

Fort Lauderdale-Hollywood International Airport



# Monthly Operations & RNAV Use Report



#### **BROWARD COUNTY AVIATION DEPARTMENT** MONTHLY RNAV REPORT

November 2022

This RNAV Report provides a monthly overview of aircraft arriving and departing from Fort Lauderdale-Hollywood International Airport (FLL). The purpose of this report is to determine the number of aircraft that utilize Area Navigation (RNAV) procedures using the FLL Airport Noise and Operations Monitoring System (ANOMS).

### OVERVIEW OF NEXTGEN 🐼

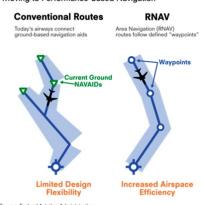


The Next Generation Air Transportation System (NextGen) is the FAA-led modernization of the United States National Airspace System (NAS). Goals include using new technologies and procedures to increase the safety, efficiency, and predictability of the NAS, as well as reducing the overall environmental impact of aviation. The FAA implemented the South-Central Florida Metroplex Project on August 12, 2021. This project is aimed at improving the safety and efficiency of airspace in South-Central Florida by optimizing arrival and departure procedures at 21 regional airports.

#### RNAV 🦟

RNAV is a method of navigation that consists of routes formed from a series of waypoints (geographical points on the ground) that may have required altitude or performance characteristics. Aircraft said to be navigating on RNAV procedures must fly over or near these waypoints (within a given tolerance), attaining the given altitude or performance settings set by the FAA and air traffic control (ATC). The potential advantages of RNAV routes include time and fuel savings, reduced dependency on radar vectoring, reduced ATC transmissions, and more efficient use of airspace.

#### **NEXT GEN Components: RNAV/RNP** Moving to Performance-Based Navigation



#### Operations and Runway Use >



This section provides a tabular and graphical summary of monthly operations and runway use at FLL. Monthly operations are broken down by airframe type, arrivals, and departures, time of day (night defined as 10:30 pm to 6:00 am) and runway use is separated graphically by east and west flow.

#### RNAV PROCEDURES FOR FLL



This report provides a tabular and graphical summary of overall RNAV procedures for FLL. For aircraft arriving to or departing from FLL, there are 14 published RNAV procedures in total. These procedures each consist of waypoints and have multiple routes. This report will allow residents near the airport to understand, at a glance, the usage of RNAV procedures that most affect them.

Standard Instrument Departures (SIDs)

AGERS, BNICE, FEALX, GLADZ, FRSBE, HROCK, LIFRR, MAYNR, REGAE, SNAPR

Standard Arrival Routes (STARs)

BHHIA, CUUDA, OLAHS, TEEKY

### FLIGHT TRACK DENSITY PLOTS 5



Flight track density plots show the relative use of the airspace surrounding FLL. Color ranges are assigned based on the relative density of traffic (from low to high) for several categories:

- Jet Arrivals
- **Jet Departures**
- Jet Departures Close Up
- Non-Jet Operations

#### **RESOURCES**



- https://www.faa.gov/air\_traffic/community\_engagement/florida/
- http://metroplexenvironmental.com/fl metroplex/fl introduction.html
- http://www.metroplexenvironmental.com/fl metroplex/fl docs.html
- https://www.faa.gov/nextgen/this is nextgen/

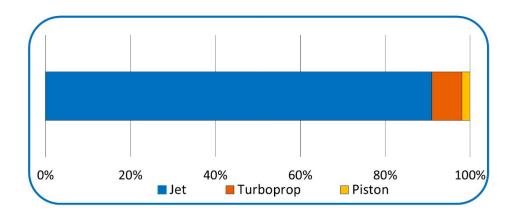




### Monthly Operations and Runway Use

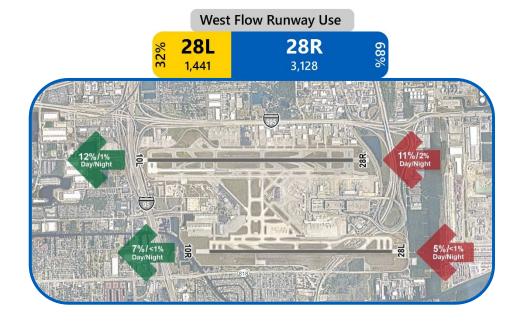
November 2022

Туре	Arrivals	Departures	Total
Jet	10,694	10,671	21,365
Turboprop	841	828	1,669
Piston	229	225	454
Total	11,764	11,724	23,488



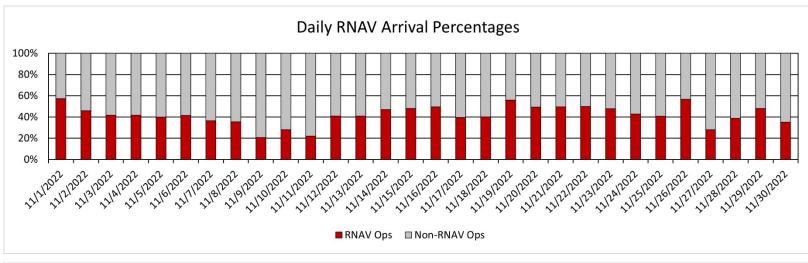
### East Flow Runway Use 10L 10R 12,283 6,648

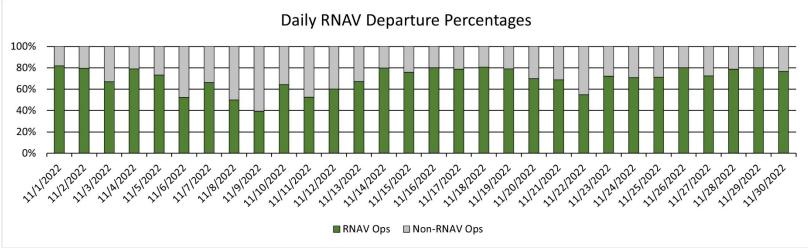






### Arrival and Departure Daily RNAV Percentages





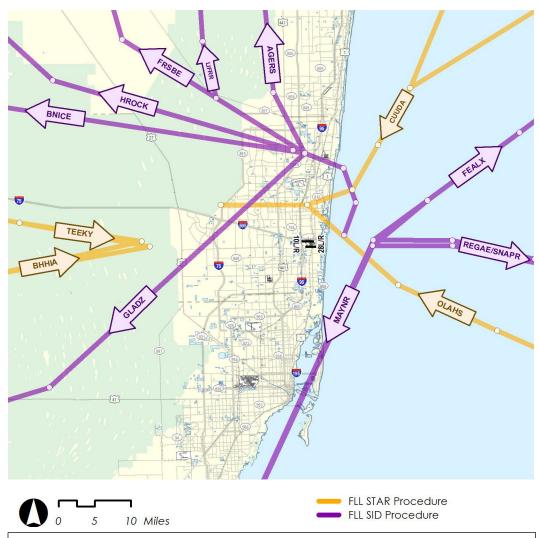




### FLL RNAV East Flow Operations



Monthly RNAV Use Summary



Note: The Arrivals and Departures tables on the right represent the total number of flights during the month flying the full procedure for each procedure listed. Percentages represent any jet flying on an RNAV within Broward County. Flights that are vectored early are not included in this list.

#### STARS | Arrivals # of Operations **Procedure Name** 26 **BHHIA CUUDA** 652 **OLAHS** 183 47% TEEKY 2062

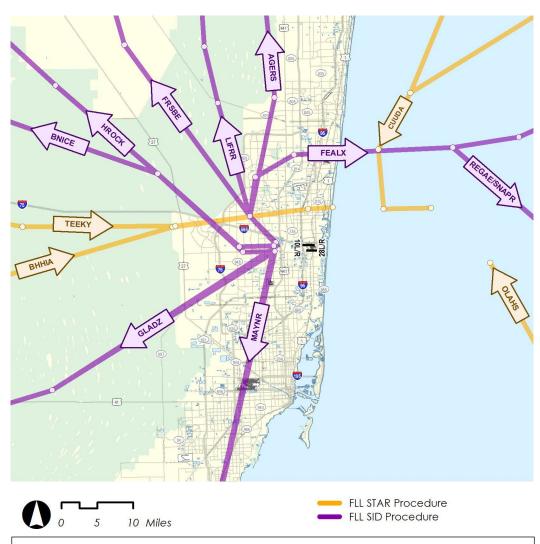
### SIDS | Departures

<u>Procedure Name</u>	# of Operations
AGERS	79
BNICE	380
FEELX	1523
FRSBE	392
GLADZ	93
HROCK	443
LIFRR	216
MAYNR	42
REGAE	5 720/
SNAPR	1014



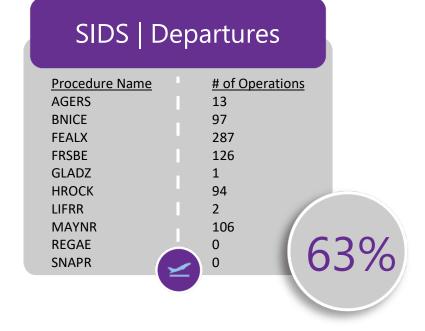
### FLL RNAV West Flow Operations =

Monthly RNAV Use Summary



Note: The Arrivals and Departures tables on the right represent the total number of flights during the month flying the full procedure for each procedure listed. Percentages represent any jet flying on an RNAV within Broward County. Flights that are vectored early are not included in this list.

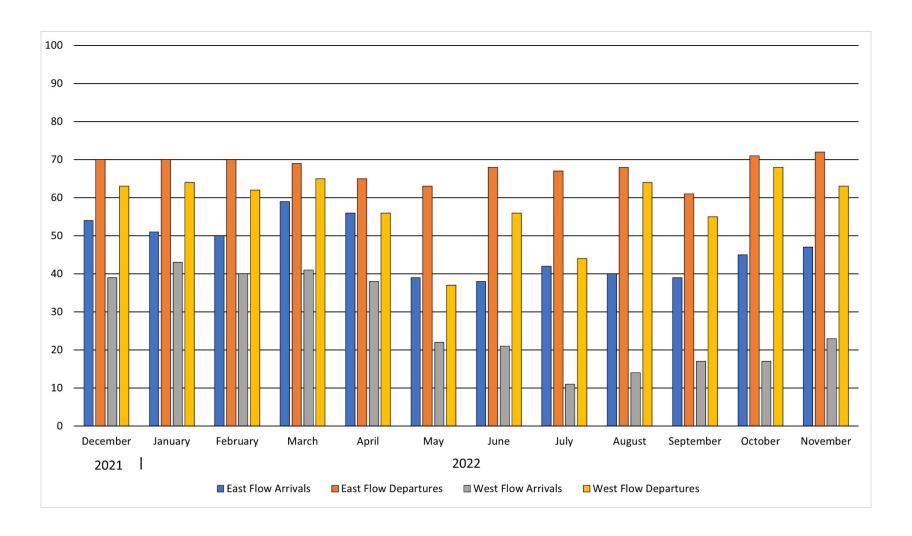






### Monthly East and West Flow RNAV Percentages

November 2022

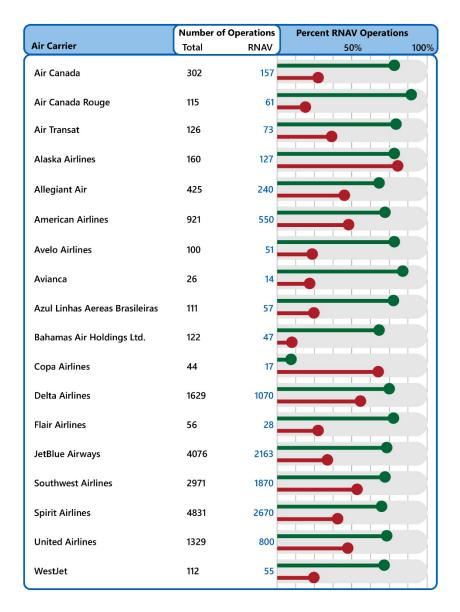


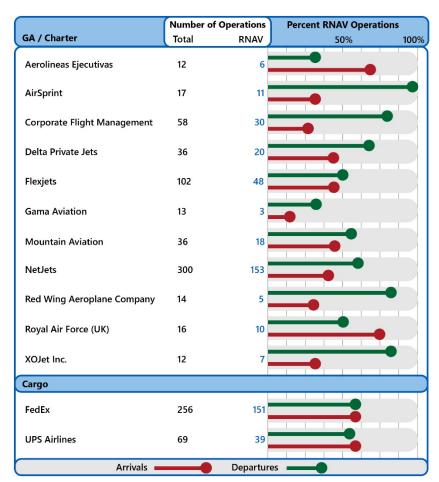




### Monthly RNAV Use by Operator

November 2022



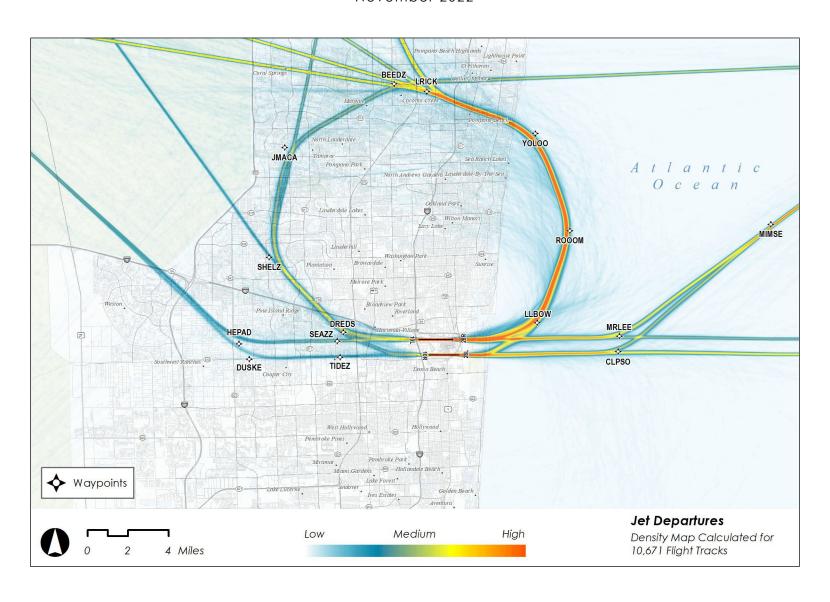




### Relative Airspace Density



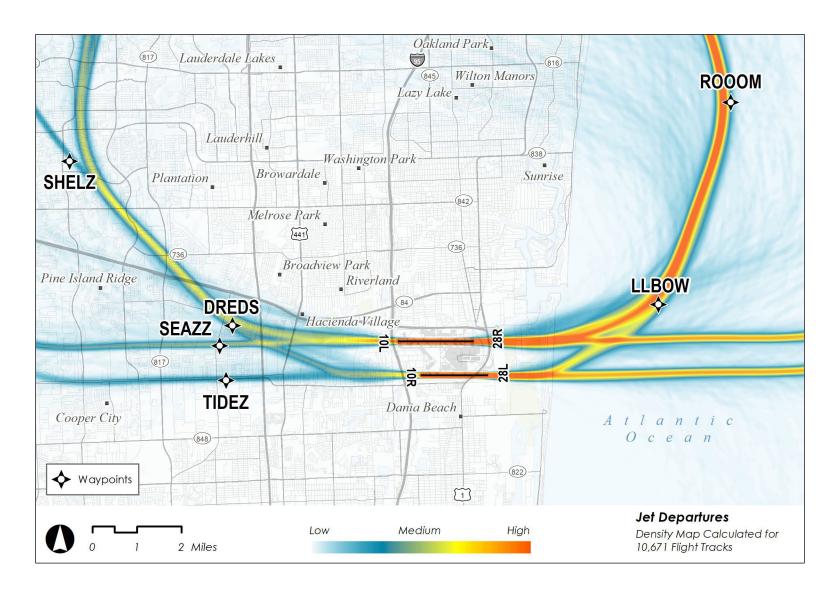
For All Jet Departures November 2022





### Relative Airspace Density

For All Jet Departures November 2022

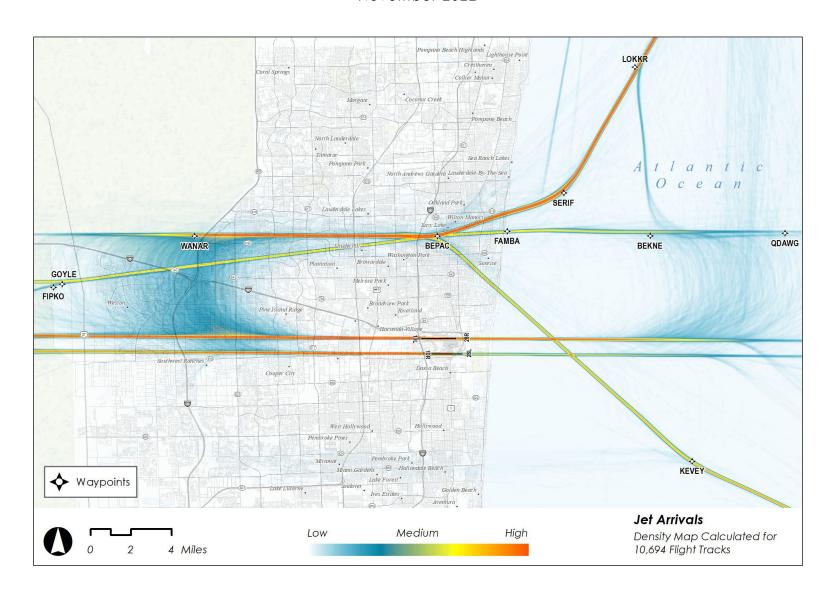




### Relative Airspace Density 🍼



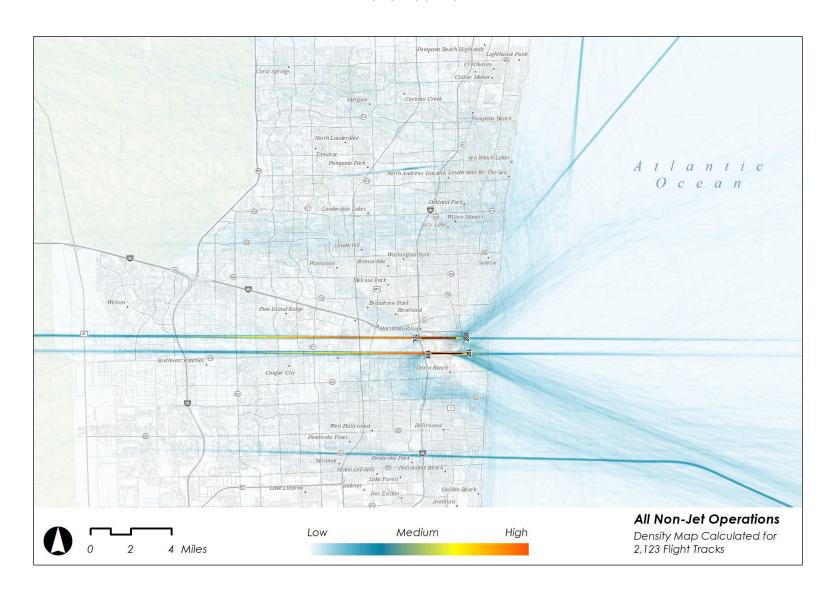
For All Jet Arrivals November 2022



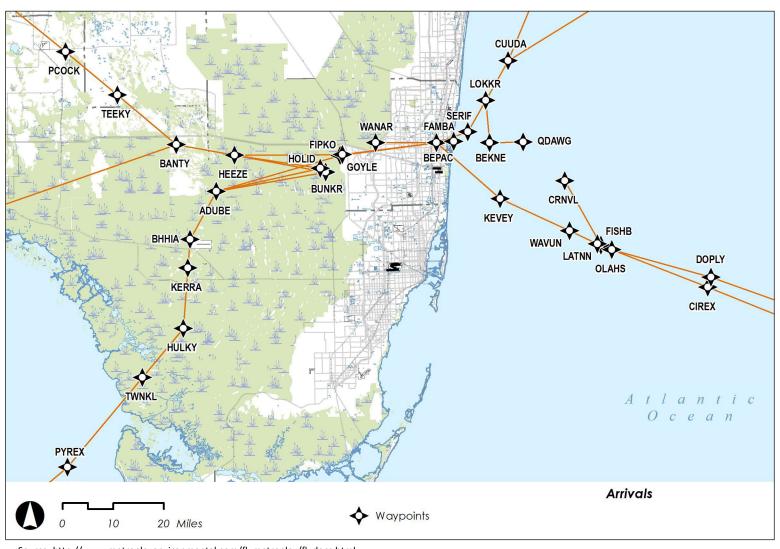


Relative Airspace Density

For All Non-Jet Arrival and Departures
November 2022

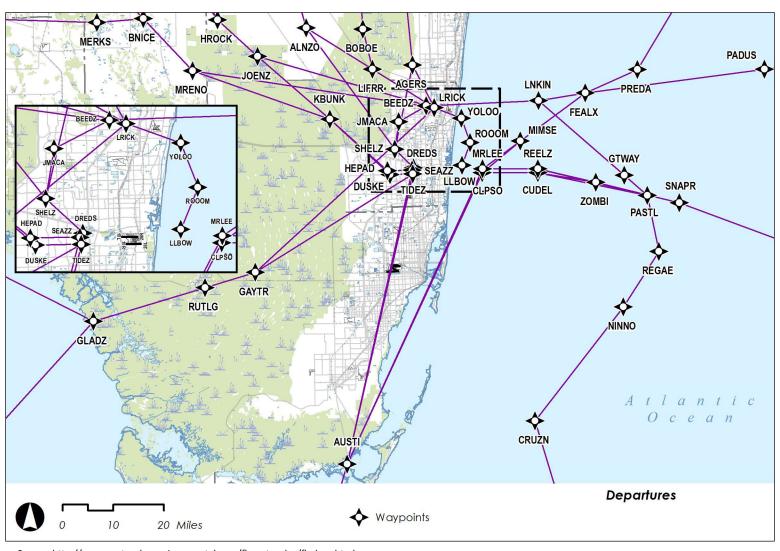


# South-Central Florida Metroplex FLL Arrivals (STARS)



Source: http://www.metroplexenvironmental.com/fl\_metroplex/fl\_docs.html

# South-Central Florida Metroplex FLL Departures (SID)



Source: http://www.metroplexenvironmental.com/fl\_metroplex/fl\_docs.html

# South-Central Florida Metroplex Waypoints by Procedure

#### STARS | Arrivals

BHHIA TWO: 10L: [PYREX+|TWNKL+]-HULKY-KERRA-BHHIA-ADUBE-HOLID BHHIA TWO: 10R: [PYREX+|TWNKL+]-HULKY-KERRA-BHHIA-ADUBE-BUNKR

BHHIA TWO: 28L/R: [PYREX+|TWNKL+]-HULKY-KERRA-BHHIA-ADUBE-FIPKO-BEPAC-FAMBA

CUUDA TWO: 10L/R: [MACKL+|PLAID+]-CUUDA-LOKKR-SERIF-BEPAC-WANAR CUUDA TWO: 28L/R: [MACKL+|PLAID+]-CUUDA-LOKKR-BEKNE-QDAWG

OLAHS TWO: 10L/R: [DOPLY+|CIREX+]-OLAHS-LATNN-WAVUN-KEVEY-BEPAC-WANAR

OLAHS TWO: 28L/R: [DOPLY+|CIREX+]-OLAHS-FISHB-CRNVL

TEEKY TWO: 10L: [PCOCK+|MARCI+]-TEEKY-BANTY-HEEZE-HOLID TEEKY TWO: 10R: [PCOCK+|MARCI+]-TEEKY-BANTY-HEEZE-BUNKR

TEEKY TWO: 28L/R: [PCOCK+|MARCI+]-TEEKY-BANTY-HEEZE-GOYLE-BEPAC-FAMBA

#### SIDS | Departures

AGERS ONE: 10L/R: LLBOW-ROOOM-YOLOO-LRICK-AGERS-[HURGI+]-PERTS-AARPS-MMART-ENWOD

SEAZY-[DUCEN+]

AGERS ONE: 28L/R: DREDS-SHELZ-AGERS-[HURGI+]-PERTS-AARPS-MMART-ENWOD-SEAZY-[DUCEN+]

BNICE ONE: 10L/R: LLBOW-ROOOM-YOLOO-LRICK-MRENO-BNICE-[COREA+|DOLIE+|MERKS+]

BNICE ONE: 28L: TIDEZ-DUSKE-KBUNK-MRENO-BNICE-[COREA+|DOLIE+|MERKS+]
BNICE ONE: 28R: SEAZZ-HEPAD-KBUNK-MRENO-BNICE-[COREA+|DOLIE+|MERKS+]

FEALX TWO: 10L: MRLEE-MIMSE- FEALX-[PADUS+|PREDA+|WOLFO+]
FEALX TWO: 10R: CLPSO-MIMSE-FEALX-[PADUS+|PREDA+|WOLFO+]

FEALX TWO: 28L/R: DREDS-SHELZ-JMACA-BEEDZ-LNKIN-FEALX-[PADUS+|PREDA+|WOLFO+]

GLADZ TWO: 10L/R: LLBOW-ROOOM-YOLOO-LRICK-GAYTR-RUTLG-GLADZ-[WIGNA+|MARCI+]

**GLADZ TWO:** 28L: TIDEZ-GAYTR-RUTLG-GLADZ-[WIGNA+|MARCI+] **GLADZ TWO:** 28R: SEAZZ-GAYTR-RUTLG-GLADZ-[WIGNA+|MARCI+]

FRSBE ONE: 10L/R: LLBOW-ROOOM-YOLOO-LRICK-ALNZO-FRSBE-[WAPOM+|STYMY+]

FRSBE ONE: 28L/R: DREDS-SHELZ-ALNZO-FRSBE-[WAPOM+|STYMY+]

**HROCK ONE:** 10L/R: LLBOW-ROOOM-YOLOO-LRICK-JOENZ-HROCK-[KPASA+|SMELZ+]

HROCK ONE: 28L: TIDEZ-DUSKE-KBUNK-JOENZ-HROCK-[KPASA+|SMELZ+]
HROCK ONE: 28R: SEAZZ-HEPAD-KBUNK-JOENZ-HROCK-[KPASA+|SMELZ+]

LIFRR ONE: 10L/R: LLBOW-ROOOM-YOLOO-LRICK-LIFRR-BOBOE-DURRY-CLEFF-[WIXED+] BAIRN+]

LIFRR ONE: 28L/R: DREDS-SHELZ-LIFRR-BOBOE-DURRY-CLEFF-[WIXED+|BAIRN+]

MAYNR ONE: 10L: MRLEE-AUSTI-MAYNR-MCLAW-[FUNDI+|JABOX+]
MAYNR ONE: 10R: CLPSO-AUSTI-MAYNR-MCLAW-[FUNDI+|JABOX+]
MAYNR ONE: 28L: TIDEZ-AUSTI-MAYNR-MCLAW-[FUNDI+|JABOX+]
MAYNR ONE: 28R: SEAZZ-AUSTI-MAYNR-MCLAW-[FUNDI+|JABOX+]

REGAE TWO: 10L: MRLEE-REELZ-PASTL-REGAE-NINNO-CRUZN-GLAMS-LRODD-[URSUS+]
REGAE TWO: 10R: CLPSO-CUDEL-PASTL-REGAE-NINNO-CRUZN-GLAMS-LRODD-[URSUS+]
REGAE TWO: 28L/R: DREDS-SHELZ-JMACA-BEEDZ-LNKIN-GTWAY-PASTL-REGAE-NINNO-CRUZN-

GLAMS-LRODD-[URSUS+]

SNAPR TWO: 10L: MRLEE-REELZ-ZOMBI-SNAPR-KRAFT-HEYDR-[RAJAY+|SUMAC+] SNAPR TWO: 10R: CLPSO-CUDEL-ZOMBI-SNAPR-KRAFT-HEYDR-[RAJAY+|SUMAC+] SNAPR TWO: 28L/R: DREDS-SHELZ-JMACA-BEEDZ-LNKIN-GTWAY-SNAPR-KRAFT-HEYDR-

[RAJAY+|SUMAC+]

To view the active published FAA full procedure plates, please follow the link here:

https://www.faa.gov/air traffic/flight info/aeronav/procedures/application/?event=procedure.results&tab=charts&nasrId=FLL#searchResultsTop

#### **Noise Information**

#### Ways to File an Aircraft Noise Comment

To file a formal aircraft noise comment, choose one of the following options:

Online: Complete the Noise Comment Form then select the Submit button.

By Phone: Call the Noise Comment Hotline at 954-359-2366

Download the new Noise Comment Web App and use this platform to file a complaint.

#### Using the New Noise Comment Web App to file a noise complaint.

From a mobile phone, click this link Noise Comment Web App and download to an iPhone or Android phone.

The link is **only** accessible from a mobile phone. It is **not** available in the iOS or Google Play App stores. It is **only** available from the webpage.

#### **Noise Comment Web App Instructions:**

Save the app to your home screen using the link above.

From an iPhone: Tap the box with the vertical arrow and select add to the home screen.

From an Android phone: Tap the 3 Menu dots and select add to the homepage.

Go to your home screen and open the new noise comment web app.

Enter your comment information following Steps 1-5 and click Submit.

Note: After using the noise comment web app the first time, user information is saved and does not need to be re-entered. You can submit additional comments by tapping "Submit Comment."

If you have questions or comments about the app, please contact the Aviation Department at 954-359-6181

Prepared by Harris Miller Miller & Hanson Inc. on behalf of Broward County Aviation Department.