JFK Airport Committee

New York Community Aviation Roundtable

Monday, September 14, 2020
7:00 - 9:30 PM
Zoom Meeting

Chairperson: Barbara E. Brown

Executive Board
Dan Mundy, 1st Vice Chair
Michele Keller, 2nd Vice Chair
Patrick Evans, Recording Secretary
Larry Hoppenhaurer, Corresponding Secretary

Facilitator: *Bill Huisman*

Draft Agenda

1.	Welcome		7:00
2.	Roll Call/Introductions		7:05
3.	Minutes	*Patrick L. Evans*	7:10
4.	PANYNJ Updates		7:15
	a. Update/Progress on the JFK Redevelopment Project and the Impact of the Pandemic		
	b. Status of Community Benefits Re Jfk Redeveloopment Project Requested by JFKAC and Presented to JFK Redevelopment Advisory Council.		
	c. "Building JFK Back Better" regarding Stakeholders Concerns		
5.	FAA Flight Procedure Presentations		7:40
	a. JFK RNAV GPS X RWY 22L – **Pub. Date 9-10-2020**		
	b. JFK RNAV Transitions for ILS or LOC RWY 22L/22R – **Pub. Date 12-31-2020**		
	Lisa Burrows, Air Traffic Control Specialist, Eastern Service Center		
6.	Current Status Report on the Airline Community based on A4A		8:00
	Bill Huisman, Executive Director, Aviation Development Council/Facilitator		
7.	JFKAC Issues and Concerns (Open discussion/Q & A)		8:05
	a. FAA Aviation Forecast and Pandemic		
	b. Status of Part 150 Study		
	c. Flight Procedures and Impact on Stakeholders		
	i. Night Flights		
	ii. Departures for 31L to minimize sound impacts		
	iii. Noise Complaints		
8.	Report from the Research and Development Subsommittee		8:40
	Dennis Graham, Submittee Co Chair		
7.	Public Comment (Time Permitting)		8:55
8.	Adjournment		9:00

John F. Kennedy Airport (JFK)
RNAV (GPS) X RWY 22L Procedure

Presented to: **JFK Roundtable**

By: **Federal Aviation Administration**

Date: **September 14, 2020**

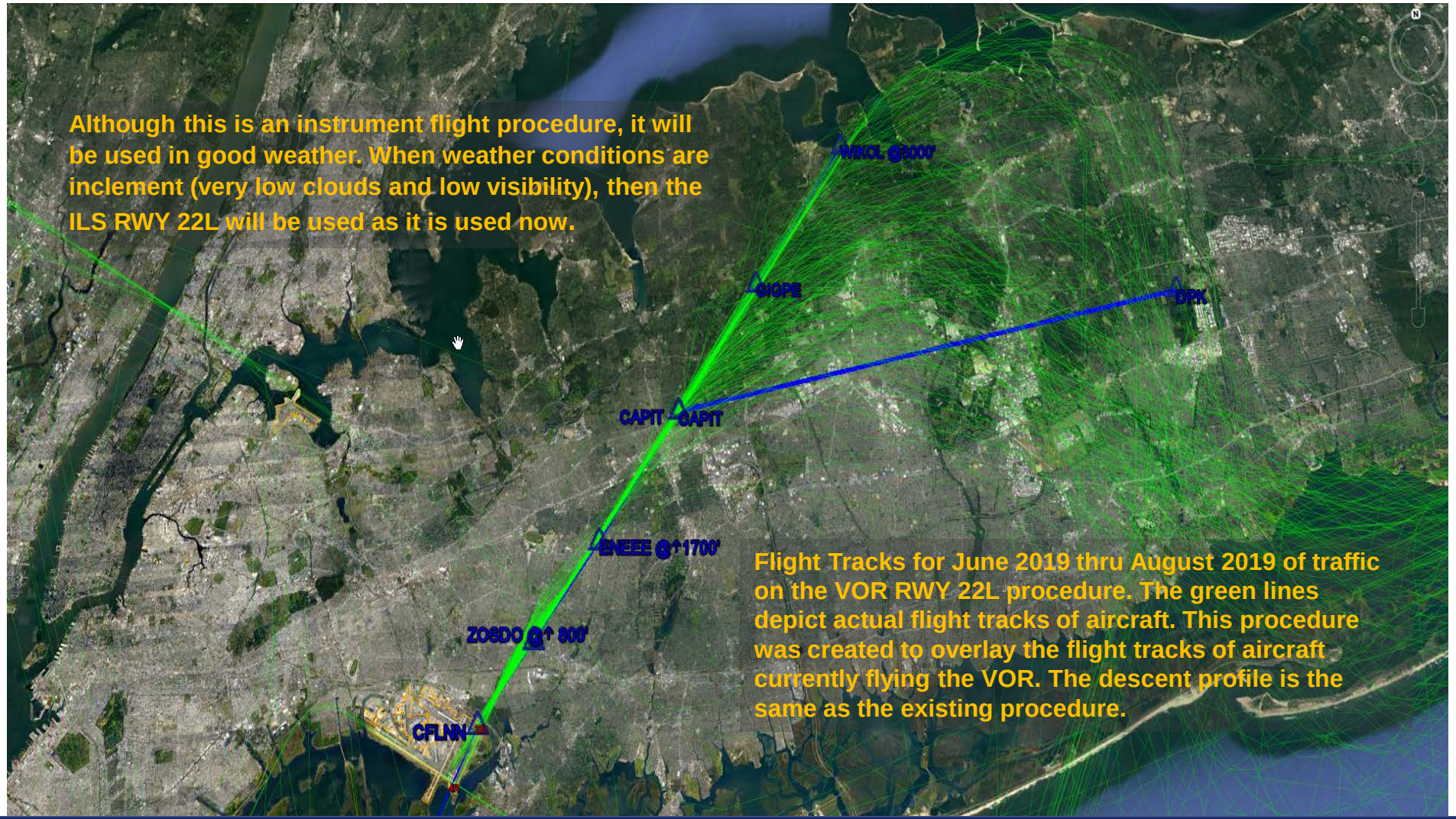
Purpose

The new Area Navigation Global Positioning System Approach Procedure to Runway 22L at John F. Kennedy Airport (JFK RNAV (GPS) X RWY 22L) is scheduled to be published on September 10, 2020.

Why was this procedure created?

- This procedure provides industry with an offset approach to RWY 22L with vertical guidance that de-conflicts LaGuardia International Airport (LGA), and JFK airspace.
- The additional vertical guidance is a safety enhancement for aircraft that currently use the VOR procedure.
- This procedure is an additional option for use when the JFK VOR is unusable.
- The procedure is an overlay of the flight tracks for the currently used VOR 22L procedure. The new RNAV (GPS) X RWY 22L procedure automates the alignment that ATC currently uses to vector aircraft for the VOR procedure.

JFK RNAV (GPS) X RWY 22L Approach



RNAV (GPS) X RWY 22L Approach

Will this increase the numbers or change the types of airplanes or altitudes over my neighborhood?

- No, it will not add any additional numbers of aircraft landing on RWY 22L. This procedure will not create any changes to the fleet mix or the numbers of aircraft on the route.
- The ILS RWY 22L will remain the preferred runway in poor weather or to meet specific air traffic operational needs.
- This procedure changes how but not where aircraft fly.
- The aircraft altitudes are not lowered, the descent profile is the same as the existing VOR procedure.

RNAV (GPS) X RWY 22L Approach Environmental Review

- The FAA has reviewed the proposed action and determined it can be categorically excluded from further environmental documentation according to FAA Order 1050.1F, "Environmental Impacts: Policies and Procedures." The implementation of this action will not involve any extraordinary circumstances in accordance with FAA Order 1050.1.

- The applicable Categorical Exclusion is referenced in FAA Order 1050.1F Paragraph 5-6.5.g. “Establishment of Global Positioning System (GPS), Flight Management System (FMS), Area Navigation/Required Navigation Performance (RNAV/RNP), or essentially similar systems that use overlay of existing flight tracks.

- The CATEX was signed on 6/29/2020.

Glossary

- **Air Traffic Control –** (ATC)
- **Area Navigation-** (RNAV) a method of instrument flight rules navigation that allows an aircraft to use virtual waypoints that are not derived from radio-frequency signals generated from ground-based equipment.
- **Flight Tracks-** Actual radar data showing where the aircraft have flown**.**
- **Global Positioning System –** (GPS) Set of satellites that provide information enabling the determination of a geographical location.
- **Instrument Flight Procedure -** Published procedure used by aircraft navigating and flying using instruments/aircraft equipment to determine location and altitude.
- **Instrument Landing System procedure** – (ILS) Procedure provides pilots with both vertical and horizontal guidance to align with the runway of intended landing
- **Offset approach procedure-** A flight procedure that guides aircraft to a runway but does not align with the runway centerline.
- **Very High Frequency (VHF) Omni-Directional Range (VOR)-** A short-range radio navigation system by aircraft to determine its position and stay on course using radio signals from ground-based radio beacons. The VOR provides lateral guidance to aircraft.
- **Waypoints –** A waypoint is a specified geographical location, generated virtually, that is used to define a route or the flight path of an aircraft. They are identified with 5-letter words.

John F. Kennedy Airport (JFK)
RNAV TRANSITIONS for ILS or LOC RWY 22L/22R

Presented to: **JFK Roundtable**

By: **Federal Aviation Administration**

Date: **September 14, 2020**

Background

- In December 2019, the FAA published new Area Navigation (RNAV) Global Positioning System (GPS) transitions to the Instrument Landing System (ILS) for Runway 22L and Runway 22R respectively at John F. Kennedy Airport (ILS or LOC RWY 22L & 22R). These transitions are used during nighttime hours, when operationally feasible.

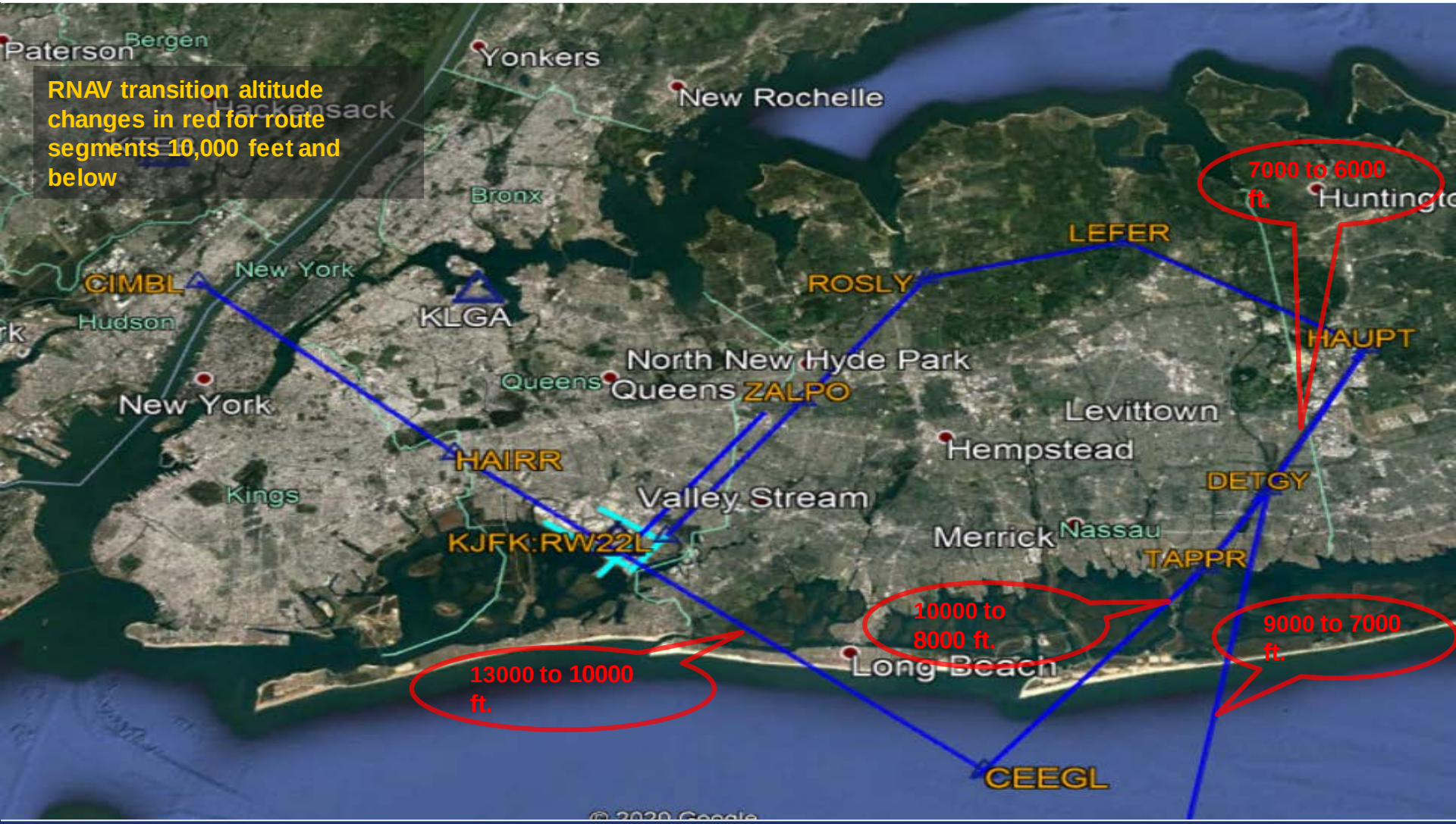
- Traditionally, ATC assigns each aircraft descent altitudes and headings (vectors) in a step-down process that aligns them to intercept the ILS navigational signals. The RNAV transitions keep aircraft higher longer, reducing noise and reducing ATC workload.

Purpose

- The FAA is amending RNAV transitions on the ILS or LOC RWY 22L/22R. These amendments are scheduled to be published on December 31, 2020.

- The original RNAV transitions proved difficult for aircraft to fly because of descent rate. The original design required aircraft to descend rapidly and slow down simultaneously, which was not easy. Airlines requested we amend the procedure so it is easier to fly and compliments the aerodynamics of more types of aircraft.

Amendments to the RNAV Transitions



Discussion

- The amendment makes the RNAV transition easier for more aircraft to fly, while remaining higher than the original ILS altitudes and traditional ATC operation.
- The altitude amendments are in the earliest segments of the transitions (from HAIRR to HAUPT).
- The RNAV transitions reduce airframe noise by the delayed deployment of flaps and landing gear until established on final approach.
- The amendment will not add any additional numbers of aircraft using the ILS to land on RWY 22L/22R. This procedure will not create any changes to the fleet mix or the numbers of aircraft on the route.
- The RNAV transitions will still be used after midnight during low arrival/departure volume and minimal traffic complexity.

Environmental Review

- The FAA conducted an environmental review of the proposed JFK RNAV Transitions for the RWY 22L/RWY 22R in compliance with the National Environmental Policy Act and its implementing regulations. The review determined that the implementation of this action will not result in any extraordinary circumstances in accordance with FAA Order 1050.1F.

- A categorical exclusion (CATEX) has been prepared to implement the amended RNAV transitions to the JFK ILS RWY 22L/R approach procedure based on FAA Order 1050.1F, Paragraph 5-6.5i. Establishment of new or revised air traffic control procedures conducted at 3,000 feet or more above ground level (AGL); procedures conducted below 3,000 feet AGL that do not cause traffic to be routinely routed over noise sensitive areas; modifications to currently approved procedures conducted below 3,000 feet AGL that do not significantly increase noise over noise sensitive areas; and increases in minimum altitudes and landing minima. For modifications to air traffic procedures at or above 3,000 feet AGL, the Noise Screening Tool (NST) or other FAA-approved environmental screening methodology should be applied. (ATO, AVS)

- The CATEX for the amended procedure was signed on 4/13/2020.

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- **Transition –** The description of the part of flight that takes aircraft from flying along a route to the beginning of a flight procedure.
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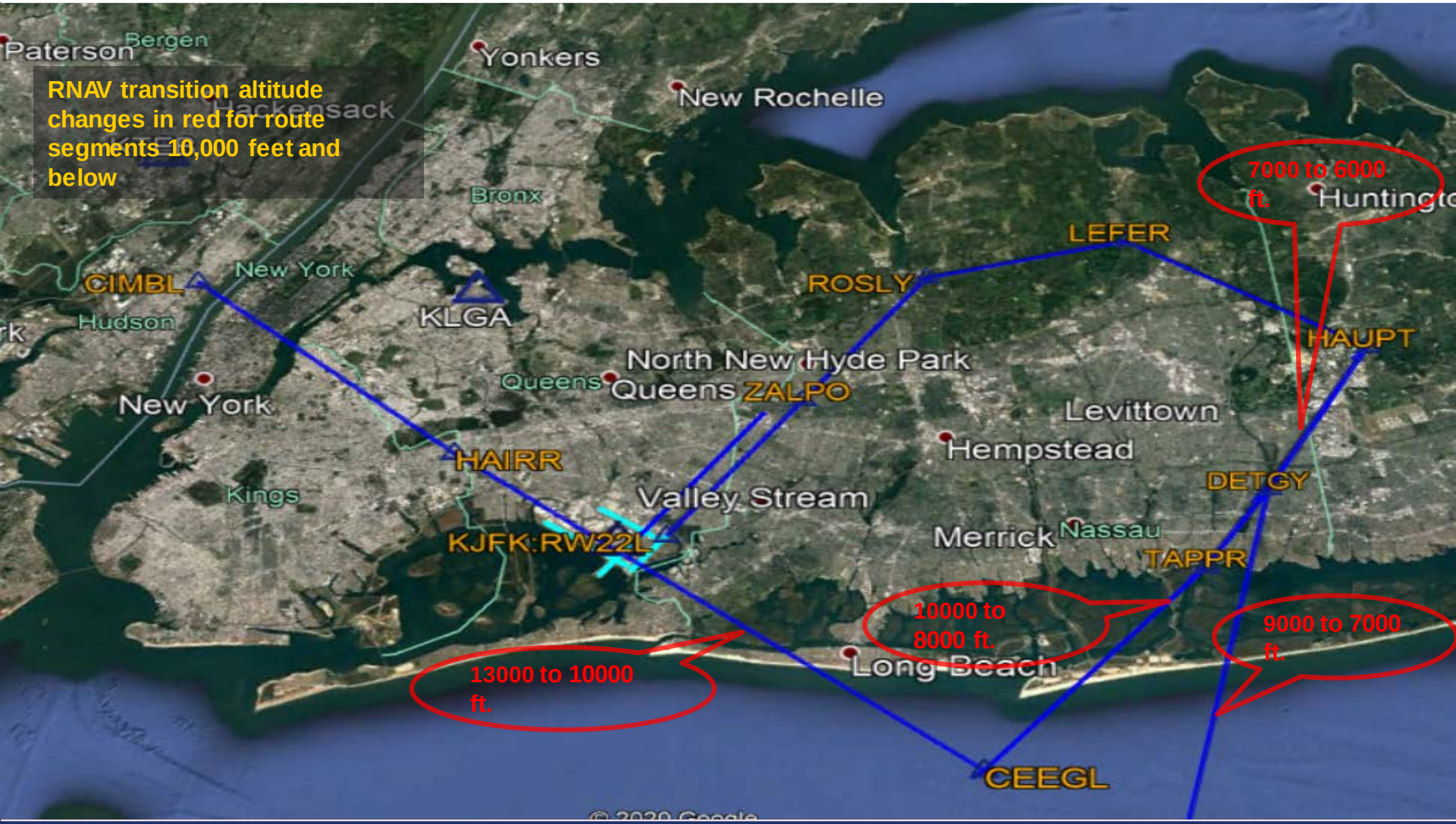

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NEW YORK TRACON

JFK Operations

Presented to: JFK New York Community Roundtable

By: Jeff Brooks

Date: October 1, 2018

Federal Aviation Administration

JFK Standard Instrument Departures (SIDs)

SIDs are published flight procedures followed by IFR aircraft immediately upon takeoff from an airport

- Standardize procedures
- Simplify coordination between ATC/pilots
- Reduce pilot workload
- Enhance safety

JFK Standard Instrument Departures (SIDs)

Currently in use:

- KENNEDY FIVE Departure
- SKORR FOUR Departure
- DEEZZ FIVE Departure

No longer used/Scheduled for removal

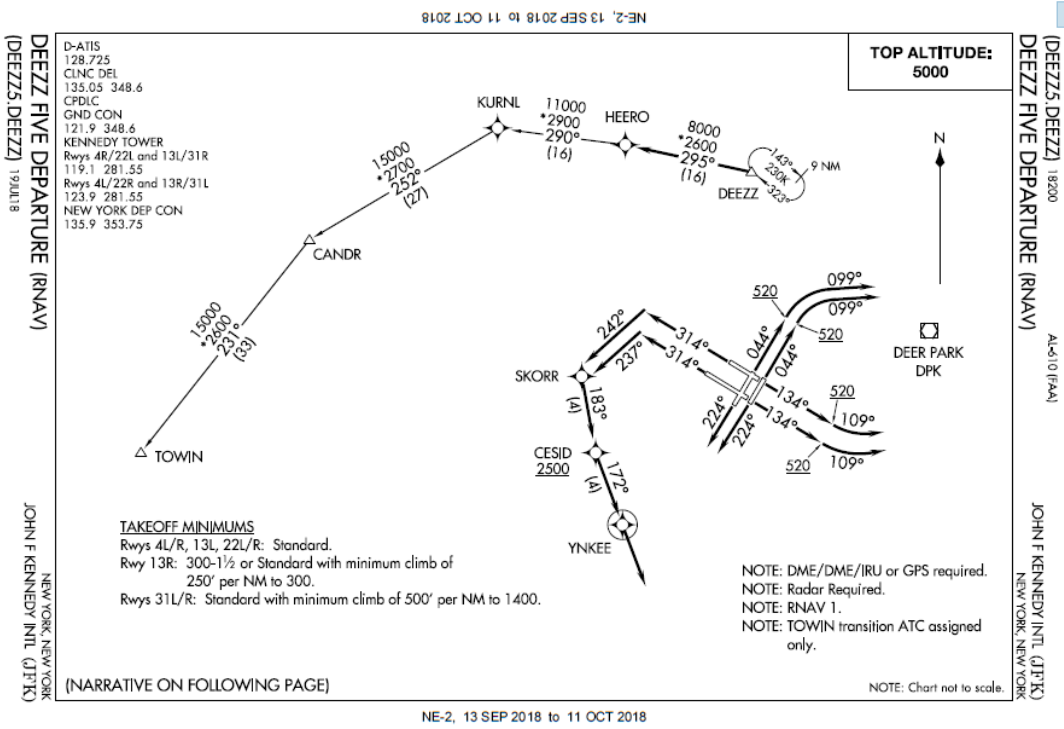
- BETTE SIX Departure
- GREKI SIX Departure
- HAPIE SIX Departure
- MERIT SIX Departure

Removal- BETTE/ GREKI/ HAPIE/ MERIT

- Removes redundant procedures/reduces costs
- Runway 31 procedures utilize Canarsie VOR (CRI).
- CRI has many unusable radials due to growth of obstructions over the years.
- CRI scheduled for decommissioning in 2021

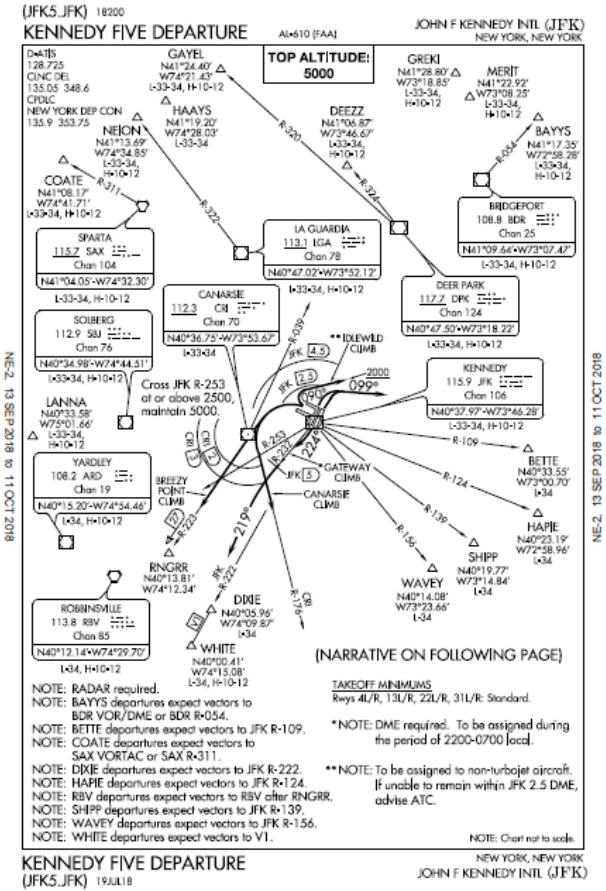
DEEZZ DEPARTURE

- Used for all departure runways
- Benefits of Next Gen technology
- RNAV (GPS) Procedure that connects to waypoint for westbound traffic
- Used to fix balance traffic volume



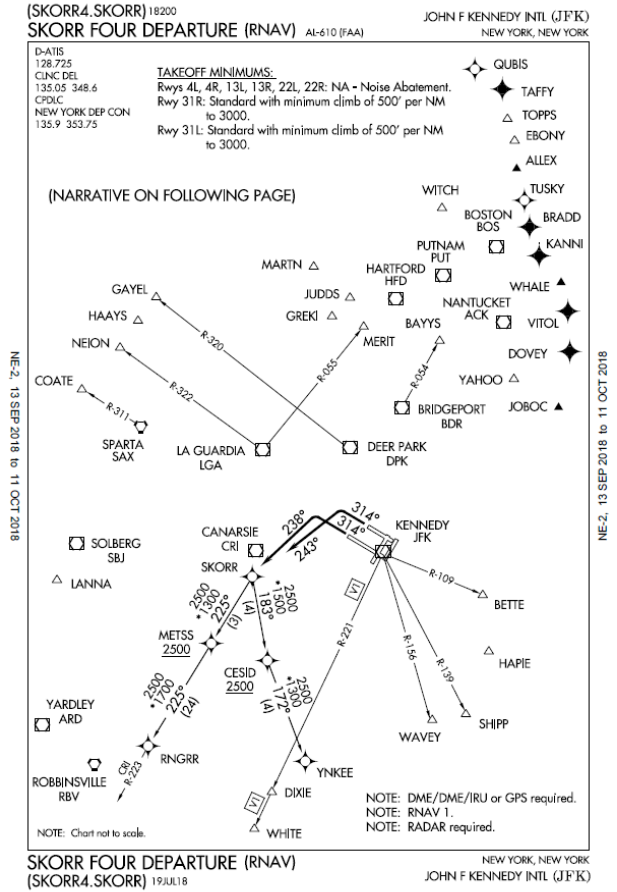
KENNEDY DEPARTURE

Used as primary SID for Runways 04L/R, 13L/R, 22L/R



SKORR DEPARTURE

- Preferred Next Gen departure procedure off Runway 31L/R
- Provides repeatable flight track
- Eliminates issue with unusable CRI radials



SKORR 3 vs SKORR 4

Increased climb gradient to get aircraft higher sooner thereby reducing noise impact to the community.

In order to handle air traffic demands, all runway configurations are used in accordance with runway selection criteria.

Runway selection is based on several factors which include:

- **Runway availability**
- **Wind/Weather**
- **Operational efficiency**
- **Noise considerations**

JFK ILS 22L/R Approaches

When Tower advises Runway 22L/R in use for landing *and*

- Weather requires use of ILS *and/or*
- Demand requires use of 2 departure runways
    - Land 22L/R- Depart 22R/31L

JFK ILS 31L/R Approaches

When Tower advises Runway 31L/R in use for landing

- Typically wind driven
- Limits departures to 1 runway

Federal Aviation Administration

JFK Airport Committee Meeting – September 14, 2020

FAA Aerospace Forecast – Fiscal Year 2020-2040

https://www.faa.gov/data_research/aviation/aerospace_forecasts/

Roundtable Question posed about the Runway 31L Procedure Meeting with Assemblywoman Amato in October 2017

Assemblywoman Amato coordinated a Meeting with the FAA, PANYNJ and her constituents from Broad Channel. The purpose of the meeting was to request a restriction of JFK Runway 31L departures from overflying Broad Channel, Queens. They discussed whether adding an Area Navigation (RNAV GPS) waypoint to JFK Runway 31L departure procedures west of Riis Park would provide noise benefits to the Broad Channel community.

The primary departure procedure for JFK runway 31L in 2017 was the SKORR THREE**.** This Departure Procedure already has a waypoint in this vicinity called *CESID*. Over 90% of all JFK runway 31L departures use this procedure. Air Traffic Controllers may elect to leave aircraft on the departure procedure until passing CESID, or they may turn aircraft prior, depending upon operational necessity. Less than 10% of the departures turn early enough that they overfly Broad Channel. The remaining departures turn south of the community over the ocean. Efficiency and safety mandate that Air Traffic Controllers retain this flexibility in the operation. Consequently, ***there is no benefit*** to the community to add additional RNAV (GPS) fixes in this area.

Aircraft on the SKORR THREE departure procedure climbed at a rate of 500 ft. per nautical mile until they reach 513 feet, then climbed at a rate of 200 feet per nautical mile until reaching 5000 feet. Following the meeting, N90 amended the procedure so the climb gradient was increased to 500 feet per nautical mile until reaching 3000 feet, then 200 feet per nautical mile until reaching 5000. This increased climb gradient ensures any aircraft that must be turned early over Broad Channel would be at a higher altitude. The SKORR FOUR departure was published on July 19, 2018 and briefed to the JFK Roundtable on 10-1-2018 **(**see attached).

There is a proposed procedure amendment called the TIGHTEN SKORR that is one of eight noise abatement measures recommended for inclusion in the Part 150 Noise Compatibility Program (NCP). This proposed procedure amendment directs traffic towards Riis Park, reducing overflights of Howard Beach, Old Howard Beach & Hamilton Beach. Contact the PANYNJ regarding status of the Part 150.