MIAMI INTERNATIONAL AIRPORT (MIA)

AIRCRAFT NOISE AND ENVIRONMENTAL PLANNING / WILDLIFE CONTROL

5600 NW  $36^{TH}$  STREET, SUITE 533

WEDNESDAY, FEBRUARY 23<sup>RD</sup> 2022 MEETING SUMMARY

MEETING WAS HELD AT THE MIAMI INTERNATIONAL AIRPORT AUDITORIUM IN CONSOURSE "D", 4<sup>™</sup> FLOOR

### **SIGN-IN SHEET ATTACHED**

The Noise Abatement Advisory Board (NAAB) held a meeting at Miami International Airport (MIA) in Concourse "D" Auditorium, 4<sup>th</sup> Floor. The meeting was called to order at 1810 hours (L) and total of (7) members were present; thus, a quorum was obtained. At approximately 1825 hours (L), Mr. Chris Mazzola, joined the meeting (in-person) for a total of (8) members present.

### INTRODUCTION

Mr. Rollason: Welcomes and calls the meeting to order.

*Mr. Hegedus*: Welcomes everyone to the meeting, takes roll of all members present and advises the chair that they have quorum.

### REASONABLE OPPORTUNITY FOR PUBLIC TO BE HEARD

*Mr. Rollason*: If we have anyone from the public that would like to speak.

*Mr. Rollason*: I see none.

NO ONE RESPONDS.

### **APPROVE AGENDA FOR TONIGHT**

*Mr. Rollason*: We're gonna bounce around just a little bit to get the FAA on so we can handle them, but I'd like to have a motion to approve the agenda for the meeting.

Mr. Arce: First.

Mr. Howard: Second.

MOTION PASSED UNANIMOUSLY.

### **FAA METROPLEX ISSUE**

Mr. Rollason: I see that we have people with us remotely, so Mr. Hegedus how do you wanna handle that?

*Mr. Hegedus*: We do have the FAA here virtually so I will hand it off to them. Thanks to the FAA for attending tonight. A couple items first, about a month and a half ago, I sent an email to all the members and requested

### AIRCRAFT NOISE AND ENVIRONMENTAL PLANNING / WILDLIFE CONTROL

5600 NW 36<sup>TH</sup> STREET, SUITE 533 WEDNESDAY, FEBRUARY 23<sup>RD</sup> 2022 MEETING SUMMARY

MEETING WAS HELD AT THE MIAMI INTERNATIONAL AIRPORT AUDITORIUM IN CONSOURSE "D", 4<sup>™</sup> FLOOR

from them to submit their questions to be submitted to the FAA reference the Metroplex. Those questions were forwarded to the FAA to be addressed at tonight's meeting.

Mr. O'Harra: Thank you Mr. Hegedus. Good evening to the board members, to Chairman Rollason, thank you for recognizing the FAA. We have myself, Michael O'Harra, the regional administrator for the FAA Southern Region joined by deputy Perlis Johnson who I believe many of you have met in the past, in fact you've probably met several of us in the past. We have our Metroplex co-leads for the Florida project, Christian Karnes and Vicki Turner, we have our national Metroplex program lead Jim Arrighi, our support team Brian Crow, and John Bacavis. Local air traffic is with us, for at least a little bit, Mr. Luis Colon, and community engagement officer Matt Felton. I hope I didn't miss anybody on our team but let me just kick off if I could with this a quick discussion on our timeline and will get right to the questions here shortly, but in terms of where we are, we're on the tail end of the project wrapping up the Metroplex. A couple of key dates in terms of the Miami area was our initial implementation of procedures for Miami on the 12th of August 2021, the team continues to work post implementation updates collectively as an agency working toward a May 19th date this year and that includes some amendments after the initial batch of procedures to resolve things like unintended consequences, airspace issues, interactions with other procedures that we saw on implementation, some of those are as small as name changes or adding or removing a waypoint or transitions along, and limited changes certainly from a noise perspective. As always, we do the noise analysis related to any of those activities and the design team has put pencils down on the design that and it's moved into the process for flight validation, flight check and procedure review so that's working toward the May publication date. Ms. Turner, I'll just ask, do you have anything to add on the timeline?

*Ms. Turner*: No sir, you covered it well, it is May 19th, and we will start doing the flight check, I believe it's next week is when they're starting.

Mr. O'Harra: Alright, thanks Ms. Turner. And I'll just invite the FAA team if you have comments feel free to jump in, but I'd like to go ahead and focus on the questions that were submitted by some of the NAAB members that Norman just mentioned. Just want to note out front, you will see it when we go through, but some of the questions seem to point, at least in my opinion, to some differing objectives within the NAAB. For example, some requests related to the CSALT waypoint; could we move it East, could we move it West? Could we potentially get more aircraft on the route, or could we potentially vector more away from the route? So, we'll talk through the questions, but I just wanted to make that note coming in. So, I assume that all the board members have seen those questions, so maybe I need to read those. Mr. Hegedus, any comment from you really quick? Were those questions distributed or would it help if I read each of those?

*Mr. Hegedus*: The questions were distributed, and there is a copy in front of the members of the same document that you have.

*Mr. Rollason*: I think it would be good, for the record, if we read the questions, then we see what the answers are, and your comments to tie them into the questions.

*Mr. Hegedus:* Question one, what percentage of eastern departures are flying through CSALT vs. JAMBA vs. BALLR? A. Historically, the vast majority of all eastern departures were given a 090 heading (CSALT). This created

### MIAMI INTERNATIONAL AIRPORT (MIA)

#### AIRCRAFT NOISE AND ENVIRONMENTAL PLANNING / WILDLIFE CONTROL

5600 NW 36<sup>TH</sup> STREET, SUITE 533 WEDNESDAY, FEBRUARY 23<sup>RD</sup> 2022

MEETING SUMMARY MEETING WAS HELD AT THE MIAMI INTERNATIONAL AIRPORT AUDITORIUM IN CONSOURSE "D",  $4^{TH}$  FLOOR

an unjust burden and allocation of noise to the residents living in the Upper Eastside, Edgewater, North Miami, Wynwood and Allapattah neighborhoods (to name of few).

*Mr. O'Harra:* Historically through CSALT, we've seen between 38% and 47% of the traffic going through CSALT which leaves between 20% and 25% of traffic over JAMBA and KBOLA and about 15% give or take over BALLR. All of those are eastbound departures. A very small percentage of aircraft fly east, I'd say less than 3% and then the remainder of traffic may not be following those specific routes.

Mr. Hegedus: Are there any questions?

*Mr. Helmstetter*: 40% CSALT, 20% JAMBA and 15% BALLR right? So that's 75% of all air traffic that's departing east? So you're saying the other 25% do not follow either of those three departure paths?

*Mr. O'Harra*: 38% to 47% through CSALT, 20% to 25% with JAMBA and roughly 15% over BALLR. I said there was about 3% that was eastbound, due east that I believe are vectored aircraft, and then the remainder would be aircraft that historically and continue to fly vectored routes, not specifically any of those procedures mentioned. I'd say that could be 5% to 10%, there's obviously gonna be a range on that.

*Mr. Helmstetter*: So, in other words, out of everyone flying the Metroplex, 53% of all flights are flying through CSALT?

Mr. O'Harra: 38% to 47% going through CSALT.

*Mr. Helmstetter*: No, but if we're just talking about the Metroplex flights you're only accounting for 75% of the total, so 40% of the 75% is 53%, so the whole point there was to establish that the vast majority of all departures are running through CSALT as it relates to the Metroplex project. They're not being equally distributed amongst those three main departure paths. That's the math based on your numbers.

*Mr. O'Harra*: My 15% and 25% and 47% could be 87% and another three would be 90% and roughly 10% would account for other procedures, none of those are a majority but those are the numbers that I'm sharing.

*Mr. Helmstetter*: Ok, 40%, 20%, 15% and then you have some other accounted percentages and a little range here and there, but you kind of look at the average of the numbers that you said three different times of the flights flying Metroplex routes, 53% of the aircraft that you're routing are going through CSALT.

*Mr. Arrighi*: I think you're confusing the seasonal traffic for the numbers. The traffic that flies that route varies depending upon the time of the year, so it's seasonal. What you may get is people who want to use that route flying back and forth to New York or other locations in the US and at other times of the year you have holiday traffic, which is gonna be busier, so as Mr. O'Harra says, it varies. This is a five-year historic average about 37% to 48% at any given time, but we haven't seen anything that was over 50% flying one of those procedures. So, I'm not sure where your math comes from, but it varies on those different exit routes.

*Mr. O'Harra*: I'm certainly willing to yield the fact they're not a 1/3, 1/3, 1/3, if that's the point, then that's accurate. If the point is also, there's more going up CSALT, than that's accurate.

### MIAMI INTERNATIONAL AIRPORT (MIA)

AIRCRAFT NOISE AND ENVIRONMENTAL PLANNING / WILDLIFE CONTROL

5600 NW 36<sup>TH</sup> STREET, SUITE 533 WEDNESDAY, FEBRUARY 23<sup>RD</sup> 2022

MEETING SUMMARY

MEETING WAS HELD AT THE MIAMI INTERNATIONAL AIRPORT AUDITORIUM IN CONSOURSE "D", 4<sup>™</sup> FLOOR

*Mr. Helmstetter*: So, you said that this was taken over a five-year average? Metroplex hasn't been in place for five years, so I don't understand that comment Mr. Arrighi.

*Mr. Arrighi*: We haven't seen the traffic vary from the historic average, so we haven't seen a significant difference in the amount of traffic that flies up there. As Mr. O'Harra stated, it may be a little bit more, but it's not 53% as near as we can tell.

*Mr. O'Harra*: So, there's another comment to introduce. I don't know if the airport wants to share anything on this or not but, when we look at post Metroplex or even recent traffic, we're coming out of hopefully a COVID period of time. Practically speaking the volume of traffic and their destinations are driven not only by the airlines but by the demand that those airlines face, so I'm quite familiar that Miami is taking a bigger hit internationally than domestically so they're gonna have had more flights in the past year domestically, a smaller reduction in the domestic traffic, than for example the international traffic. It's a complex system and it's certainly not my intent to debate or push back, I think the numbers are what the numbers are.

*Mr. Helmstetter*: I don't know why there's a range when we know how long that the Metroplex has been in place and there's really no seasonality, it's just based on the current timeframe.

*Mr. Arrighi*: The routes are based upon the city pairs that the airlines file, so they use the procedures that are available to go to their destination airport. They're flying the same city pair routes generally, as they did pre-Metroplex, so the seasonality is that sometimes with more airplanes there's more traffic to some areas it could be dependent upon the change in the amount of in the equipment that the airlines are flying based upon the demand to a city pair. So, the routes that they're flying up Biscayne Bay have historically been at a particular percentage, we said 37% to about 48% maybe a little bit more, but that's based upon those city pairs. They're filing their flight plans based upon those same city pairs and the amount of traffic flying up Biscayne Bay using the Metroplex routes is about the same as what we forecasted.

*Mr. Gilderman*: What you forecast and what historically is are going to be different and I actually asked for that data from Mr. Hegedus but unfortunately, I wasn't given it because I really wanted to go back to 2011 to see how the flight paths changed over time and I believe some of this was an anticipation of Metroplex.

Mr. Gilderman: I think the point is this, there seems to be more traffic going north on the Biscayne Bay route, forget about CSALT and everything else, making that left turn going east, then there was before. We have flights that eventually head South, going up north. That was actually one of the questions I think was presented and I'm hoping you guys talk about that, and I think that's what we're getting at; I think we're trying to alleviate some of the burden from the northern route, spread them to the southeastern and southern route, especially when they're eventually gonna go South. Central America, Mexico, you actually have the LA and the Texas flights doing that too, going north, going West, going southwest almost parallel to the airport and then heading out to the Gulf of Mexico. So, I'm not gonna go back and forth with you guys about numbers and all that because we did ask, can you guys help us and get a little bit of relief by moving those flights from the northern route to a southern gate?

*Mr. Colon*: When we did Metroplex, we decided on three departure gates instead of two, CSALT, JAMBA and BALLR. Historically the 090 heading, traffic that does not go to JAMBA, used to be on a 090 heading so that's traffic

### MIAMI INTERNATIONAL AIRPORT (MIA)

AIRCRAFT NOISE AND ENVIRONMENTAL PLANNING / WILDLIFE CONTROL

5600 NW 36<sup>TH</sup> STREET, SUITE 533 WEDNESDAY, FEBRUARY 23<sup>RD</sup> 2022

MEETING SUMMARY

MEETING WAS HELD AT THE MIAMI INTERNATIONAL AIRPORT AUDITORIUM IN CONSOURSE "D", 4<sup>™</sup> FLOOR

that we took up that CSALT routing. The only traffic that was added going northbound over the Bay is the traffic that files over the gulf route and if you look back at the reports and the presentation that we did during the public outreach that was presented to the public, we did tell you that there was gonna be some traffic that files over the gulf routes that will now be turning to the north, what we call the GLADZ Departure and that's only on an east operation. You guys need to keep in mind that we don't dictate which route the airlines choose to take. Other than weather, or routes being closed because of a rocket launch or military activity, we can't tell airlines to not file anything that goes over CSALT being the VACAY, AARPS, BNGOS or the HURCN Departure because that's their prerogative. If they feel that it's better because of the wind or why ever they feel like it's better, they will file and we can't stop them from doing that. So, even if we wanted to say anybody going to the northeast should file this way, they can still file another procedure that we didn't prefer.

Mr. Gilderman: I thank you so much for saying that, that was great, but in the end, you build the highways that they choose to drive on. So, what I'm asking for is that if we could create another gate or get a procedure that they would want to use that would take the planes that are now going north and distribute it more evenly to the other gates. There are three gates, one is used excessively; one that is used excessively has flights that previously were not doing that, they were not using that gate. So, we're asking that it be shifted back to either the southeast or the southern gate and if you think about it, look at a map, those planes are going South anyway. So, let's do something good for the environment, let's do something good for the citizens of Miami-Dade County and let's do something good for the airlines themselves by doing some cost savings so they could burn less fuel by having those flights go back.

*Mr. Colon*: I do understand, we do have that traffic that's going over the Gulf of Mexico and turning north and that's because of conflictions with airspace and other stuff but remember that we did take traffic that used to go 090 and we took them south eastbound away from where they're going to help spread that balance of where departures go.

*Mr. Gilderman*: I represent Miami Beach and that only helped mid-beach, congratulations. I'm sure the owners of the Fountainebleau are very excited that you took the planes off their real estate, good job, but it didn't help the people in North Beach or any of the north cities.

*Mr. Hegedus:* Part B. The Metroplex Architects stated on numerous occasions that there would be a more equitable distribution of eastern departures amongst CSALT vs. JAMBA vs. BALLR, which would more fairly distribute noise in the County.

Mr. O'Harra: I think that's just a comment. I don't see a question there, so I recommend we continue to part C.

*Mr. Hegedus:* Part C. Ideally the distribution would be 1/3, 1/3, 1/3. Unfortunately, based on observations, it appears that the vast majority of eastern departures still fly through CSALT. Part D. Why are northeast destinations and Central America destinations (especially Mexico) flying through CSALT? More recently, there is a flight to Havana that also goes through CSALT. These destinations should be utilizing JAMBA and BALLR.

Mr. O'Harra: Just to address a couple of the comments, our goals were not specifically about equalizing the distribution on various routes, so I think probably the position of the team is that sometimes balance is good but

### AIRCRAFT NOISE AND ENVIRONMENTAL PLANNING / WILDLIFE CONTROL

5600 NW 36<sup>TH</sup> STREET, SUITE 533 WEDNESDAY, FEBRUARY 23<sup>RD</sup> 2022 MEETING SUMMARY

MEETING WAS HELD AT THE MIAMI INTERNATIONAL AIRPORT AUDITORIUM IN CONSOURSE "D", 4<sup>TH</sup> FLOOR

attempting to force balance in a system as complex as the airspace in South Florida is generally not good, but there's a question about the specific flights and destinations to Central America and Mexico. I know Luis started to address that but Miami departures that have happened to use the MAXIM, CANOA or MINOW waypoints are assigned GLADZ, I know Luis mentioned that. I've pulled up the diagram from our 2020 workshops that GLADZ SID read that it was primarily for departures filed over the Gulf of Mexico. That routing developed helps us to expedite the crossing out over and under between Miami departures and arrivals from the southwest. Overall, our mission at the FAA is safety and efficiency, so our goal is to safely optimize the traffic flow given the destinations and routes requested by the airlines and I'm confident this project helped improve that routing and built the increased safety through predictability of the routes and the aircraft separation incorporated in the design. I know the comment was made earlier about geography but it's not as straightforward as just where the planes going South, it has to include the separation and the other activity in the airspace. It's much like people sometimes comment that I didn't see weather over my house, but it can be local weather, or it can be distant weather that affects a route, just as an example. So, I believe those routes are functioning the way they were designed.

**Mr. Colon**: I just want to add something, that one of the considerations why these departures are turned to the north, is the sector that works these departures, it's a sector that tends to get very congested at the same time that these departures are going so we try to split those departures making it a safer operation.

*Mr. Hegedus*: Part E. Can the FAA consider using FOLZZ for **all** northeast destinations and GWAVA/MHITO/ NNOCE for **all** Caribbean and Central America destinations (including Mexico and Cuba)?

*Mr. O'Harra*: the filing of an RNAV standard instrument departure is contingent on things like aircraft equipment and crew qualifications. A lot of these are filed by the airlines based on the destination. The FOLZZ RNAV SID was developed to serve aircraft destined over the Atlantic or joining Atlantic routes to the north.

Mr. Colon: Most of the aircraft with destinations to the northeast they file FOLZZ however, there's times where an AR route might be closed or there is weather out there over the Atlantic hundreds of miles from here and they'd rather fly the inland route, we can't control that and it's up to them. So, the northeast destinations the majority get FOLZZ and that's what they file. To the Caribbean and South America, they are using either JAMBA or BALLR, the only ones that are not going to the South are the ones that you mentioned before MAXIM, CANOA, and MINOW, which is mostly over the Gulf of Mexico and sometimes that includes Cuba. They do that because there is some military airspace off Florida that gets used a lot and then creates complications for Miami center so, it's easier for these aircraft to go West, climb and then get above all that.

*Mr. O'Harra*: The only thing I'd add, is not all flight crews can fly FOLZZ to join what we call AR Routes to go north. They're not all qualified to do that. I think we'll have that question later and may take that a little bit deeper but, there can be rocket launches, weather north, etc. that can impact both the filings or the assigned routings.

*Mr. Colon*: That is correct Michael, and also the airplane itself needs to be equipped with a raft. If they don't have rafts, they're not authorized to fly more than 50 or 100 miles offshore, I'm not correct on the number, therefore some of them will file inland because they don't have that equipment.

### MIAMI INTERNATIONAL AIRPORT (MIA)

### AIRCRAFT NOISE AND ENVIRONMENTAL PLANNING / WILDLIFE CONTROL

5600 NW 36<sup>TH</sup> STREET, SUITE 533 WEDNESDAY, FEBRUARY 23<sup>RD</sup> 2022

MEETING SUMMARY MEETING WAS HELD AT THE MIAMI INTERNATIONAL AIRPORT AUDITORIUM IN CONSOURSE "D",  $4^{TH}$  FLOOR

*Mr. Hegedus*: Part F. Will the FAA expand the list of eastern destinations who are issued FOLZZ to include Baltimore, Washington DC, Windsorlocks, Charleston, Norfolk, and other northern and mid-Atlantic destinations? Additional destinations would increase the FAA's ability to more equally and fairly spread-out departures and related noise using JAMBA, BALLR and CSALT.

Mr. O'Harra: We've talked a little bit about how we don't necessarily 100% align a destination with a procedure but I guess I'd just say the system doesn't really work that way but, again I'm not sure a vast majority are using any particular route but there's several factors including the local and distant weather, equipage, destination, separation from other aircraft, crew qualifications, and the route filed that affect the routing. So, I mentioned earlier about COVID and that's affected some of the traffic so there's perhaps in the room some thinking that it all needs to be balanced every day and that's just not the way the FAA looks at it so, I think it's more complex than having that as the goal before us. I mentioned for example some of the European routes, I might just ask, that's a fair statement, right? I don't want to mischaracterize but the traffic to Europe for example out of Miami that might be using some of these other routes is significantly down from where it was in 2019, is that fair?

*Mr. Agostino*: Basically, international is off about between 10 and 20% versus what it was pre COVID, now on the reverse of that, domestic is probably up 10 to 15% where it was pre COVID.

*Mr. O'Harra*: So were taking a little bit of a snapshot, again I'm not disputing that there's more traffic going up the Bay, or the CSALT route but, I think there are other factors to keep in mind with what's contributing to that.

*Mr. Rollason*: I think another issue that we tend to gloss over or forget about, is the banking system that's in place where these planes are going one right after another as opposed to how it was prior to the banking system they implemented. That has had an impact on the noise being constant, a plane goes by, just about gets out of ear shot and the next plane is right behind it. So, I think that has compounded the problem, not so much the routes, but the banking has impacted the effect of the noise on the ground also.

*Mr. O'Harra*: I mean there's certain factors the FAA owns, and I think this group has heard us talk about this, this particular project was a federal action, we ran the meetings, we did the outreach, we did the analysis so, that's all fair. I think the comment was even made that we build the roads or airways for the airplanes and that's also true, but we don't control the scheduling, we don't control the destinations, the demand, and you know as we've identified, we don't control the filing so, it's a bit of a give and take. I'm not trying to push blame anywhere else, there's a part of this FAA is responsible for, there's a part of it that is not something that we control, but I'm happy to share as much info as we can from our perspective.

*Mr. Agostino*: Mr. Chairman, you use the word banking, it's really a peaked operation. It's different today than it was. Right now, you have a big peak that departs Miami between 9:30 AM and noon time and then another big peak that leaves between 7:30pm and 9:30pm in the evening. So, it used to be a much smoother operation through the day, but it is peaked more than it has been in the past.

*Mr. Rollason*: And that has an impact because, the planes just keep coming, and the other thing is, those planes were spread out during the day when a lot of people were at work. Now they're home and they're having left to go to work when starts and they got home and now it starts again.

### MIAMI INTERNATIONAL AIRPORT (MIA)

#### AIRCRAFT NOISE AND ENVIRONMENTAL PLANNING / WILDLIFE CONTROL

5600 NW 36<sup>TH</sup> STREET, SUITE 533 WEDNESDAY, FEBRUARY 23<sup>RD</sup> 2022

MEETING SUMMARY MEETING WAS HELD AT THE MIAMI INTERNATIONAL AIRPORT AUDITORIUM IN CONSOURSE "D",  $4^{TH}$  FLOOR

*Mr. Agostino*: We're running approximately 5 to 8% more passenger operations per month since November than we were in 2019 pre-COVID.

*Mr. Hegedus*: Part G. Can the FAA require airlines to use aircraft departing from MIA with an eastern destination to have the capability to fly over water and therefore all of the flights will use FOLZZ? IE I've been told that there a numerous aircraft departing to NY that use CSALT because they are not "capable" of flying over water. This would help to reduce the number of departures utilizing CSALT and provide for a more equitable distribution.

*Mr. O'Harra*: The FAA doesn't dictate the equipment airlines use on particular routes, that's not something that we get involved with, in fact they may use different equipment on different days, so you could see a particular flight on Tuesday that's different than it is on Thursday but, you might imagine that's driven by the capacity and the ticketing, Fridays are different than Tuesdays etc. but, those are after affects that are not under FAA control nor do we dictate the need to have a particular equipment for a particular destination or route.

*Mr. Hegedus*: Question 2. Why are eastern departures utilizing CSALT starting their northerly turn prior to reaching Biscayne Bay?

*Mr. O'Harra*: There has been a lot of discussion about CSALT and the aircraft that use the route, not all the aircraft are flying these procedures so that can explain why some would start their turn early and then there's a later question about whether all the pilots utilize autopilot or could manually fly, and pilots are allowed to fly a procedure manually as long as they fly it within tolerance, but more likely than not it's folks not specifically on autopilot on the RNAV route, and there can be a variety of reasons, it could be weather, it could be traffic, it could be separation from other aircraft. There are reasons why aircraft would not, it could be equipage, it could be a number of factors. Anything else Luis, why eastbound departures might not fly exactly over CSALT?

*Mr. Colon*: It could be sometimes; you might see an aircraft that's actually on a heading and thinks he's on the procedure. Those are turned by the controller.

*Mr. O'Harra*: To be clear, we'd love to see a high percentage of aircraft on these procedures, but we didn't model 100% of aircraft flying the RNAVs so that was not our assumption, we didn't think that would be the case, so we expected a bit of a blend of that and that's what we're seeing.

*Mr. Hegedus*: Part A. The NAAB's suggested departure path was based upon the Miami Tower's original intent and procedures for Noise Abatement. All aircraft should fly runway headings until reaching Biscayne Bay (approximately 29<sup>th</sup> / 30<sup>th</sup> Street), at which point they can start to turn north. This procedure would force aircraft to turn up and be in the middle of the bay when crossing over the Julia Tuttle Bridge. The FAA team agreed with this logic as it was a logical precedent to follow. Part B. Aircraft are currently starting to veer north as early as when flying over Allapattah and Midtown Miami. As a result, aircraft are essentially crossing 36<sup>th</sup> Street when they reach Biscayne Bay and swipe up the coast heading north. This creates significant noise for the thousands of residents that live in the area, which could easily be mitigated. Part C. Can we move CSALT further east and south in order to achieve "a." and eliminate "b." as stated above?

AIRCRAFT NOISE AND ENVIRONMENTAL PLANNING / WILDLIFE CONTROL

5600 NW 36<sup>TH</sup> STREET, SUITE 533 WEDNESDAY, FEBRUARY 23<sup>RD</sup> 2022 MEETING SUMMARY

MEETING WAS HELD AT THE MIAMI INTERNATIONAL AIRPORT AUDITORIUM IN CONSOURSE "D", 4<sup>TH</sup> FLOOR

Mr. O'Harra: So, it's talking about early turns to the north and moving CSALT and again specifically, it's talking about could CSALT move east and South, I mentioned in the intro there will be a later question about can we move CSALT further West, again not at all trying to be difficult, but we can't move it East and West. There was a time that we were analyzing what we could do in the fall with CSALT but I don't think there was consensus about what that info would be, so in the absence of agreement, CSALT is where it was. I'm happy to dig a little bit deeper into that, but I know I also mentioned up front at this point the project designs are done, not trying to put the airport in any awkward position, but I'll just say rhetorically the airport knows that we took a look at this and knows that we were looking at CSALT and what might be possible, but frankly we were not able, given this different input to take it both east and West, I think that's obvious. So the project designs are done, we're not making further designs to what's called the Metroplex project, as I mentioned previously that's gonna wrap up in May, so I can mention that there's an RNAV procedure that's relevant to the question, an RNAV procedure for shorter routes that go up, for example through the Palm Beach airspace, and there are a number of flights that head up that way but they're relatively short haul flights, not as short as say Opa-Locka but you know, up into the Palm Beach, Stuart area and this RNAV route that's gonna be published on May 19th, will give the capability for us to have more aircraft on that RNAV route where they might today be cutting that corner a little bit earlier. So, we do look at aircraft, we've looked at a number of airports to see where we don't have aircraft on the procedures and that's an example of where the team has worked to build that opportunity for those aircraft. I mean technically it's a different procedure but in reality, what it's doing is taking another group of aircraft and having them fly a similar route. Brian did I say that in a way you're comfortable with?

Mr. Crow: Yes, instead of being pre-vectored over North Miami, they'll go out to CSALT and be on the bay.

Mr. O'Harra: But even then, as I said in the last answer, not all aircraft are gonna be on the routes all the time.

*Mr. Hegedus*: Part D. Can the FAA add a minimum altitude that all turbojets must reach by time they reach CSALT, JAMBA and BALLR?

*Mr. O'Harra*: So, the location the team used to design where those waypoints are positioned, is located where aircraft had historically been around 4000 to 5000 feet. I think that's consistent with longstanding procedures to climb to 5000 and make that turn, but those are assigned altitudes. There are assigned altitudes in the system within the national airspace but as close to the airport as these waypoints are, there's really no guarantee that a departing aircraft would be at a specific altitude. So, the short answer is, we're not going to require the aircraft to be at a specific altitude because the pilots aren't necessarily going to know whether they would make that altitude or not until they're up in the air. Hopefully that makes sense, I'm not trying to make that too simplistic.

*Mr. Hegedus*: Part E. Are all pilots required to use autopilot to fly RNAVS or are they allowed to manually fly the departure routes?

*Mr. O'Harra*: I touched on this one a little bit earlier, but pilots are allowed to manually fly RNAV procedures as long as they stay within the tolerance of the procedure, that said, the majority of pilots will utilize autopilot, and I'd go so far as to say that's preferable. You know we use the word predictability; you can get that a couple ways,

AIRCRAFT NOISE AND ENVIRONMENTAL PLANNING / WILDLIFE CONTROL

5600 NW 36<sup>TH</sup> STREET, SUITE 533 WEDNESDAY, FEBRUARY 23<sup>RD</sup> 2022 MEETING SUMMARY

MEETING WAS HELD AT THE MIAMI INTERNATIONAL AIRPORT AUDITORIUM IN CONSOURSE "D", 4<sup>TH</sup> FLOOR

but probably none of them are as good as autopilot on an RNAV. That was a long way of saying they're not required to use autopilot, but the majority do.

*Mr. Hegedus*: Moving on to questions submitted by Brian Gilderman, Miami Beach. Question 1. The FAA recently released its multi-year Neighborhood Environmental Survey (dated 01/21/21) on aircraft noise and its effects on local communities. The findings showed "a substantial increase in the percentage of people who are highly annoyed by aircraft noise levels considered, including at lower noise levels." Part A. Based on the fact that Miami was one of the participating cities in the study, what is the FAA doing to address these concerns especially since the findings were known before Metroplex was initiated at Miami International Airport.

Mr. O'Harra: The neighborhood environmental survey was a national initiative that was managed by our FAA headquarters, those results were not released or known by any of the Metroplex team members, prior to the time the record of decision, in fact it was several months after that when that was released but prior to the record of decision for Metroplex, and frankly none of us were aware that Miami was included in the study. So, that's a little bit of background that could surprise you, but they're 50,000 plus FAA employees and we've got different parts of the agency. I can tell you when that study was released our office of environment energy put out a Federal Register notice soliciting public feedback on our noise policy, things that we might consider in future studies and that office is working through the review of the comments that were received from that notice, they can say that no policy changes have taken place yet, but our FAA administrator has announced that the FAA is going to work with the federal mediation and conciliation service to go through a process to review and update the FAA aviation noise policy. So, it's somewhat separate from the field of expertise that you have with the Metroplex crew so there's probably more to come, but the Metroplex was implemented under the policy that's in effect at the time of the project.

*Mr. Hegedus*: Question 2. In a previous presentation by the FAA to our Board, we were told the straight east flight paths over central Miami Beach would be shifted to the southeast route over Virginia Key to the south. While some eastern seaboard flights do use this new route many go up the Northern Bay route only to head out to the Atlantic further up the coast. Can all eastern seaboard flights be routed on the southeastern gate so they can start their Atlantic route right away therefore minimizing aircraft noise over Northern Dade and Southern Broward County (densely populated areas)?

Mr. O'Harra: I touched on this one a little bit earlier, we don't mandate how the airlines file a particular flight, so the filing of an RNAV SID is contingent on aircraft equipment, crew qualifications, they're not all gonna be equipped to head out that far offshore. So, there can be crew qualifications that preclude some of the overwater routings that would be affiliated with the route over Virginia Key. The statement is correct though that many of the straight-out path flights would be moved further South, there was not an intent to take those straight east departures and do anything else with them. So, when the overwater routings are not available, alternates over land are requested, that FOLZZ RNAV SID was developed to serve aircraft that are destined over the Atlantic or joining the Atlantic routes further north and again, I think I touched on this earlier, but things further north off the coast like rocket launches or weather can impact either filings or available routes. I think to put a point on that, is can all the flights be routed? and there's reasons why they can't all be routed.

MIAMI INTERNATIONAL AIRPORT (MIA)

AIRCRAFT NOISE AND ENVIRONMENTAL PLANNING / WILDLIFE CONTROL

5600 NW 36<sup>TH</sup> STREET, SUITE 533 WEDNESDAY, FEBRUARY 23<sup>RD</sup> 2022

MEETING SUMMARY MEETING WAS HELD AT THE MIAMI INTERNATIONAL AIRPORT AUDITORIUM IN CONSOURSE "D",  $4^{TH}$  FLOOR

*Mr. Hegedus*: Question 3. Aircraft heading to Mexico, certain Central American destinations, Cuba and other points that utilize the GLADZ SID are heading up the bay to the north to eventually turn west and then back south over heavily populated areas. Regardless of the amount of traffic this amounts to, any relief we can get to shift these routes to the southern gates would go a long way to helping minimize the heavy aircraft traffic over northern Dade County/Broward County. Can options be examined?

*Mr. O'Harra*: So again, I think we've touched on this one, Luis mentioned earlier we designed the routes, briefed them the way they're flown from a geography standpoint that may not make sense to everybody, but there are some benefits in terms of expediting crossing out over and under between other Miami departures and arrivals from the southwest. I think I mentioned that GLADZ is intended, as we indicated in the workshops, it was "primarily for departures filed over the Gulf of Mexico". So, I don't want to give the impression that we have plans to change that, again when you think of Metroplex as a project, that was part of the project, that's what's in place at this point.

Mr. Hegedus: Question 4. It seems the Northern routes are being utilized more than the other two east flow departure gates (South and Southeast). Can we move any flights to the South or Southeast gates? Are you trying to balance workloads in sectors? Have the gates become unbalanced? If there are times when the Southern gates are not that busy can we shift workload and hence aircraft to them.? I know you may look at the volume of flights and say, "well if we do this it only moves 17 flights per day to the southern gates" but that is a lot with a concertation of flights over 3 routes. Any help moving flights to the Southeast and Southern gates would be appreciated.

Mr. O'Harra: So again, I think we've touched on this, we've touched on some of these topics, but if an airline files a route that goes over DEALZ for example, then the controllers are gonna work to accommodate that. I think I may have said this earlier but, balance across the various procedures isn't a specific goal, we're not looking for a 1/3, a 1/3, and a 1/3 just as an example since that was referenced earlier. Balance might be helpful for efficiency, I don't deny that, but forcing balance is typically not gonna be what makes the system run smoothest. So, you know, some of that answer is where the aircraft file, some of it is just acknowledging that it's not our specific goal to balance things out, and then as I mentioned earlier I think there's some temporary factors with international flights, for example, that will use those southern gates more heavily in the future. I'll share the one other thing that we discussed yesterday just for context, if a number of aircraft were lined up, which wouldn't be uncommon, but if a number of domestic flights are lined up and they're headed to parts of the country that are gonna go up the Bay, if there all filed in the same route then that's probably the route that they're gonna get. So, I think that puts a point on it, that we're not gonna take that and say it'd be so much better if some of you would go over here, it doesn't really work that way for air traffic. Luis, I'm not asking you to expand but did I say that accurately from your perspective?

Mr. Colon: Yes, you did Michael.

*Mr. O'Harra*: Thanks Luis, I think that covers the different parts of how we view the balancing and workload, what our goals are, and the role that how those flights are filed plays in that process.

AIRCRAFT NOISE AND ENVIRONMENTAL PLANNING / WILDLIFE CONTROL

5600 NW 36<sup>TH</sup> STREET, SUITE 533 WEDNESDAY, FEBRUARY 23<sup>RD</sup> 2022 MEETING SUMMARY

MEETING WAS HELD AT THE MIAMI INTERNATIONAL AIRPORT AUDITORIUM IN CONSOURSE "D", 4<sup>TH</sup> FLOOR

*Mr. Hegedus*: Question 5. As I understand it, using vectoring of east bound flights was noise modeled and analyzed but not included in the Environmental Assessment. AEDT noise modeling performed in the Environmental Assessment did not account for reflection of noise on water. Low dispersion of flights causes a substantial burden for those living underneath these flight corridors. Is there a way we can use vectoring to help with dispersion of flights to spread the noise over a wider area therefore alleviating this burden?

Mr. O'Harra: I know there's part of that, that's the question, but I just wanted to acknowledge, there has historically been some amount of vectoring, there was vectoring that was included in our modeling and in that modeling is part of the environmental assessment, so I think I think there was part of the comment that said it was not included in the EA, but the modeling would be very central to our environmental assessment but, our project purpose in need and statement in that same environmental assessment included the use of these new satellite based procedures for safety and predictability. It's very complex airspace, I assume the groups probably have seen depictions of overlays of all the traffic in South Florida, but there's hardly a place that there isn't traffic, especially when you've got to get aircraft up, under, and over other aircraft. So, part of our whole entire goal was to increase the predictability and separate that traffic by design of those procedures and frankly we're happy when those routes are utilized, the new routes to deliver the benefits that were part of the goals of the project. I think there was a question earlier, just to point out, about trying to get more aircraft on the routes and again this is a place where it's less, so it's not really possible for us to do both of those, at the same time I can say the controllers, for example, are happier with the increased utilization, which is why they're looking for ways to get aircraft on these performance based procedures and why we implemented it in the airspace across South Central Florida to begin with.

*Mr. Hegedus*: Question 6. Can the FAA look at creating a fourth gate heading due east (90-degree heading) until aircraft are over the ocean before turning North? If not, can more aircraft use the Southeastern gate over Virginia Key? Arriving aircraft already cross paths with North bound traffic over the north bay (between Indian Creek and North Miami). Why can't this crossover happen slightly offshore?

Mr. O'Harra: I would say less than 3%, at least some particular handful of days I've seen analyzed since Metroplex was implemented, but there's a relatively small number of radar vectored aircraft that still continue that 90 degree heading, but that's not on an RNAV procedure and at this point, I've kind of outlined, the FAA doesn't have plans to add a fourth gate or other re-designs, so part of that question goes to can we put more aircraft on this southeastern gate over Virginia Key. I feel like we've touched on that a little bit but again we don't mandate how the airlines are going to file, from an FAA perspective the new procedures are meeting the project purpose and need, they're performing as intended based on the analysis the teams done, there is a question about the crossover and, you know from a historical perspective, we've touched on the fact that the design originally, we've been asked the question a number of different ways at least over the last couple of years about flights over the ocean, so you know there's separation requirements off the North and South runways at Miami, there would be a significant impact on the efficiency, and the team took that into account when they declined to design aircraft heading toward the Virginia key and southerly routes along with an air route that was headed to east. So, it just wasn't feasible to do that, I mean even at the highest levels of the agency, we've had discussions on that and at some point, you know what happens is you bring the efficiency of the airport down which is not our interest and

### MIAMI INTERNATIONAL AIRPORT (MIA)

# AIRCRAFT NOISE AND ENVIRONMENTAL PLANNING / WILDLIFE CONTROL 5600 NW 36<sup>TH</sup> STREET, SUITE 533

WEDNESDAY, FEBRUARY 23<sup>RD</sup> 2022

**MEETING SUMMARY** 

MEETING WAS HELD AT THE MIAMI INTERNATIONAL AIRPORT AUDITORIUM IN CONSOURSE "D", 4<sup>™</sup> FLOOR

you also potentially have aircraft higher and then you bring the departures in where they have to tunnel under the arrivals so I wasn't really prepared to go into all the details of why that straight out doesn't work in mass number, but there are a number of reasons why I think folks in the room probably are familiar that we've looked at that overtime. Brian, anything that you want to add.

*Mr. Crow*: The only thing I would add, is that the number of conflicting routes increases dramatically when you go further east and that's why it was that choice that was made.

*Mr. Hegedus*: Question 7. I read that aircraft speed correlated with noise. Is there any way to regulate aircraft speed until they get to an unpopulated area to finish their climb?

Mr. O'Harra: My understanding is that typical departure speeds are around 230 knots. Brian?

Mr. Crow: You're right, 230 accelerating to 250 knots.

Mr. O'Harra: I'm not familiar with some of the speed studies that have taken place, I know in this environment where we had discussions internally and it seemed relatively doubtful that possible speed adjustments would impact the noise levels, and in addition to that, our team recognized that restricting speed may impact the efficiency of the airport, so there are times that flexibility is critical to the smooth flow of the operation, so I think the question technically, is there any way to regulate aircraft speed until they get to an unpopulated area? Given the density of South Florida, I don't think that's feasible given the complexity of the airspace. It's not something that we have looked at in detail, and at the risk of being too blunt, it's not something we're currently looking at although I know there have been some studies elsewhere in the country but I'm not sure those studies produced beneficial results, they were not in the region I'm responsible for, so I'm not fully equipped to speak to those.

*Mr. Hegedus*: Question 8. Before Metroplex was initiated, the Noise Abatement Board at Miami International Airport voted on and asked the FAA to move CSALT a little east and south with the caveat being that flights remain in the middle of the bay between Normandy Isle and Miami Shores. The FAA obliged, thank you, but now it seems that larger, low flying aircraft as well as others are not able to keep on track and fly over or near Miami Beach, Indian Creek Surfside and the surrounding municipalities. Is there anyway the FAA can move CSALT back to its original proposed position before this request was made? The exhibits below illustrate the problem and were sent to you in a letter dated October 4, 2021, from Norman Hegedus on another matter. The black lines show where the planes should be.

Mr. O'Harra: Some of the feedback is can we move it East; can we move it West? I think I mentioned that earlier, we don't have plans to move CSALT at this point. We did assess moving CSALT last fall, there appeared to be both support and opposition and at this point there aren't any more changes that the Metroplex project is pursuing, I know I mentioned that earlier, but the designs have been submitted for validation and flight check and this team will move on to other efforts as the South-Central Florida project wraps up. I mean that that's the short answer, there could have been some possibilities but, not possible to do both. Norman, I know you mentioned that was the last submitted question and there may be some additional ones, I know we're gonna lose some of our folks, but I just want to acknowledge, this is a long project, it goes through environmental outreach and review, the FAA has met with this board a number of times and my office is committed to doing that moving forward, I've said that

AIRCRAFT NOISE AND ENVIRONMENTAL PLANNING / WILDLIFE CONTROL

5600 NW 36<sup>TH</sup> STREET, SUITE 533 WEDNESDAY, FEBRUARY 23<sup>RD</sup> 2022 MEETING SUMMARY

MEETING WAS HELD AT THE MIAMI INTERNATIONAL AIRPORT AUDITORIUM IN CONSOURSE "D", 4<sup>TH</sup> FLOOR

to the director of the airport, Norman and Dan, I know I've said it to you both as well, I know not everybody's gonna agree, not everybody who takes the time to be on a noise board is gonna love what the FAA has brought to the table and the process even that we've gone through, even in the room frankly, it feels like there's some agreement and there's probably some disagreement, but I remain committed to doing my best to understanding where those noise concerns are. I'm gonna be as transparent as I possibly can be with the group, some of my answer's tonight may have seemed blunt or too direct, but I'm trying to answer and be factual but not give hope that we're doing something that in likelihood we're not. So, I'll continue to do my best to answer the questions, and there are times there's possible mitigations, but what's a little bit unique about where we are in this project, is it's a long-term project that's really wrapping up at this point, so the Metroplex team as I mentioned will disband, so to speak, but my office and our efforts to remain engaged with communities will still be here. So, I'll just kind of close with that, I know I said some things like, that won't work, that won't work, we're not looking at that, I understand that. I am open to understanding where the community concerns are, I will try to share where something may be possible, I'll also share when something may not be possible and it won't just be my opinion, we will get the experts within the FAA to look at that.

Mr. Arrighi: Michael, I just want to make one comment about why aren't they flying over the black line. There's a lot involved in establishing an airplane on a route, so everyone climbs at a little bit different rate, depending upon the weight, the type of airplane, how fast it accelerates, when do they engage autopilot. Different airlines have different policies on when a pilot engages autopilot, and we would probably agree that the faster you could do that the more accurate the flight path is going to be. Generally, once they're established on the route, that graphic that we saw is pretty consistent, the navigation specification calls for the ability to remain within a mile either side of the centerline, realistically we see that significantly tighter, and I think with the graphic that you displayed shows that. So, the concerns about why some go really far to the east and why others, certainly we're concerned, and we've looked very hard at the ones that have turned early and gone up the West side of the Bay the ones that are flying up the center of the Bay are pretty consistently where we anticipated they would be once they were stablished on their own.

Mr. Hegedus: I received this afternoon during the meeting from representative Chris Mazzola from the Doral area on the West side of the airport, a few questions. First of all, (Norman reading Mr. Mazzola's statement and questions) Metroplex's plans have improved west flow departures significantly: The 290 route was closed and replaced with a RNAV route south of 36 Street. These changes have reduced noise over neighborhoods. Additionally, we think a few minor adjustments could improve the outcome further: to that point, we would like to know the current separation between KROCS and KSENO waypoints can be reduced to further improve noise over residential areas in close proximity to the VACAY/FOLZZ/BNGOS RNAV. We were told before that when RNAVs were implemented, instead of having a 15-to-20-degree divergence from the two flight tracks by using RNAVs you could reduce them all the way to 15 or 12 degrees. The question is, can they be further reduced by two or three degrees? Mr. Mazzola knows on the West side that the 270 heading which is from the South runways cannot further be moved to the South because then it will affect other residential areas, but the one that goes to VACAY/FOLZZ/BNGOS RNAV, if it can be brought down a few more degrees closer to the South. Is that what you meant by your questions Mr. Mazzola?

#### AIRCRAFT NOISE AND ENVIRONMENTAL PLANNING / WILDLIFE CONTROL

5600 NW 36<sup>TH</sup> STREET, SUITE 533 WEDNESDAY, FEBRUARY 23<sup>RD</sup> 2022 MEETING SUMMARY

MEETING WAS HELD AT THE MIAMI INTERNATIONAL AIRPORT AUDITORIUM IN CONSOURSE "D", 4<sup>™</sup> FLOOR

Mr. Mazzola: Yes.

Mr. O'Harra: We can take a look at that, I'm looking at the boards where KROCS and KSENO are, I don't know if there's an immediate answer from the team, there may be two parts of it, there may be what's possible in general and there's what's possible in this project, I mean there's criteria, but again I know I've mentioned a couple times that the teams not in a position to make changes, for example, in 2023 on the Florida Metroplex, so it may or may not surprise folks, but moving a waypoint and adjusting their procedures is a lengthy process, that's why we're actually amending the August procedures in May, because it takes that long to go through those updates. So, I'm happy to jump in and say I don't know that we're looking at that in the near term but Brian, do you have any explanation from a criteria perspective?

*Mr. Crow*: The best I can tell you right now, I'm pulling it up, but 10 degrees is the minimum that you can go. I don't remember the exact degrees that we are, I don't remember if we were ten or eleven, I'm trying to figure it out. I think it was 10. That's what I believe without having it confirmed yet.

*Mr. Colon*: Brian, you're correct, there's really no wiggle room because the inability to move the southern fix further South. We moved it as far South as we could.

*Mr. Rollason*: Going forward with any changes that may come, or recommendations that may come from this board, would they require an environmental assessment for that to be done for those change? In other words, these Metroplex things have been pretty well fast tracked compared to what we went through a few years ago with the EA that we had, dealing with a little bit of relief that we got years ago. The EA took us 18 months, something like that. I'm just wondering, are we looking at an EA with anything that comes along with another change? Once the May finalization takes place and we want to make a suggestion or make a change, do we enter an EA process?

*Mr. O'Harra*: I'm not an environmental expert, two parts to that, we were pencils down, I think it was November 22<sup>nd</sup> give or take a week. So, this team said Hey, we're done with the design work on Metroplex. In a friendly way I would disagree with you a little bit on this being a fast-track project, it seems like it was a very lengthy project and a complex one at that. This project actually was the largest Metroplex project around the country by perhaps a factor of 2, I'm speaking roughly, but it was a big project, and it did take time, but to be factual this project is has been defined and won't be changed. Is it the last change that will ever happen in Miami? I couldn't begin to say that. So, we have a number of environmental tools that are available, some changes qualify for a categorical exclusion, some require an EA, and other projects that are typically larger, like a runway for example, require an environmental impact statement. So, if there was some consensus within the board, for us to look at a recommendation, we could do that. That's typically a lengthy process, think years, and an appropriate level of environmental review depending on the scope of the change, and I also feel like I need to share, hopefully folks can appreciate when we wrap up, what I think was probably an 8 or 9 year project, that we're not looking on day one to say how can we undo this and do something different? If there are things we can look at, again our ears are open, but we don't normally restart a Metroplex in the same city right upon completion, so I think it's a balanced answer. There were some opportunities during the Metroplex, but the NAAB existed before the

### MIAMI INTERNATIONAL AIRPORT (MIA)

#### AIRCRAFT NOISE AND ENVIRONMENTAL PLANNING / WILDLIFE CONTROL

5600 NW 36<sup>TH</sup> STREET, SUITE 533 WEDNESDAY, FEBRUARY 23RD 2022

MEETING SUMMARY

MEETING WAS HELD AT THE MIAMI INTERNATIONAL AIRPORT AUDITORIUM IN CONSOURSE "D", 4<sup>™</sup> FLOOR

Metroplex, that NAAB probably will exist after the Metroplex, and again my office and several folks who work alongside me will be more than happy to understand where the concerns are in the greater Miami community.

Mr. Rollason: My comments were based upon the portion of the Metroplex dealing with Miami, I mean it was a relatively short period of time that we dealt with the team, and this came into fruition. So maybe we were at the tail end of the whole project and that's how that came to be, but I guess to sum it all up, you're telling me in the King's English that the horse has left the barn and we're looking at the backside.

Mr. O'Harra: The horse has left the barn on Metroplex.

*Mr. Rollason*: Anything from the members of the board?

Mr. Helmstetter: Maybe I'm mistaken, but I thought we were going to have an opportunity to provide feedback and comments to the FAA that would hopefully be considered in this modification period, and it's very clear that no comments were ever going to be considered. We completely missed their date, but when they were pencils down in November, we're just meeting today. It was impossible for us to even try to come to a consensus, but it sounds like there was the ability to move CSALT, but we were incapable of meeting since April of 2021. I'm very frustrated, and now I'm hearing that there's no chance to make any modifications.

Mr. Rollason: Let me comment on that, my understanding was, is the comment period was during those public meetings that took place for us to be able to put in our comments, and you're saying your understanding is that, past that, there was gonna be another period of time that we were going to be able to make comments?

Mr. Helmstetter: Ya, post implantation we could all observe exactly how the planes are flying and provide the FAA and the folks at the airport our feedback.

Mr. Rollason: As I understand it, they're flying according to the routes that were given to us, that we examined early on when the FAA met with us months ago. That's the routes they're flying. Do you think they are flying something different than what was presented to us?

Mr. Gilderman: No, but respectfully I'm gonna go on with what you said, which was, we were really brought in at the tail end. We were never engaged by the FAA or even our airport to let us know this is coming, 'cause I know our airport was engaged with them years ago about these routes, to really say what do you guys think? I mean, to the FAA guys up there, that's what this board does, that's why we spend our time meeting here at the airport, at night, during the week, to talk about things like this. This is the biggest thing to happen in noise ever in Miami, and basically we were kind of brought here today, and this is how I feel, why did I come here today? You guys just basically said there's nothing we can do. I'm sorry, I'm kind of disappointed in that, I'm disappointed I spent years on this board, and this is the finality of it all. So, I'm gonna ask the FAA again, please consider what we're asking for, and I know you're saying, hey we presented this in the workshops and blah blah blah, and I get that, but at the same time, on your first drawing, and you've done this all over the country, I'm sure whatever you started didn't eventually end up that way, there's always tweaks to anything. So, all we're asking from the FAA, is to listen to the board, give us a credence, we are appointed by the different municipalities and areas of the county, and listen to some of our requests to see if something could be done.

### MIAMI INTERNATIONAL AIRPORT (MIA)

AIRCRAFT NOISE AND ENVIRONMENTAL PLANNING / WILDLIFE CONTROL

5600 NW 36<sup>TH</sup> STREET, SUITE 533 WEDNESDAY, FEBRUARY 23<sup>RD</sup> 2022

MEETING SUMMARY

MEETING WAS HELD AT THE MIAMI INTERNATIONAL AIRPORT AUDITORIUM IN CONSOURSE "D", 4<sup>™</sup> FLOOR

Mr. O'Harra: I'll offer a comment if I'm allowed to do that, I do think that in this project there was more engagement than many other projects that we've undertaken previously. I think our number was five workshops in 2019, that was before the draft EA was even prepared, so it was almost pre-coordination which I'm confident included the NAAB. Then we went through the EA process, and we had another series of workshops and I believe we met with the NAAB again during that process and as the chairman mentioned there were public comment period associated with both of those efforts. I'm not trying to sound defensive, I think your request, will we listen, and certainly we can listen. I think there's some places I pointed out tonight, what we can't do is, we can't move the same waypoint two different directions just as an example, and we all understand why that might be requested, there are folks who live particularly West or particularly East that might hope to see that nudge, and I'm not trying to speak for folks in the room, but it's understandable generally speaking, that folks might have different opinions. We did listen to that; we just can't do both of those.

Mr. Gilderman: I think that's a poor example and let me just stop you right there. We are asking for some of the Central American and Gulf of Mexico flights to add either a 4th gate or go South. I've spoken to someone who has designed your routes and he said anything is possible, so I'm asking that you guys listen to the board. You have two board members that have requested that, and we could vote on it in front of you, if you'd like. Could you please consider doing that? I'm not asking for the flights to go over the ocean to turn North, I'm not asking for no traffic over the North Bay. I'm asking to alleviate some of the burden. That's all I'm asking.

*Mr. Rollason*: But Brian, as I understand what the FAA has stated, they are providing the routes, but the airlines are picking what route they want to go on. They don't have control over what flight path they file.

*Mr. Gilderman*: No, the Cuban, South American, Central American, and Mexican flights have to go north to turn South, that is the gate they're told to use, there's no other gate.

Mr. Rollason: Well, it can't be both ways, they're told what to use or they're not told what to use.

*Mr. Gilderman*: They are told. Let's stop being government officials here, let's be realistic, reasonable people. We are all here to try to do something good for the community. You guys work for us, and we are volunteering for those same people you work for, which are the citizens. Can we please look at a fourth gate, or moving some of the Central American and Mexican traffic to go South instead of North? That's it, it's not that many flights, give us a bone.

*Mr. Rollason*: Brian, let's get an answer from the FAA. On one hand you told us tonight, that you do not have any control over what path they take. Is that correct or not, correct? Who's telling them that they have to go this way?

**Mr. Arrighi**: Unfortunately, we lost Luis, I think he answered this previously, the facility will assign that gate depending upon the volume of traffic to the South. I can't speak to whether or not the aircraft operator, it's the dispatch the files and not the individual pilot normally, I can't speak to whether or not they are filing to go South or not, or they're frequently routed to the north because of volume and that the intent of those routes that went to the north was to provide some efficiencies in the routing of aircraft. So, we'd have to get back with you on that.

### MIAMI INTERNATIONAL AIRPORT (MIA)

#### AIRCRAFT NOISE AND ENVIRONMENTAL PLANNING / WILDLIFE CONTROL

5600 NW 36<sup>TH</sup> STREET, SUITE 533 WEDNESDAY, FEBRUARY 23<sup>RD</sup> 2022

MEETING SUMMARY MEETING WAS HELD AT THE MIAMI INTERNATIONAL AIRPORT AUDITORIUM IN CONSOURSE "D",  $4^{TH}$  FLOOR

*Mr. Gilderman*: Respectfully no, what he said was, this was disclosed in the meetings, you knew this was coming, that's what he said, that was his answer about that. You can't have it both ways, we're doing it this way because we disclosed it or we're doing it this way because we can't do it any other way. I got an email Mr. O'Harra that said we can't really do that, I think I got that copied from Norman, because there's treaties about us flying over Cuba. Do you remember that Mr. O'Harra? Do you remember that email you sent out, as an explanation to my original question before this meeting was scheduled?

Mr. O'Harra: Treaties about flying over Cuba?

*Mr. Gilderman*: I have no idea, I read it and I thought it was crazy, but you did say something about flying over Cuban airspace, that there would be a problem with it, when I specifically asked that question many months ago.

Mr. O'Harra: I would need to refresh my memory.

Mr. Gilderman: Norman, can you find that email for me and send it out to the group?

Mr. Hegedus: If I have such a thing, I will look for it. I don't remember anything about a treaty, but I'll look.

Mr. O'Harra: I think to clarify, what are team provided was that we did talk about GLADZ, it doesn't mean we do GLADZ because, but we talked about GLADZ serving routes over the Gulf, GLADZ was intended to quote primarily be used for departures filed over the Gulf of Mexico but operationally why is that? We said that routing helps expedite the crossing out, over and under, between Miami departures and arrivals from the southwest. So, it's not always a simple answer and I'm not trying to hide behind that, but they designed it a particular way knowing that they have to clear traffic headed, so they're not headed due South, a lot of traffic is headed West over the Gulf of Mexico and there's other traffic in the area. I am not an air traffic controller in the Miami area, but it's not just we're doing it because we said it. We laid it out back in 2019, got feedback, got more feedback in 2020, communicated in those meetings that was the intent, it may not have been crystal clear but there are reasons why and if you all want a better picture of why that design exists, I don't know that we have that expertise here, but Brian I'll ask if you have anything else to add?

Mr. Crow: I think you did a good job of explaining it, it was designed for MAXIM/CANOA traffic or traffic going over to the Gulf that head southwest as well as northwest. So, the traffic going to Houston, for example, used to have to go northbound over some of those cities to the North, and we moved it out West to go out over the GLADZ so that it could get over the Gulf sooner and get on course sooner. So, that was the part of the traffic that goes on GLADZ. The other part of the traffic goes MAXIM/CANOA to the southwest and sometimes it's faster to go southwest to go to South and Central America, so the airlines are definitely going that way. There is another route you can fly, it's currently called the MJITO, that goes South, that goes through the GORON corridor, through the warning areas that were mentioned earlier, which there's traffic to goes that way and goes to Havana but I guess there's also traffic that file to Havana to the North. I heard in your questions that someone said Havana traffic filed out over MAXIM/CANOA to the West, southwest, so there is an alternate for them to go. Do we force every Havana flight one direction or the other? No, they won't do that, that's that option that we pointed out.

### MIAMI INTERNATIONAL AIRPORT (MIA)

### AIRCRAFT NOISE AND ENVIRONMENTAL PLANNING / WILDLIFE CONTROL

5600 NW 36<sup>TH</sup> STREET, SUITE 533 WEDNESDAY, FEBRUARY 23<sup>RD</sup> 2022

**MEETING SUMMARY** 

MEETING WAS HELD AT THE MIAMI INTERNATIONAL AIRPORT AUDITORIUM IN CONSOURSE "D", 4<sup>™</sup> FLOOR

*Mr. Rollason*: I'm still somewhat confused on getting a straight answer, so I'll try one more time. Who makes the decision on which flight path the plane goes on?

Mr. Crow: That decision falls with the airline who files the flight plan.

*Mr. Rollason*: So, the airline files the flight path and if they want to go in any of those corridors, they can so choose to do that, is that correct?

**Mr. Crow**: There's some limitations, for example, if somebody wants to go to Chicago and they decide they're gonna fly out over the ocean and head up through New York, we're probably gonna reroute them out West unless there's some compelling reason why they want to do that. So, there's exceptions to everything.

*Mr. Arrighi*: Like Luis said, he talked about the military airspace, the warning areas down South, the density of traffic that sometimes gets very heavy in that area, so you could sometimes accept them to stay on the ground if you just want to wait for that route, I wouldn't doubt that air traffic will make the alternative route available to the pilot.

*Mr. Rollason*: But the answer you're telling me is the airline makes the choice of which flight path they want to take.

Mr. Arrighi: Correct.

Mr. Rollason: It's not the FAA and it's not the \*unintelligible

Mr. Gilderman: Who said correct? Who said correct?

*Mr. Arrighi*: The pilot, as Brian Crowe said, the airline files the route. There are times where routes are not available for one reason or another, an alternate route may be assigned. So, I don't know if that would be the case you're asking about, but the airline files the flight plan and is normally cleared on the route that they ask for depending on circumstances. There may be circumstances where they do not receive the route they file, or they receive an alternate route.

Mr. Rollason: Understood. Any other questions from the board?

Mr. Helmstetter: I'd just like to finish my comment there, yes, we were told we'd be able to comment post implementation, and yes, our comments would be considered while they are polishing up the design and that it would be considered if they made sense. I was absolutely told that from the beginning and it was always my understanding. I've provided comments to Norman numerous times via email, I've spent countless hours studying this and it feels like a complete waste of time since none of our comments were considered and even if Brian and I were able to have a discussion about CSALT before, and the FAA is anchoring on that, that there's a contradiction there, but were both trying to achieve something very similar, so despite our recommendations, there probably was something else that would have satisfied both of our issues, if we were able to discuss that with you, and unfortunately we've never had that opportunity.

Mr. Rollason: But these letters that came from us that went to Mr. O'Harra from October 4<sup>th</sup>...

### MIAMI INTERNATIONAL AIRPORT (MIA)

#### AIRCRAFT NOISE AND ENVIRONMENTAL PLANNING / WILDLIFE CONTROL

5600 NW 36<sup>TH</sup> STREET, SUITE 533 WEDNESDAY, FEBRUARY 23<sup>RD</sup> 2022

MEETING SUMMARY

MEETING WAS HELD AT THE MIAMI INTERNATIONAL AIRPORT AUDITORIUM IN CONSOURSE "D", 4<sup>TH</sup> FLOOR

Mr. Helmstetter: It was retracted, because we could not meet as a board. That's the whole issue.

*Mr. Rollason*: No, but we did send these recommendations to them.

**Mr. Helmstetter**: But we didn't talk about it ahead of time, they are anchoring on this whole point that we contradict one another, so yeah, we could have made the changes to CSALT and this and that but guess what? You guys couldn't make up your minds. Of course, we can't make up our minds, because there's no discussion amongst the board members because we don't meet.

Mr. O'Harra: But to be fair, there were discussions on CSALT in 2019 and 2020, but it is a true statement that we got the letter that was just referenced from October, the team was looking at it, it wouldn't have been a monumental change, but I hate to almost say it because it may frustrate folks in the room, but we could have made perhaps a small change, but the letter was pulled back. That was not the first time this board had an opportunity to provide input on CSALT, that's reflected even in the questions. There are a lot of handprints from public comments and board comments around on this project of changes that were made, so those changes were incrementally made prior to what was implemented.

*Mr. Gilderman*: But you know what, I think we keep talking about CSALT and you know what, I don't think that's the issue. I think the issue is trying to move traffic from the northern routes to any of the other routes. I really think that's what we're trying to do here, and I'm gonna ask George, I'm ok with CSALT, where it is, even though I'm not happy, but I really want to talk about the big issue which is trying to alleviate some of that traffic on the route. Would you agree with that?

Mr. Helmstetter: Yes, but that's not gonna happen, clearly.

*Mr. Gilderman*: Right, that's disappointing. I almost feel like I should've had barbeque at 6:00 o'clock, not after the meeting, you know what I mean? Like it's crazy. You're laughing! But this is disappointing because I live here.

Mr. Arrighi: I understand Brian, that was an empathetic chuckle, I apologize if it appeared to be otherwise.

*Mr. Rollason*: Anything further from anyone from the board? I appreciate the FAA spending the time you did with us this evening to go over and clarify exactly the position that we're in at this point. Anything from the administration?

*Mr. O'Harra*: Thank you chairman, I think I closed my comments earlier, my office. To the point that was made, I agree with it, you all are our volunteers, and you have an interest in aviation noise. We serve a constituency across a big region, but it includes the individuals who are in and around the Miami area, so this is not my office signing off, I'm just again trying to be transparent, so there may be future opportunities for us to engage and I hope you don't hear otherwise.

Mr. Rollason: Appreciate your input and your comments. Thank you

Mr. Hegedus: On behalf of Miami-Dade, thank you Mr. O'Harra for being here tonight.

FAA Signed off.

### MIAMI INTERNATIONAL AIRPORT (MIA)

AIRCRAFT NOISE AND ENVIRONMENTAL PLANNING / WILDLIFE CONTROL

5600 NW 36<sup>TH</sup> STREET, SUITE 533 WEDNESDAY, FEBRUARY 23<sup>RD</sup> 2022

**MEETING SUMMARY** 

MEETING WAS HELD AT THE MIAMI INTERNATIONAL AIRPORT AUDITORIUM IN CONSOURSE "D", 4<sup>TH</sup> FLOOR

*Mr. Rollason*: At no time did I receive a request from any member of this board to convene a meeting to review this, and we've been going along as the meetings have been going, and certainly if there had been a request from a board member to hold a meeting here, we would have scheduled a meeting. All you would have to do is send something to Norman, saying I'd like to have a meeting to discuss XYZ and Norman would get a hold of me and schedule a meeting. So, am I missing something here? You said we were unable to have a meeting.

*Mr. Helmstetter*: The last meeting we had, and it was specifically the woman from North Miami, I can't remember her name, wanted to meet more often, and we all said okay, we're gonna meet more often. We're not just gonna meet once or twice a year, yes absolutely we're gonna do that. Last meeting, we had was April 2021.

*Mr. Rollason*: First of all, the change that was made to this ordinance that established this board came from us that were here, we were meeting here about every other month or whatever and we had absolutely no business to conduct and yet if we didn't have those meetings the board would have been sunsetted, and we made a proposal to the County Commission to minimum requirements of two meetings a year and then we would hold additional meetings whenever we felt it was necessary by the business to come before this board. The ordinance was changed to that effect, minimum of two times a year and if we needed to meet more, we meet more.

Mr. Helmstetter: During that meeting I thought it was pretty clear that we were going to meet more often especially given Metroplex was going to be implemented in mid-August, okay, let's have it implemented and then we should meet and discuss what we're seeing in the skies. I know I sent Norman an email about when we're going to meet post implementation, to have a discussion, nothing was ever arranged. I constantly sent in my comments, my comments were forwarded to the FAA apparently, then I don't know, the contradiction and nothing was done, we missed our opportunity.

Mr. Rollason: I don't know how to respond to that.

Mr. Helmstetter: There's nothing to respond to, honestly.

*Mr. Rollason*: It just doesn't fall into a black hole, if a member of this board wants to have a meeting, all they have to do is ask to have a meeting.

Mr. Helmstetter: I did.

Mr. Rollason: Who did you make that request to have a meeting?

*Mr. Helmstetter*: I'm sure, I'll look through my emails, I know I asked when are we gonna meet to discuss comments on metroplex or post-implementation or what have you.

*Mr. Rollason*: The board members are prohibited to have contact with one another, we can't do that, it's a sunshine violation to discuss anything that may be coming before the board. So, what we have said is, if a board member wants to have a meeting, they send a request to Norman, Norman would send something to me as the chair, and we would discuss about scheduling a meeting. There's been no intent not to have a meeting. I don't know how to respond to you, that we're unable to meet, we're able to meet.

### MIAMI INTERNATIONAL AIRPORT (MIA)

#### AIRCRAFT NOISE AND ENVIRONMENTAL PLANNING / WILDLIFE CONTROL

5600 NW 36<sup>TH</sup> STREET, SUITE 533 WEDNESDAY, FEBRUARY 23<sup>RD</sup> 2022

MEETING SUMMARY

MEETING WAS HELD AT THE MIAMI INTERNATIONAL AIRPORT AUDITORIUM IN CONSOURSE "D", 4<sup>™</sup> FLOOR

Mr. Helmstetter: Alright, well we didn't meet, I don't know, I sent a request, and we didn't meet. We all knew, or at least I thought we all knew, there's going to be an opportunity to provide comments for the FAA post implementation, it was sent to us numerous times by the aviation department as well as the FAA and they would consider comments while they're doing their modifications before they finalize Metroplex. That clearly didn't happen even though we knew, it sounds like we knew, that in November that they would be closing the door. Even us meeting here today has no bearing on anything cause our comments were never going to be considered.

*Mr. Howard*: It appears to me that the FAA proceeded with their business without our knowledge and now were stuck with what they've done and what they've done is not satisfactory to me.

*Mr. Rollason*: I'm looking at this letter from October 4<sup>th</sup>, it was sent by Norman to Mr. O'Harra, and Mr. O'Harra responded on October 18<sup>th</sup>, with recommendations that we had discussed, that came from Miami-Dade Aviation Department, not from this board, about making some moves.

Mr. Helmstetter: Which was subsequently retracted.

*Mr. Gilderman*: At my request, because that was done by one member talking to Norman, and I said how can we make these suggestions without meeting as a board, actually I spoke to the County Attorney about that, I think that's what I did, and I think I spoke to you Mr. Agostino, and they retracted the letter immediately. That's how this whole process has been.

Mr. Rollason: So, there was another letter that went to the FAA to retract this letter?

Mr. Gilderman: Yes.

Mr. Howard: FAA proceeded, and we didn't even get involved.

*Mr. Rollason*: Well, I'm not 100% convinced that we are out of it. Its apparent that the airlines choose the flight path. We used to have on this board representatives of different airlines and they backed out or they no longer participate or whatever.

*Mr. Hegedus*: I'd like to add that the City of Miami Shores appointed a new member for which is a pilot for American Airlines, but he was not able to be here today because he has COVID, but he will be here for the next meeting.

*Mr. Rollason*: Maybe we need to talk to the airlines about the choice of paths they are taking because if the path is available for them to go another way, then that would solve the problem that you're asking for. Is that correct?

*Mr. Gilderman*: It would, but I don't that option is available. They really only have one choice for the Cuban, Mexican and Central American, it's to go North and head West and Southwest. It's ok, I was asking for a bone, to take maybe 10% of the stuff off North Bay and they basically said \*unintelligible.

Mr. Rollason: Well, I think it would be worth pursuing.

### MIAMI INTERNATIONAL AIRPORT (MIA)

#### AIRCRAFT NOISE AND ENVIRONMENTAL PLANNING / WILDLIFE CONTROL

5600 NW 36<sup>TH</sup> STREET, SUITE 533 WEDNESDAY, FEBRUARY 23<sup>RD</sup> 2022

MEETING SUMMARY

MEETING WAS HELD AT THE MIAMI INTERNATIONAL AIRPORT AUDITORIUM IN CONSOURSE "D", 4<sup>™</sup> FLOOR

**Ms. Gutierrez**: You mentioned something about, If I am an airline, I'm going to submit my flight plan request and someone has to approve that, I don't know if you have the option to do a flight request for something \*unintelligible, scheduled flights, or maybe one flight, but who is the one that is gonna approve that?

Mr. Hegedus: The airline submits the flight plan, and the FAA approves it.

*Mr. Rollason*: The other thing I noticed is being said, is a lot of flights are starting to make a path across 36th St and Allapattah, who was saying that?

Mr. Helmstetter: Me.

Mr. Rollason: I don't ever see that. So, you're saying there's planes that are turning over Allapattah?

Mr. Helmstetter: Let me clarify that, the intent, as I understood it, planes on the eastward departure were going to fly the original noise abatement procedures with flying runway heading, 5 nautical miles, which is actually past the bay, and at that point in time they would start their northerly turn. So, what ended up happening, based on my observation, and looking at past, actually when they implemented in August or September, they were flying those runway headings for the most part and then turning when they got close to the Bay or just over the Bay and then as time went on, they started turning sooner and sooner, I'm not saying it's a direct Northerly turn, but it's veering. So, instead of flying runway headings, you get a little into the bay and then you start going north, they start turning early. So, once they get to 36th street they're sweeping up where Bay Point is essentially. That's what my comment was, not that they're turning a hard right Northerly turn over Allapattah.

*Mr. Rollason*: We're all getting more noise from this, I get more noise from what I was getting before and yet when I look out to see the planes, I can tell that they have to be over the Intercoastal, I mean they're just too far away from me not to be. I'm almost on the edge of the Intercoastal, it's a couple of blocks from the water. So, I see them and they're over there, but I don't see any behind me now to the West. So, what you're saying is they're making the turns earlier and they arc out over you.

Mr. Rollason: Approval of the minutes from the last meeting.

Mr. Arce: Motions to approve minutes.

Mr. Howard: Seconds the motion.

MOTION PASSED UNANIMOUSLY.

Mr. Rollason: Illegal run-ups? Do we have anything on that?

*Mr. Hegedus*: Nothing for this time period.

*Mr. Rollason*: Is there anyone from this board that would like to request a meeting?

Mr. Rollason: Next meeting scheduled for April 20th.

Mr. Rollason: Motion to adjourn?

### MIAMI INTERNATIONAL AIRPORT (MIA)

### AIRCRAFT NOISE AND ENVIRONMENTAL PLANNING / WILDLIFE CONTROL

### 5600 NW 36<sup>TH</sup> STREET, SUITE 533 WEDNESDAY, FEBRUARY 23<sup>RD</sup> 2022

#### **MEETING SUMMARY**

MEETING WAS HELD AT THE MIAMI INTERNATIONAL AIRPORT AUDITORIUM IN CONSOURSE "D", 4<sup>TH</sup> FLOOR

Mr. Mazzola: Motions to adjourn.

Mr. Howard: Seconds the motion.

MOTION PASSED UNANIMOUSLY.

Meeting adjourned.

### **IN ATTENDANCE:**

#### **Board Members:**

Arce, Jorge Gilderman, Brian Gutierrez, Silvia V. Helmstetter, George Howard, Donald Mazzola, Chris Rollason, Frank Schweiger, Larry

### MDAD:

Agostino, Dan Cutie, Ralph Hegedus, Norman Kinnebrew, Joseph Lee, Cynji (Virtual) Pyatt, Ken Zagare, Ryan

### FAA (Virtual):

Arrighi, Jim
Bacavis, John
Colon, Luis
Crow, Brian
Felton, Matt
Johnson, Pearlis
Karns, Christian
O'Harra, Michael

### MIAMI INTERNATIONAL AIRPORT (MIA)

### AIRCRAFT NOISE AND ENVIRONMENTAL PLANNING / WILDLIFE CONTROL

5600 NW 36<sup>TH</sup> STREET, SUITE 533 WEDNESDAY, FEBRUARY 23<sup>RD</sup> 2022

MEETING SUMMARY

MEETING WAS HELD AT THE MIAMI INTERNATIONAL AIRPORT AUDITORIUM IN CONSOURSE "D", 4<sup>TH</sup> FLOOR

Turner, Vicki