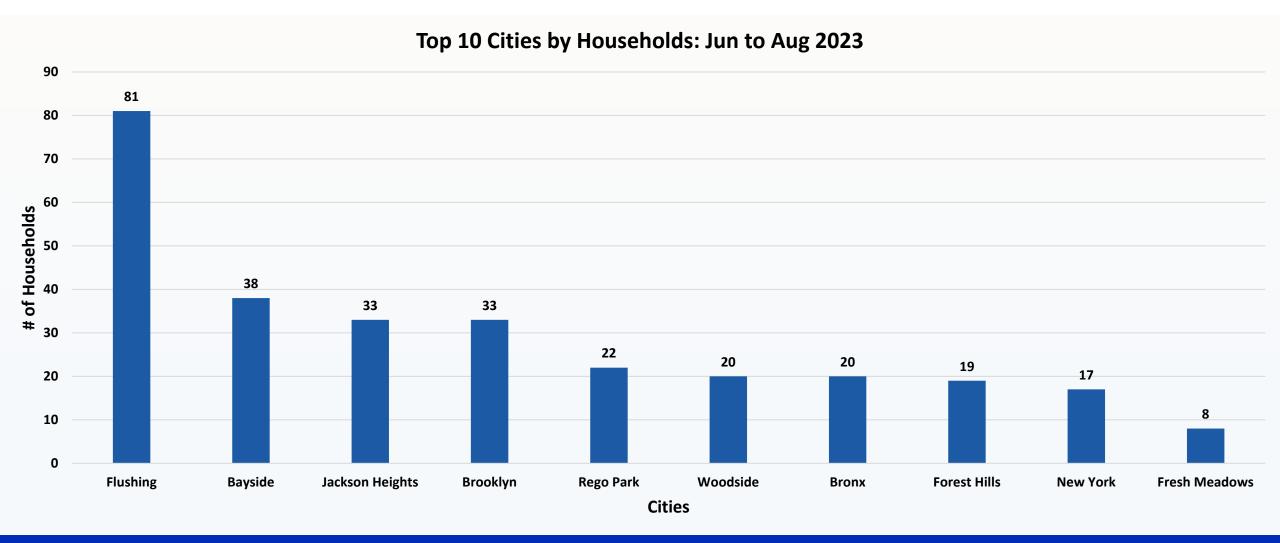
TNNIS Operations by Day

TNNIS Operations by Day (June – August)





Geographical Distribution of Noise Complaints – Number of Households (June to August 2023)



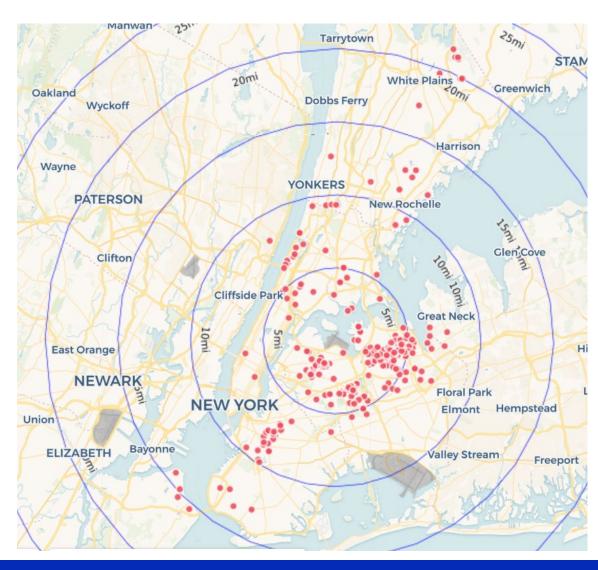


Geographical Distribution of Noise Complaints – Number of Complaints (June to August 2023)





Geographical Distribution of Noise Complaints by Households (June to August 2023)



- Showing all complaints collected via Port Authority Webform, Hotline, and 3rd party app
- Total of 483 household locations



Helpful Links

- PA Aircraft Noise webpage https://aircraftnoise.panynj.gov/
- Webtrak https://webtrak.emsbk.com/panynj4
- Submit a noise complaint https://aircraftnoise.panynj.gov/submit-a-noise-complaint/
- Monthly Reports https://aircraftnoise.panynj.gov/reports/
- Noise information and FAQs https://aircraftnoise.panynj.gov/faqs/



Thank You

Questions?



LGAAC roundtable

September 27, 2023





1954 LGA airport.

Agenda

Acronyms

NY AREA traffic

LGA traffic and flows

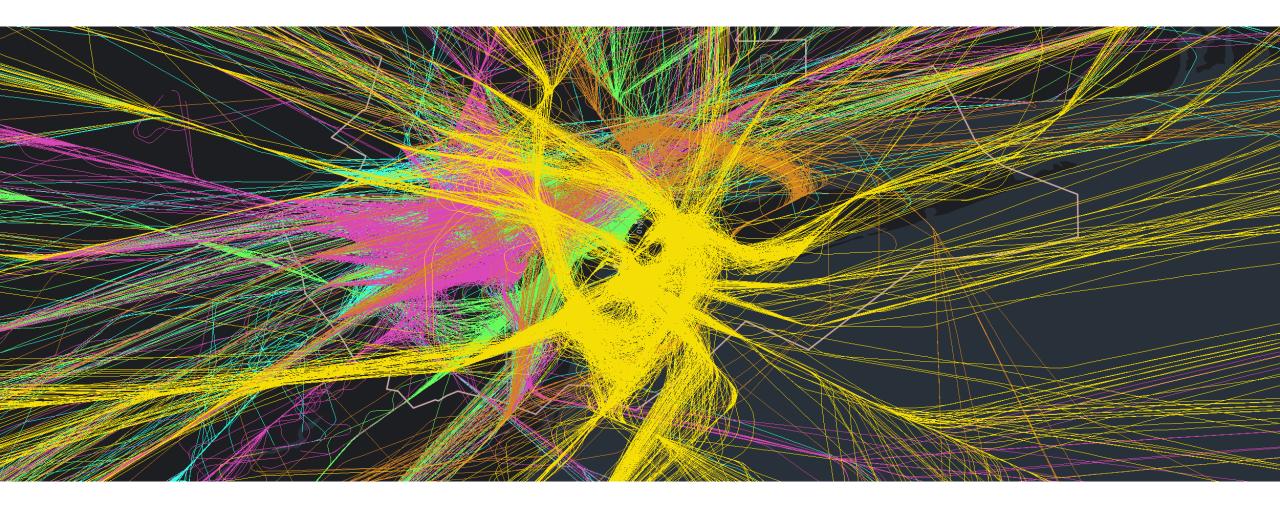
JFK impacts on LGA operation

SWAP impacts to the operation

Acronyms and phrases

- ILS Instrument Landing System radio signal aligns aircraft with the runway and provides vertical guidance to the runway.
- Glideslope Part of the ILS system that provide vertical guidance
- Vector Controller issued heading to guide aircraft
- Dispersal Headings two or more paths assigned to a departure, off a runway
- Headings paths based on a 360-degree compass
- VAP Visual Approach Pilot will maintain separation from other arrivals and line up with the runway
- RNAV GPS type of approach that uses satellite technology
- VOR Older navigational aid for aircraft, was primary means of Navigation before satellite navigation.
- Conventional procedure A set of instruction for a pilot that relies on older navigation technology.







LGA arrivals and departures

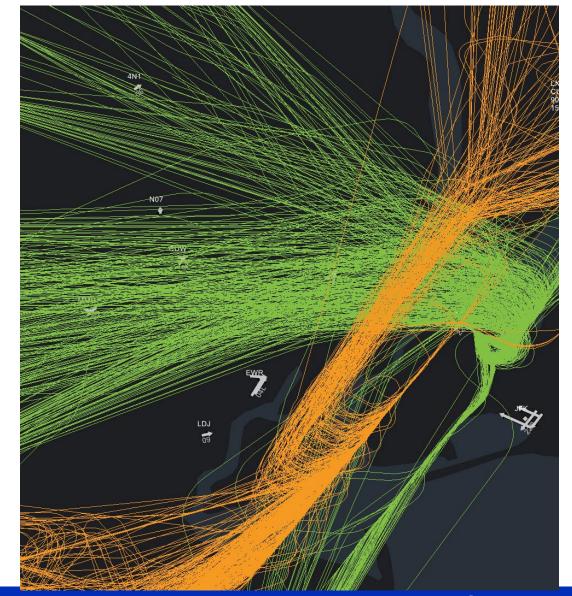
9/25/2023 1:00 pm through 9/26/2022 1:00 pm

Arrivals in Gold

Departures in Green

Land 4 depart 13

Whitestone/TNNIS/NTHNS climbs utilized at different times of the day





LGA Runways

- LGA has 2 runways
- 4 runway ends
- Runway numbers are based the magnetic heading to the nearest 10 degrees dropping the last digit



LGA Runways

Runway 13 departures have the largest number of procedures.

7 different climbs published for runway 13

Conventional climbs	RNAV climbs
---------------------	-------------

Whitestone TNNIS
Flushing GLDMN
Coney NTHNS

Maspeth

JFK was limited to a single arrival runway (22L) during the departure banks. TNNIS allowed for JFK to utilize both ILS 22L/22R



LGA - Noise complaints history

- Noise concerns prior to LGA TNNIS
- JFK VOR/DME 22L (predecessor to RNAV GPS X) was the primary approach used, approximately 80 percent of the time, when on the 22's. Many communities voiced their concerns the constant use of the approach.
- LGA Whitestone climbs were used 90 percent of the time when departing 13: several communities made requests to alternate headings off 13, if possible.
- The best possible scenario is to balance the usage of climbs and approaches to each of the 2 airports.



LGA runway configurations

Primary runway configurations used

- Land 22 depart 13
- Land 22 depart 31
- Land 4 depart 13
- Land 31 depart 4
- Land 13 depart 4
- Land 13 depart 13



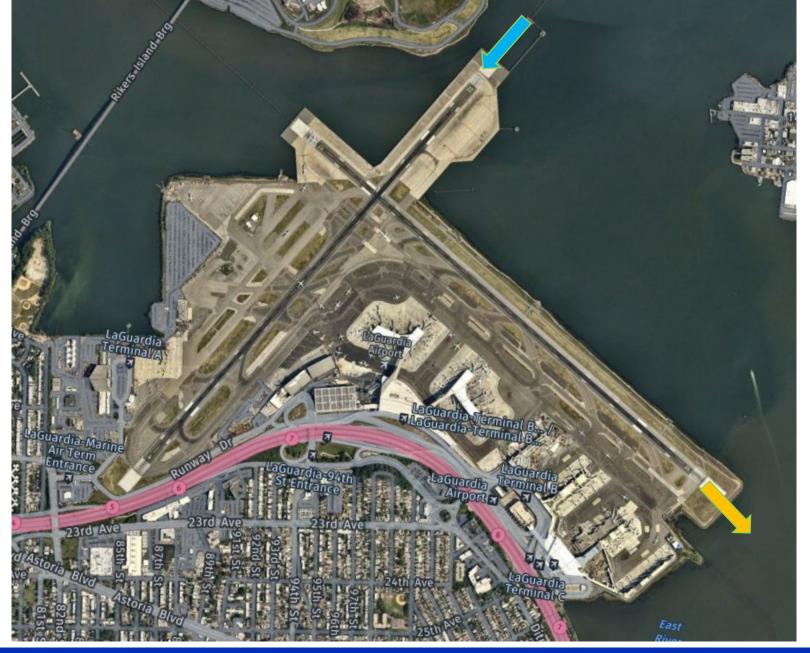
LGA runway configurations

LAND 22

DEPART 13

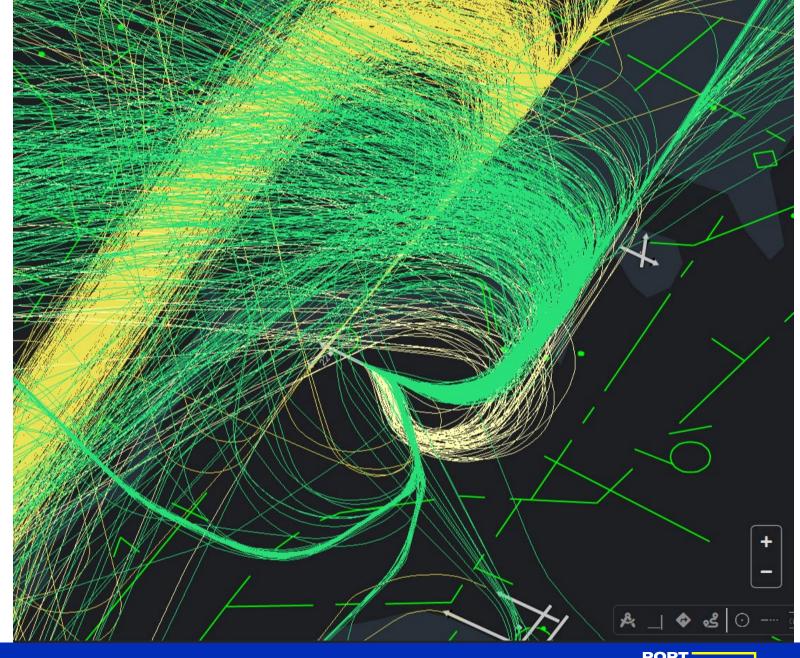
Preferred runway configuration for SWAP days, due to surface flexibility

Most efficient arrivaland departure operation





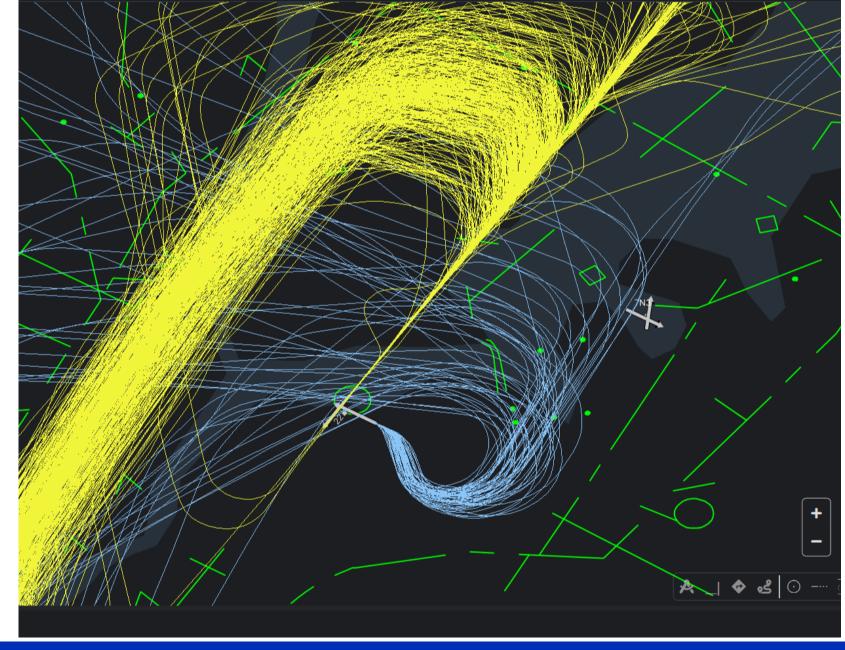
- Arrival transition to the west side of the airport Hudson River
- 13 has the largest number of departure procedures available





Whitestone climbs
 JFK dependent
 Conventional procedure

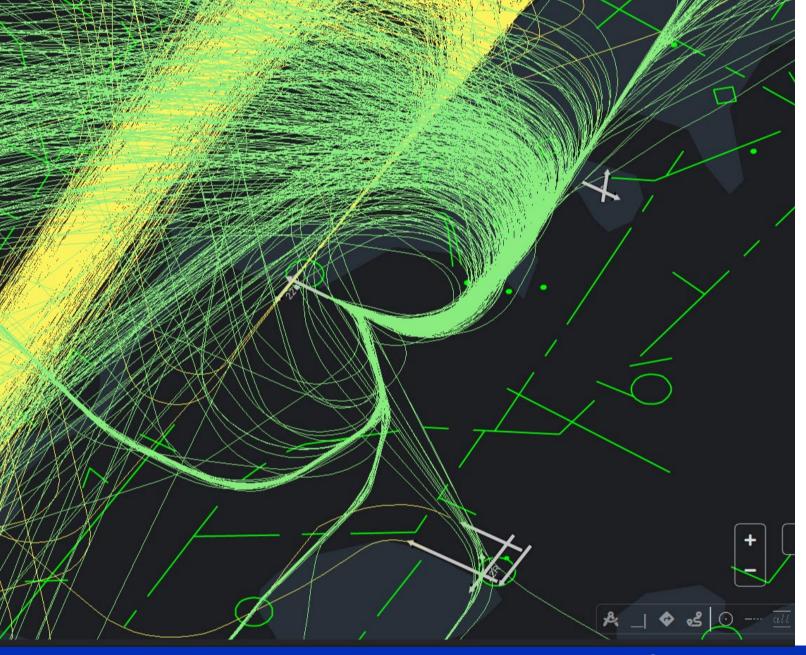
Typically used when JFK is Land 13L/22L (RNAV GPS X) depart 13R or other configurations





"all climbs"
 TNNIS NTHNS GLDMN

RNAV procedures

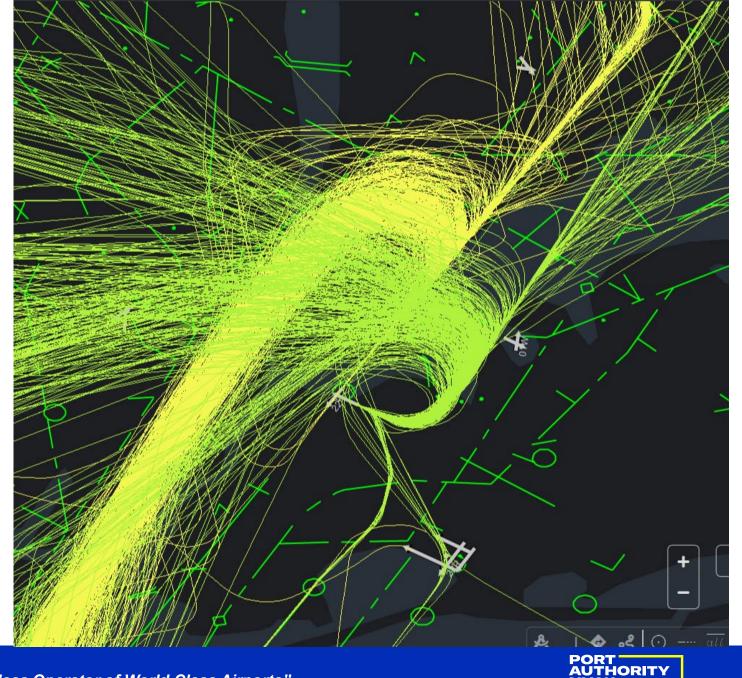




Different combinations available

TNNIS/NTHNS

Typically used when JFK is Land 22L depart 22R

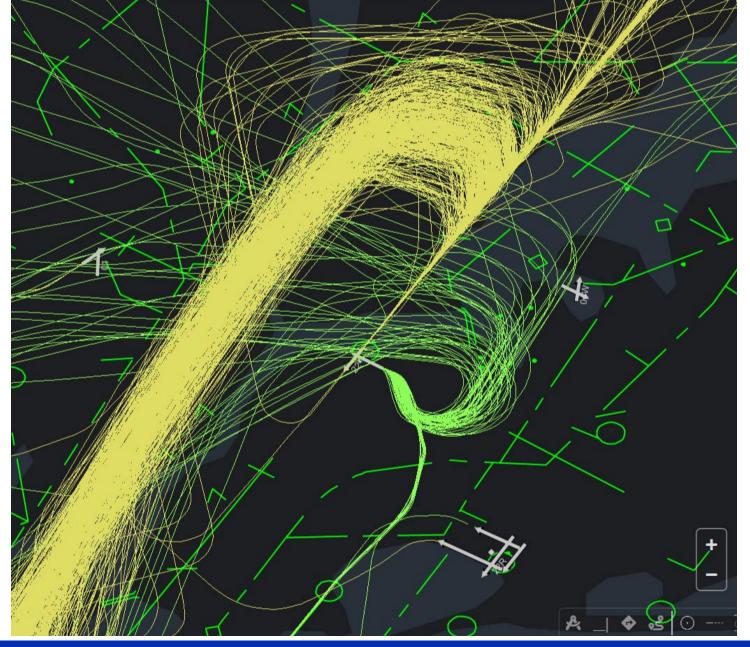




Different combinations available

Whitestone/NTHNS

Typically used when JFK is on Land 4R depart 4L

















Weather review of September 11, 2023

How severe weather impacts the operation

How quickly thunderstorms can impact the operation



