

JFK NYCAR

Presented to: JFK NYCAR

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Date: June 3, 2019



Federal Aviation
Administration



Topics

JFK Runway 13L/31R Construction

- How are Runway Selections Made?
- How have JFK Arrivals been Affected by Construction?
- Why has Traffic Increased over Certain Nassau County Communities?

How JFK, LGA and EWR Air Traffic Operations Interact

- Can Altitudes to JFK Runway 22L and 22R be Amended?
- Can JFK Arrival Flight Patterns be Changed?
- What is Being Done to Improve Noise Issues?
 - RNAV Transition JFK Runway 22L and 22R



JFK Runway 13L/31R Construction



How are Runway Selections Made?

- ❑ Runway availability (i.e. Runway closures, taxiway closures or airport construction etc.)
- ❑ Weather (i.e. Weather/wind conditions)
- ❑ Operational efficiency (i.e. airport throughput, delays)
- ❑ Noise considerations



How Have JFK Arrivals been Affected by Construction?

- ❑ Traffic that normally would be routed to RWY 31R or 13L is now being routed to RWY 22L/22R.
- ❑ Normal operation when winds are from the south, JFK primarily lands runway 13L and overflows to 22L (Different Approach) as needed.
- ❑ Due to 13L/31R closure aircraft must land 22L and 22R to accommodate the arrival capacity.
- ❑ Increased traffic volume to runway 22R pushes traffic further out on final and turn to final, causing traffic to overfly communities which may not normally experience the increased volume.



Why has Traffic Increased over Certain Nassau County Communities?

Due to the 8 month closure of JFK RWY 13L-31R, Traffic typically assigned to this runway is being diverted to the 4-22 runways when weather conditions permit.

☐ Estimated number of arrivals to Runways 13L/R and 31L/R diverted to 22L/R

☐ Up to 42,000 Operations

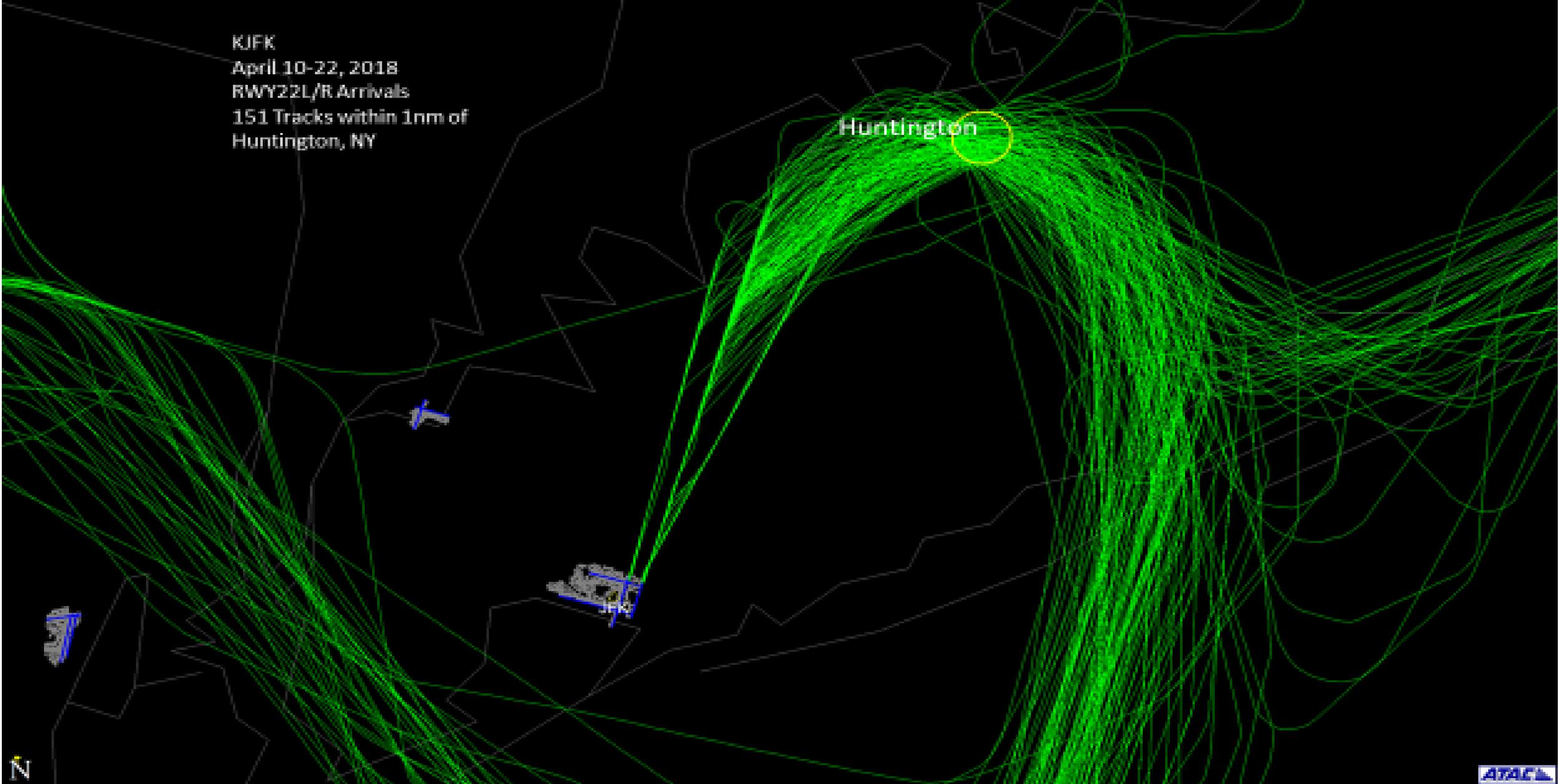
☐ Estimated number of arrivals to Runways 13L/R and 31L/R diverted to 4L/R

☐ Up to 28,000 Operations



KJFK
April 10-22, 2018
RWY22L/R Arrivals
151 Tracks within 1nm of
Huntington, NY

Huntington



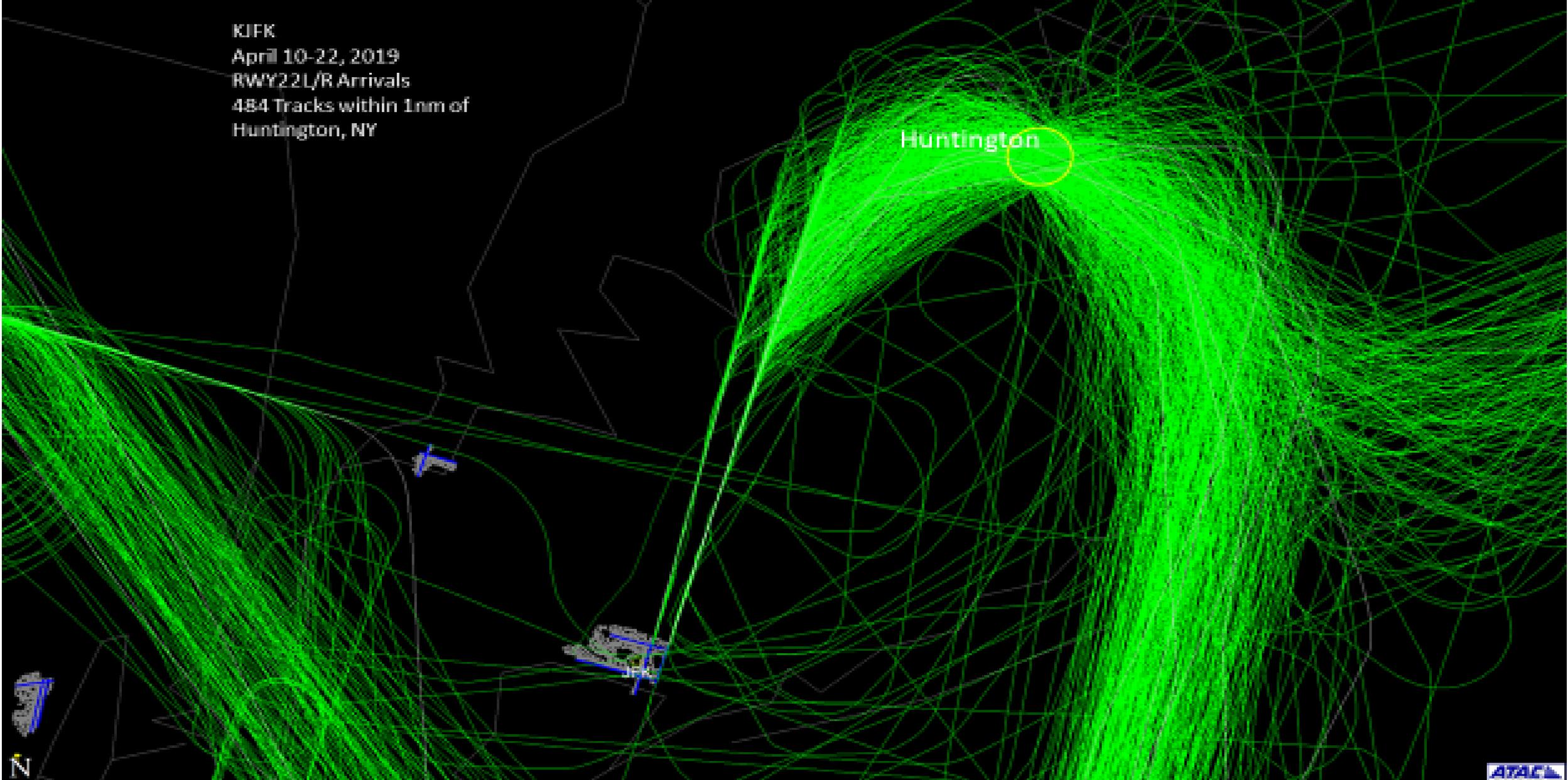
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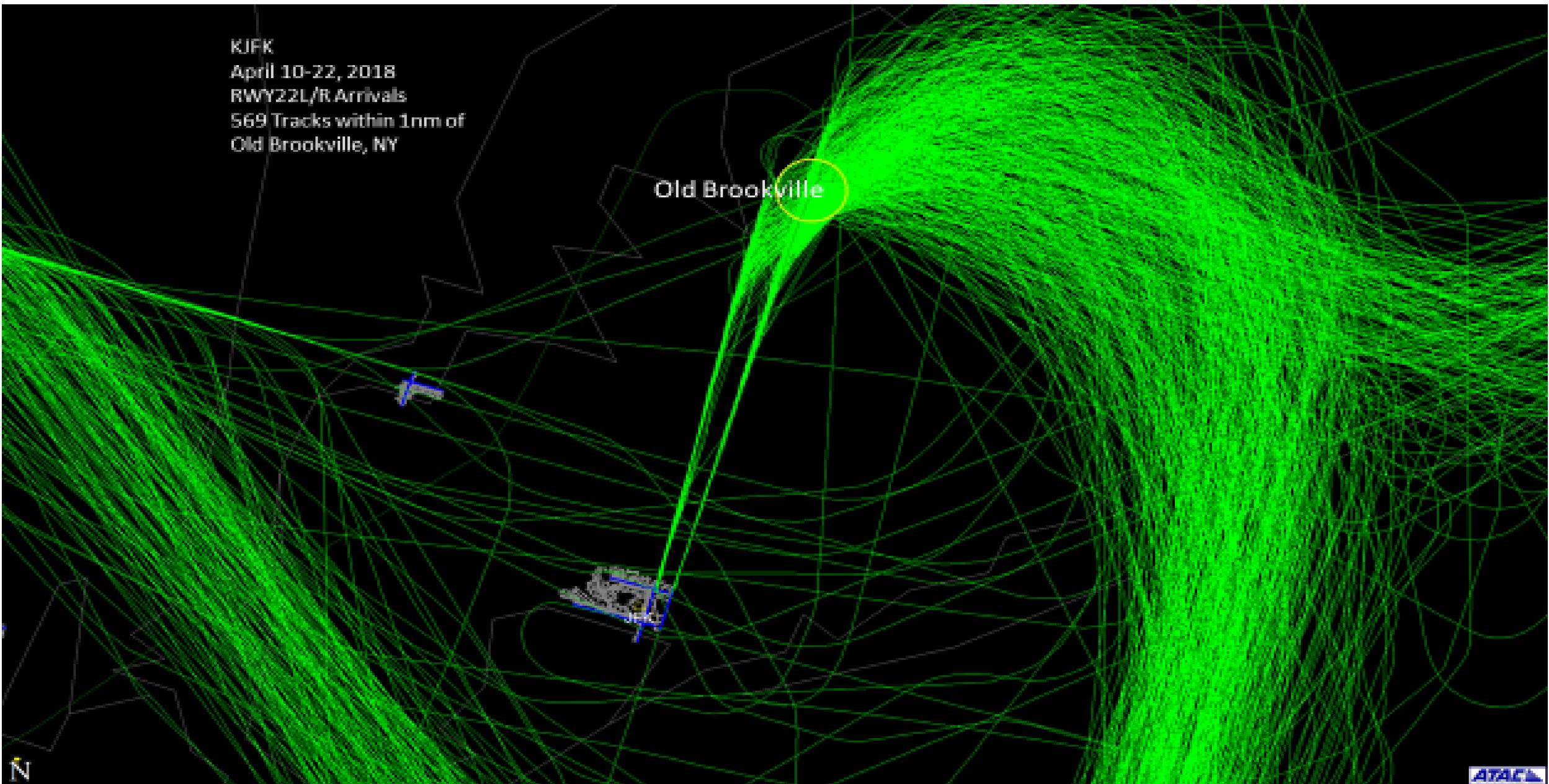
KJFK
April 10-22, 2019
RWY22L/R Arrivals
484 Tracks within 1nm of
Huntington, NY

Huntington



KJFK
April 10-22, 2018
RWY22L/R Arrivals
569 Tracks within 1nm of
Old Brookville, NY

Old Brookville



KJFK
April 10-22, 2019
RWY22L/R Arrivals
2676 Tracks within 1nm of
Old Brookville, NY

Old Brookville



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How JFK, LGA and EWR Air Traffic Operations Interact

Can Altitudes to JFK Runway 22L and 22R be Amended?

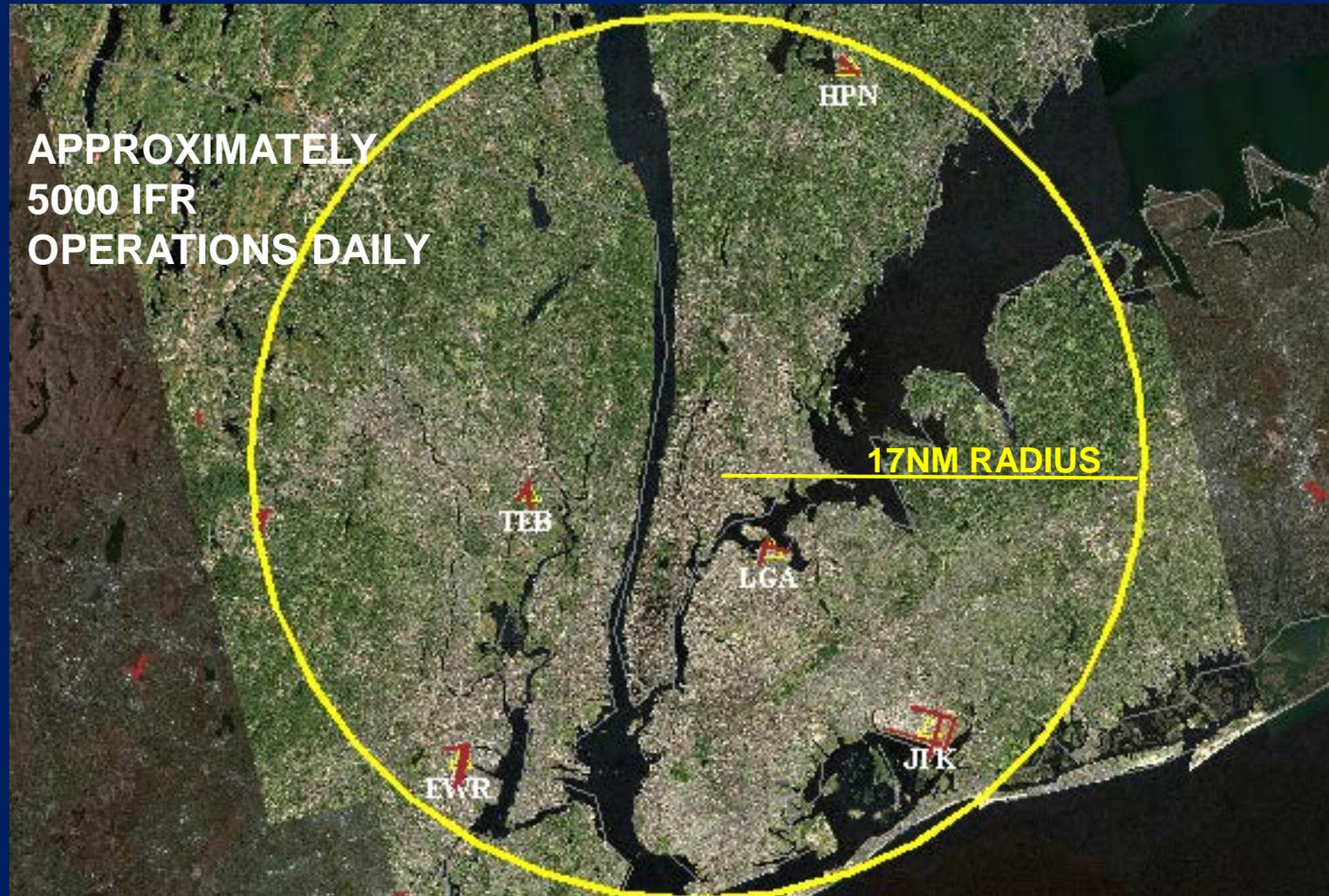
- Changing altitudes to aircraft on final to JFK runways 22L and 22R would affect LGA arrivals to runway 22 and departures off of LGA runway 13.

Can JFK Runways 22L/R Arrival Flight Patterns be Changed?

- Changing impacts LGA runway 22 operation when departing runway 13.
- Impacts the flow of traffic to the LGA Expressway Visual runway 31 and ILS runway 4.



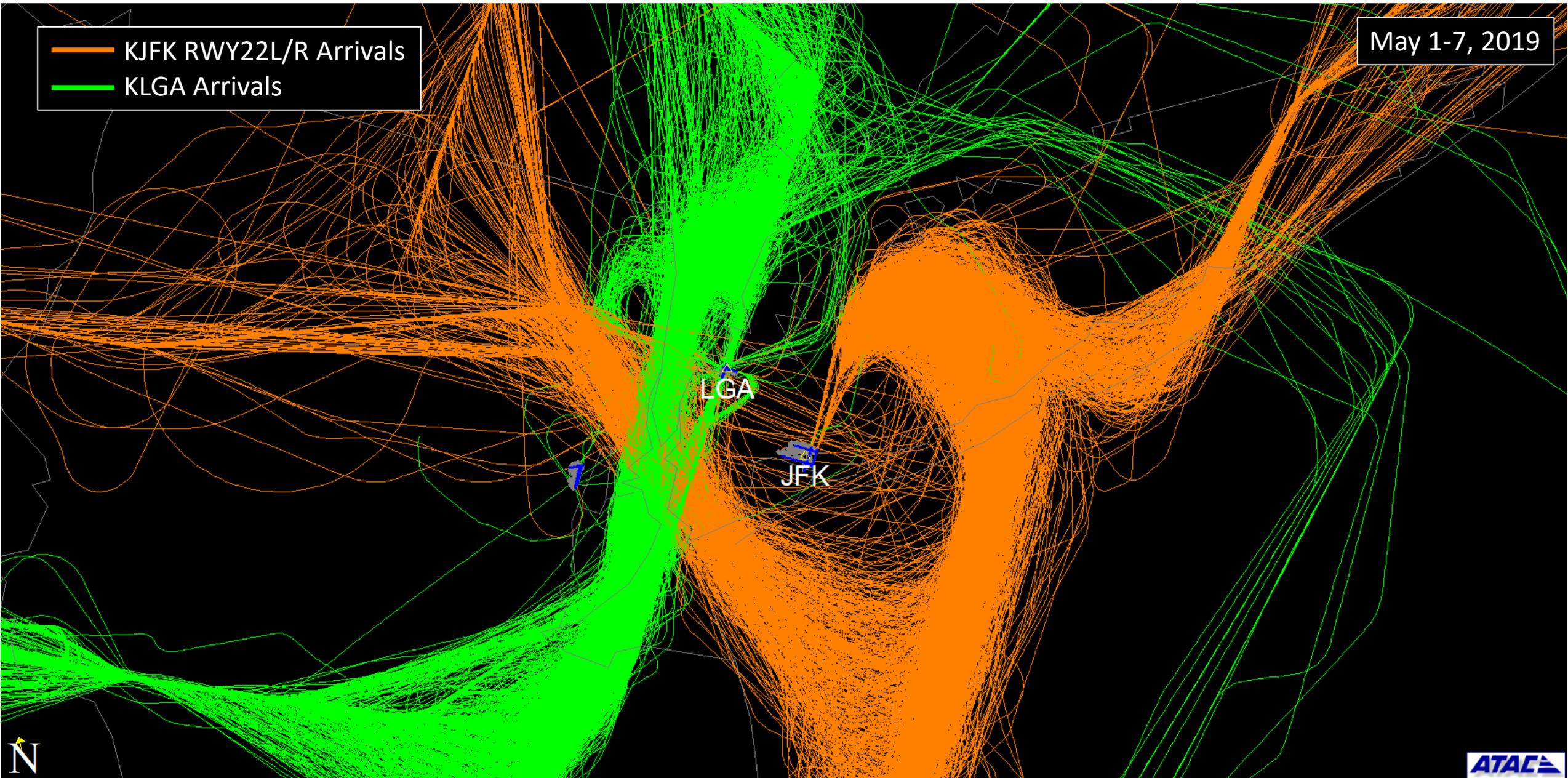
5 MAJOR N90 AIRPORTS



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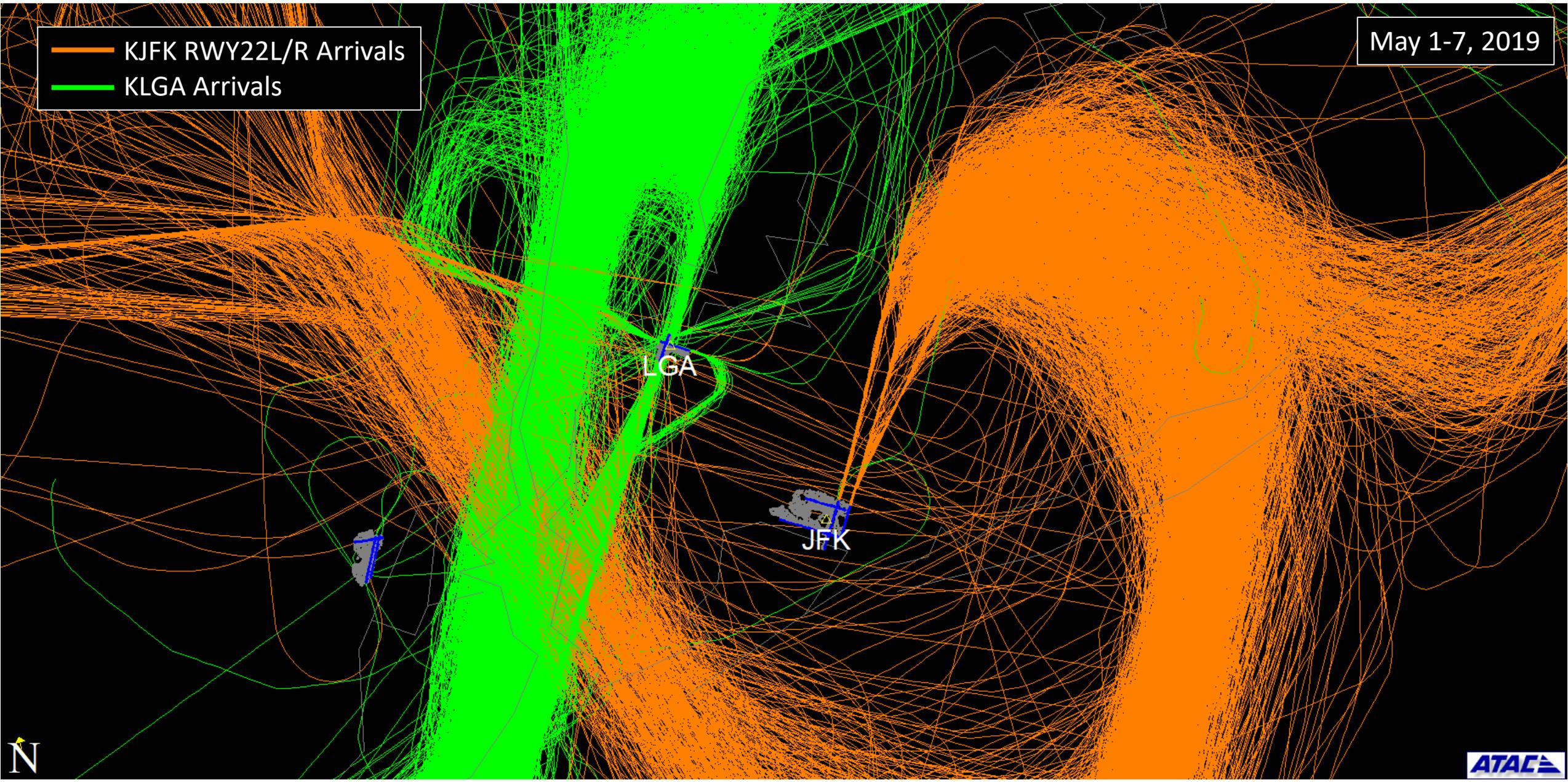
May 1-7, 2019

— KJFK RWY22L/R Arrivals
— KLGA Arrivals



May 1-7, 2019

— KJFK RWY22L/R Arrivals
— KLGA Arrivals



LGA

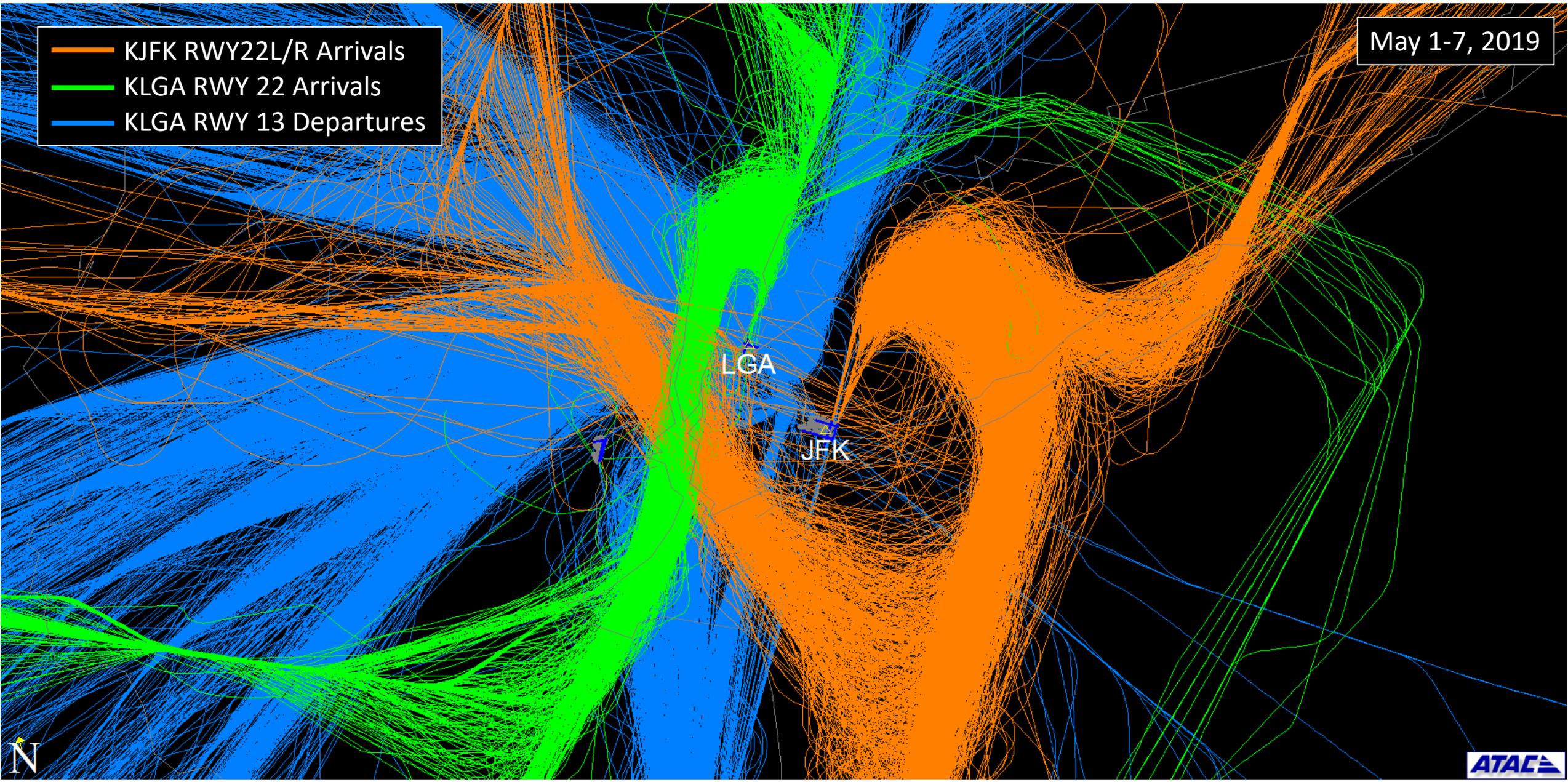
JFK

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May 1-7, 2019

- KJFK RWY22L/R Arrivals
- KLGA RWY 22 Arrivals
- KLGA RWY 13 Departures

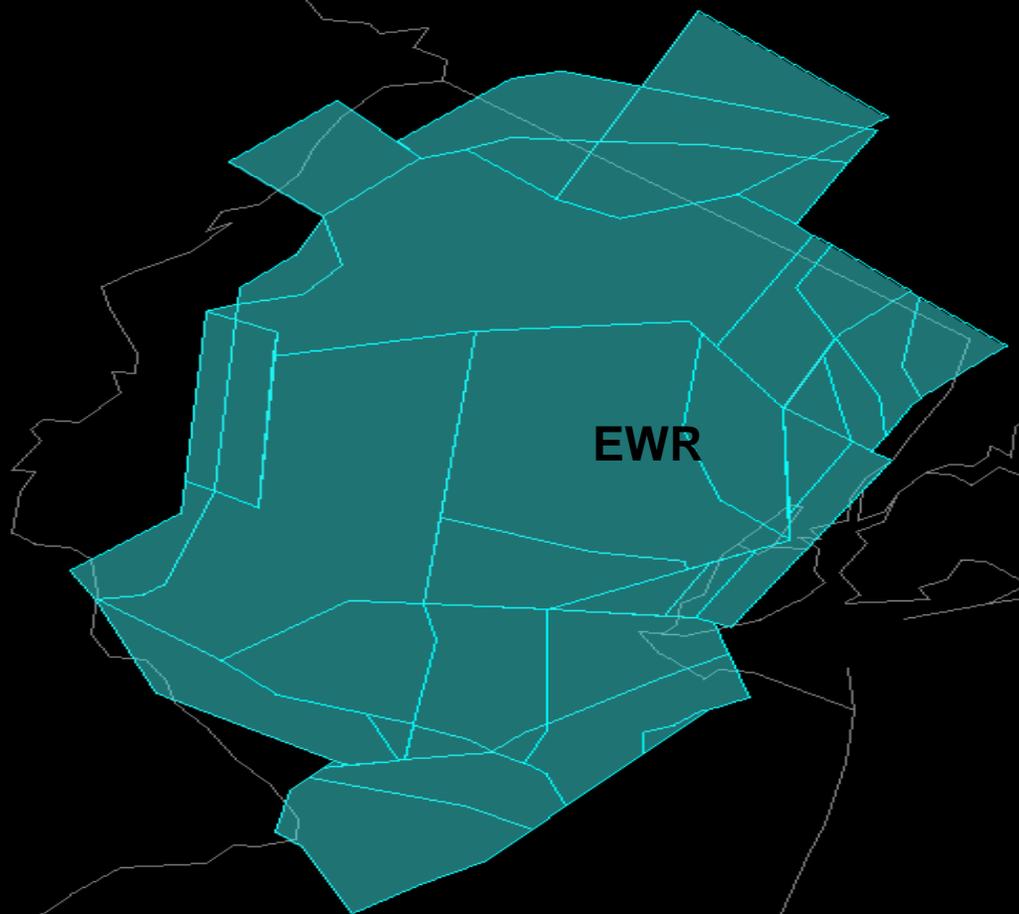


LGA

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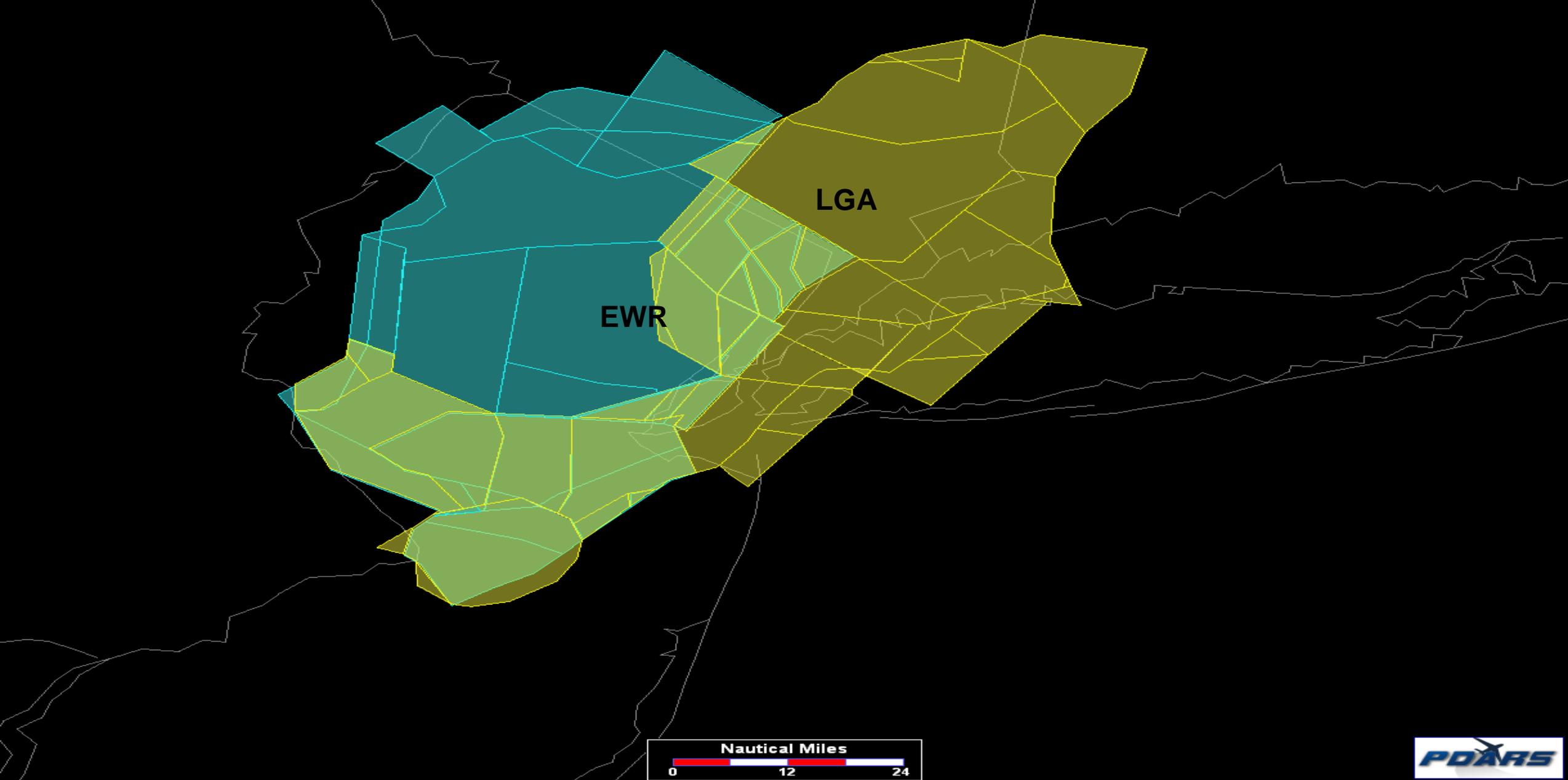




EWR



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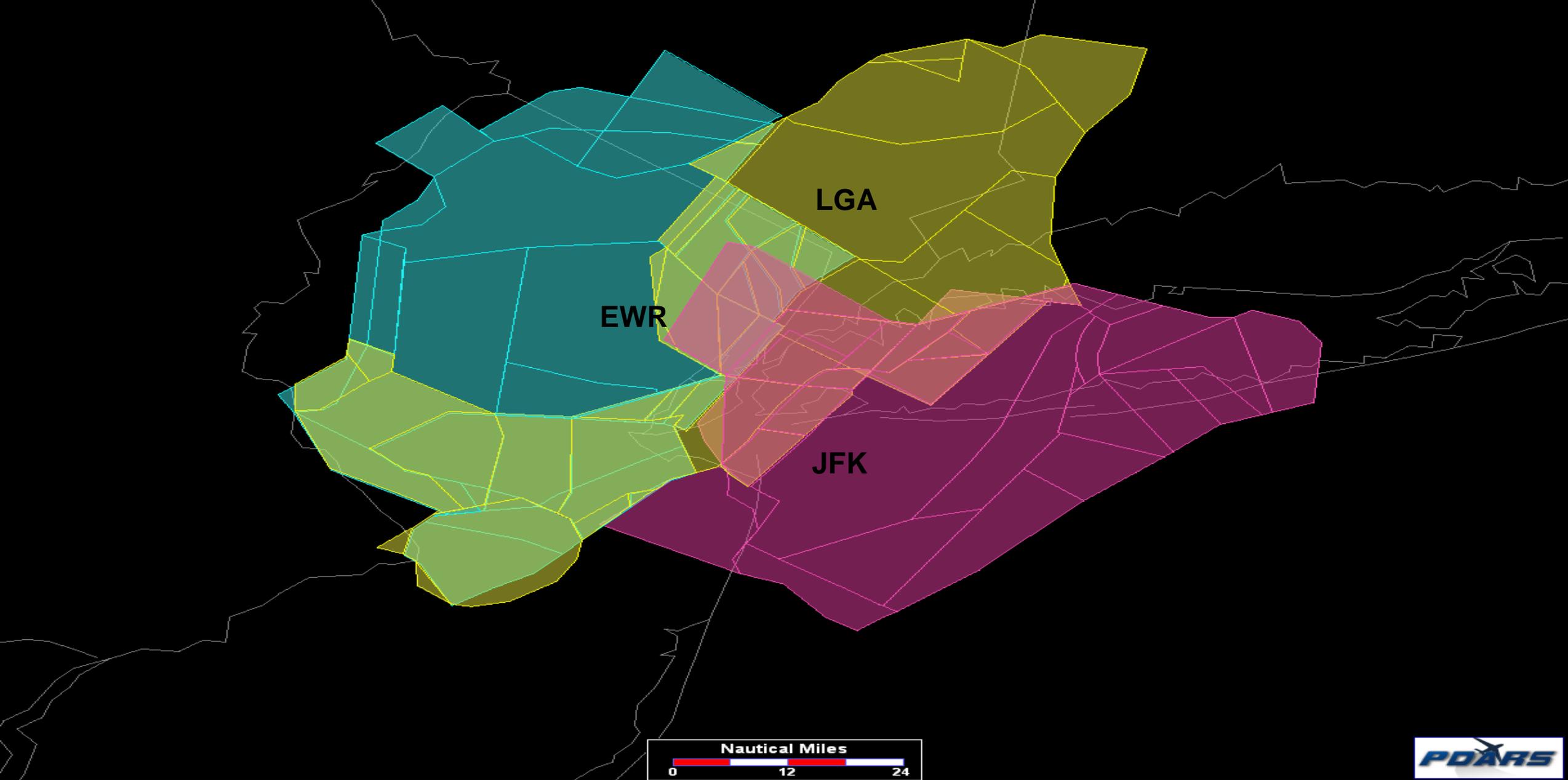


LGA

EWR



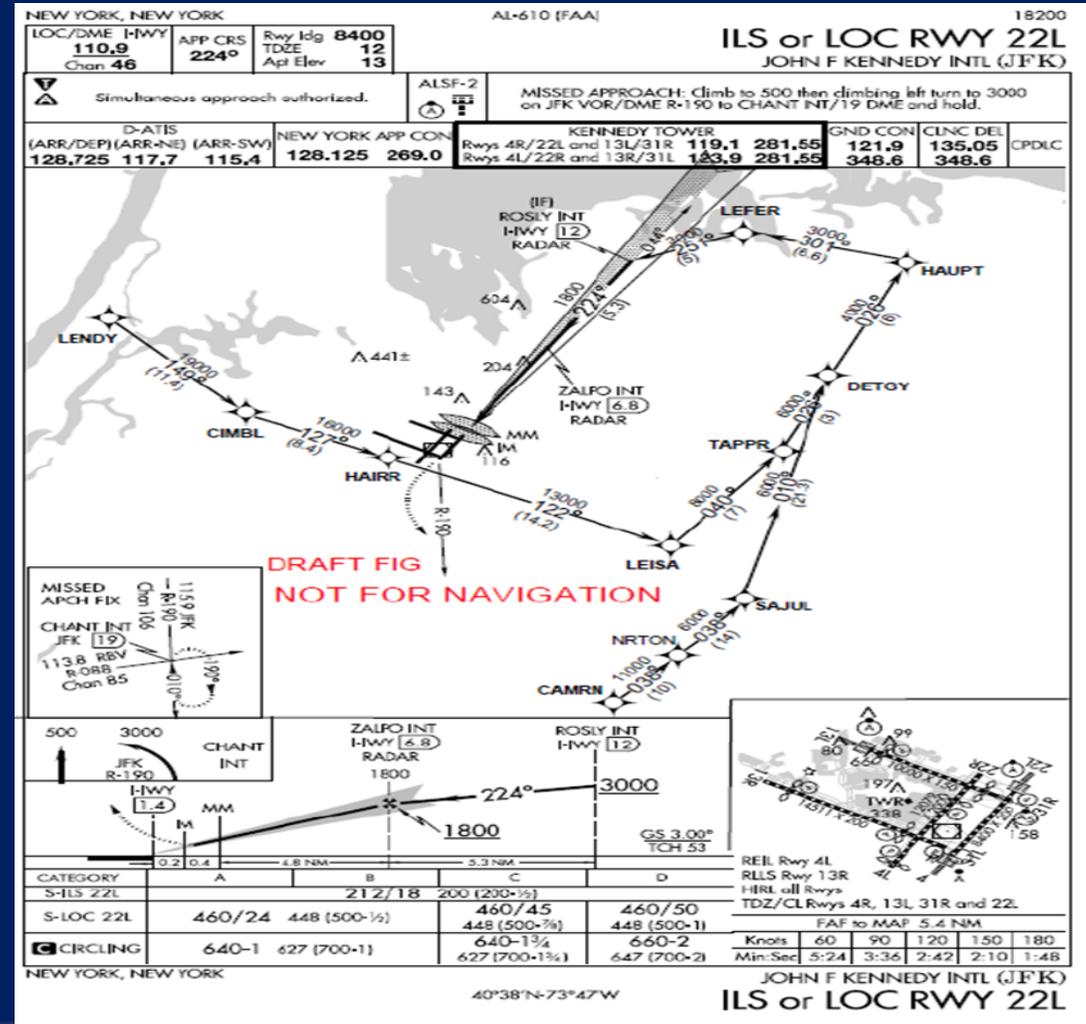
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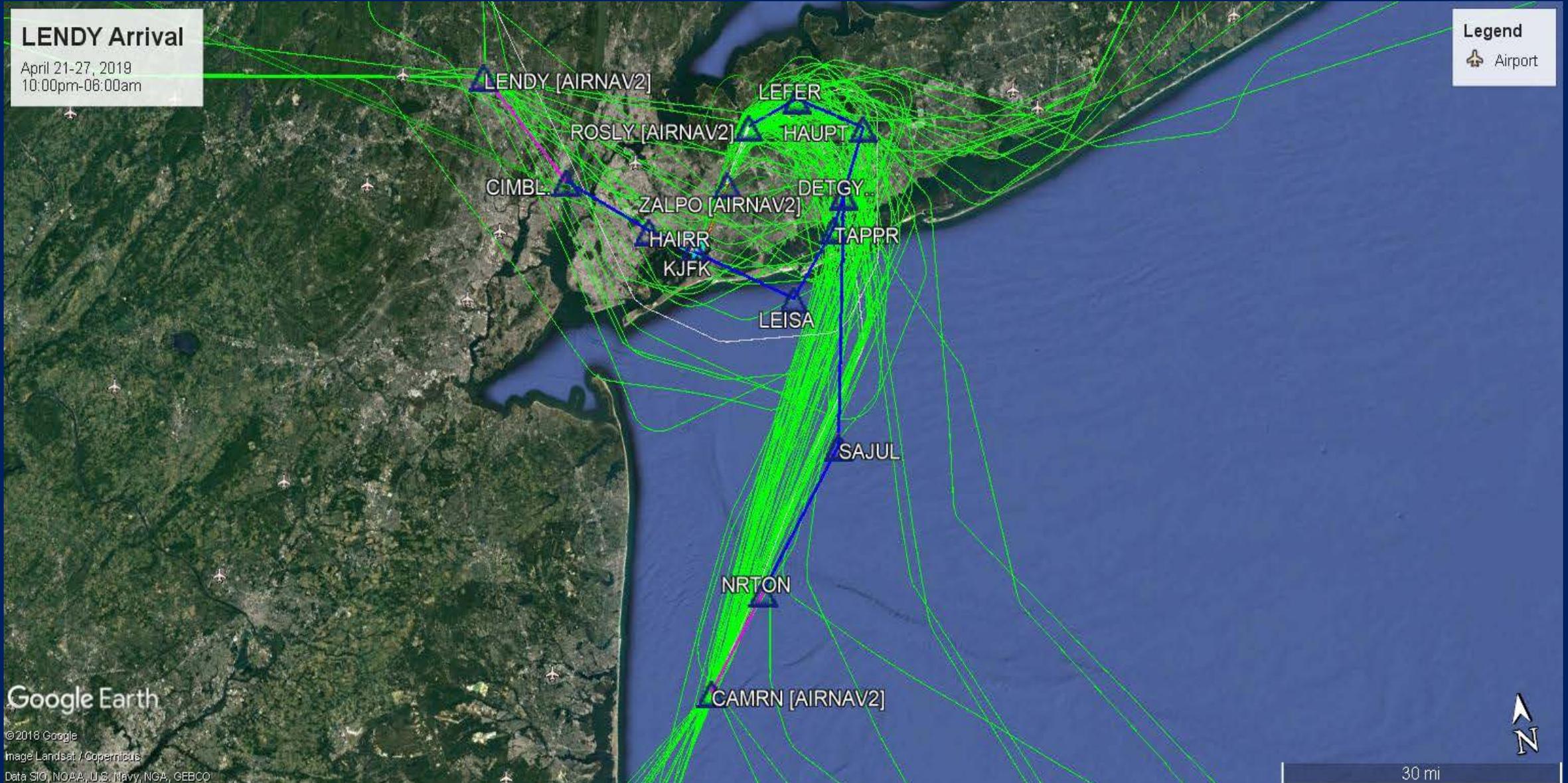
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What is Being Done to Improve Noise Issues?

RNAV Transition JFK Runway 22L and 22R



RNAV Transition JFK Runways 22L and 22R



RNAV Transition JFK Runway 22L and 22R

Procedure Description

- Add RNAV transitions to the JFK ILS RWY 22L/R approach so arrivals from LENDY and CAMRN can be cleared for a continuous descent from entry altitude to the ILS Intermediate Fix.

Procedure Usage

- Procedure will be used after midnight.
 - Low arrival/departure volume and minimal complexity

Procedure Benefits

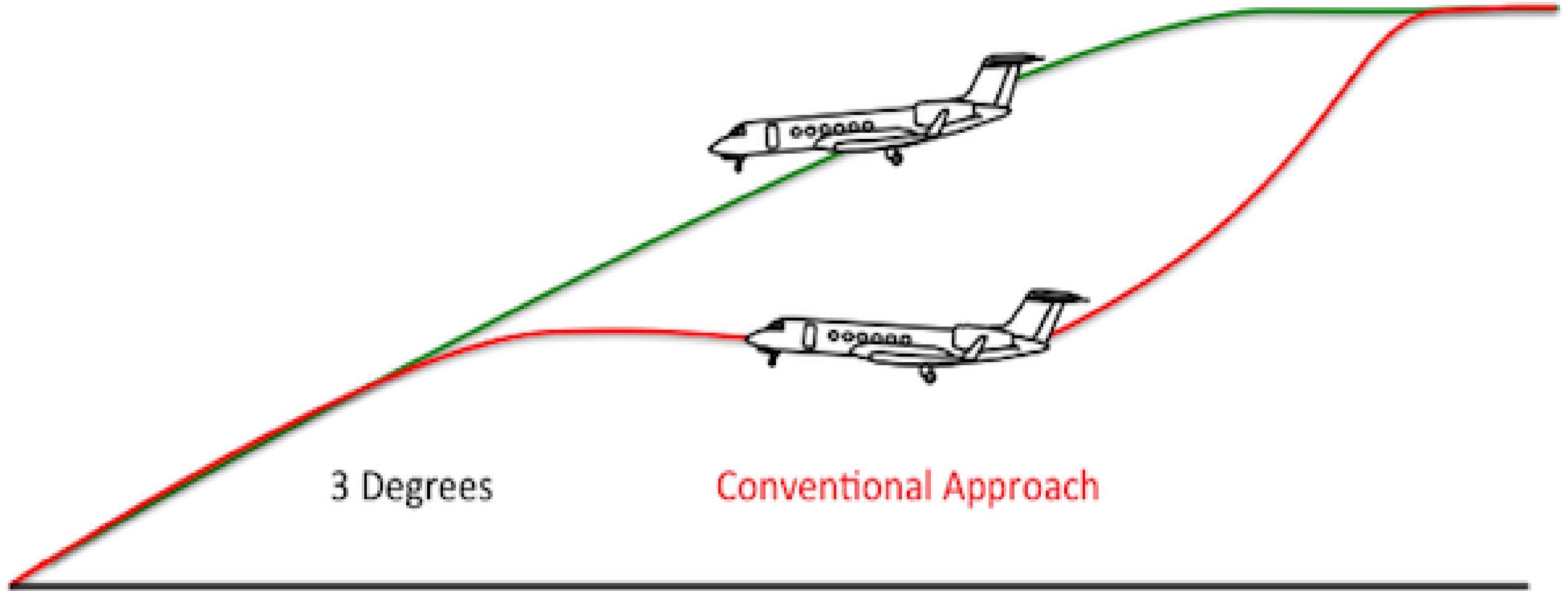
- Procedure will keep aircraft higher over noise sensitive communities in Nassau County.

Next steps

- Complete environmental review and community outreach
- Publication of procedure: December 5, 2019



Continuous Descent Final Approach (CDFA)

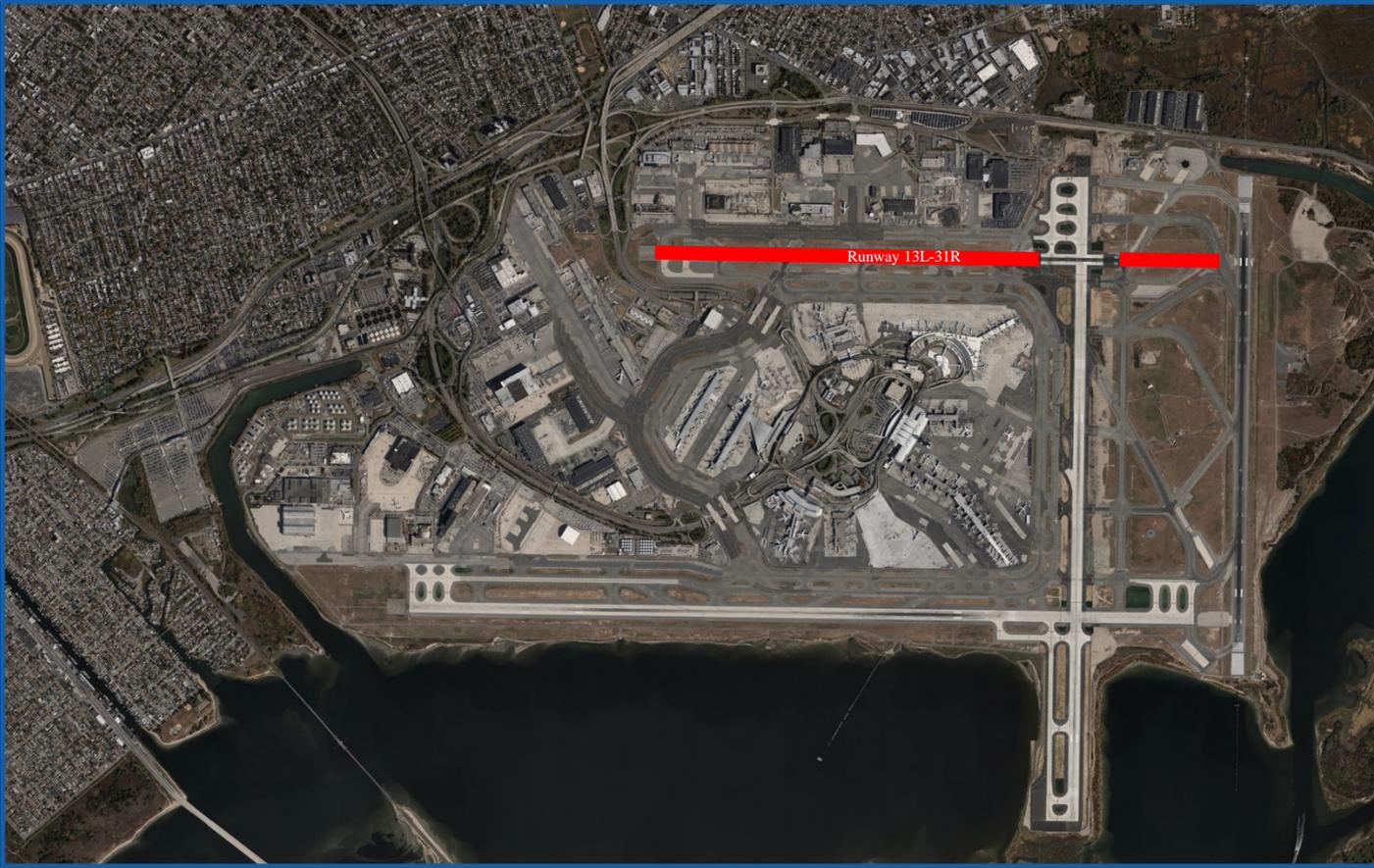


JFK Runway 13L-31R Reconstruction Project



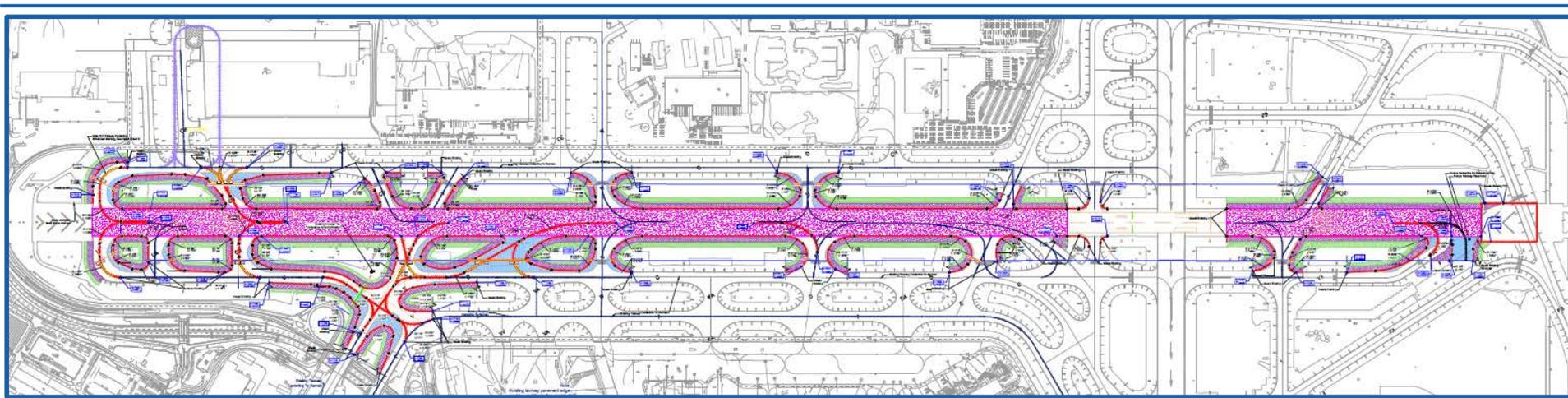
JFK Community Roundtable Meeting
June 3, 2019

Reconstruction of Runway 13L-31R & Associated Taxiways Project Location



Reconstruction of Runway 13L-31R & Associated Taxiways

Project Scope



Project Scope

- Reconstruction of Runway 13L-31R in concrete
- Widening of Runway 13L-31R to 200-ft width
- Rehabilitation of crossing taxiways
- Upgrade of Taxiway fillets
- Construction of new high-speed Taxiway
- Realignment & rehabilitation of Taxiway U and Taxiways U/V/B intersection
- Replacement of electrical systems
- Replacement of signs
- Replacement of drainage systems

Reconstruction of Runway 13L-31R & Associated Taxiways

Project Schedule

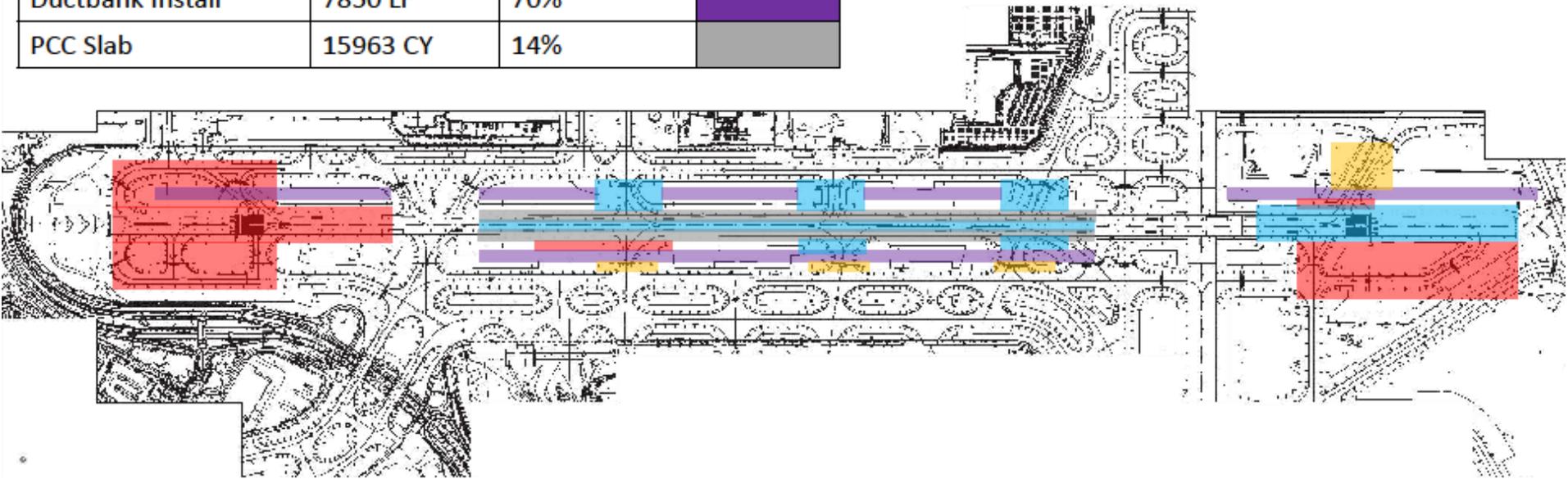
- **Contract Award** **March 1, 2019**
- **Runway Closure & Start of Construction** **April 1, 2019**
- **Runway Re-opening to Air Traffic Operations** **November 16, 2019**

Reconstruction of Runway 13L-31R & Associated Taxiways

Progress of Construction

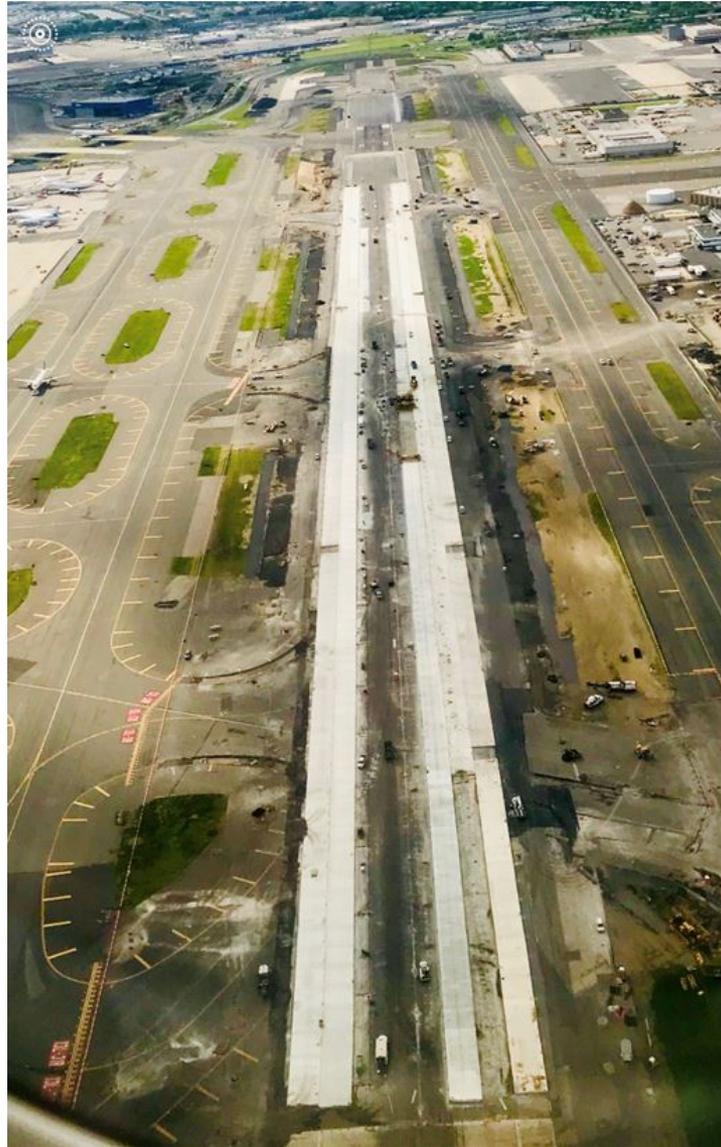
5/24/19

Item	Total to Date	% Complete	Color
R/W Mill	190274 SY	93%	Red
Leveling Course 2" AC	14510 TONS	53%	Blue
Can Removal	1333 EA	65%	Yellow
Ductbank Install	7850 LF	70%	Purple
PCC Slab	15963 CY	14%	Grey



Reconstruction of Runway 13L-31R & Associated Taxiways

Field Activities



Construction Progress

Northeast Corridor (NEC)

Overview Briefing & JFK Initiatives

- Presented to: JFK NYCAR
- Date: June 3, 2019



- Federal Aviation
- Administration



Review Northeast Corridor Background

- On February 22, 2017, the NextGen Advisory Committee (NAC) voted to make the Northeast Corridor (NEC) a priority region in the FAA's ongoing implementation of NextGen
- NAC members recognized that continuous improvements to the system in the NEC operationally benefits the entire US aviation system
≈50% of the delays emanate across the system from this area
- The FAA formally tasked the NAC in April 2017 to develop recommendations for the collective set of FAA, airport, operator and community initiatives that focus on implementing NextGen in the NEC
- The NEC is defined as the region between Washington, D.C. and Boston, including Philadelphia and the New York metropolitan area



NEC Operational Needs and Milestones

- **To meet NEC goals & objectives, 10 operational need areas were identified and grouped into three categories:**
 - Deconfliction of airports
 - Enhancement of airport and airspace throughput
 - Improving the balancing of demand and capacity in NEC traffic flow
- **NAC has approved recommendations that were jointly derived by Industry representatives in close collaboration with FAA**
- **Joint commitments to complete over 100 milestones by December 2021**



NEC Scope – What is included?

- **Airspace and Procedures**: design and evaluate operational procedures that improve efficiency of today's airspace/airport operation; and explore opportunities to deconflict traffic between close-in airports
- **Tools / Technology**: deploy new automation capabilities, decision support tools, and processes that enhance controller information and decision making such that operational performance is improved in all operating conditions
- **Tactical Initiatives**: maximize and evolve the utilization of already deployed tools, routes and processes to improve movement of air traffic into, out of and within the NEC during periods of exceptionally high demand and severe weather
- **Airports**: build airport infrastructure on the airport surface, airport terminal buildings and air traffic towers that enable improved surface operations and airport throughput

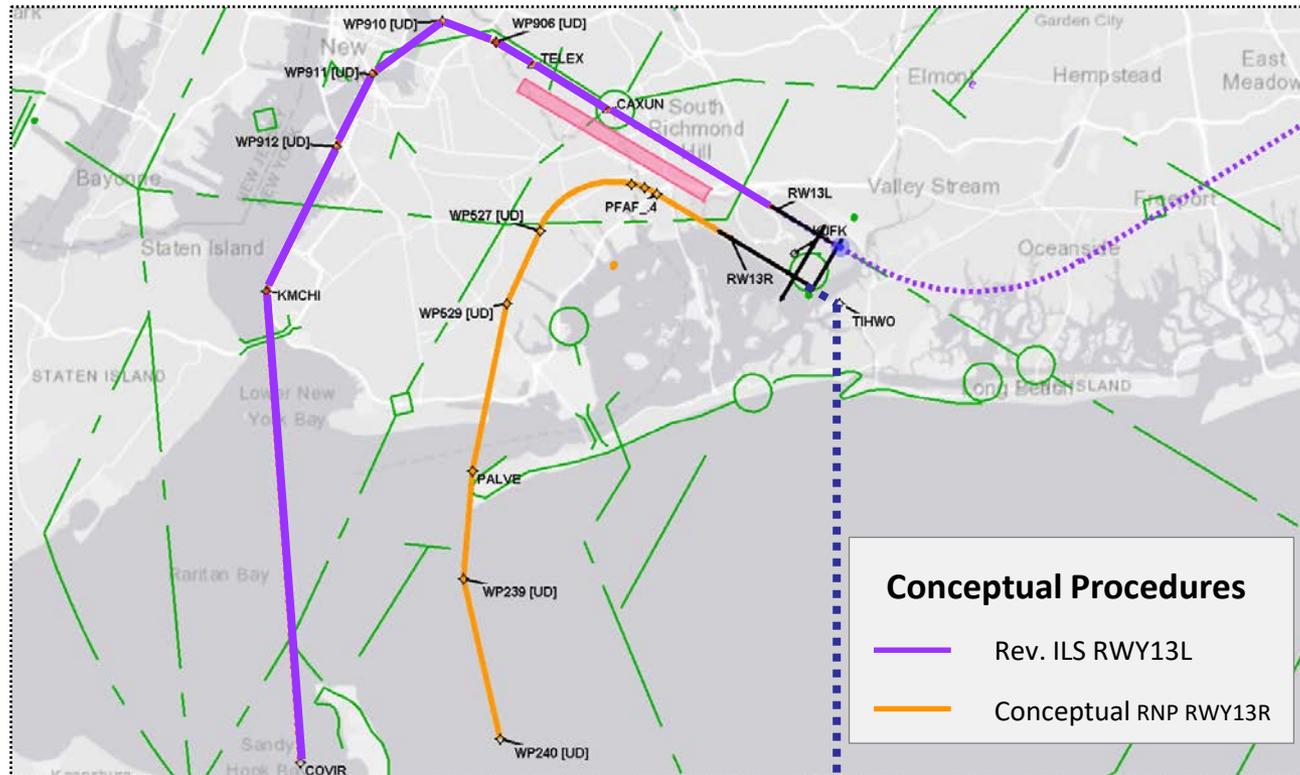


NEC Procedure Concepts in the vicinity of JFK



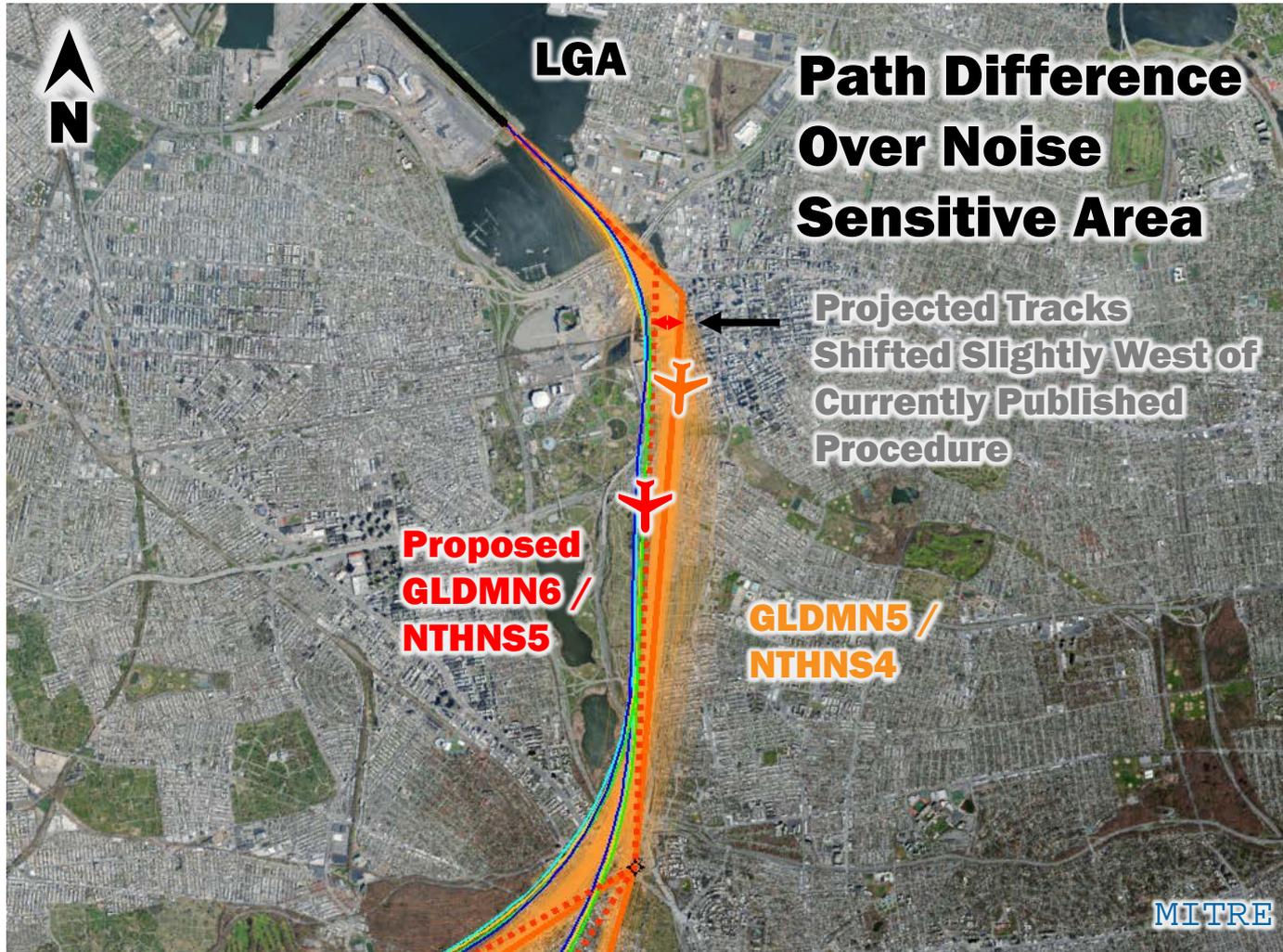
JFK13L/R Arrivals Concept

FAA committed to assessing the feasibility of EoR simultaneous operations to 13R RNP and 13L ILS at JFK



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NEC initiative: “Evaluate design alternatives to the GLDMN/NTHNS RNAV SIDs to address noise concerns”



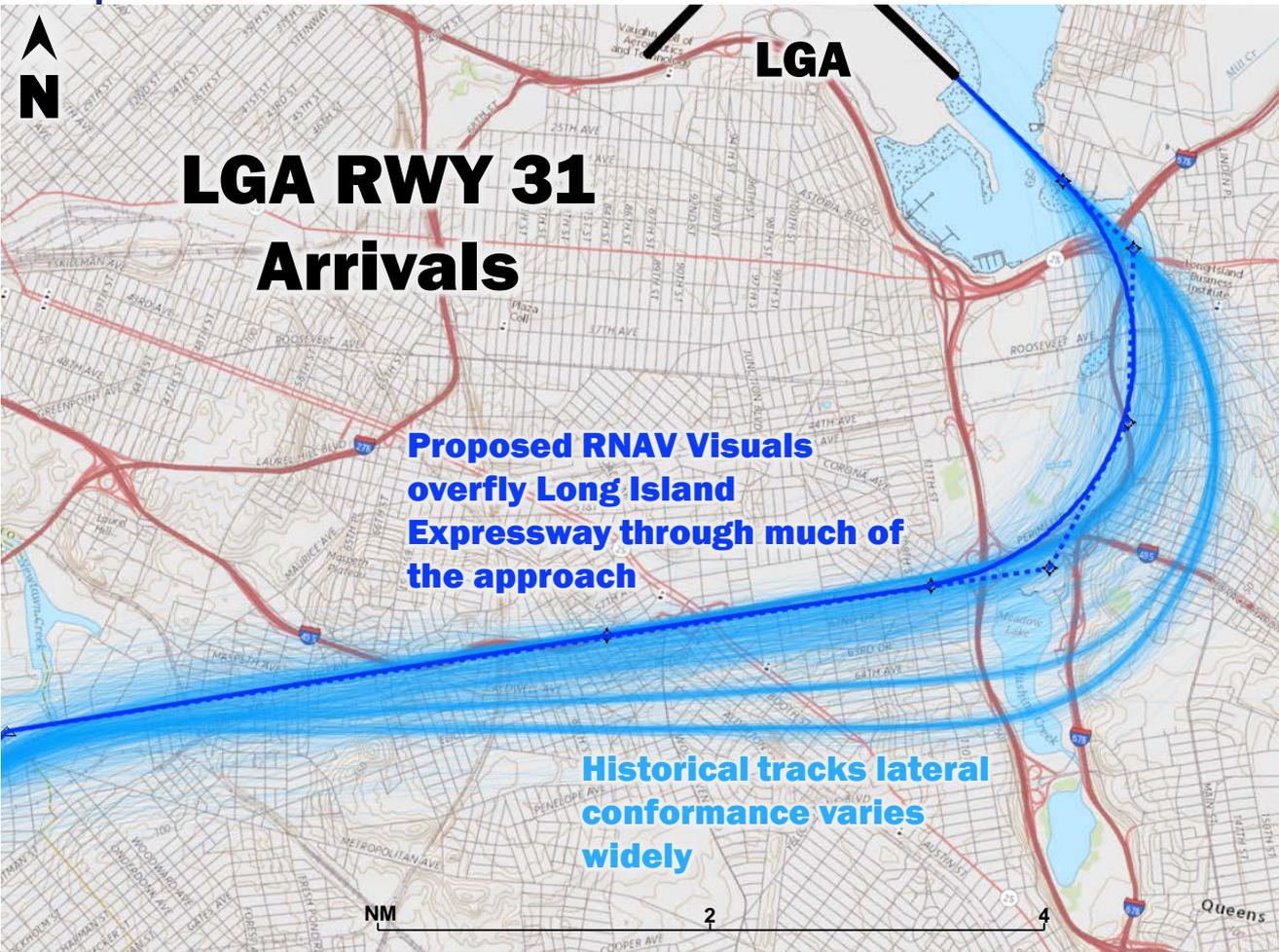
GLDMN/NTHNS Departures “Current vs Proposed”



Federal Aviation Administration

NEC initiative: “Evaluate LGA31 public RNAV approach design alternatives that approximate the LGA 31 EXPWY VIS approach and is usable for most operators”

Objective is to keep flights on a predictable path over the Long Island Expressway when on a Visual Approach



Summary & Next Steps for NEC JFK Initiatives

- **JFK RWY13L/R Arrivals Feasibility Concept**
 - NEC initially found simultaneous operations to JFK RWY13R/13L not feasible with current procedures
 - Concept alternatives indicate possible procedural options
 - Determine operational viability of alternatives and conduct preliminary environmental review of options to include community engagement
- **LGA GLDMN/NTHNS modification**
 - Finalize design
 - Conduct environmental review to include additional community involvement and noise mitigation considerations
- **LGA31 approach alternative evaluations**
 - Determine operational viability of RNAV Visual Approach proposed
 - Conduct environmental review to include additional community involvement and noise mitigation considerations



Thank you!

We will continue to keep you and your communities updated

*Please click the link below to view the latest report titled
“Priorities for Improving Operational Performance in the
Northeast Corridor (NEC) through CY2021”*

*Approved by the
NextGen Advisory Committee June 2018*

https://www.faa.gov/about/office_org/headquarters_offices/ang/nac/media/NEC_Report_Jun2018.pdf



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