



CITY OF BELLE ISLE, FLORIDA

1600 Nela Avenue
Belle Isle, Florida 32809
(407) 851-7730 • FAX (407) 240-2222
www.cityofbelleislefl.org

<DATE>

Simon Snyder, Chairman
Airport Noise Abatement Committee
One Jeff Fuqua Boulevard
Orlando, Florida 32827-4399

RE: Report on Noise and Metroplex Operations

Dear Mr. Snyder:

The City of Belle Isle is submitting, for your consideration, a report produced by the City of Belle Isle in cooperation with the Orlando Aviation Consultant Group.

The report addresses concerns made by the City of Belle Isle during the Metroplex public hearings and after the implementation of Metroplex procedures. These procedures continue to be of concern to the City of Belle Isle and its residents.

The City is requesting that the Noise Abatement Committee review the report and send a formal recommendation to the Greater Orlando Aviation Authority Board for their consideration of the recommendations in the report. Thank you.

Sincerely,

Nicholas Fouraker
Mayor

Report to Greater Orlando Aviation Authority Airport Noise Abatement Committee

Introduction

This report is presented to the Airport Noise Abatement Committee (ANAC) to explain the concerns of the City of Belle Isle with the new flight patterns created by the Orlando Airport Metroplex operations. The new flight pattern, referred to as Metroplex, is creating excessive noise and vibrations to homes in Belle Isle and allows aircraft to depart over the City of Belle Isle. This operation is contrary to the long-standing agreement between the Orlando International Airport (OIA) and the City of Belle Isle that has been in place for the past 50 years.

This report was developed and completed in cooperation with the Orlando Aviation Consultants (OAC). OAC is a full-service aviation consulting company providing consulting services from broad problem-solving consulting to specialized technical analyses in airport operations. OAC staff has over 150 years of experience in the aviation industry providing airport facility planning, master planning, feasibility studies, airfield and airspace analysis, and airport development services. OAC supports the City's comments and recommendations (Attachment 1).

The City of Belle Isle's representative in developing this report, working closely with OAC, is Anthony Carugno. Mr. Carugno is an American Airlines employee for over 36 years at Orlando International Airport and during those 36 years he was also an FAA Air Traffic Controller for 28 years; 1 year at Orlando Executive Airport; 6 years at Sanford International Airport; 11 years at Daytona International Airport; and the final 11 years at Orlando International Airport Tower and TRACON (Terminal Radar Approach Control). Mr. Carugno has been a Belle Isle resident for over 30 years and he is currently serving his third term as a Belle Isle City Commissioner. Mr. Carugno also currently serves on the OIA Airport Noise Abatement Committee as the Representative for the City of Belle Isle. On the ANAC Committee, Mr. Carugno is considered a Subject Matter Expert on Air Traffic Control.

Operations Prior to Metroplex

During Mr. Carugno's tenure and service at OIA as a controller, the management team required all controllers to follow "informal noise abatement procedures" for South Arrivals and North Departures in accordance with the aforementioned agreement between OIA and the City of Belle Isle. These standard operating procedures allowed for a fan-like pattern of departures which distributed takeoffs over a wide geographical area. This dispersion of the flight pattern kept the aircraft farther away from Belle Isle and therefore significantly kept the noise complaints and vibrations in Belle Isle to a minimum. On South Arrivals, standard operating procedures called for controllers to instruct the Air Carriers to join and be established on the Localizer at 4000 feet over Winter Park so they can slow and descend over ORL at a safe and slow altitude and speed.

On North Departures, the standard operating procedures to controllers were to vector all jet departures over pre-established markers, commonly referred to as "Tick Marks" on the radar scope that both the Tower and the TRACON controllers have on display. These Tick Marks were slightly right of course from the normal runway heading off the runways. Although using these Tick Marks were sometimes challenging due to the direction and speed of the wind conditions, proper training and experience by former controllers allowed for the continued operation in accordance with standard operating procedures and the OIA/Belle Isle agreement. This procedure was in effect for many years and continued until the introduction of Metroplex operations.

Metroplex

The FAA developed "Metroplex". Metroplex was developed to improve the efficiency of airspace in the South-Central Florida Metroplex area by optimizing aircraft arrival and departure procedures to and from various airports; streamline air traffic control; and was to be a cost effective way to control aircraft in order to save fuel. It was also created to provide more direct routings for all the Air Carriers at 10,000 feet and above. Today, Air Traffic Controllers conduct a procedure that basically disregarded the prior standard

operating procedures which violate the OIA/Belle Isle Noise Abatement Agreement that the FAA agreed to with the City of Belle Isle and northern communities. The FAA held the required meetings and conducted an Environmental Assessment (EA). The purpose of the EA was to evaluate the potential environmental impacts resulting from changes in aircraft routing proposed to occur below 10,000 feet above ground level (AGL). The FAA requested public input on the EA which they were to review. The City of Belle Isle Council and many of Belle Isle residents objected to the results of the EA (Attachments 2 & 3). After holding public meetings and community forums, the FAA stated that after review of the written comments submitted by the City and its residents, that there were no significant comments that impacted the EA and stated that there will be no significant impacts to the community with the introduction of Metroplex procedures (Attachment 4). The FAA was successful in convincing that nothing will change. They erred in their statement because Metroplex operations were to be conducted at high altitudes (above 10,000 feet). Allowing operations to be conducted at lower altitudes, the FAA staff has purposely misled the residents of Belle Isle and failed in their procedures by their comments on the harmful effects that are now occurring.

Error in Metroplex Procedures

After speaking with other former controllers who are still connected with Metroplex and responsible for training the new controllers and providing refresher training for the senior controllers, controllers are trained to implement Metroplex procedures off the ground. This is contrary to the Metroplex operations that the FAA stated prior its implementation. All aircraft departing off the airport follow all new RNAV/GPS routes off the runways so when the Tower departs them, all aircraft will be separated from the east and west complex. The problems that are encountered with these new Metroplex procedures are:

1. All the departures are concentrated on this single line departure corridor (Figure 1). Prior to this procedure, departures were all spread out and evenly distributed across all the communities (Figure 2).
2. All non RNAV/GPS aircraft wander or drift off course (mostly west of the departure corridor on a north operation) and the Tower does not catch it, or ignores it, before it gets off the ground and they are not held accountable for their actions to allow this and fail to follow established procedures. It appears there is a cavalier attitude toward ignoring procedures. (The normal excuse was "My Bad").

The City of Belle Isle contacted GOAA to request that a noise study be done in the City of Belle Isle. The City was informed that both the FAA and GOAA denied the request twice (Attachment 5 & 6). GOAA also sent a letter to the FAA stating that there were concerns expressed by residents (Attachment 7). The FAA basically ignored both letters.

Conclusion and Recommendations

With the large group of controllers and managers that have been retiring, the training and institutional knowledge has been lost on these new controllers. Along with the transfers of the older controllers to the larger airports, and the variety of New Temporary Acting Managers, nobody knows or cares about the procedure that has been in place for decades. Although, the OIA/Belle Isle agreement cannot be located through an extensive records research, there is no question that it existed. This is acknowledged by the former senior City of Belle Isle elected officials and the staff at OIA.

The Belle Isle City Council and the City's residents understand what the FAA is trying to do, and understand that "Safety And The Expedited Flow of Air Traffic" is their concern. However, on VFR days (visual flight rules), the City is requesting that the FAA Tower on a North Operation goes back to using visual separation procedures. This is not a difficult procedure to implement again. To accomplish this action, trainers need to provide the necessary instruction to the current controllers and provide instructions to vector aircraft back on the original "Tick Marks". They also need to actually work the Jet Departures off the runway. Only during IFR (Instrument Flight Conditions) days where Visual Separation cannot be applied, then go back to the RNAV/GPS off the ground procedures. Returning to the previous procedures have many advantages. During VFR conditions, controllers can sharpen their skills, keep them more involved with hour by hour operations, and have more options during special off schedule operations such as law enforcement, medical emergencies, photo shoots, and especially "Go – ArounDs". Sharpening skills in these procedures will only increase safety to airfield operations.

The City is not requesting that the FAA to change their Metroplex procedures on a North Operation. The City is requesting the Tower to implement the procedures to actually "point and aim" aircraft using Visual Separation Rules in good weather to the old "Tick Marks" and thereby creating the prior "fan-like" departures as illustrated in Figure 2. This will significantly reduce or eliminate the concentration of all northbound departures over the same exact line as illustrated in Figure 1.

For South Operations, the City is requesting that the FAA and/or GOAA instruct the tower to use the east runways during the hours of 5:00 PM to 9:00 AM. This will significantly decrease the noise level that is being experienced by Belle Isle residents.

These are simple fixes that will take little effort but will resolve the majority of problems that are taking place in Belle Isle.

If these measures do not work then the City request GOAA consider constructing walls to prevent the jet blast from escaping to the north on takeoff and landings.

ANAC is an advisory board for the Greater Orlando Aviation Authority (GOAA) and the elected officials in Belle Isle believe that their concerns are not be seriously addressed because GOAA does not want to confront the FAA for fear of retribution from the FAA; (Like the saying goes "don't bite the hand that feeds you"). Although this should not be the case, the City's concerns and recommendations have been given no credence by ANAC or GOAA. In fact, the City has no evidence that ANAC has ever addressed this issue with the GOAA Board or the FAA. One of the more significant issues that continue to occur is the lack of an FAA representative at ANAC meetings. How can the FAA understand any noise issues without having representation at ANAC meetings? Requiring the FAA to attend every ANAC meeting would be a good start in having the FAA understand the complaints that are surfaced at every ANAC meeting.

The City certainly understands that times are changing and the airport is never going to stop growing; however sometimes new procedures cause more problems than continuing procedures that were successful for many years. The City of Belle Isle and Orlando Aviation Consultants believe the simple solution is to discontinue the current operations and return to the pre-Metroplex operations that have worked well for the past 50 years. We strongly believe that by going back to the procedures that mentioned above, we can achieve that solution and continue to be good neighbors.

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Figure 1
Post Metroplex

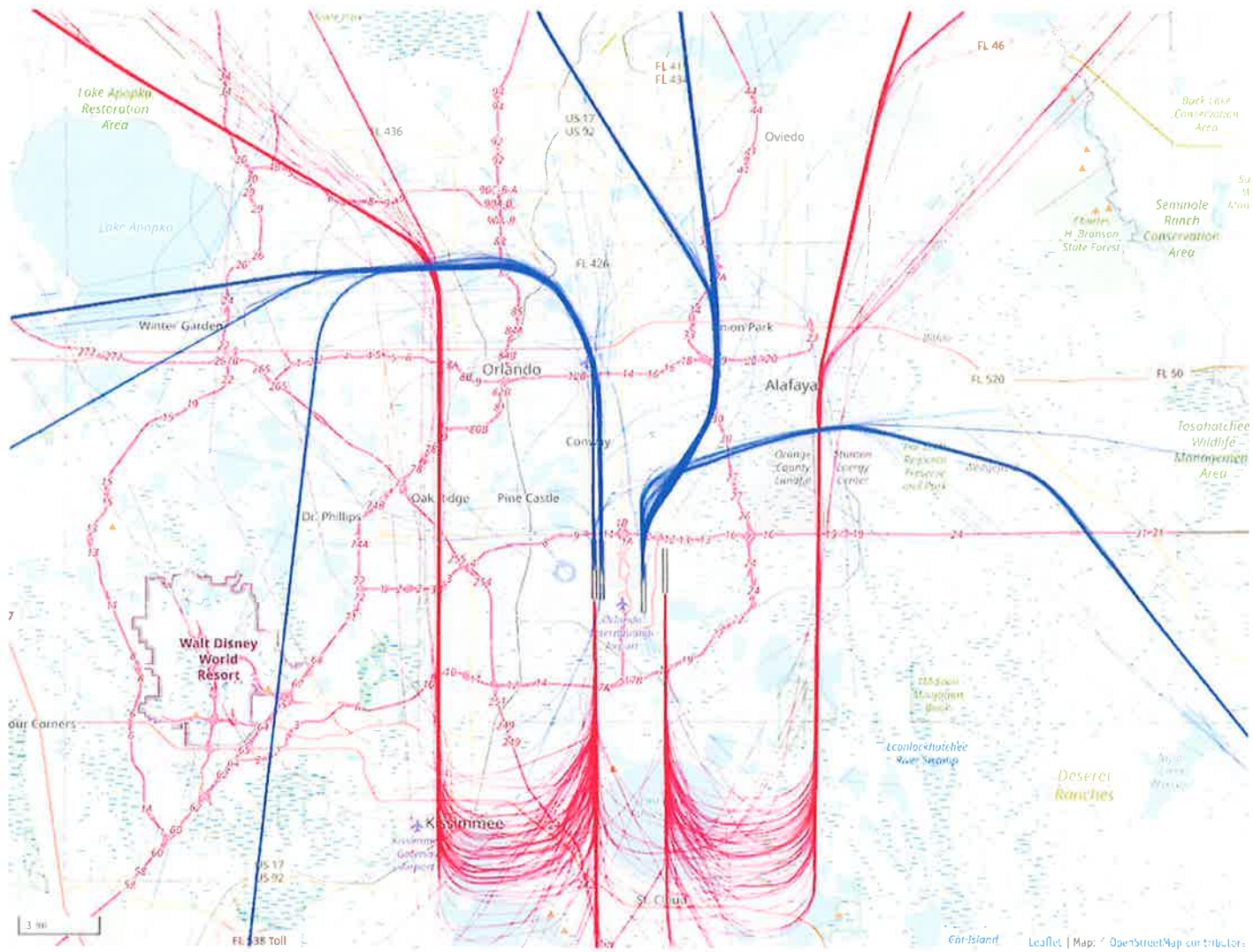
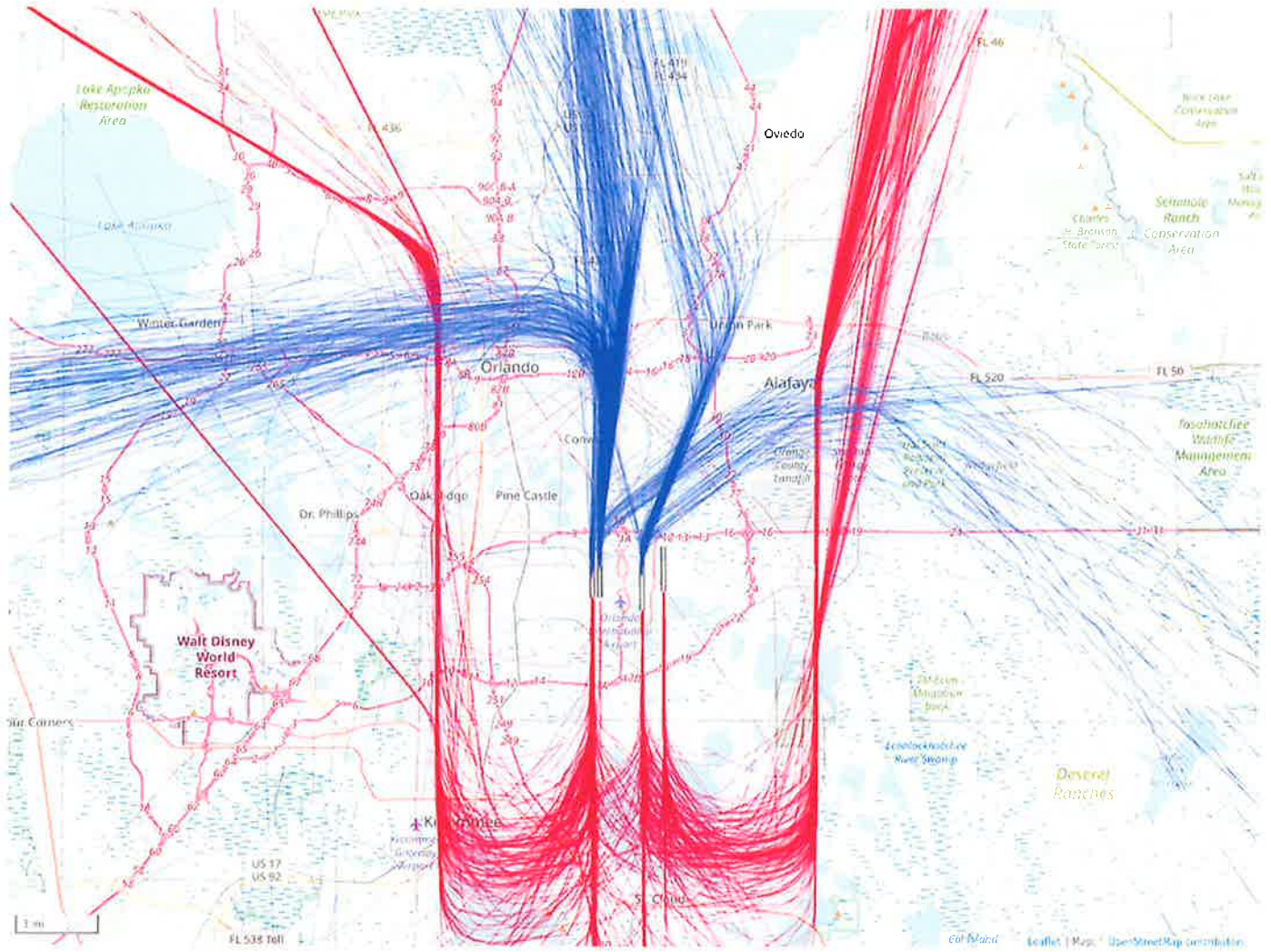


Figure 2
Pre-Metroplex



Attachment 1

Orlando Aviation Consultant Letter Supporting City



ORLANDO AVIATION CONSULTANTS

To: Bob Francis
From: Vern Munroe
Subject: Aircraft Noise
Date: October 18, 2022

Orlando Aviation Consultants was requested to evaluate the increase in aircraft noise that the City of Belle Isle is experiencing from north departures operating from the Orlando International Airport

After reviewing the changes made to the operational procedure at Orlando International Airport that occurred after Metroplex was implemented, it seems that many of the aircraft on north departures appear to track slightly west of the "Kyote" and "Facts" navigational fixes which creates more noise in the City of Belle Isle and areas west of Conway Road. These areas in the past were exposed to aircraft noise from 36 departures, however, not to this degree.

Over thirty years ago the Aviation Noise Abatement Committee (ANAC) along with the FAA and the Aviation Authority worked together to reduce the effect of aircraft noise for the Airport's neighbors in the City of Belle Isle.

During Visual Flight Rules (VFR) conditions, jet departures from runway 36L, would be vectored over a Tick Mark that was displayed on the FAA's radar scopes in both the Tower and the TRACON. This Tick Mark was slightly east of Conway Road and just east of the existing procedure which used runway heading from 36L. Apparently, from what I have determined this procedure is no longer being used by Air Traffic Control. However, this specific change to the departure procedures is a major cause of the increase in complaints from the Belle Isle community.

Additionally, at the time of the implementation of these procedures there was little or no development south of the airport, therefore from 11PM to 7AM the FAA agreed to depart aircraft to the south and bring arrivals in from the south, weather and traffic permitting. This head on procedure would take most of the aircraft south of the airport during these light traffic hours. This procedure was very effective not only reducing noise levels over Belle Isle but reducing the noise complaints the Aviation Authority received. From what I was told this procedure is still in use. However, annually at the time, this was accomplished about 80 percent of the time, and I was told it is now in the 70s.

I was advised by GOAA's Noise Abatement Officer that the FAA hasn't been coming to ANAC meeting and without their attendance and cooperation nothing can be accomplished.

Vern Munroe
OAC Director of Airspace
www.orlandoaviationconsultants.com

Attachment 2

City Response to Metroplex Environmental Assessment

Bob Francis <bfrancis@belleislefl.gov>

Opposition to the Metroplex Draft EA- Orlando MCO

1 message

Nicholas Fouraker <mayor@belleislefl.gov>
To: 9-AJO-MCO-FL-Metroplex-Comments@faa.gov
Cc: Bob Francis <bfrancis@belleislefl.gov>

Fri, Jul 24, 2020 at 4:21 PM

To Whom It May Concern,

Good afternoon. Be advised that as the Mayor of the City of Belle Isle and as a resident living near Conway Road, I firmly oppose the draft EA as written. We do not want flights coming any closer to our City, which was established in 1924 long before the MCO existed. We will not tolerate more noise than is already emanating from the airport flights. We want to be good neighbors to the airport and are willing to work with the FAA, but this draft of the policy is flawed from our City's perspective and does not appear to have contemplated our City's interests into the plan. The FAA should consider moving this flight path closer to SR- 436 (Semoran) which is a commercial district, not close to residential areas, schools and our pristine lakes which can amplify the noise from the planes.

We are prepared to work with the FAA on alternatives as this is the amicable thing to do as neighbors.

Also, it should be noted that on July 21st, our City Council unanimously voted to oppose this. A letter will be forthcoming from the Vice Mayor formally outlining the City's objections.

Thank you in advance for your cooperation and understanding.

Truly yours,

Nicholas "Nick" Fouraker
Mayor - The City of Belle Isle
City Hall Tel: 407-851-7730
Cell: 407-717-7868
[1600 Nela Avenue](#)
Belle Isle, FL 32809



www.cityofbelleislefl.org

Attachment 3

City Response to Metroplex Environmental Assessment



CITY OF BELLE ISLE, FLORIDA

1600 Nela Avenue
Belle Isle, Florida 32809
(407) 851-7730 • FAX (407) 240-2222
www.cityofbelleislefl.org

July 24, 2020

South-Central Florida Metroplex Draft EA
Federal Aviation Administration
Eastern Service Center – Operations Support Group
1701 Columbia Avenue
College Park, GA 30337

RE: Input to FAA South Central Florida Metroplex Project

To Whom It May Concern:

I am the Vice Mayor of the City of Belle Isle, Florida. I am submitting this letter, on behalf of the Belle Isle City Council, as testimony to the FAA Metroplex procedures. I was chosen to do so as both a professional in the airline industry and as a resident of over 27 years in Belle Isle. My expertise and testimony on this subject is based on my 27-year career as an Air Traffic Controller (ATC), retiring from this position at Orlando International Airport. Along with working as an ATC, I also worked (and continue to work) as an employee of American Airlines for 34 years. Most recently, as Vice Mayor, I serve as the City's representative on the OIA Airport Noise Abatement Committee (ANAC).

I would like to thank you for taking into consideration the ANAC's recommendations for the departures off Orlando International Airport (Airport code MCO). The Committee approves most of the procedures outlined in the plan with the exception of the departures to the north of MCO. For many years the City of Belle Isle (COBI) has had an Informal noise abatement procedure in place. Occasionally, the controllers at MCO have to bend the rules because of special operations; mostly due to weather. The City understands the special circumstances and the reasons for violating this procedure when necessary for the safety of the aircraft; however we still need to register complaints.

The Greater Orlando Aviation Authority has been a great neighbor by developing the ANAC to act as a liaison between the City of Belle Isle and other surrounding communities and the FAA. Now, due to perceived increases in capacity, efficiency, and "safety", the FAA wants to improve the navigation of aircraft off the ground to join the "highways in the sky" (and vice versa). These new procedures created on a North operation will bring departures closer to the City of Belle Isle; homes north of the City; and Downtown Orlando. This will also include flying directly over two schools in the Conway area. This new procedure will change the aircraft noise to almost double the current noise level. This new North departure procedure will put the larger and heavier cargo aircraft over our elementary and middle schools that are along Conway road. These aircraft are also much louder than passenger aircraft.

Current procedures and headings are safe and efficient and provide Belle Isle with acceptable noise conditions that we have grown accustomed to. The current noise abatement at MCO has been acceptable to most communities for 50 years. With this proposed change, not only will the residents to the north and west of MCO runways receive all the landing traffic to MCO on a South Operation, but now they will also have all the departures on a North Operation. This is unacceptable to the City of Belle Isle. This does not happen when MCO is on a South Operation as South Departures get fanned out to six different headings and the North Arrivals come straight in. As a retired controller, I know it is not hard to communicate and coordinate a simultaneous departure to another controller in the same tower.

The City is vehemently opposed to any modifications to routes that would have the effect of concentrating additional flights over Belle Isle. In particular, any modification of routes which add additional aircraft to a route that approaches the City of Belle Isle would have a substantial noise impact on the City.

The City believes that the Environmental Assessment (EA) is incorrect in its calculation of noise levels and they should be reevaluated. The significant increases in noise that will be created by the new procedures outlined in the NextGen Plan are unacceptable to the City of Belle Isle for the following reason:

1. They violate the designated as "Noise Sensitive Area" that has been in place for over 50 years.
2. The older homes along Conway Road will incur damage from the increased noise levels especially from cargo aircraft. This will have a significant negative impact on property values in this area.
3. Belle Isle residents and residents to the north of Belle Isle will be significantly and negatively affected by increased aircraft noise caused by the implementation of FAA's Next Generation Air Transportation system (NextGen).
4. Medically: Aircraft noise is one, if not the most detrimental environmental effect of aviation. It can cause community annoyance, disrupt sleep, adversely affect academic performance of children, and could increase the risk for cardiovascular disease of people living in the vicinity of airports. A new study conducted by Cornell University states the constant roar from jet aircraft can seriously affect the health and psychological well-being of children. The health problems resulting from chronic airport noise, including higher blood pressure and boosted levels of stress hormones, the researchers say, may have lifelong effects.

Also for future discussion, we believe the FAA should be charged with the responsibility for identifying and proposing solutions to mitigate noise concerns. Further, the City recommends that the FAA monitors and documents noise exposure of any feasible solutions before and after implementation to ensure impacts are verified, and to determine whether results are of a discernible benefit.

RE: Input to FAA South Central Florida Metroplex Project
Page 3

Lastly, the City recommends ongoing compliance monitoring for any set of solutions accepted and implemented by the FAA and that the Members of Congress ensure that the FAA takes the appropriate steps to measure and guarantee ongoing compliance.

The City of Belle Isle is not fighting air travel; we are fighting the distribution of air travel.

Thank You for your time and consideration,

A handwritten signature in black ink, appearing to read 'Anthony P. Carugno'. The signature is stylized with several overlapping loops and a long horizontal stroke extending to the left.

Anthony P. Carugno
Vice-Mayor
City of Belle Isle, Florida

Attachment 4
FAA Response to Metroplex Environmental Assessment



October 22, 2020

Mr. Bob Francis
City of Belle Isle
1600 Nela Ave.
Belle Isle, FL 32809

**Reference: South-Central Florida Metroplex (FL Metroplex) Project
Final Environmental Assessment (EA) – Notice of Availability**

Dear Mr. Francis,

This letter is to inform you that the Federal Aviation Administration (FAA) has prepared a Final Environmental Assessment (EA) to consider the potential environmental impacts of the South-Central Florida Metroplex (FL Metroplex) Project. Based on the information and analysis contained in the Final EA, the FAA has also issued a Finding of No Significant Impact/Record of Decision (FONSI/ROD) for the project. The FONSI/ROD documents the FAA's determination that the project, as proposed, would not significantly affect the quality of the human environment and that an Environmental Impact Statement (EIS) is therefore not necessary. The FONSI/ROD documents the FAA's decision to proceed with the proposed action detailed in the Final EA. Implementation of the project is scheduled to begin in the spring of 2021.

A "metroplex" is a major metropolitan area with multiple airports, where heavy air traffic and environmental constraints combine to hinder efficient aircraft movement. The FL Metroplex project would improve the efficiency of the national airspace system in the South-Central Florida area airspace by optimizing aircraft arrival and departure procedures at a number of airports. A total of 21 airports were included in the study and are listed below.

Major Study Airports

Fort Lauderdale-Hollywood International
Airport -- FLL
Orlando International Airport -- MCO
Miami International Airport -- MIA
Palm Beach International Airport -- PBI
Tampa International Airport -- TPA

South Satellite Study Airports

Ocean Reef Club Airport -- 07FA
Boca Raton Airport -- BCT
Fort Lauderdale Executive Airport -- FXE
Miami-Opa Locka Executive Airport -- OPF
Witham Field Airport -- SUA
Miami Executive Airport -- TMB

North Satellite Study Airports

Kissimmee Gateway Airport -- ISM
Lakeland Linder International Airport -- LAL
Leesburg International Airport -- LEE
Melbourne International Airport -- MLB
Orlando Executive Airport -- ORL
Punta Gorda Airport -- PGD
St. Pete-Clearwater International Airport -- PIE
Orlando Sanford International Airport -- SFB
Sarasota Bradenton International Airport -- SRQ
Venice Municipal Airport -- VNC

The project involves changes in aircraft flight paths and altitudes in certain areas. Specifically, the FAA proposes to publish and implement optimized standard arrival and departure instrument procedures, serving instrument flight rules (IFR) air traffic flows only into and out of airports in the FL Metroplex airspace area. The proposed action would not require any ground disturbance or increase the number of aircraft operations within the FL Metroplex airspace area. The analysis of potential environmental impacts in the EA was conducted in accordance with FAA Order 1050.1F, *Environmental Impacts: Policies and Procedures*.

On October 26, 2020, the Final EA will be released to the public. Electronic copies of the Final EA, Appendices, and FONSI/ROD are available through the following:

- 1) Online at: <http://metroplexenvironmental.com>
- 2) Local libraries: Electronic versions of the documentation have been distributed to 117 libraries in the General Study Area. A complete list of libraries with electronic copies of the Final EA, Appendices, and FONSI/ROD is available online at the above website link and is presented below.
- 3) Contacting the FAA: Those unable to access the document through one of the methods above may contact Lisa Favors at 404-305-5604.

County	Library Name	Address	Phone
Alachua	Alachua County Library HQ	401 E. University Ave., Gainesville, FL 32601	352-334-3900
	Millhopper Branch Library	3145 NW 43rd St., Gainesville, FL 32606	352-334-1272
	Tower Road Branch Library	3020 SW 75th St., Gainesville, FL 32608	352-333-2840
Brevard	Catherine S. Rood Central Library	308 Forrest Ave., Cocoa, FL 32922	321-633-1792
	Franklin T. DeGroot Library	6475 Minton Rd. SE, Palm Bay, FL 32908	321-952-6317
	Suntree/Viera Library	902 Jordan Blass Dr., Melbourne, FL 32940	321-255-4404
Broward	Broward County Main Library	100 S. Andrews Ave., Ft. Lauderdale, FL 33301	954-357-7444
	Weston Branch Library	4205 Bonaventure Blvd., Weston, FL 33332	954-357-5420
	Leon Slatin Branch Library	1856A W. Hillsboro Blvd., Deerfield Beach, FL 33442	954-357-7740
	Northwest Regional Library	3151 N. University Dr., Coral Springs, FL 33065	954-357-7990
	West Regional Library	8601 W. Broward Blvd., Plantation, FL 33324	954-765-1560
Charlotte	Englewood Charlotte Library	3450 North Access Rd., Englewood, FL 34224	941-681-3736
	Mid-County Regional Library	2050 Forrest Nelson Blvd., Port Charlotte, FL 33952	941-613-3160
	Punta Gorda Charlotte Library	401 Shreve St., Punta Gorda, FL 33950	941-833-5460
Citrus	Coastal Region Library	8619 W. Crystal St., Crystal River, FL 34428	352-795-3716
	Homosassa Public Library	4100 S. Grandmarch Ave., Homosassa, FL 34446	352-628-5626
	Lakes Region Library	1511 Druid Rd., Inverness, FL 34452	352-726-2357
Collier	East Naples Branch Library	8787 Tamiami Trail E., Naples, FL 34113	239-252-7140
	Everglades City Branch Library	102 Copeland Ave. N, Everglades City, FL 34139	239-695-2511
	Immokalee Branch Library	417 N. 1st St., Immokalee, FL 34142	239-252-7073
DeSoto	DeSoto County Library	125 N. Hillsborough Ave., Arcadia, FL 34266	863-993-4851
Flagler	Main Palm Coast Library	2500 Palm Coast Pkwy. NW, Palm Coast, FL 32137	386-446-6763
	Bunnell Branch Library	103 E. Moody Blvd., Bunnell, FL 32110	386-437-7390
Glades	Glades County Library	201 Riverside Dr., Moore Haven, FL 33471	863-946-0744

County	Library Name	Address	Phone
Hardee	Hardee County Library	315 N. 6th Ave., Wauchula, FL 33873	863-773-6438
Hendry	Clewiston Public Library	120 W. Osceola Ave., Clewiston, FL 33440	863-983-9194
	Barron Library	461 N. Main St., LaBelle, FL 33934	863-675-0833
	Florida B. Thomas Library	1010 J Harlem Academy Ave., Clewiston, FL 33440	863-902-3322
Hernando	Hernando County Main Library	238 Howell Ave., Brooksville, FL 34601	352-754-4043
	Spring Hill Branch Library	9220 Spring Hill Dr., Spring Hill, FL 34608	352-754-4043
	East Hernando Branch Library	6457 Windmere Rd., Brooksville, FL 34602	352-754-4043
Highlands	Lake Placid Memorial Library	205 W. Interlake Blvd. #9643, Lake Placid, FL 33852	863-699-3705
	Avon Park Library	100 N. Museum Ave., Avon Park, FL 33825	863-452-3803
	Sebring Public Library	319 W. Center Ave., Sebring, FL 33870	863-402-6716
Hillsborough	Bloomingtondale Regional Library	1906 Bloomingtondale Ave., Valrico, FL 33596-6204	813-273-3652
	Jan K. Platt Regional Library	3910 S. Manhattan Ave., Tampa, FL 33611-1214	813-273-3652
	Jimmie B. Keel Regional Library	2902 W. Bearss Ave., Tampa, FL 33618-1828	813-273-3652
	New Tampa Regional Library	10001 Cross Creek Blvd., Tampa, FL 33647-2581	813-273-3652
	SouthShore Regional Library	15816 Beth Shields Way, Ruskin, FL 33573-4903	813-273-3652
	Town 'N Country Regional Library	7606 Paula Dr., Suite 120, Tampa, FL 33615-4116	813-273-3652
Indian River	Indian River County Main Library	1600 21st St., Vero Beach, FL 32960	772-770-5060
	North Indian River County Library	1001 Sebastian Blvd., Sebastian, FL 32958	772-589-1355
Lake	Astor County Library	54905 Alco Rd., Astor, FL 32101	352-759-9913
	East Lake County Library	31340 S. County Rd 437, Sorrento, FL 32776	352-383-9980
	Cagan Crossings Community Library	16729 Cagan Oaks, Clermont, FL 34714	352-243-1840
Lee	Fort Myers Regional Library	2450 First St., Fort Myers, FL 33901	239-533-4400
	East County Regional Library	881 Gunnery Rd. N, Lehigh Acres, FL 33971	239-533-4400
	South County Regional Library	21100 Three Oaks Pkwy., Estero, FL 33928	239-533-4400
Levy	Williston Public Library	10 SE First St., Williston, FL 32696	352-528-2313
	Luther Callaway Public Library	104 NE 3rd St., Chiefland, FL 32626	352-493-2758
	A.F. Knotts Public Library	11 56th St., Yankeetown, FL 34498	352-447-4212
Manatee	Downtown Central Library	1301 Barcarrota Blvd. W., Bradenton, FL 34205	941-748-5555
	Braden River Library	4915 53rd Ave. E, Bradenton, FL 34203	941-727-6079
Marion	Marion County Library HQ	2720 E. Silver Springs Blvd., Ocala, FL 34470	352-671-8551
	Dunnellon Public Library	20351 Robinson Rd., Dunnellon, FL 34431	352-438-2520
	Fort McCoy Public Library	14660 NE Hwy. 315, Fort McCoy, FL 32134	352-438-2560
Martin	Elisabeth Lahti Library	15200 SW Adams Ave., Indiantown, FL 34956	772-597-4200
	Peter & Julie Cummings Library	2551 SW Matheson Ave., Palm City, FL 34990	772-288-2551
	Hobe Sound Public Library	10595 SE Federal Hwy., Hobe Sound, FL 33445	772-546-2257
Miami-Dade	Miami-Dade Main Library	101 W. Flagler St., Miami, FL 33130	305-375-2665
	North Dade Regional Library	2455 NW 183 St., Miami Gardens, FL 33056	305-625-6424
	West Kendall Regional Library	10201 Hammocks Blvd. #159, Miami, FL 33196	305-385-7135
	West Dade Regional Library	9445 Coral Way, Miami, FL 33165	305-553-1134
	South Dade Regional Library	10750 SW 211 St., Cutler Bay, FL 33189	305-233-8140
Monroe	Key West Public Library	700 Fleming St., Key West, FL 33040	305-292-3595

County	Library Name	Address	Phone
Monroe	Key Largo Public Library	101485 Overseas Hwy., Key Largo, FL 33036	305-664-4645
	Marathon Public Library	3251 Overseas Hwy., Marathon, FL 33050	305-743-5156
Okeechobee	Okeechobee County Public Library	206 SW 16th St., Okeechobee, FL 34974	863-763-3536
Orange	Alafaya Branch Library	12000 E. Colonial Dr., Orlando, FL 32826	407-835-7323
	North Orange Branch Library	1211 E. Semoran Blvd., Apopka, FL 32703	407-835-7323
	Orlando Public Library	101 E. Central Blvd., Orlando, FL 32801	407-835-7323
	South Creek Branch Library	1702 Deerfield Blvd., Orlando, FL 32837	407-832-7323
	West Oaks Branch Library	1821 E. Silver Star Rd., Ocoee, FL 34761	407-835-7323
Osceola	West Osceola Branch Library	301 Campus St., Celebration, FL 34747	n/a
	Poinciana Branch Library	101 N. Doverplum Ave., Kissimmee, FL 34758	n/a
	Kenansville Branch Library	1154 S. Canoe Creek Rd., Kenansville, FL 34739	n/a
Palm Beach	Palm Beach County Main Library	3650 Summit Blvd., W. Palm Beach, FL 33406	561-233-2600
	Belle Glade Branch Library	725 NW 4th St., Belle Glade, FL 33430	561-996-3453
	Acreage Branch Library	15801 Orange Blvd., Loxahatchee, FL 33470	561-681-4100
	West Boynton Branch Library	9451 Jog Rd., Boynton Beach, FL 33437	561-734-5556
	Okeechobee Blvd. Branch Library	5689 Okeechobee Rd., W. Palm Beach, FL 33417	561-233-1880
	Pasco	Hudson Regional Library	8012 Library Rd., Hudson, FL 34667
Pinellas	Land O'Lakes Branch Library	2818 Collier Pkwy., Land O'Lakes, FL 34639	813-929-1214
	South Holiday Branch Library	4649 Mile Stretch Dr., Holiday, FL 34690	727-834-3331
	Palm Harbor Library	2330 Nebraska Ave., Palm Harbor, FL 34683	727-784-3332
Polk	Clearwater Main Library	100 N. Osceola Ave., Clearwater, FL 33755	727-562-4970
	Barbara S. Ponce Public Library	7770 52nd St. N., Pinellas Park, FL 33781	727-369-0669
	St. Petersburg Main Library	3745 9th Ave., St. Petersburg, FL 33713	727-893-7724
	Lakeland Public Library	100 Lake Morton Dr., Lakeland, FL 33801	863-834-4280
Putnam	Winter Haven Public Library	325 Avenue A NW, Winter Haven, FL 33881	863-291-5880
	Dundee Public Library	202 E. Main St., Dundee, FL 33838	863-439-9426
	Lake Wales Public Library	290 Cypress Garden Lane, Lake Wales, FL 33853	863-678-4004
	Fort Meade Public Library	75 E. Broadway St., Fort Meade, FL 33841	863-285-8287
	Putnam County HQ Library	601 College Rd., Palatka, FL 32177	386-329-0126
Sarasota	Bostwick Public Library	125 Tillman St. Bldg. 2, Bostwick, FL 32007	386-326-2750
	Crescent City Public Library	610 North Summit St., Crescent, FL 32112	386-698-2600
	Interlachen Public Library	133 N. County Road 315, Interlachen, FL 32148	386-684-1600
	Melrose Public Library	312 Wynnwood Ave., Melrose, FL 32666	352-475-1237
	Betty J. Johnson Public Library	2801 Newtown Blvd., Sarasota, FL 34234	941-861-1360
Seminole	Elsie Quirk Public Library	100 W. Dearborn St., Englewood, FL 34223	941-861-1200
	W. H. Jervey Jr. Public Library	300 Nokomis Ave. S, Venice, FL 34285	941-861-1330
	Osprey Public Library	337 N. Tamiami Trail, Osprey, FL 34229	941-918-4037
	Jean Rhein Central Library	215 N. Oxford Rd., Casselberry, FL 32707	407-665-1500
St. Lucie	Seminole County Library East Branch	310 Division St., Oviedo, FL 32765	407-665-1560
	Seminole County Library North Branch	150 N. Palmetto Ave., Sanford, FL 32771	407-665-1620
	Susan B. Kilmer Library	101 Melody Ln., Fort Pierce, FL 34950	772-462-1615

County	Library Name	Address	Phone
St. Lucie	Paula A. Lewis Library	2950 SW Rosser Blvd., Port St. Lucie, FL 34953	772-871-5470
	Morningside Branch Library	2410 SE Morningside Blvd., Port St. Lucie, FL 34952	772-337-5632
Sumter	Bushnell Public Library	402 N. Florida St., Bushnell, FL 33513	352-689-4567
	Panasoffkee Community Library	1500 County Road 459, Lake Panasoffkee, FL 33538	352-689-4567
	Villages Public Library at Belvedere	325 Belvedere Blvd., The Villages, FL 32162	352-689-4567
Volusia	Daytona Beach Regional Library	105 E. Magnolia Ave., Daytona Beach, FL 32114	386-257-6036
	Deltona Regional Library	2150 Eustace Ave., Deltona, FL 32725	386-789-7207
	Port Orange Regional Library	1005 City Center Circle, Port Orange, FL 32129	386-322-5152
	Oak Hill Public Library	125 E. Halifax Ave., Oak Hill, FL 32759	386-345-5510
	Pierson Public Library	115 N. Volusia Ave., Pierson, FL 32180	386-749-6930
	DeLand Regional Library	130 E. Howry Ave., DeLand, FL 32724	386-822-6430

For additional information, contact:

South-Central Florida Metroplex Final EA
 Federal Aviation Administration
 Eastern Service Center – Operations Support Group
 1701 Columbia Avenue
 College Park, GA 30337

The FAA would like to thank you for your interest in this project. If you have any questions about the information provided, please feel free to contact me.

Sincerely,

**RYAN W
 ALMASY**

Digitally signed by
 RYAN W ALMASY
 Date: 2020.10.14
 10:42:42 -04'00'

Ryan W. Almasy
 Manager, Operations Support Group
 Eastern Service Center, Air Traffic Organization

Attachment 5

GOAA Response to City Request for Noise Study



**GREATER ORLANDO
AVIATION AUTHORITY**

September 4, 2020

Mayor Nicholas Fouraker
City of Belle Isle
1600 Nela Ave.
Belle Isle, FL 32809

Dear Mayor Fouraker,

I am writing to follow-up on your noise study request to measure the impact of proposed Metroplex procedures. The procedures in question involve north flow departures moving from a 010° voluntary noise abatement heading to a 006° runway heading (remaining east of Conway Road). You proposed using the Aviation Authority's noise monitor to measure the difference in noise by having departing aircraft alternate between flying to the noise abatement marks and flying runway heading. This proposed test introduces various challenges, and hinges on Federal Aviation Administration (FAA) participation.

In order to facilitate your request, we approached the FAA regarding their capacity to assist with the proposed noise test. The Aviation Authority recently received correspondence from the FAA stating that, "the FAA is not in a position to support the City's request." The FAA outlined the following issues with the test:

- The request is not as simple as vectoring a series of aircraft (due to wind drift, fleet mix, differences in takeoff power settings)
- The proposed RNAV (GPS) departure procedures have not been published and would not be available for entry into aircraft Flight Management Systems
- Controller training has not yet occurred as the FAA has not completed the environmental review for the project
- The use of noise monitors would provide a single event noise evaluation that is not comparable to the FAA's analysis found in the Draft Environmental Assessment (EA)

The Aviation Authority recognizes the concerns of the residents of Belle Isle, and we have communicated these concerns to the FAA through our community-led Aviation Noise Abatement Committee (ANAC). Please understand this result does not dismiss our commitment to engage the community. Our noise monitor will continue to be available for residents upon request.

Sincerely,

Phillip N. Brown, A.A.E.
Chief Executive Officer
Orlando International Airport

CC: Anthony Carugno

Attachment 6
ANAC Email regarding Noise Equipment


Bob Francis <bfrancis@belleislefl.gov>

Noise Monitoring Equipment / Noise Metrics

3 messages

Richard LePore <richard.lepore@goaa.org>
To: Bob Francis <bfrancis@belleislefl.gov>

Thu, Aug 18, 2022 at 5:19 PM

Bob,

I just wanted to reach out and inform you on some information regarding the noise monitoring equipment and the metrics that the FAA use. First, the noise monitoring equipment measures environmental sound pressure levels without discriminating between aviation and non-aviation noise events and it is not scientific or certified for the use in an official noise study. Included in the results of the noise monitoring will be all environmental noise including local air-conditioning units, lawn equipment, vehicles, etc.. Although the noise monitoring results quantify environmental noise levels using the FAA noise metric, the day-night average sound level (DNL), unlike the FAA studies, the results of the noise monitoring equipment includes all environmental noise as mentioned before. You must also keep in mind that routing and altitude of overflying aircraft is in the exclusive jurisdiction of the FAA.

The day-night average sound level (DNL) metric is the average noise level over a 24 hour period and is NOT based on a single event noise. Please let me know if you have any further questions on noise metrics or noise equipment. Hope you have a great weekend.

Best Regards,

Richard LePore

Program Manager, Airport Operations – Noise Abatement

Greater Orlando Aviation Authority

One Jeff Fuqua Blvd.

Orlando, FL 32827-4399

(D) 407-825-3828 | (M) 407-255-2578

richard.lepore@goaa.org

**Bob Francis** <bfrancis@belleislefl.gov>
To: Richard LePore <richard.lepore@goaa.org>

Mon, Aug 22, 2022 at 2:01 PM

Rich - Thank you for the information and the previous email on the equipment that you use.

Sincerely,

*Bob*Bob Francis, ICMA-CM
City Manager
City of Belle Isle, FL1600 Nela Ave.
Belle Isle, FL 32809

Attachment 7
GOAA Letter to FFA with Concerns



**GREATER ORLANDO
AVIATION AUTHORITY**

August 1, 2019

Mr. Michael O'Harra
Southern Region Regional Administrator
Federal Aviation Administration
Southern Region
1701 Columbia Avenue
College Park, Georgia 30337

Dear Mr. O'Harra:

RE: SOUTH-CENTRAL FLORIDA METROPLEX MCO NOTIONAL DESIGNS

On July 12, 2019, the Greater Orlando Aviation Authority's (Aviation Authority) Aviation Noise Abatement Committee (ANAC) convened a meeting to examine the South-Central Florida Metroplex notional designs for Orlando International Airport (MCO). The ANAC comprises residents who represent various communities; both noise impacted and non-impacted, throughout the Greater Orlando area. The aim of the ANAC meeting was to submit comments to the Aviation Authority for consideration to be forwarded to the FAA Metroplex team.

The ANAC had five recommendations regarding proposed Standard Terminal Arrival Routings (STARs) and Standard Instrument Departures (SIDs) for the Aviation Authority to review. The ANAC recommendations are focused on maximizing flights over industrial-use areas and minimizing the introduction of new or increased noise to previously non-impacted areas.

The Aviation Authority strives to reflect the concerns of our residents as expressed through the public process of our regular ANAC meetings. Enclosed are the recommendations of our community-led noise abatement committee in response to the South-Central Florida Metroplex notional designs. I request your consideration of these community concerns and views as you finalize your designs.

Sincerely,

A handwritten signature in black ink, appearing to read "Phillip N. Brown".

Phillip N. Brown
Chief Executive Officer
Greater Orlando Aviation Authority

Enclosure: Comments on South-Central Metroplex MCO Notional Designs
2019

COMMENTS ON SOUTH-CENTRAL METROPLEX
MCO NOTIONAL DESIGNS 2019

1. General Comments

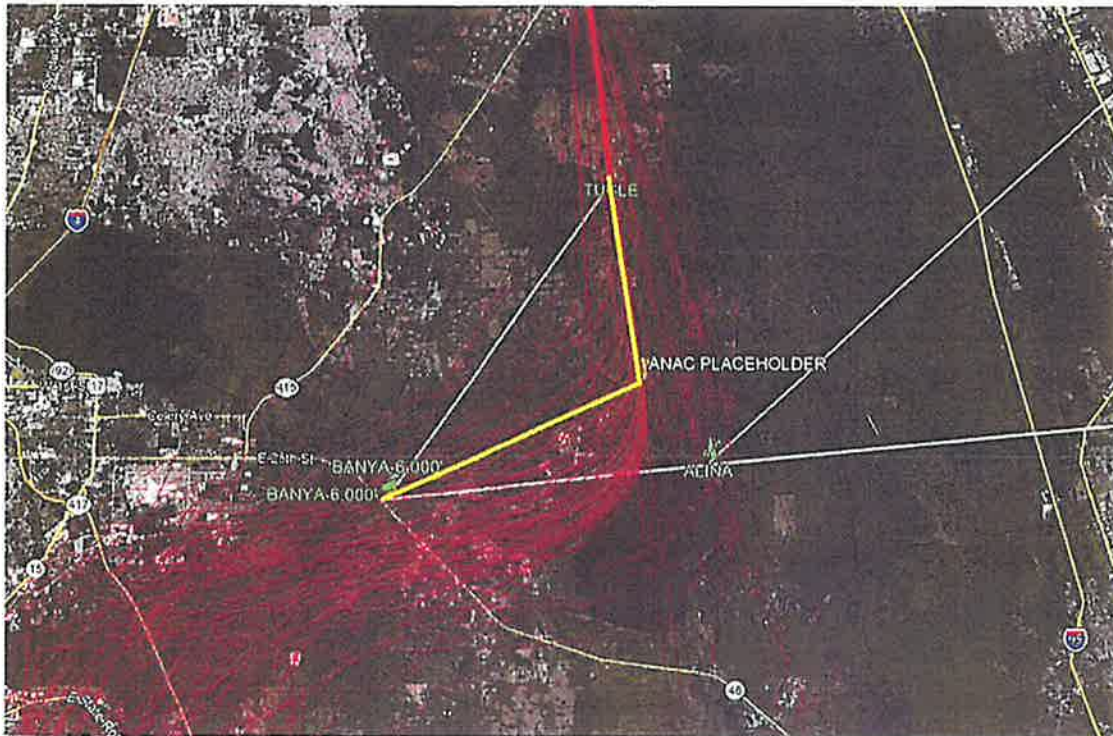
- a. Maintain preferential south flow operations
- b. Maintain the 060 night-time noise abatement heading for north flow departures
- c. Continue to direct traffic to the noise abatement marks during north flow operations when conditions permit
- d. During south flow operations, do not issue any radar turns to departing aircraft until they reach 3,000 ft. on Tower assigned headings.

2. South Flow RNAV STAR SNFLD

There is concern that the path from TUGLE to BANYA will keep arrivals lower for a longer period. Move TUGLE to the ANAC placeholder, creating the route shown in yellow (Fig. 1) to allow SFB traffic to climb earlier. We expect that the placeholder will provide better noise abatement for the growing City of Oviedo.

The suggested ANAC Placeholder Coordinates are 28°48'43.69"N 81°3'28.30"W.

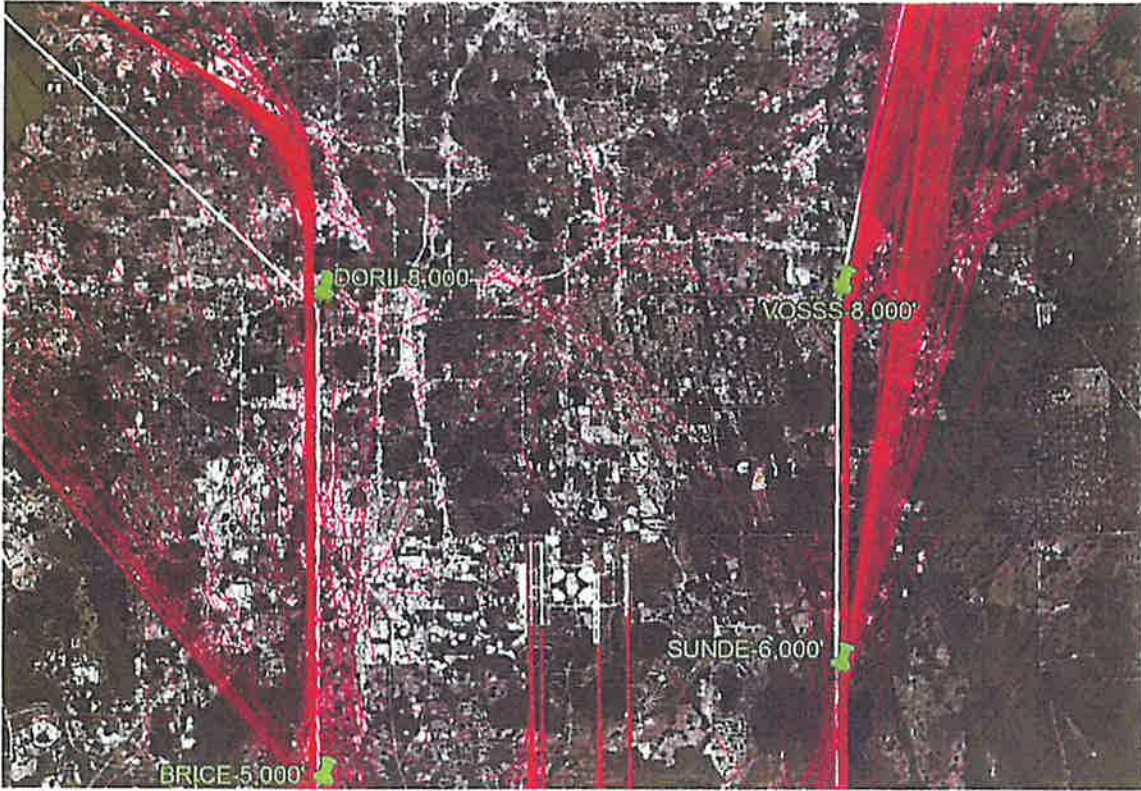
Figure 1 – South Flow Arrivals SNFLD



3. North Flow RNAV STARs GRNCH & ALINA

Increase the altitudes of the waypoints VOSSS & DORII from 8,000 to 9,000, making the downwind legs higher. This would reduce noise exposure to the east and west.

Figure 2 – North Flow Arrivals JAFAR/ SNFLD



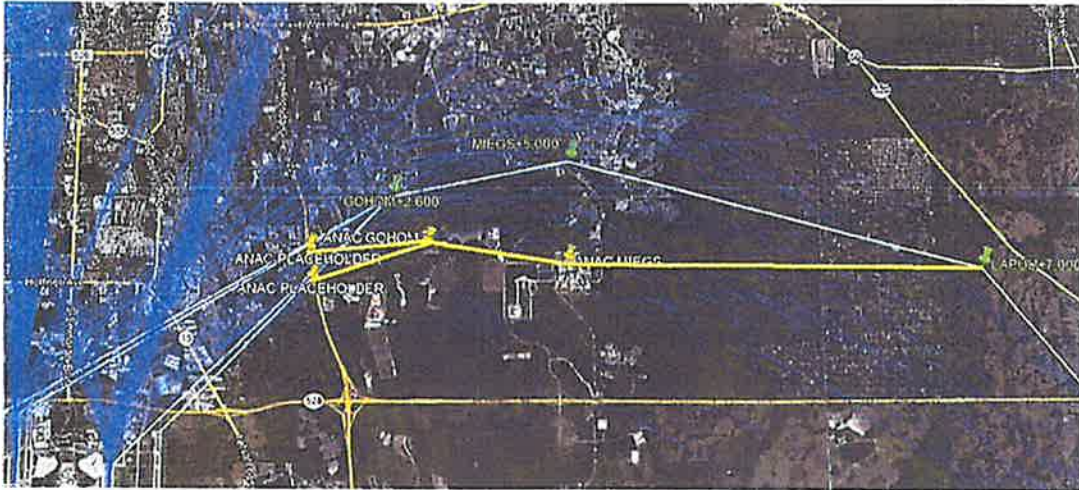
4. *The Authority recognizes that land-use practices that attract or sustain hazardous wildlife populations on or near airports can significantly increase the potential for wildlife strikes, and that the FAA recommends the minimum separation criteria outlined for land-use practices that attract hazardous wildlife to the vicinity of airports. Therefore the comments in para a and para b are submitted with the expectation that the FAA will assess their safety in accordance with AC 150/5200-33B SECTION 1. GENERAL SEPARATION CRITERIA FOR HAZARDOUS WILDLIFE ATTRACTANTS ON OR NEAR AIRPORTS and other existing FAA regulations, and will adopt them only if the recommendations are determined by the FAA not to increase the threat of hazardous wildlife movement into or across the approach or departure airspace of MCO.*

a. North Flow RNAV SIDs DDANY & MZULO

Consider moving the waypoints GOHOM and MIEGS south of current locations to the ANAC placeholders, creating the route shown in yellow (Fig. 4a). This moves departing traffic away from existing developments [Avalon Park, Stonybrook East] to overfly the vicinity of the Orange County landfill and the OUC Stanton Energy Center.

- i. Suggested ANAC Placeholder_1 Coordinates - 28°28'50.42"N
81°14'30.44"W
- ii. Suggested ANAC Placeholder_2 Coordinates - 28°29'19.51"N
81°14'35.71"W
- iii. Suggested ANAC GOHOM Coordinates - 28°29'22.96"N
81°12'31.90"W
- iv. Suggested ANAC MIEGS Coordinates - 28°29'11.21"N 81°10'3.62"W

Figure 4a – North Flow Departures DDANY/ MZULO



b. Authority Comment on North Flow RNAV SIDs DDANY & MZULO ANAC Recommendation

Upon further examination, the Authority requests consideration to move GOHOM farther south than the proposed ANAC GOHOM waypoint, and connecting to the proposed ANAC MIEGS over the OUC Stanton Energy Center. This would shift departure tracks, depicted in blue (Fig. 4b) farther to the south and would reduce noise exposure to residential areas northeast of MCO. The headings would move from 045 to 058 degrees.

- i. Suggested GOAA GOHOM Coordinates - 28°28'36.79"N 81°13'22.22"W
- ii. Suggested ANAC MIEGS Coordinates - 28°29'11.21"N 81°10'3.62"W

Figure 4A – North Flow Departures DDANY/ MZULO

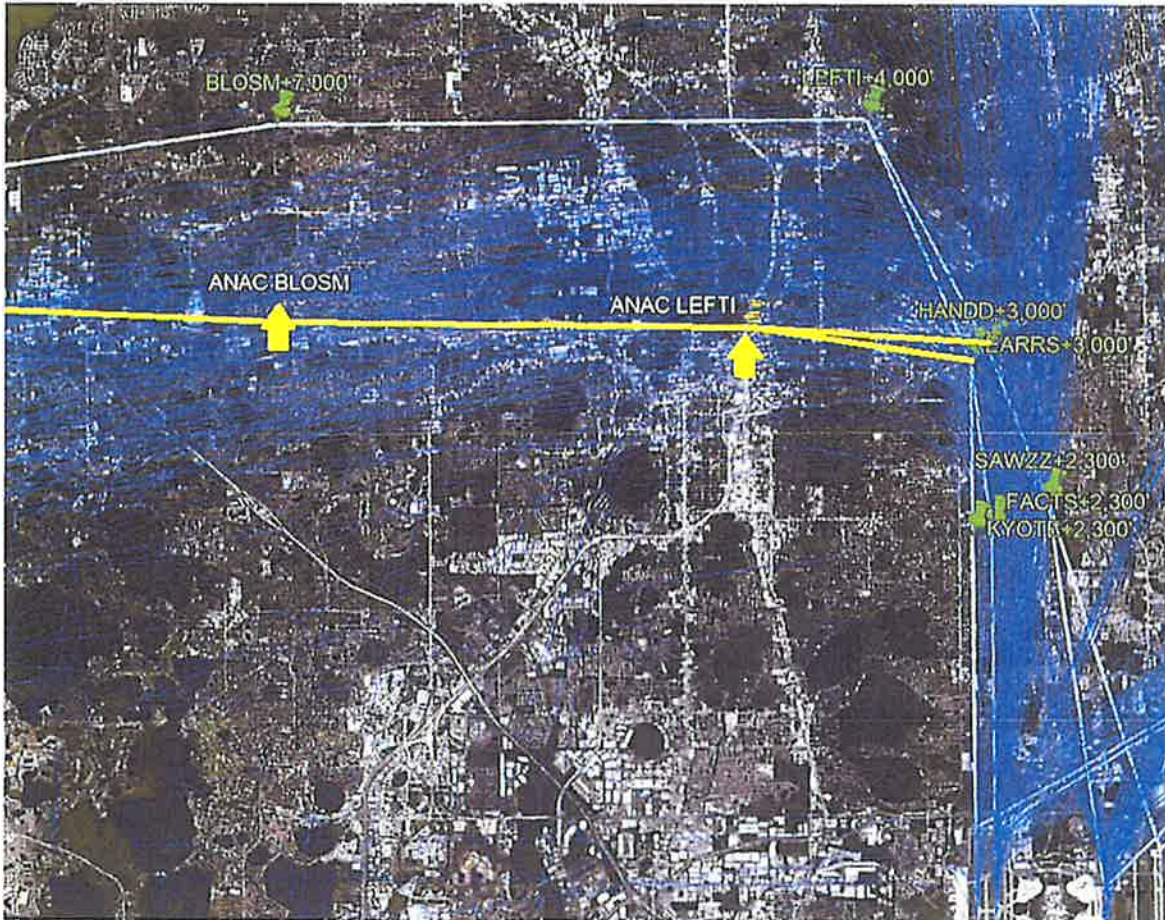


5. North Flow RNAV SID EPCOT, FSHUN, and LEWRD

There is concern that the routing to LEFTI and BLOSM will shift traffic to an area that currently has a low concentration of departure flight tracks. Consider shifting these waypoints south to ANAC LEFTI and ANAC BLOSM, depicted in yellow (Fig. 5) to keep departures closer to today's pattern, and to a path that follows more closely along the commercially developed area of SR 50.

- a. Suggested ANAC LEFTI - 28°33'8.63"N 81°22'54.67"W
- b. Suggested ANAC BLOSM - 28°33'14.86"N 81°29'45.41"W

Figure 5 – North Flow Departures EPCOT/ FSHUN/ LEWRD



6. Authority Comment on RWY 35L/ R Departures to JWOLF Waypoint

It appears that the future JWOLF location on the FATHE RNAV SID will shift departure tracks to the east. This would introduce noise to areas that are not currently accustomed to such high intensity traffic. This procedure is expected to generate significant amounts of new noise complaints during north flow operations.

Figure 6 – RWY 35L/ R Departures to JWOLF Waypoint

