

Fort Lauderdale-Hollywood International Airport



Monthly Operations & RNAV Use Report

March 2024



BROWARD COUNTY AVIATION DEPARTMENT MONTHLY RNAV REPORT March 2024

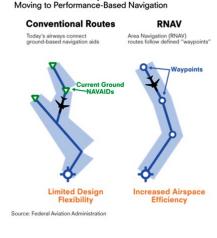
This *RNAV Report* provides a monthly overview of aircraft arriving and departing from Fort Lauderdale-Hollywood International Airport (FLL). The purpose of this report is to determine the number of aircraft that utilize Area Navigation (RNAV) procedures using the FLL Airport Noise and Operations Monitoring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

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

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

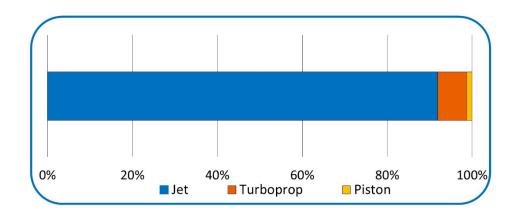
RESOURCES 🖸

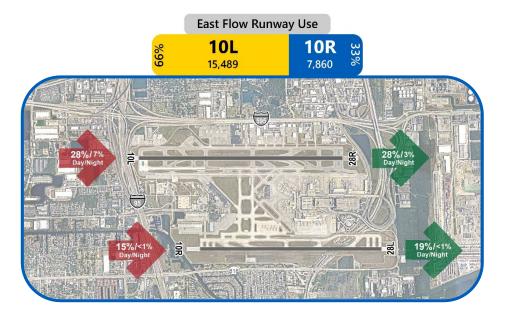
- https://www.faa.gov/air_traffic/community_engagement/florida/
- <u>http://metroplexenvironmental.com/fl_metroplex/fl_introduction.html</u>
- <u>http://www.metroplexenvironmental.com/fl_metroplex/fl_docs.html</u>
- https://www.faa.gov/nextgen/this-is-nextgen/



Monthly Operations and Runway Use March 2024

Туре	Arrivals	Departures	Total
Jet	13,800	13,792	27,592
Turboprop	1,041	1,014	2,055
Piston	191	189	280
Total	15,032	14,995	30,027

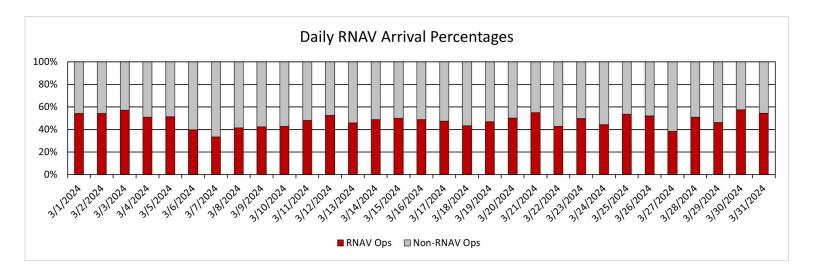


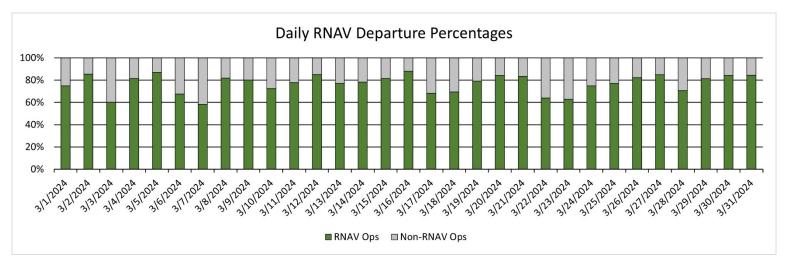






Arrival and Departure Daily RNAV Percentages March 2024

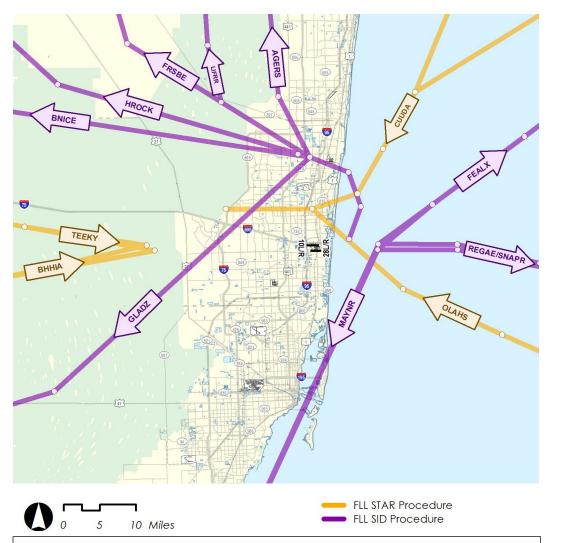






FLL RNAV East Flow Operations 놀

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	
<u>Procedure Name</u> BHHIA	<u># of Operatio</u> 17	ns
CUUDA	1137	
OLAHS	271	
ТЕЕКҮ	2532	50%
F		

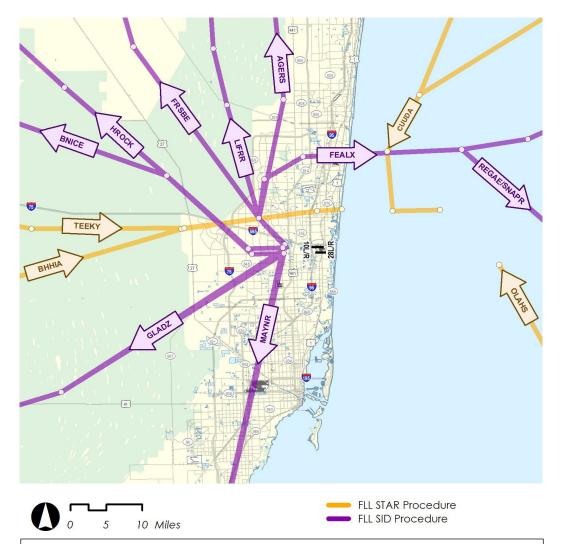
SIDS | Departures

Procedure Name		<u># of Operations</u>	
AGERS		70	
BNICE		605	
FEALX		2177	
FRSBE		544	
GLADZ		105	
HROCK		754	
LIFRR		242	
MAYNR		131	
REGAE		58	
SNAPR		1222	9%
	\leq	*	



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.

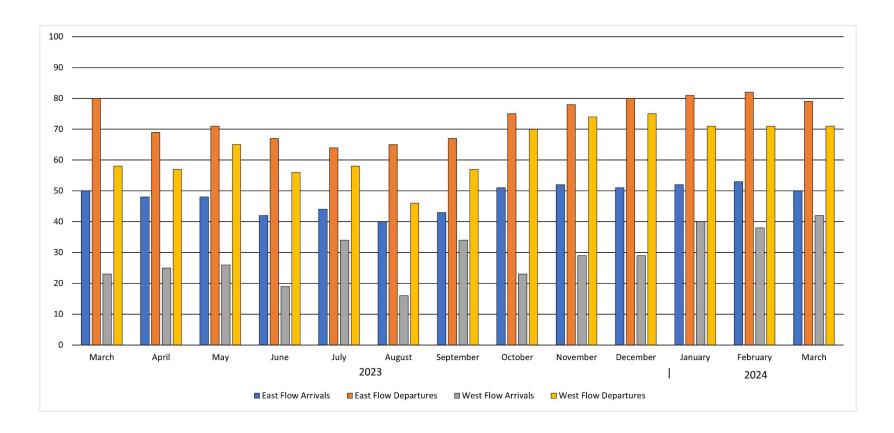
STARS	A	rrivals		
Procedure Name		<u># of Operati</u>	ons	
BHHIA		3		
CUUDA		194		
OLAHS		73		
ТЕЕКҮ		521	Λ	2%
			42	_ /0

SIDS | Departures

Procedure Name	<u># of Operations</u>	
AGERS	10	
BNICE	179	
FEALX	332	
FRSBE	0	
GLADZ	1	
HROCK	248	
LIFRR	13	
MAYNR	138	
REGAE	1 7	10/
SNAPR	0	170



Monthly East and West Flow RNAV Percentages



Page 7 of 16



Monthly RNAV Use by Operator March 2024

	Number o	f Operations	Percent RNAV Operations
Air Carrier	Total	RNAV	50% 100%
Air Canada	250	158	
Air Canada Rouge	285	162	
Air Transat	168	101	—
Alaska Airlines	270	196	
Allegiant Air	754	509	
American Airlines	1344	881	
Avelo Airlines	111	60	
Avianca	39	21	
Azul Linhas Aereas Brasileiras	109	62	
Bahamas Air Holdings Ltd.	169	90	
Copa Airlines	44	32	
Delta Airlines	2316	1625	••••••••••••••••••••••••••••••••••••••
Flair Airlines	254	148	
JetBlue Airways	4663	2783	•••••
Southwest Airlines	3821	2625	
Spirit Airlines	6183	3889	
United Airlines	1731	1197	
WestJet	154	90	

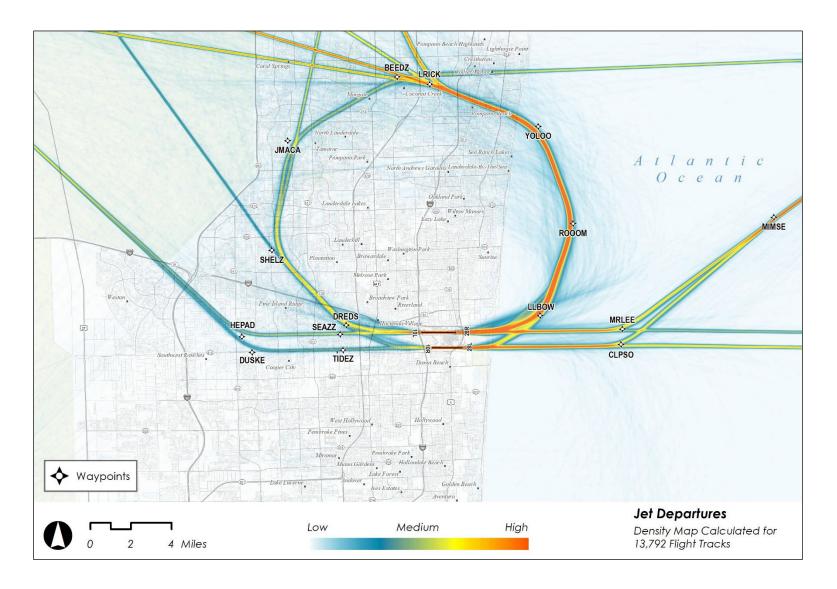
	Number o	f Operations	Percent RNAV Operations
GA / Charter	Total	RNAV	50% 100%
Aerolineas Ejecutivas	27	16	
AirSprint	14	9	
Corporate Flight Management	51	31	
Executive Flight Services	28	17	
Executive Jet Management, Inc.	22	16	
Flexjets	200	106	
Mountain Aviation	30	20	
NetJets	354	205	
Red Wing Aeroplane Company	39	15	
Sun Country Airlines	86	63	
VistaJet	13	8	
Cargo			
Air Transport, Inc.	13	7	
Everts Air Alasksa	11	5	
FedEx	170	123	
UPS Airlines	46	30	
Arrivals 💻	0	Departure	25



BROWARD COUNTY AVIATION DEPARTMENT MONTHLY RNAV REPORT March 2024

Relative Airspace Density \circlearrowleft

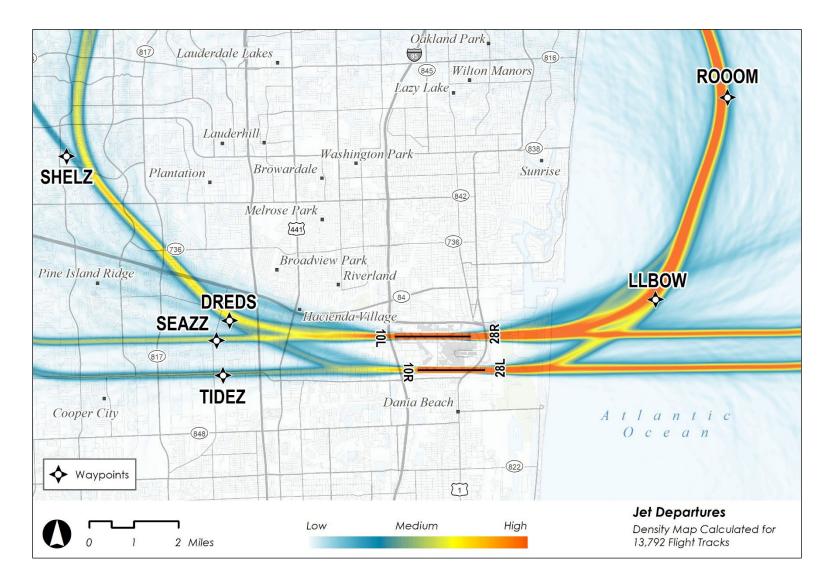
For All Jet Departures March 2024





Relative Airspace Density

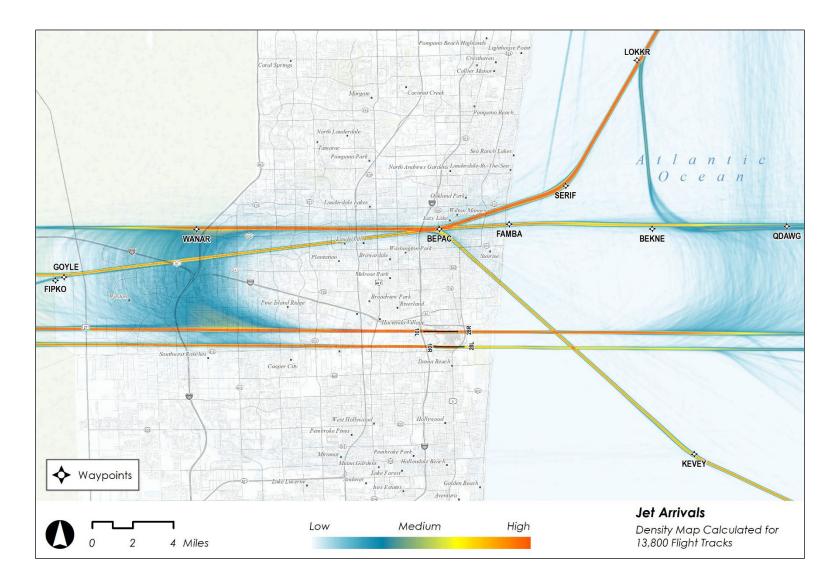
For All Jet Departures March 2024





Relative Airspace Density J

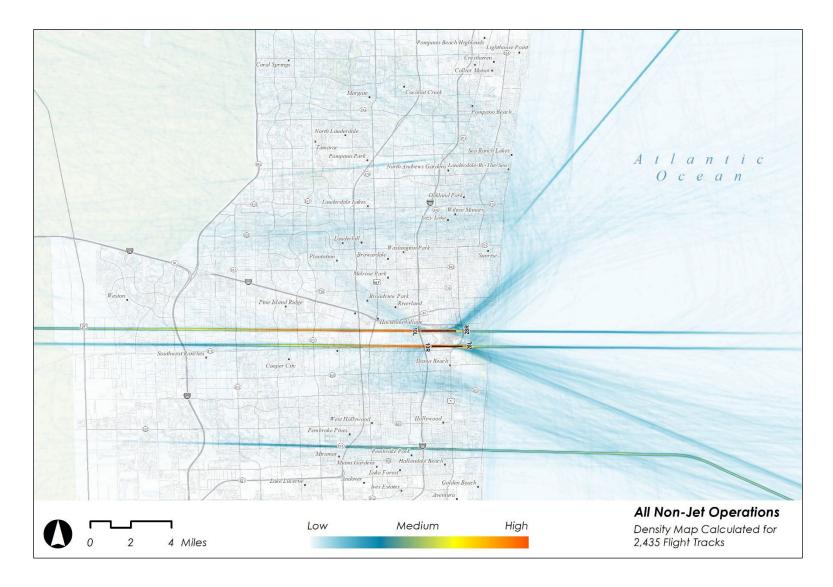
March 2024





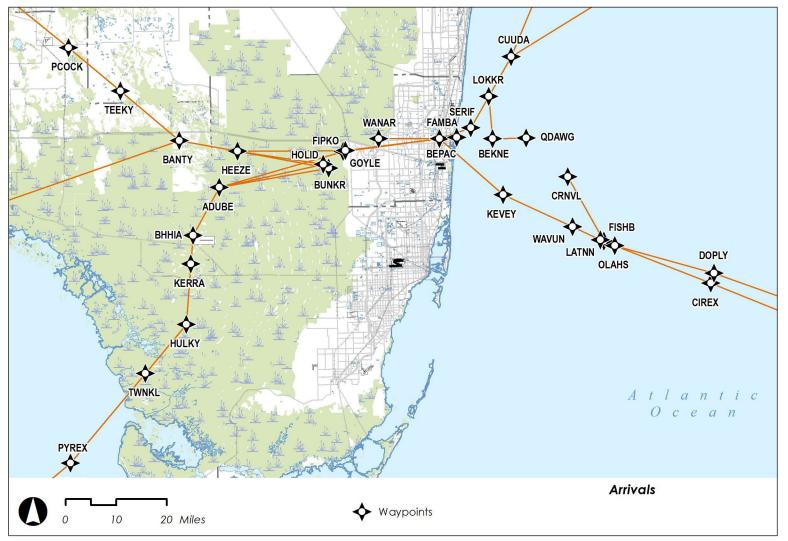
Relative Airspace Density

For All Non-Jet Arrival and Departures March 2024





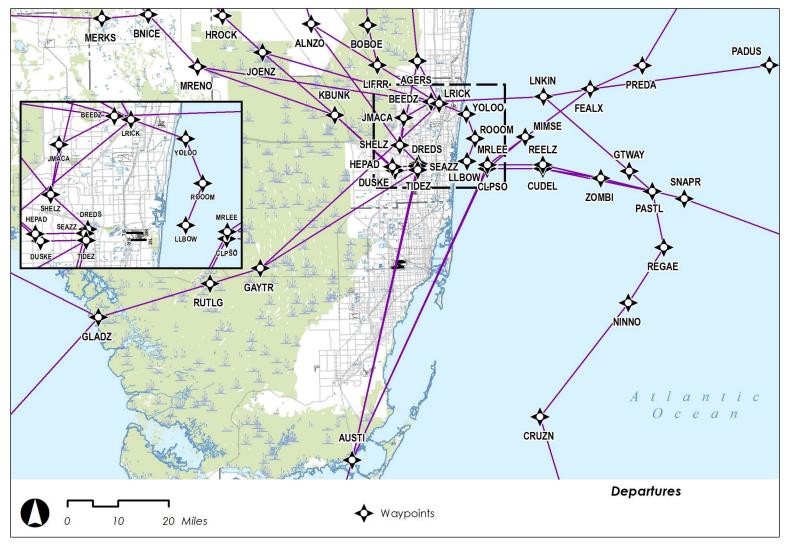
South-Central Florida Metroplex FLL Arrivals (STARS)



Source: http://www.metroplexenvironmental.com/fl_metroplex/fl_docs.html

Appendix

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 THREE: 10L: [PYREX+ TWNKL+]-HULKY-KERRA-BHHIA-ADUBE-HOLID BHHIA THREE: 10R: [PYREX+ TWNKL+]-HULKY-KERRA-BHHIA-ADUBE-BUNKR	OLAHS THREE: 10L/R: [DOPLY+ CIREX+]-OLAHS-LATNN-WAVUN-KEVEY-BEPAC-WANAR OLAHS THREE: 28L/R: [DOPLY+ CIREX+]-OLAHS-FISHB-CRNVL
BHHIA THREE: 28L/R: [PYREX+ TWNKL+]-HULKY-KERRA-BHHIA-ADUBE-FIPKO-BEPAC-FAMBA	
	TEEKY THREE: 10L: [PCOCK+ MARCI+]-TEEKY-BANTY-HEEZE-HOLID
CUUDA THREE: 10L/R: [MACKL+ PLAID+]-CUUDA-LOKKR-SERIF-BEPAC-WANAR	TEEKY THREE: 10R: [PCOCK+ MARCI+]-TEEKY-BANTY-HEEZE-BUNKR
CUUDA THREE: 28L/R: [MACKL+ PLAID+]-CUUDA-LOKKR-BEKNE-QDAWG	TEEKY THREE: 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+]	HROCK TWO: 10L/R: LLBOW-ROOOM-YOLOO-LRICK-JOENZ-HROCK-[KPASA+ SMELZ+] HROCK TWO: 28L: TIDEZ-DUSKE-KBUNK-JOENZ-HROCK-[KPASA+ SMELZ+] HROCK TWO: 28R: SEAZZ-HEPAD-KBUNK-JOENZ-HROCK-[KPASA+ SMELZ+]
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+]	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+]
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+]	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+]
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+]	REGAE TWO: 10L: MRLEE-REELZ-ZOMBI-PASTL-REGAE-NINNO-CRUZN-GLAMS-LRODD-[URSUS+] REGAE TWO: 10R: CLPSO-CUDEL-ZOMBI-PASTL-REGAE-NINNO-CRUZN-GLAMS-LRODD-[URSUS+] REGAE TWO: 28L/R: DREDS-SHELZ-JMACA-BEEDZ-LNKIN-GTWAY-PASTL-REGAE-NINNO-CRUZN- GLAMS-LRODD-[URSUS+]
FRSBE TWO: 10L/R: LLBOW-ROOOM-YOLOO-LRICK-ALNZO-FRSBE-[WAPOM+ STYMY+] FRSBE TWO: 28L/R: DREDS-SHELZ-ALNZO-FRSBE-[WAPOM+ STYMY+]	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

Appendix

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 <u>Noise Comment Form</u> 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 <u>Noise Comment Web App</u> 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.