

Fort Lauderdale-Hollywood International Airport



Monthly Operations & RNAV Use Report



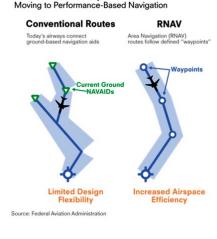
This *RNAV Report* provides a monthly overview of aircraft arriving and departing from Fort Lauderdale-Hollywood International Airport (FLL). The purpose of this report is to determine the number of aircraft that utilize Area Navigation (RNAV) procedures using the FLL Airport Noise and Operations Monitoring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

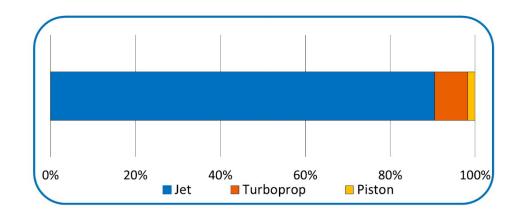
RESOURCES 🗳

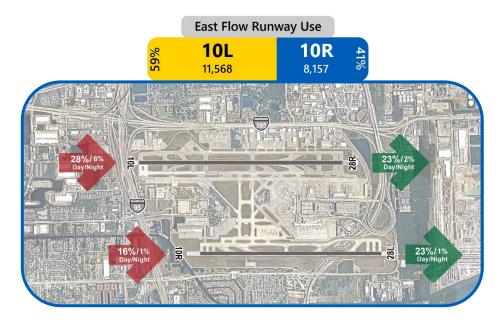
- <u>https://www.faa.gov/air_traffic/community_engagement/florida/</u>
- <u>http://metroplexenvironmental.com/fl_metroplex/fl_introduction.html</u>
- <u>http://www.metroplexenvironmental.com/fl_metroplex/fl_docs.html</u>
- https://www.faa.gov/nextgen/this-is-nextgen/



Monthly Operations and Runway Use

Туре	Arrivals	Departures	Total
Jet	11,217	11,239	22,456
Turboprop	992	954	1,946
Piston	212	215	427
Total	12,421	12,408	24,829

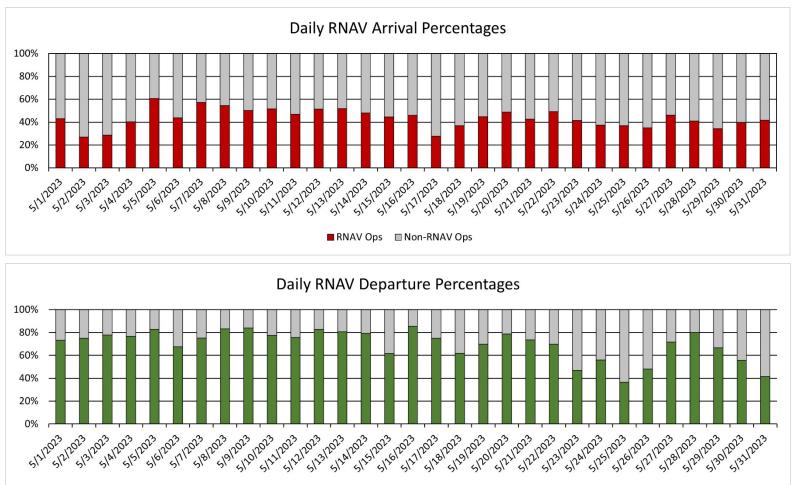








Arrival and Departure Daily RNAV Percentages

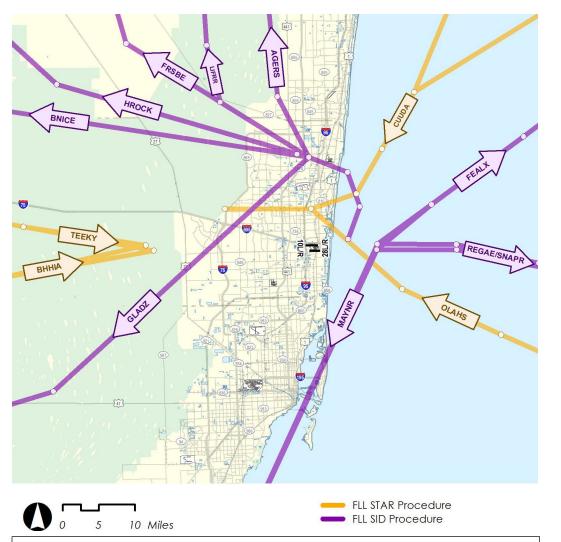


RNAV Ops Non-RNAV Ops



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		
<u>Procedure Name</u> BHHIA	<u># of Operati</u>	ons
CUUDA	816	
OLAHS	176	1001
TEEKY	2200	48%

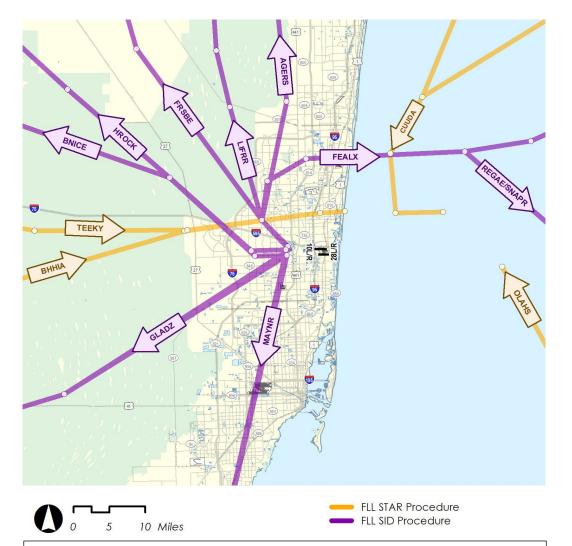
SIDS | Departures

Procedure Name		# of Operations	
AGERS		95	
BNICE		418	
FEALX		1607	
FRSBE		500	
GLADZ		93	
HROCK		417	
LIFRR		230	
MAYNR		53	
REGAE		5 7	10/
SNAPR		1075	
	\geq		



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.

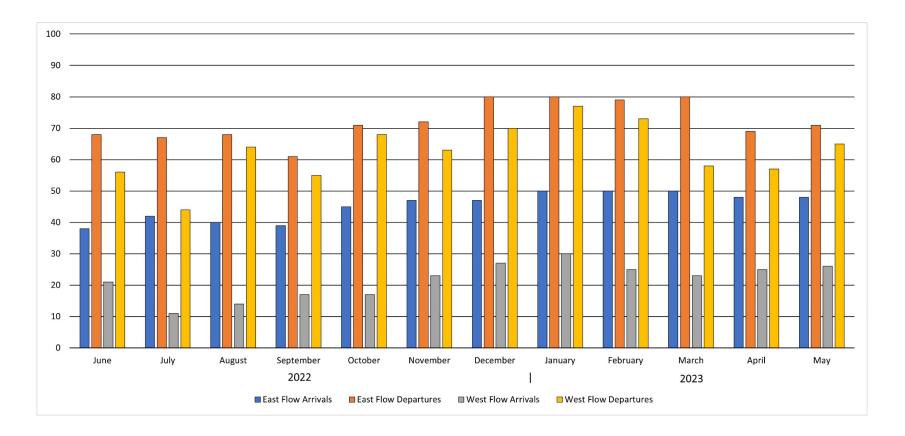
STARS		
Procedure Name	<u># of Opera</u>	itions
BHHIA	7	
CUUDA	84	
OLAHS	47	
ТЕЕКҮ	244	760/
		26%

SIDS | Departures

Procedure Name		# of Operations	
AGERS		14	
BNICE		132	
FEALX		371	
FRSBE		154	
HROCK		129	
LIFRR		3	
MAYNR		134	
		6	5%
	\leq		570



Monthly East and West Flow RNAV Percentages





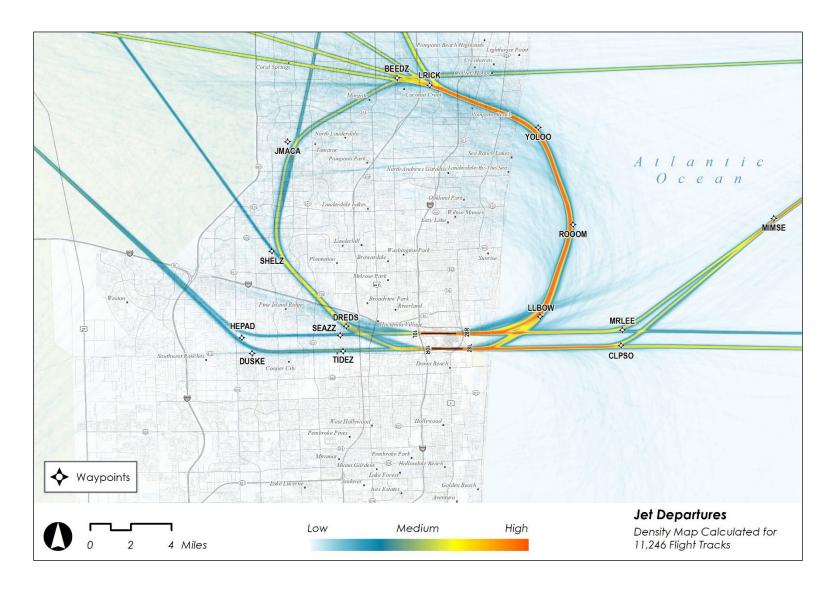
100%

Monthly RNAV Use by Operator

	Number of	Operations I	ercent RNAV Ope	rations		Number o	f Operations	Percent RNAV Ope	erations
Air Carrier	Total	RNAV	50%	100%	GA / Charter	Total	RNAV	50%	
Canada	30	13			Corporate Flight Management	63	13		-•
nada Rouge	226	125		-	Delta Private Jets	34	12		
at	98	62			Executive Jet Management, Inc.	24	10		
ines	96	74			Flexjets	114	58		
ir	517	305		•	Hop-A-Jet	14	5		•
lines	1012	598			Mountain Aviation	14	7		•
lines	126	65			NetJets	240	108		
	26	17			Red Wing Aeroplane Company	11	4		•
ereas Brasileiras	138	77	•		Sun Country Airlines	19	9		
ir Holdings Ltd.	141	73			Western Air Charter	41	18		
	46	19			XOJet Inc.	12	4		
	2018	1354		•	Cargo				
s	46	26			FedEx	235	141	· · · · · ·	•
ways	4295	2288		•	UPS Airlines	72	54		-
Airlines	3229	1963			Arrivals 🗕	•	Departures		
rlines	5279	3005							
ines	1436	892		•					
	38	15							



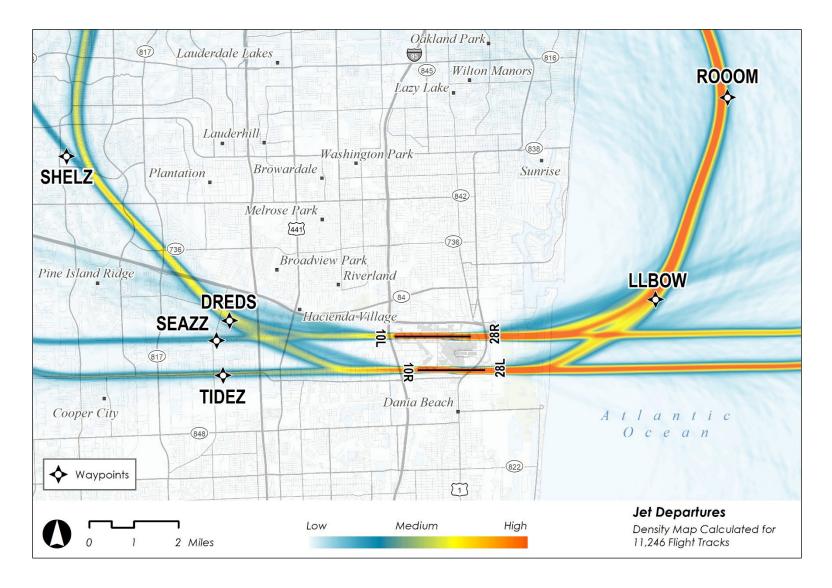
Relative Airspace Density J





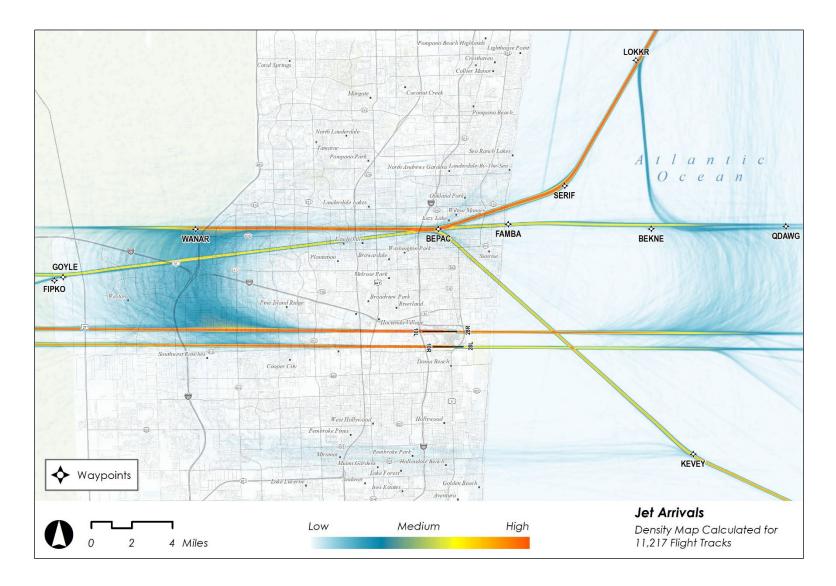
Relative Airspace Density

For All Jet Departures May 2023





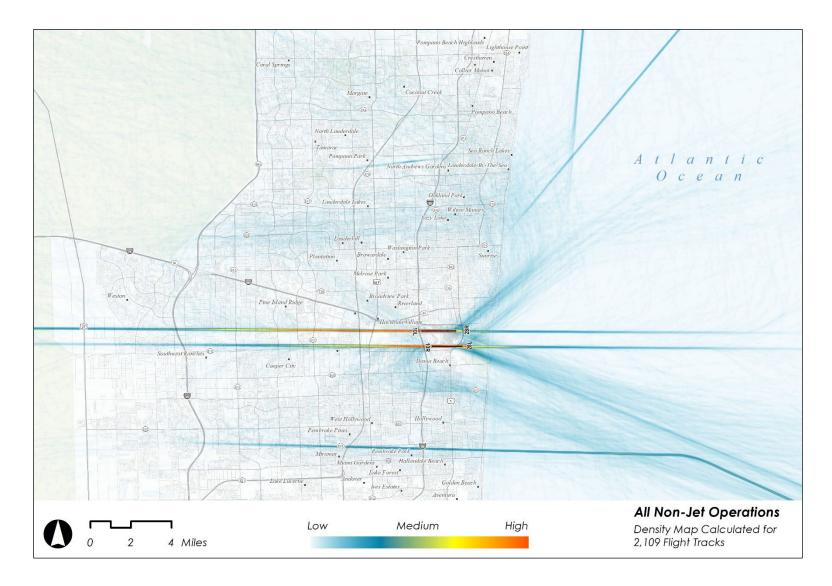
Relative Airspace Density J For All Jet Arrivals May 2023





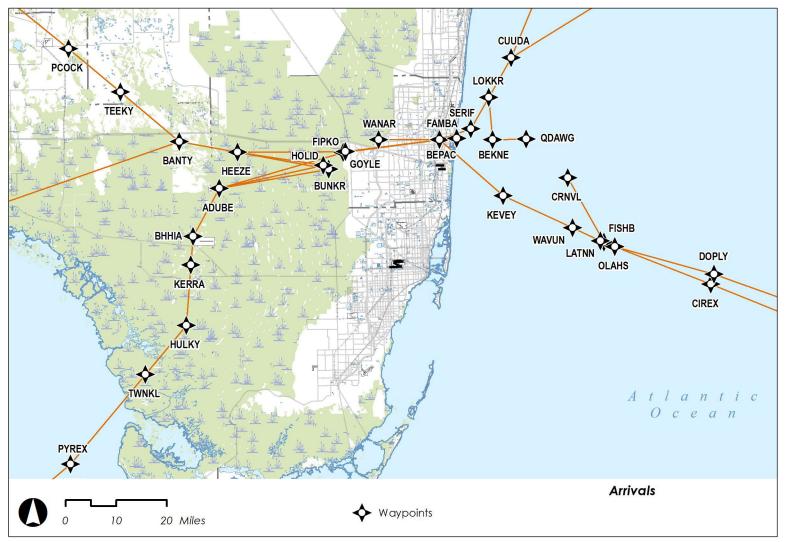
Relative Airspace Density

For All Non-Jet Arrival and Departures May 2023





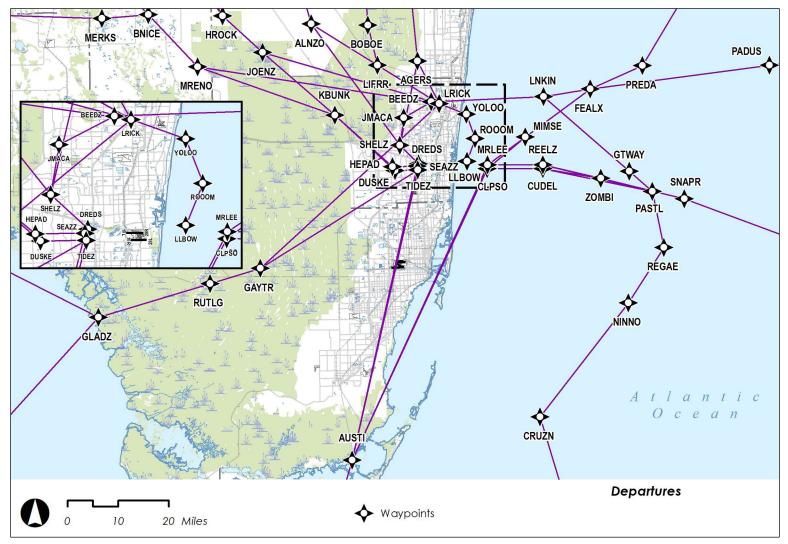
South-Central Florida Metroplex FLL Arrivals (STARS)



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 TWO: 10L: [PYREX+ TWNKL+]-HULKY-KERRA-BHHIA-ADUBE-HOLID BHHIA TWO: 10R: [PYREX+ TWNKL+]-HULKY-KERRA-BHHIA-ADUBE-BUNKR	OLAHS TWO: 10L/R: [DOPLY+ CIREX+]-OLAHS-LATNN-WAVUN-KEVEY-BEPAC-WANAR OLAHS TWO: 28L/R: [DOPLY+ CIREX+]-OLAHS-FISHB-CRNVL
BHHIA TWO: 28L/R: [PYREX+ TWNKL+]-HULKY-KERRA-BHHIA-ADUBE-FIPKO-BEPAC-FAMBA	
	TEEKY TWO: 10L: [PCOCK+ MARCI+]-TEEKY-BANTY-HEEZE-HOLID
CUUDA TWO: 10L/R: [MACKL+ PLAID+]-CUUDA-LOKKR-SERIF-BEPAC-WANAR	TEEKY TWO: 10R: [PCOCK+ MARCI+]-TEEKY-BANTY-HEEZE-BUNKR
CUUDA TWO: 28L/R: [MACKL+ PLAID+]-CUUDA-LOKKR-BEKNE-QDAWG	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	HROCK ONE: 10L/R: LLBOW-ROOOM-YOLOO-LRICK-JOENZ-HROCK-[KPASA+ SMELZ+]
SEAZY-[DUCEN+]	HROCK ONE: 28L: TIDEZ-DUSKE-KBUNK-JOENZ-HROCK-[KPASA+ SMELZ+]
AGERS ONE: 28L/R: DREDS-SHELZ-AGERS-[HURGI+]-PERTS-AARPS-MMART-ENWOD-SEAZY-[DUCEN+]	HROCK ONE: 28R: SEAZZ-HEPAD-KBUNK-JOENZ-HROCK-[KPASA+ SMELZ+]
BNICE ONE: 10L/R: LLBOW-ROOOM-YOLOO-LRICK-MRENO-BNICE-[COREA+ DOLIE+ MERKS+]	LIFRR ONE: 10L/R: LLBOW-ROOOM-YOLOO-LRICK-LIFRR-BOBOE-DURRY-CLEFF-[WIXED+ BAIRN+]
BNICE ONE: 28L: TIDEZ-DUSKE-KBUNK-MRENO-BNICE-[COREA+ DOLIE+ MERKS+]	LIFRR ONE: 28L/R: DREDS-SHELZ-LIFRR-BOBOE-DURRY-CLEFF-[WIXED+ BAIRN+]
BNICE ONE: 28R: SEAZZ-HEPAD-KBUNK-MRENO-BNICE-[COREA+ DOLIE+ MERKS+]	
	MAYNR ONE: 10L: MRLEE-AUSTI-MAYNR-MCLAW-[FUNDI+ JABOX+]
FEALX TWO: 10L: MRLEE-MIMSE- FEALX-[PADUS+ PREDA+ WOLFO+]	MAYNR ONE: 10R: CLPSO-AUSTI-MAYNR-MCLAW-[FUNDI+]JABOX+]
FEALX TWO: 10R: CLPSO-MIMSE-FEALX-[PADUS+]PREDA+]WOLFO+]	MAYNR ONE: 28L: TIDEZ-AUSTI-MAYNR-MCLAW-[FUNDI+]JABOX+]
FEALX TWO: 28L/R: DREDS-SHELZ-JMACA-BEEDZ-LNKIN-FEALX-[PADUS+ PREDA+ WOLFO+]	MAYNR ONE: 28R: SEAZZ-AUSTI-MAYNR-MCLAW-[FUNDI+ JABOX+]
GLADZ TWO: 10L/R: LLBOW-ROOOM-YOLOO-LRICK-GAYTR-RUTLG-GLADZ-[WIGNA+ MARCI+]	REGAE TWO: 10L: MRLEE-REELZ-PASTL-REGAE-NINNO-CRUZN-GLAMS-LRODD-[URSUS+]
GLADZ TWO: 28L: TIDEZ-GAYTR-RUTLG-GLADZ-[WIGNA+ MARCI+]	REGAE TWO: 10R: CLPSO-CUDEL-PASTL-REGAE-NINNO-CRUZN-GLAMS-LRODD-[URSUS+]
GLADZ TWO: 28R: SEAZZ-GAYTR-RUTLG-GLADZ-[WIGNA+ MARCI+]	REGAE TWO: 28L/R: DREDS-SHELZ-JMACA-BEEDZ-LNKIN-GTWAY-PASTL-REGAE-NINNO-CRUZN-
	GLAMS-LRODD-[URSUS+]
FRSBE ONE: 10L/R: LLBOW-ROOOM-YOLOO-LRICK-ALNZO-FRSBE-[WAPOM+ STYMY+]	
FRSBE ONE: 28L/R: DREDS-SHELZ-ALNZO-FRSBE-[WAPOM+ STYMY+]	SNAPR TWO: 10L: MRLEE-REELZ-ZOMBI-SNAPR-KRAFT-HEYDR-[RAJAY+ SUMAC+]
	SNAPR TWO: 10C. MILLE-RELEZ-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.