SANAC
Sanford Aviation Noise Abatement Committee

**MINUTES OF THE REGULAR MEETING OF THE**
**SANFORD AVIATION NOISE ABATEMENT COMMITTEE**
**HELD AT THE ORLANDO SANFORD INTERNATIONAL AIRPORT VIGILANTE ROOM**
**TUESDAY, APRIL 25, 2023 – 9:00 A.M.**

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## I. CALL TO ORDER/QUORUM CALL

The regular meeting of the Sanford Aviation Noise Abatement Committee (SANAC) was called to order at 9:00 a.m. by Chairman George Speake.

## II. APPROVAL OF JANUARY 17, 2023 MINUTES

Motion to approve the minutes of the SANAC meeting held on January 17, 2023, made by Scott Runkel, seconded by DJ Staub. Minutes approved as submitted, motion passed.

## III. COMMITTEE MEMBER UPDATE

Chairman Speake advised that Noelle Lamonthe (City of Sanford, voting member) has resigned from SANAC and moved out of the area. The City of Sanford is working on appointing someone to take her place. Chairman Speake said he will follow up on that prior to the next meeting.

## IV. THE SUNSHINE LAW

Brief presentation on the Sunshine Law given by Brett Renton of Shutts & Bowen, who is the Attorney representing the Sanford Airport Authority.

See document attached.

Mr Renton said the City of Sanford and various government entities put on a half day class dealing with the Sunshine Law and ethics. If SANAC Committee Members have the time and would like to attend, let Julie Sawyer know and she will give specific dates and times etc.

Chairman Speake said he hopes to have a new member of staff to take on the role of Airport Representative to the Committee/Chairman within the next year to 18 months, as the Sunshine Law makes it difficult for him to be on the Committee and to discuss activities that the Committee is conducting.

Mr Renton said that Chairman Speake is in a unique position; he is on this board, so Committee Members cannot communicate with him on anything regarding SANAC.

Mr Renton handed out his business card and suggested that Committee Members give him a call if they have any issues or questions on the Sunshine Law.

**Questions:**
Mark Austin said he understands there can be no discussions about SANAC between Committee Members, but can he have a conversation with anyone else about what goes on at the meetings?

Mr Renton said the restriction is between Committee Members having conversations about an issue that may arise coming back before SANAC in the future.

## V. ATKINS PRESENTATION

Presentation given by Gavin Fahnestock, Manager of Aviation Planning at Atkins on aviation noise and noise contours at the Orlando Sanford International Airport.

See presentation attached.

**Questions:**

SAA Board Member Steve Smith asked how the parameters were established on the noise exposure maps, and if they measured the sound.

Mr Fahnestock replied that they do not go out and measure the sound. They take all the information gathered as part of the Master Plan process and the forecasting process and plug it into the Aviation Environmental Design Tool (AEDT) system, and the system will generate those noise contours. They also look at flight paths.

Ms Staub said she had seen noise exposure maps at different airports, and they all look the same. She asked Mr Fahnestock if they ever have noise that is out further near the final approach fix.

Mr Fahnestock said you don't typically see a lot of noise contours that will hit 65 DNL that far out. Ms Staub said they do hit the decibel level, but when divided by 24 hours they don't meet the 65 DNL.

Mr Fahnestock said that goes back to how the noise is measured and how it's mapped. You may experience events that exceed 65 or even 75 decibels, but if you look at the average impact of that over a 24-hour period, you are not exceeding that 65 DNL threshold.

Ms Staub said this is done for almost every airport, but she has never seen them go out any further, she asked if the noise contours are even a mile on the other side of the runway.

Mr Fahnestock said they will typically dissipate pretty quickly; if you look at the flight profile of an aircraft, they will climb as quickly as they can out of the Airport to a certain altitude or when they are coming in, they are usually on idle, so the noise impact is going to be less at that stage.

Mark Austin asked what the threshold decibels of noise that creates hearing damage is. Mr Fahnestock referred to the chart on slide 14 which gives the decibel levels of different types of sounds.

Mr Austin said harmful to hearing is above 100. Mr Fahnestock said typically the higher you get, the more impact it's going to have, and every person is going to have an impact at different levels. Where that point is, where it causes damage to your ears, he did not know the answer to that, but he could find out.

Mr Austin said decibels of 110 or 120 would be harmful to your hearing. He would think that jet engines on airplanes, especially the older ones, the MD80s, if you are standing right next to them a lot, you are going to have to wear hearing protection because that's really going to be harmful. So, when we see the map showing the 65/75 DNL, that's not really telling you the decibels you are getting there, it's just spreading it out over a 24-hour period. You are going to take a 120-decibel jet that takes off 4 times a day, and divide it by 24 hours, so you could be in a 65 DNL area, and actually have hearing issues because of the impact of the short-term, very high, decibel levels that would occur there. Jet engines make a lot more than 65 or 75 decibels when they are taking off.

Mr Fahnestock said they do, and it really depends on where you are in relation to that aircraft. There is an FAA order which publishes the decibel level of every aircraft type and every aircraft engine. They created a standardized way to measure that, because if you were standing in front, at the side, or behind the plane, you would experience the noise at a different level. The way the FAA measures the specific noise is to stand 1,500 ft in front of the aircraft, with the aircraft at full throttle. That order is available online, so you can go there and see specifically on every aircraft type how much aircraft noise you are going to experience for a single event.

Mr Fahnestock said you may experience higher than 65 decibel noise levels during certain periods, they may be very short periods of time, they may be spread out throughout the day, or throughout the week. The purpose behind the noise contours is to measure the average effect over a specific point on the ground so you can get that cumulative impact at that point.

Mr Austin said if something made 150 decibels once a day, and that was the only noise that happened during that day, it's going to register pretty low on the DNL chart. It would appear to be not bothersome, because you have a DNL below 65, but you can't hear any more, because you stood there and once a day you've got a decibel level of 150, so it is affecting your hearing. It looks like it's not a very high number, because it got spread out, but a really loud noise even once a day is a big deal. There should be another way they could figure out the maximum decibel rate that is tolerable anywhere. For example, you can't go over a certain level of decibels for more than x seconds a day. Is that the only way they do it? Or do they actually take a decibel level that is considered not tolerable for residential areas?

Mr Fahnestock said there are some other methods; Part 150 is the voluntary noise compatibility program, and airports that experience a higher level of noise, or experience a lot more noise complaints, can go through this voluntary Part 150 noise study. An option is to put noise measuring equipment around an airport over specific areas where there have been reports of high levels of noise, so you can get very specific data at those points. They are still going to average over that 24-hour period to get the DNL contours, but it will give you a better idea of the $L_{max}$ level at that specific point. If you look at why there is this DNL concept, everyone experiences noise differently, so there has to be some sort of average, but also people are moving around, so the chances of someone being in one specific spot every time that noise occurs are lower, so you have

to look at that average movement of people, the average types of operations, and aircraft coming into land. Unless you are very close to the runway, the chances of being in a very specific spot every single time are lower. All these things were factored in to that AEDT modelling.

Mr Fahnestock said they have to work within the parameters of what the FAA is providing guidance on how to measure noise. They are continually evolving, there has been a very long study on noise and the annoyance of aircraft noise, and the perception of noise as well. If you think about it from a perception standpoint, if you see a large aircraft go over your head, even though that aircraft is brand new, with the highest level of noise stage requirements and it might be quieter, because it's larger and in your face, you are going to perceive that noise higher than you would an older aircraft that is actually noisier. There's a lot of different factors that go into it and that's why the FAA was forced down this road of creating this metric.

Mr Austin said a decibel is a decibel. Even though your perception could be different, the decibel is what the decibel is. It is a readable thing, it is reality. $L_{max}$ is that very high, short period of time decibel reading, so is there an $L_{max}$ max? Is there a decibel they set that you can't go over, that is not acceptable even for a short time? Mr Fahnestock said he is sure there is, but he did not know what it is.

Mr Austin asked if Part 161 is what the FAA says we have to allow, and you can't argue with them about it?

Mr Fahnestock said a public use airport can't restrict access to certain types of aircraft or certain types of operations. That is essentially saying a public use airport is open to the public, it's funded through federal grants etc., so you can't restrict access. Mr Austin said so you can't restrict the old MD80's from coming in because they make too much noise? Mr Fahnestock said that is correct.

Ms Staub said the Sanford Master Plan unfolds over time, and as they look at projects, they have to conform to the FAA federal rules, they have to look at noise abatement. She asked if they look at the noise contours as the sole source they use for considering noise abatement in their plan.

Chairman Speake said for a project like an overlay of a runway, there is not a big impact there, it's an existing runway, we are putting new pavement down. If we are looking at having a cargo operation come in or a new commercial business MRO, something like that, then we would have to go through NEPA, the environmental review, to see what that new operation brings to the Airport and the community. That is another set process by the FAA, there are things we have to provide to them, and they review it and determine if there is a negative impact or not.

Mr Runkel asked Mr Fahnestock what the $L_{max}$ is at the end of Airport property. By the time it leaves there, what is the highest level of noise that you are averaging down to 65 DNL? Mr Fahnestock said he did not have the $L_{max}$ or any of the other measuring types, this is just looking at the DNL noise contours, so it's saying when you hit different points here, this line is where you will experience 65 decibels average over a 24-hour period.

Mr Austin asked if there is a record of the numbers they used to average. There must be something that says at this time we had this decibel and at this time we had this decibel, and we

took all the numbers and added them together. There must be a record somewhere of what the decibels were at different times.

Mr Fahnestock said there is a record of the data that was input into the AEDT system in order to generate the noise contours. That data does not include specific decibel levels, the AEDT tool is utilizing those decibel levels that are FAA ordered and measured for every single aircraft during certification. It's using that as a basis because during different segments of flight, take off, aircraft coming into land, you will experience different levels of noise. When you plug everything into the AEDT tool, you are plugging in time of day when it occurs, the number of occurrences throughout the day, flight paths that they are taking, you are splitting up the operations in different directions based off the percentage of time that each runway is used. All of that is factored in creating these contours, but the data does not specifically state at this point you are reaching this decibel level.

Chairman Speake said it simulates that data based on past accumulation that was then used to design the program that the FAA has said has to be used. Unfortunately for airports, and the engineers who have to do this, we are stuck with what the FAA will accept. The pink areas on the contour maps depict properties where we would either purchase or provide noise mitigation (whether it be insulation, baffled A/Cs or other measures) as we complete projects that affect those areas. The FAA funds those programs based on this data, and this is what the FAA and HUD say is a concern for residences, and where we have to come in and do something through the FAA.

Mr Austin said this is what the regulations say you have to do in this situation, but he was curious if there was any way to see the data that they got to get to that, as there has to be a number, there has to be a reading somewhere of some decibel. It's simulated, but if they put equipment out, it's reading something.

Chairman Speake said they don't put equipment out now, it's the program. When the first Part 150 was done, some equipment was put out, but even if you put equipment out, you are still going to get something very similar to this, it's not going to stretch out 3 miles beyond the Airport because you have equipment out there. We have put that equipment out on numerous occasions, both to the west and the east, and there are moments when you get a singular high reading, but it all goes back into that formula and gets spread out over a 24-hour period.

Mr Austin said there was a time when they set equipment out there, the registered decibel readings that they used to add together. Chairman Speake said he was not at the Airport when that was done. It is his understanding that there was actual equipment put out in the community when the first Part 150 was done in 1998 or 1999. AEDT did not exist then, so he is not sure there is any other way they could have done it without putting equipment out.

Ms Marsden said her understanding was that they took a single reading back in the 90s and extrapolated upon that as to exactly what it would be, if you look back at the minutes it will tell you a little bit about that and who they used to do it. There was an actual test years ago, but unfortunately it was not done around her area, it just said certain areas around the Airport.

Ms Marsden said she lives on the east side of the Airport, where the flights turn, in the past it was said they are at their loudest, but they have now said they don't mean that anymore. They get multiple flights turning one after the other and they are extremely noisy even inside the house

because they are so loud, but it is never taken into consideration. She has been told that because of where she lives (she lives on 20 acres), and because there is little to no noise, that's how it gets lowered in the 24-hour period. Since traffic has increased, and Orlando's traffic has increased, they hear a lot more noise than they ever used to, it used to be very quiet. Between this Airport, Orlando's airport, and the roads, they now have a lot more noise than they ever had. She asked how that is taken into consideration.

Mr Fahnestock said when we are looking at these noise contours, we are only looking at this Airport, we are only looking at the operations in and out of this Airport, we are not taking into account other airports' noise, or roadway noise. Everyone has different perceptions of noise, time of day can have an impact, during the daytime hours when the roadway traffic is higher, noise impacts from aircraft are going to be perceived a little bit lower because you have that other buffer of noise that you are experiencing. These contours cannot possibly take all those factors into account in creating these noise contours. We can only look at the data that we have available and the data that we can extrapolate through the forecasting process. But it also takes into account what we know today of the specific aircraft operating at the Airport, the fleet, number of operations, type of operations, the flow east and west, north, and south of the Airport. We can only take into account those different factors; other factors are outside of that and may have a positive or negative impact on your perception of the noise from the Airport.

Ms Marsden said she has been told that the reason the Airport is able to get away with these extremely loud flights over her property is because it's over a 24-hour period, and since there is little to no noise other than the aircraft, it lowers the percentage. But that is not the case anymore, they do have more noise outside now, so she would think that should factor in because they have more noise now than they typically had before.

Chairman Speake said there is a gentleman who lives out to the west who was complaining about noise, and he offered (as he has for Ms Marsden and others) to bring noise monitoring equipment out to his property. It is a snapshot in time, it is not a year's worth of data. There is a lot of environmental noise that plays into what happens when we put that noise equipment out, because it's not just measuring aircraft, it's measuring anything that occurs in a 1-minute period. The new piece of equipment we have records anything over the 65 DNL. It records about 10 or 15 seconds of whatever the noise is. There were around 38 instances of whatever the noise was that weekend, and only 2 of them were aircraft noise, the rest were motorcycles, lawnmowers etc. All these things that generate noise in the community play into that total number that comes out at the end.

Ms Marsden said she was told before that because they had no noise (other than wildlife, they don't have motorcycles or lawnmowers, she is at the dead end of a road), but now that noise has increased, that should be factored in because when the equipment was brought out to do the monitoring, it was 59.9 but there were flaws in the system. The first time it didn't work and then the second time, they weren't able to do the penalties for before 7am or after 10pm. How could you say what the noise level is when you weren't able to factor those in because they do have quite a few early flights and late flights.

Chairman Speake said we have offered to bring noise monitoring equipment back out to Ms Marsden's property. Ms Marsden said she thinks that is a conflict of interest but bring it out again.

Ms Marsden said for the arrivals there's not a set flight path, they come in all different directions and all different angles and there can be 4 within a minute apart, or 2 minutes apart, they come in at different levels. She asked Mr Fahnestock how they factor that into the system, if you don't know what path they are going to take or what level they are at?

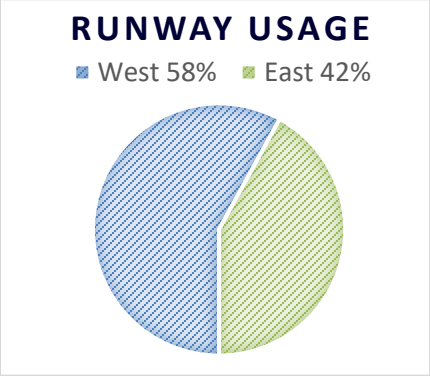
Mr Fahnestock said they do have a good idea of the flight paths they are going to take in and out of the Airport. They look at over a year's worth of flight path data for every aircraft that is operating in and out of the Airport. We cannot predict every single operation as far as exactly where it will turn and what altitude it will be at, however we look at the average over that previous 12-month period and all of those flight tracks are input into this system tool and that's why you see some random different pieces that are coming out of the contours. Those are because of the different flight paths, so they are taken into account, and that data is available within the Master Plan.

Chairman Speake said Julie Sawyer will email a copy of the presentation to SANAC members.

## VI. NOISE REPORT: REVIEW OF JANUARY, FEBRUARY & MARCH 2023 DATA

### January 2023

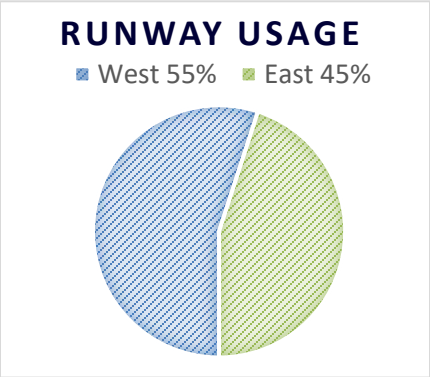
| | | |
|---|---|---|
| **Total Complaints:** | 442 | (2022: 447) |
| **Total Operations:** | 20,140 | (2022: 11,788) |
| **Complaints by Location:** | | |
| Deltona | 3 | |
| Geneva | 426 | |
| Heathrow | 8 | |
| Sanford | 5 | |
| **Number of Households:** | 5 | (2022: 3) |
| **New Households:** | 1 | (2022: 0) |




Chairman Speake said the airfield and the tower are getting busier, primarily due to increased general aviation activity. We had the busiest month we have ever had in January in terms of passenger numbers, commercial operations were not the busiest we have ever had.

### February 2023

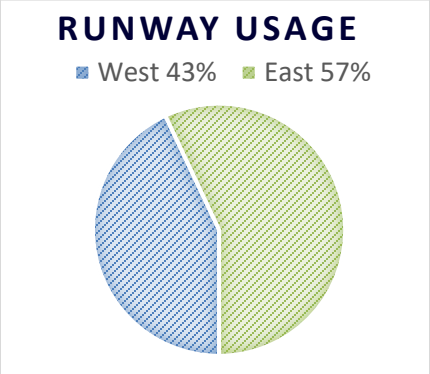
| | | |
|---|---|---|
| **Total Complaints:** | 456 | (2022: 481) |
| **Total Operations:** | 19,240 | (2022: 13,569) |
| **Complaints by Location:** | | |
| Deltona | 1 | |
| Geneva | 450 | |
| Heathrow | 2 | |
| Osteen | 1 | |
| Sanford | 2 | |
| **Number of Households:** | 6 | (2022: 5) |
| **New Households:** | 1 | (2022: 0) |



February was the second busiest month, again not in terms of commercial operations, but in passenger numbers.

**March 2023**

| | | |
|---|---|---|
| **Total Complaints:** | 419 | (2022: 475) |
| **Total Operations:** | 22,428 | (2022: 15,167) |
| | | |
| **Complaints by Location:** | | |
| Crystal River | 1 | |
| Geneva | 406 | |
| Heathrow | 7 | |
| Lake Helen | 2 | |
| Lake Mary | 1 | |
| Longwood | 1 | |
| Sanford | 1 | |
| | | |
| **Number of Households:** | 8 | (2022: 8) |
| **New Households:** | 2 | (2022: 1) |




Runway usage shifted a little more to the east, which is somewhat typical. When you get the sea breezes going, the east tends to get a little stronger.

March was the third busiest ever month in terms of passenger numbers.

**<u>Comments from Committee</u>**

DJ Staub handed out copies of a document she had prepared.

Ms Staub said she had been an Air Traffic Controller for 30 years, she worked at Daytona Beach and Orlando, and she also worked as staff. She lives 3 miles west of the Airport, where everybody is flying directly over and landing on 9L. Ms Staub said she knows from experience what can be done, and there are a lot of constituents out there that complain about noise.

Ms Staub said as a Committee we really can't do anything about the big aircraft landing on 9L/27R, you can't change the flight path and you can't change the decibels, but there are other things we can do, and that is what her proposals are.

See proposals attached.

Chairman Speake said we can put this on the agenda for the next meeting. He said this is a perfect example of what should happen if a Committee Member had something they would like to present. They should bring it to the meeting, and we can make copies for them, and then it can get handed out at the meeting and we can either discuss it at that meeting or bring it up in the next meeting.

Chairman Speake advised Mr Carew that Vector Airport Systems are continuing to look at the issues he brought up. They have pinpointed some opportunities for optimization that they feel

would improve the user experience on the public portal. They anticipate being able to provide an update on progress in the coming weeks. They are working on Mr Carew's browser issue as well. Mr Carew said he has noticed some improvements.

Chairman Speake said there has been some maintenance going on this past weekend where it wasn't usable for several hours, so if you ever run into an instance where you can't get on there to file a complaint, it is a temporary issue, it won't go on for too long, and they typically do that at the weekends.

Chairman Speake said Ms Staub had requested that we show some tracks in each meeting. Starting with the next meeting, his intention is that we will pull up tracks for the new complaints that come up each month. If someone wants to see tracks based on an existing complainer, he is happy to show that, but we can't show them all, it's just not possible. He asked the Committee to email Julie Sawyer if they would like to see anything specific prior to the next meeting.

Chairman Speake said he can also pull up a 24-hour period. Ms Staub said she would like to see what the dominant turn is, Ms Marsden said the flights come from every which way, and they may sound like that, but they actually come from specific directions, they are either coming straight in, they are making a close in turn, they are really not coming from a million directions, so she would like to see dominant to 9L and dominant to 27R. Chairman Speake said he could pull up all the tracks for 24 hours, which will show what happened on that given day. You can even pull up a week, but then you are going to get overloaded. Ms Staub said she would like to see where the dominant track is. Chairman Speake said if that is what everyone wants, we can pull up separate screen shots for each day of the week, because Tuesdays are extremely different from Thursdays, so we can pull that up and let everybody see.

Mr Carew said when Carl Reda previously provided 24-hour tracks, they took a while, but they were very beneficial, and he assumes Chairman Speake has that capability. Chairman Speake said we do; the system will do a lot.

## Other Liaison Reports

### Allegiant Air

Chairman Speake said Allegiant's flights are down, they expect that they will stay that way through October, and then in October they may pick up. Their forecast is that it will pick up, they are purchasing 100 Boeing 737s, and those are projected to come online in October, although Boeing has a new issue in their manufacturing process which may slow things down. The summer deliveries may roll into the fall, but the expectation is that October, November, and December will be busier than last year's October, November, and December, barring that slowdown in the delivery of the aircraft.

Brad Schramski said Sanford will be the first base to receive the 737s.

Chairman Speake said he has been told an initial 5 will come here, and it will not eliminate any of the airbuses, they will be operating both aircraft. Right now, we are at 15 or 16 based aircraft, so that will take us up to 20 or 21. Chairman Speake said he and President & CEO Nicole Martz were

just out in Las Vegas at the Allegiant conference, and that doesn't mean Allegiant will be adding a lot of new destinations to the Airport. There is some frequency that went away, both from Covid and the maintenance time that they are having to put into the aircraft right now, because the airbus aircraft are older. It will bring back some of that frequency and there will probably be some select added destinations, there are also some destinations that will be getting dropped soon.

Allegiant have said they expect 2.2% growth through October, and 2% – 6% growth for the full year. They expect to double their activity by 2029. Not all that activity will happen here, they believe there are 1,400 destinations in the United States that are potential new destinations for them to serve.

Mr Runkel asked if the new planes will be any quieter than the existing ones. DJ Staub said Boeing 737 is noisier. Mr Schramski said it depends on the model. Chairman Speake said the Max-8 is what they will most likely be putting here first. The Max-7 are smaller aircraft, they will mostly be used at airports that have a constrained runway, it doesn't mean that they won't come in here, because we could serve some communities (we do) that have a shorter runway. The Max-8 is what they are focused on out of here because it has a larger seating capacity, and they are moving to premium seating. They charge more for that premium seating, and you have a lot of people coming here who are potentially premium customers, so the Max-8 aircraft will accommodate that. They are supposed to be quieter aircraft. Theo Aftonomos said according to google, it is 40% quieter than the 800 series. Chairman Speake said they use a similar sort of technology to the 787 Dreamliner on the engine, with some of the baffling and the shielding, they are definitely a quieter aircraft.

Mr Runkel said our obligation is to try to keep the noise down. He asked if there is anything we can do to encourage the airlines to get quieter planes or at least recommend that. Chairman Speake said he has previously requested noise profile information on the newer planes through Jeff Yost (the ATC Coordinator for Allegiant). Mr Yost has not been able to get that information from whoever he is dealing with at Boeing. Chairman Speake said he will renew that conversation; he will work on that again for the next meeting.

**General Aviation**

Mr Hawker said L3Harris got 2 new aircraft yesterday, and they are looking at getting several more by the end of the year. They are anticipating growth up to about 550 students by the end of the year. Growth has been pretty substantial, not just here but also in Jacksonville.

Chairman Speake said before Covid, L3 Harris were at 700 to 800 students. Mr Hawker said they had 135 aircraft at that time; they currently have 72 aircraft.

Chairman Speake said we have been hitting 1,000 ops some days, and we had a 1,200 ops day in March. In 2019, we were hitting 1,000 operations every day, so we are slowly creeping back towards that. If the students do get to 550, we will basically be at 1,000 a day. Chairman Speake asked Mr Hawker if L3 Harris would then be flying at the weekends again. Mr Hawker said that had not been discussed yet, but he would anticipate flying again at the weekends. Chairman Speake said the reason that is important to this group is because if you have that many more aircraft in the pattern, it stretches out the flight path for safety purposes and separation, which means you have now got aircraft further out into the community.

**FAA**

Mr Aftonomos said the Tower has seen the traffic increase steadily since July last year. We are not anywhere close to pre-Covid levels, but if it continues to grow as it is, within a year or so it might get back to that.

Chairman Speake said he thinks we will probably hit 260,000 operations this year. In 2019, we were at 360,000, so it's still about 100,000 below. If L3 Harris gets 550 students by the end of this year, in 2024 we could be well over 300,000 operations.

Mr Carew asked if the Tower's operating hours are going to be increased. Mr Aftonomos said it is not on his agenda. Mr Carew asked if there was a category downgrade around Covid time, and if we need to get that back. Mr Aftonomos said they do a staffing study to determine how many controllers they are allowed to have. Surprisingly enough when they had the increase prior to Covid, they did not get any additional personnel. They are still overstaffed.

Chairman Speake said prior to Covid the Airport Authority were working on trying to get the Tower's hours extended from a safety standpoint. If we get back to those numbers, it is something that the Airport Authority will work on.

## VII. PUBLIC COMMENT

Mr Carew said the Master Plan, which is located on the opening page of the Sanford Airport Authority website (it's down at the bottom where the SANAC is), is long, lengthy, and detailed, but he would encourage everyone, particularly members of the board, to read it. It is very interesting about how airports plan for the future, and he thinks that anyone who is on this committee, particularly a voting member, should take a few moments to read it, it also gives a marvelous history of this place.

Ms Marsden said she has noticed recently that Allegiant arrivals are coming in that aren't on the schedule. Chairman Speake said they could be ferry aircraft coming from St. Pete to here. There have been diversions lately, we got 4 or 5 aircraft from Fort Lauderdale as a result of their flooding issue. There have also been weather issues, we got a few that were supposed to go to St. Pete not long ago. Those are not going to be on the schedule, they are mid-air decisions to divert to here.

Ms Marsden said her uncle came and stayed with her, he is a former Air Traffic Controller, and he thought that the Airport allows these larger aircrafts like the PIE, the Coastguard and just recently one out of Melbourne, to make flight approaches, they don't actually come in and land. He said they have to get permission to be able to do that. They will come in 5 or 6 times, fly over really low and turn around, and they are extremely loud.

Chairman Speake said we cannot prevent the military (which includes the Coastguard) from operating in and out of the Airport as they wish. They don't need permission, the federal government pays for quite a bit of what happens at this Airport, so that happens because they want to. Other larger aircraft that want to come in and do flight training (with 31 seats or more) do have to request permission, but they don't always do that. It's published in the Airport Facility Directory that they should, it tells them the phone number they need to call. When they do call, we evaluate whether or not it's going to be an issue, but it's pretty rare. The last one was JetBlue,

and they did not ask permission, they came and did a couple of touch and goes, and they may have even done a full stop, but we do try to prevent it. There are quite a few airlines out there that have decided that this is a great training place. We shut them down the best we can when we find out about them. It hasn't happened for quite a while.

## VIII. FUTURE MEETING DATES

Meeting dates have been changed to avoid conflicts with annual events held at the airport.

- June 20, 2023
- September 19, 2023
- December 12, 2023

Motion to adjourn the meeting made by Mr Runkel, seconded by Mr Schramski. The meeting was adjourned at 10:50 a.m.

**Voting Members**

Brad Schramski, Airline Representative, Allegiant
D J Staub, Seminole County
Chairman George Speake, SAA
Mark Austin, Seminole County
Scott Runkel, City of Lake Mary
Wade Hawker, L3 Harris

**Non-Voting Members**

Bill Smith, F11 (dialed in)
Maya Athanas for Jeff Hopper, Seminole County
Theo Aftonomos, FAA, Sanford ATC
Chris Carson, City of Lake Mary (dialed in)

**Others Present**

Al Nygren, SAA
Brett Renton, Shutts & Bowen
Gavin Fahnestock, Atkins
Jane Marsden, Geneva resident
Mr Carroll, Enterprise resident (dialed in)
Mr Carew, Heathrow resident
Steve Smith, SAA Board Member
Kayla Boccuzzo, Allegiant
Michael Bouzianis, Allegiant
Derek Scafidi, L3 Harris

# SUNSHINE LAW

The origin of government in the sunshine in Florida is Article I, Section 24(c) of the Florida Constitution which in pertinent part states:

> All meetings of any collegial public body of the executive branch of state government or of any collegial body of public body of a county, municipality, school district or special district, at which official acts are to be taken or at which public business of such a body is to be transacted or discussed, shall be open and noticed to the public and meetings of the legislature shall be open and noticed as provided in Article III, section 4(e), except with respect to meetings exempted pursuant to this section or specifically closed by this Constitution.

This constitutional provision has been implemented by § 286.011, F.S. commonly known as the "Sunshine Law," which has three basic requirements:

(1) Meetings of public boards or commissioners must be open to the public;

(2) Reasonable notice of such meetings must be given;

(3) Minutes of the meetings must be taken.

The Sunshine Law is liberally and broadly construed to accomplish its purposes. See, Wood v. Marston, 442 So.2d 934(Fla. 1983).

The Sunshine Law applies to "every board or commission" of the state, including the Sanford Airport Authority ("SAA") and would in turn apply to sub entities of the SAA which would provide recommendations to the SAA, including the Sanford Airport Noise Abatement Committee ("SANAC"). *See* Turner v. Wainwright, 379 So.2d 148 (Fla. 1st DCA), *affirmed and remanded*, 389 So. 2d 1181 (Fla. 1980)(relating to the Parole Commission).

The Sunshine Law applies, in general, to any gathering, whether formal or casual, of two or more members of the Board or committee in which members discuss or deliberate on some matter on which foreseeable action will be taken by the Board. *See* Florida Parole and Probation Commission v. Thomas, 364 So.2d 480 (Fla 1st DCA 1978); *See also* Mitchell v. School Board of Leon County, 335 So.2d 354 (Fla. 1st DCA 1976).

## Penalties of the Sunshine Law

1. A resolution, rule, regulation or formal action of the Board is invalid if it is not made or adopted at an open meeting when required by the Sunshine Law. Town of Palm Beach v. Gradison, 296 So.2d 473 (Fla. 1974).

2. A Board Member who knowingly attends a meeting or gathering in violation of the law may be guilty of a second degree misdemeanor. §286.011(3)(b), F.S. Violators of the Sunshine Law who are convicted of a misdemeanor may be removed from office by the Governor. §112.52(1) and 112.52(3), F.S.

3. A plea of no contest or an adjudication withheld is a conviction for purposes of the removal from office provision. Attorney's fees and costs can be assessed against the Board if there is a violation, and in rare cases, can be assessed against an individual board or commission member, unless the member acted on advice of board or commission counsel. *See* § 286.011(5), F.S.

**The Sunshine Law <u>applies</u> to the following:**

1. Telephone, text messaging or email communications among or between Board or Committee Members to discuss any matter on which foreseeable action will be taken by the Board or Committee.

2. Meetings of Board or Committee Members by the use of communication media technology to discuss official matters.

3. Rulemaking, rule development workshops or informal workshops attended by Board or Committee Members to discuss proposed regulations or other matters on which foreseeable action will be taken by the Commission. (Rulemaking workshops are conducted in accordance with the Sunshine Law).

4. An executive work session in which a committee of Board Members or the full Commission discuss issues on which foreseeable action will be taken by the Commission, such as budget or legislation.

5. Meetings of advisory committees or councils of the Board (Advisory committee or council meetings such as SANAC must be conducted in accordance with the Sunshine Law).

6. Luncheon meetings of Board or Committee Members which are scheduled for the purpose of discussing official matters of the Board or Committee.

7. Communications between Board or Committee Members by proxy, either through a member of SAA staff or any other person, if the intent is to poll the Board or Committee Members to affect a decision or deliberation on a matter on which foreseeable action may be taken by the Board or Committee.

8. Field or inspection trips made by two or more Board or Committee Members relating to a subject which will forseeably come before the Board or Committee for action. *See* <u>Finch v. Seminole County School Board</u>, 995 So.2d 1068 (Fla. 5th DCA 2008)(a field trip undertaken by school board members to review school bus routes was held to be subject to the Sunshine Law).

Unless the requirements of the Sunshine Law are met in the above-referenced situations, Board or Committee Members shall not participate in such meetings or communications.

**The Sunshine Law <u>does not apply</u> in the following situations:**

1. Settlement negotiations or strategy sessions relating to pending litigation to which the Commission is a party <u>provided</u> such sessions are conducted only with the

Commission's General Counsel and Executive Director, the sessions are recorded and the sessions are for discussion not for final action. (Once the litigation is resolved, the record of the strategy session is open to public disclosure).

2. Social events, such as lunches, attended by two or more Board or Committee Members, provided that matters which come before the Board or Committee are not discussed.

3. Field or inspection trips made by one Board or Committee Member, with or without SAA staff, to management areas, facilities of the Authority, or other sites provided there is no discussion with other commission members of matters on which foreseeable action will be taken by the Board or Commission.

4. Field trips made by one or more Board or Committee Member, when the subject is not related to any subject that will foreseeably come before the Board or Committee.

5. Communications, whether in person, by email or conference telephone, between a Board or Committee Member and a constituent or a constituent group for fact-finding or to hear comments or suggestions on matters on which foreseeable action will be taken by the Commission, provided the Board or Committee Members do not discuss such communications among themselves.

6. Written reports between Board or Committee Members or from SAA staff to Board or Committee Members provided there are no comments, responses or replies are shared between Board or Committee Members not at a public meeting and that such report is not designed to circumvent the Sunshine Law.

7. Meetings involving one Board or Committee Member, SAA staff and stakeholders that are purely fact-finding or informational in nature and where no decision-making authority has been delegated by the Board or Committee; however, even though such fact-finding meetings are not required to meet the Sunshine Law, Counsel urges that it may be in the best interest to notice such meetings and hold them as open to the public. SAA staff is urged to contact Counsel on a case-by-case basis on questions relating to Sunshine Law and stakeholder and staff meetings.

**Recommendation**

The Authority must not only adhere to the letter of the Sunshine Law, but also to its spirit. Board or Committee Members should refrain from any unnoticed gatherings, meetings or communications among themselves if there is even an appearance of impropriety about government in the sunshine. Board or Committee Members should seek legal counsel in advance if there are questions about compliance with the Sunshine Law.

April 24, 2023
Proposals to SANAC - Sanford Noise Abatement Committee
By DJ Staub, Board member
seminolecountysanacrep1@osaa.net

**The goals of these proposals**

Goals:
- increase safety.
- save airlines money.
- spread the pain of noise more fairly.

The first goal is always safety. The more we can get commercial jets up and out of the airspace student pilots are practicing in, the more safety can be built into the airport. Secondly, getting commercial jets up and on-course is a cost and time saver for airlines. Third, it is basic fairness to spread out the pain so no one group endures most of the airport noise. Most Sanford Airport noise is caused by jet arrivals to RWY9L over suburban areas, and RWY27R, from the final approach fix (about 5 miles directly E or W of the airport) to the runway threshold,. Due to the nature of modern approaches, we just can't make any changes to high performance aircraft to these north runways. Instead we can first try to reduce noise with altitude on departure, and second try to spread traffic noise among the runways.

RWY = runway
VFR = visual flight rules, a status that most non-jets are flying under
F11 = Central Florida TRACON, the ATC facility that controls aircraft after leaving Sanford Tower airspace.

**Departures: Northbound Jets**

Currently departures are assigned 2000 feet and runway heading. This proposal would be that they climb to 4000 feet on departure and turn to an assigned northbound heading. This change would save the airlines money via the altitude and turn, and greatly enhance safety by getting them out of the VFR practice-aircraft altitudes much sooner. Additionally, jet traffic can begin a turn at 400 feet; this would be a turn at about a mile off the runway end, putting the departure's noise over primarily commercial (Hwy 17-92, I-4, Seminole mall, businesses) rather than suburban areas.

Specific proposals:
Departures on RWY9L on departure would be assigned 4000 feet and a turn to 330 degrees.
Departures off RWY 27R on departure would be assigned 4000 feet and a turn to 360 degrees.

**Departures: Southbound Jets**

Currently, departures are assigned 2000 feet on departure. This proposal would be that they climb to 4000 feet on departure, saving money and greatly enhancing safety by getting them out of the VFR practice-aircraft altitudes much sooner. (The aircraft remain on runway heading because a SW turn on departure is something F11 is unlikely to find acceptable.)

Specific proposals:
Departures off RWY 27R on departure would be assigned 4000 feet.
Departures off RWY 9L on departure would be assigned 4000 feet.

**Practice Approaches**

Proposal: Practice approaches would be restricted to RWY9R/27L. (This procedure was in effect at the Sanford Airport when I was on the SANAC committee representing the FAA for F11, approximately 15 years ago.)These are student pilots in small normally 4 seat single or twin engine propeller aircraft. This would reduce noise to the homes underlying the final approach to RWY9L/27R. The homes under

the final approach course for RWY9L/27R endure all the jet arrivals; this would spread the pain. Additionally, separating student practice traffic from commercial jets enhances safety.

**Calm wind RWY and Noise Reduction RWY**

Proposal: Calm wind runway would be assigned to RWY27R/27L.(This procedure was in effect at the Sanford Airport when I was on the SANAC committee representing the FAA for F11, approximately 15 years ago.) This means that when the wind is “calm” as defined by the FAA as less than 3 knots, the runways used would be RWY27R/27L. Assigning a calm wind runway occurs at most airports. The attached diagram from WindHistory.com indicates that the wind at Sanford Airport is calm 18% of the time. This would spread the pain of the jet noise from 9L, and bring it closer to 50/50.

Proposal: Noise Reduction runways will be RWY27R/27L. (This procedure was in effect at the Sanford Airport when I was on the SANAC committee representing the FAA for F11, approximately 15 years ago.) This proposal would mean that the runways in use would be RWY27R/27L when the wind is 8 knots or less. It is acceptable for the pilot of an A320 Airbus (the type most used by Allegiant Airlines) to land opposite the direction of the wind when the wind is less than 10 knots. The information from WindHistory.com shows that the wind at the Sanford Airport in 2022 was not dominantly from any direction. This proposal is that when the wind is 8 knots or less, the runways in use would be 27R/27L. This would spread the pain of the jet noise from 9L and bring it closer to 50/50.

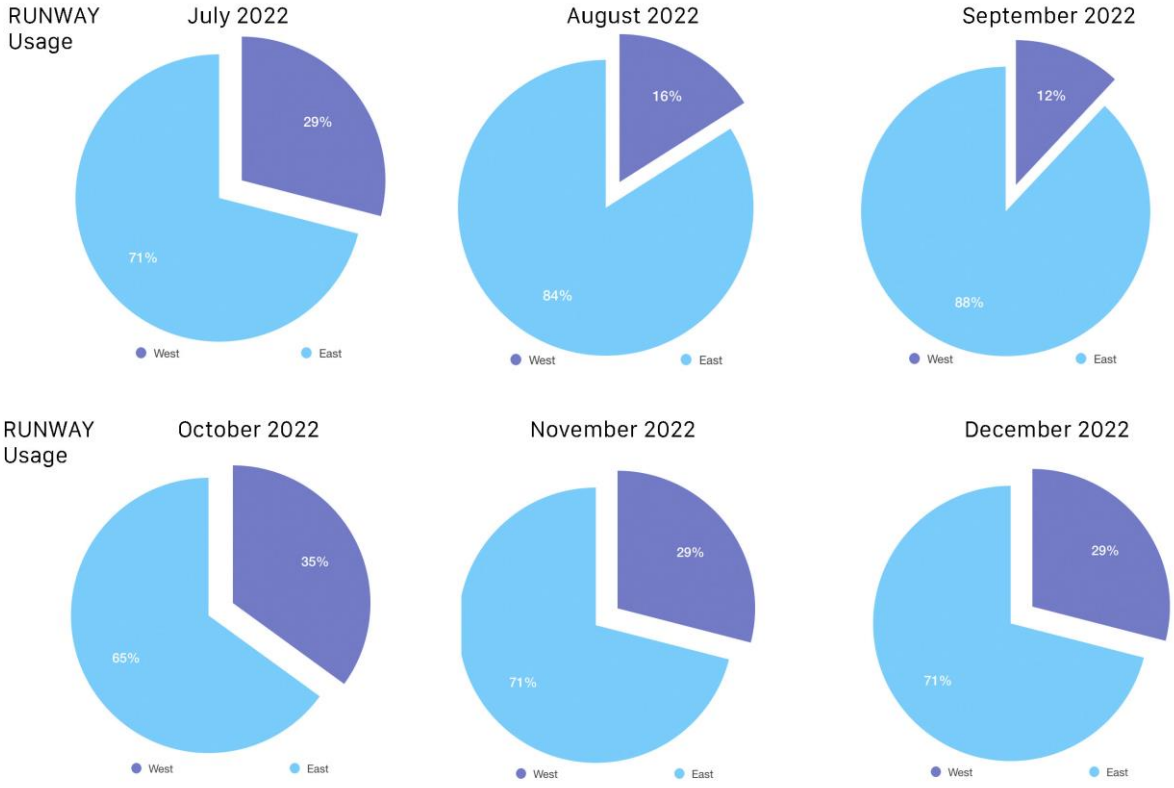
**ATC Tower open 30 minutes earlier and 30 minutes later**

This proposal is to ask the FAA to consider extending the ATC tower hours from 6:30am -11:30pm. This adds a half an hour in the morning and a half an hour at night of ATC coverage. There is a large departure rush at Sanford airport where commercial airlines are departing from 6am to 6:30 with no ATC tower personnel to separate private and commercial traffic. Also, commercial flights are often arriving between 11:00 and 11:30pm. The Sanford airport is growing, and mixing uncontrolled private and commercial traffic increases the potential for an adverse event. These extended hours would enhance the safety of the Sanford airport, especially during the busy early-morning launches.

**Supporting Data**

**Runway Usage** July - December 2022

Source: SANAC meeting minutes 11/15/2022 & 1/17/2023




Sanford Airport runway use data up through March has been reported as either “east” or “west,” so we don’t know, for example, how many of the “east” arrivals/departures were to 9L and how many were to 9R. In order to give discussion to the above proposals, data from the existing service in use can be queried to sort for runway used and type aircraft.

Analysis of SFB Tower Daily Ops Report for Oct/Nov/Dec 2022
by DJ Staub, based on experience at DAB, F11 and MCO as an Air Traffic Controller & Staff
data source: FAA SFB Tower Daily Operations Reports Oct/Nov/Dec 2022, available in SANAC meeting minutes 1/17/2023

**38% of aircraft that arrive SFB safety dictates should be assigned RWY9L/27R (11,000 ft RWY)**
Formula: (IFR Air Carrier + IFR Air Taxi + .60 x IFR GenAv) + (VFR Air Taxi + .20 x VFR GenAv)

**62% of aircraft that arrive SFB safety dictates can be assigned RWY9R/27L (5,800 ft RWY)**
Formula (.40 x IFR GenAv) + (.80 x VFR GenAv) + Local Civil

**Prevalent Wind at Sanford Airport 2022**
Source: WindHistory.com

## KSFB: Orlando Sanford Airport


**Summary:**
Wind direction at SFB is 50/50 east and west, yet runway usage does not reflect this.
Wind speed at SFB is defined as “CALM” 18% of the time, otherwise it is generally below 10KTS.


# Sanford Aviation Noise Abatement Committee

## Orlando Sanford International Airport

April 25, 2023

# Program

- What constitutes noise?
- How is aviation noise measured?
- Are there FAA requirements around noise?
- Noise at Orlando Sanford International Airport

**Note**: Information provided in this presentation was obtained from the following resources:

- Federal Aviation Administration
- NoiseQuest, The Pennsylvania State University
- 2022 Airport Master Plan Update

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Member of the SNC-Lavalin Group

# What constitutes noise?

Sanford Aviation Noise Abatement Committee
April 24, 2023

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Member of the SNC-Lavalin Group

# What constitutes noise?


Source: Airliners.net | Airbus A320-214

Noise = Unwanted or Disturbing Sound

Noise can be defined as unwanted sound.

"Sound becomes unwanted when it either interferes with normal activities such as sleeping, conversation, or disrupts or diminishes one's quality of life."

- www.epa.gov

Noise can vary depending on several factors, such as:

- Time of Day
- Length of Time
- Predictability
- Control
- Emotional Variables
- Physical Surroundings

# What constitutes noise?

Noise can vary depending on several factors, such as:

- Time of Day
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# What constitutes noise?

Noise can vary depending on several factors, such as:

- **Time of Day**
- Length of Time
- Predictability
- Control
- Emotional Variables
- Physical Surroundings

- Noise may impact a person differently at different times of day.
- Noise heard at night while you are trying to sleep or relax may upset a person more than noise heard during the daytime.
- Noise at night may be more noticeable due to other background noise being lower at this time of day.

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# What constitutes noise?

Noise can vary depending on several factors, such as:

- Time of Day
- **Length of Time**
- Predictability
- Control
- Emotional Variables
- Physical Surroundings

✈ Noise which lasts longer may annoy a person more than noise which occurs quickly.


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# What constitutes noise?

Noise can vary depending on several factors, such as:

- Time of Day
- Length of Time
- **Predictability**
- Control
- Emotional Variables
- Physical Surroundings

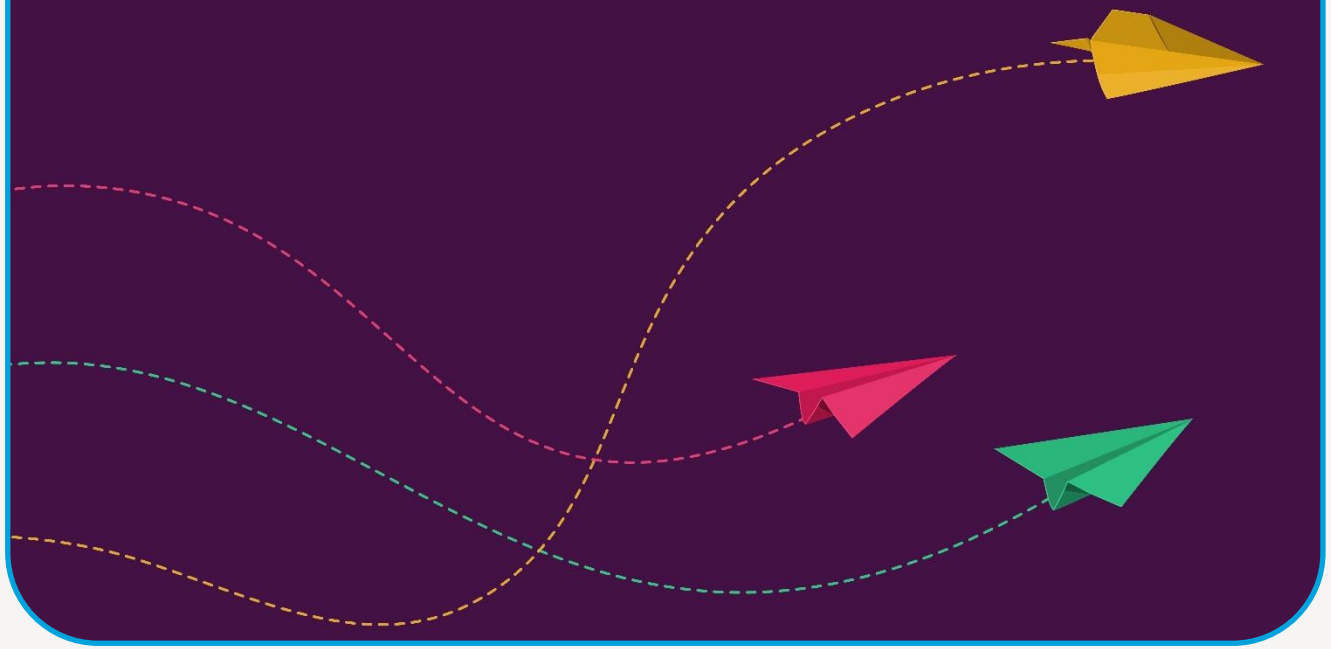
- Noise which occurs at random, or which is not anticipated may result in a higher level of annoyance.
- Noise which occurs on a schedule may be less of an annoyance because it can be predicted.

# What constitutes noise?

Noise can vary depending on several factors, such as:

- Time of Day
- Length of Time
- Predictability
- **Control**
- Emotional Variables
- Physical Surroundings

✈ The higher the level of control a person has over the noise, the lesser the annoyance.



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# What constitutes noise?

Noise can vary depending on several factors, such as:

- Time of Day
- Length of Time
- Predictability
- Control
- **Emotional Variables**
- Physical Surroundings

- A person's experiences, values, beliefs, or their mood, may play a significant role in the perception of noise.
- Noise which is perceived as unnecessary or unimportant may cause a higher level of annoyance.
  - If you are awoken by a plane transporting tourists, this may cause a higher level of irritation.
  - If you are awoken by a plane transporting cargo such as medication, perishables, food, or mail, this may be tolerable and may not irritate a person.

# What constitutes noise?

Noise can vary depending on several factors, such as:

- Time of Day
- Length of Time
- Predictability
- Control
- Emotional Variables
- **Physical Surroundings**

- Surroundings may influence the level of noise impact.
- Vegetation may reduce sound by absorption or deflect sound waves, resulting in a lower level of noise impact.
- During milder months when a person may have windows open, the noise impact may be higher due to the removal of barriers which reduce sound levels.

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# How is aviation noise measured?

Sanford Aviation Noise Abatement Committee
April 24, 2023

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# How is aviation noise measured?

- The FAA uses the Day-Night Average Sound Level (DNL) as the primary metric for quantifying cumulative expose to aircraft noise over a 24-hour period.
- The Aviation Environmental Design Tool (AEDT) is used to model noise levels at airports.
- AEDT uses the specific fleet of aircraft, times of operations, frequency of operations, and specific flight tracks used to generate DNL noise contours.

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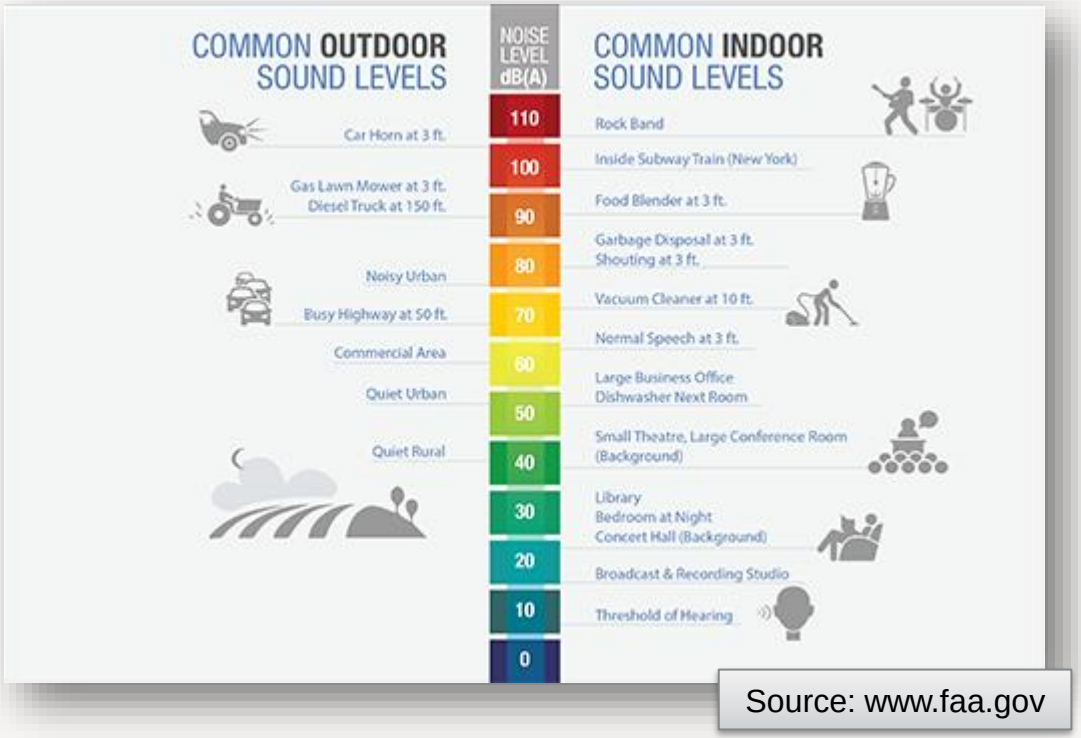
# What is the Day-Night Average Sound Level (DNL)

- There are numerous methods for measuring noise.
  - **Maximum Sound Level ($L_{max}$)** – Notes the moment of maximum sound level of an event, but does not account for the duration.
  - **A-weighted Scale (dBA)** – Approximates the relative loudness of sounds in air as perceived by the human ear.
  - **Sound Exposure Level (SEL)** - represents all the acoustic energy (a.k.a. sound pressure) of an individual noise event as if that event had occurred within a one-second time period.
- Why does the FAA use DNL?
  - DNL reflects a person's cumulative expose to sound over a 24-hour period, expressed as the noise level for the average day of the year based on annual aircraft operations.



Source: www.faa.gov

"The DNL noise metric provides a mechanism to describe the effects of environmental noise in a simple and uniform way. DNL is the standard noise metric used for all FAA studies of aviation noise exposure in airport communities." – www.faa.gov

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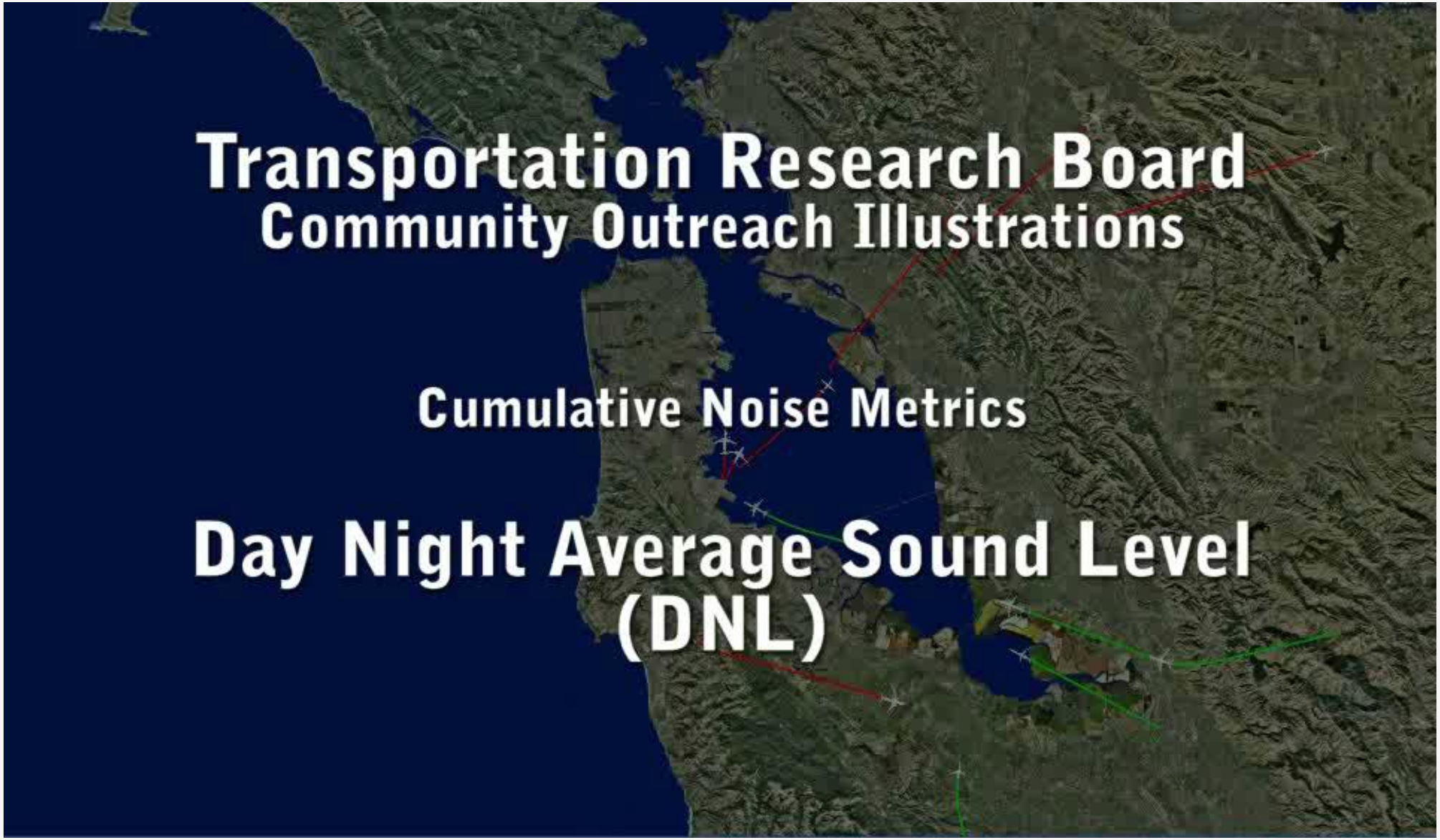
# Day-Night Average Sound Level (DNL)

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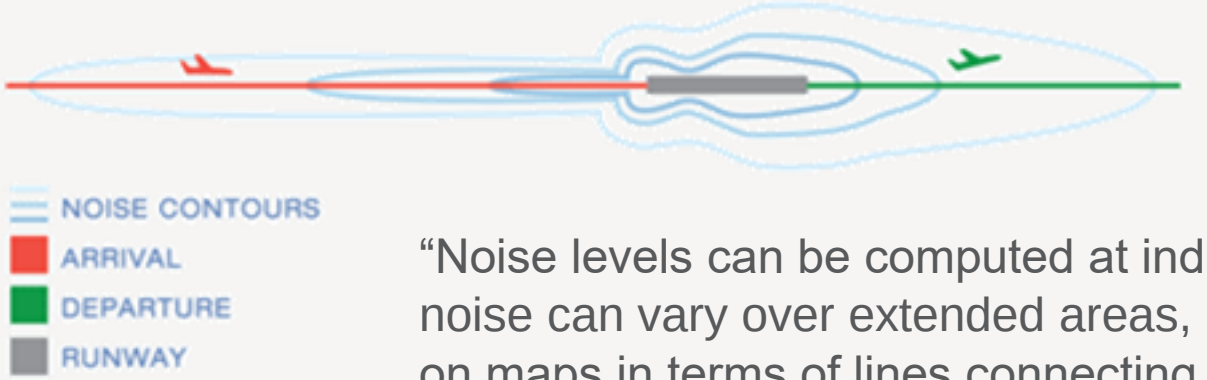
# How is aviation noise measured




"Noise levels can be computed at individual locations of interest, but to show how noise can vary over extended areas, noise metric results like DNL are often drawn on maps in terms of lines connecting points of the same decibel (dBA)."

– www.faa.gov

- Noise contours compare noise exposure throughout a community.
- Noise contours for the Orlando Sanford International Airport were developed during the 2022 Airport Master Plan Update.

# Are there FAA requirements around noise?

Sanford Aviation Noise Abatement Committee
April 24, 2023

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Member of the SNC-Lavalin Group

# Are there FAA requirements around noise?

Yes!

National Environmental Policy Act (NEPA)

- Enacted in 1969
- Catalyst for public awareness and government response to aircraft noise issues.

14 CFR Part 36

- Established limits on allowable levels of aircraft noise emissions.
- Initially (1969) only applied to transport-category large and turbojet-powered aircraft.

1974 Amendment to 14 CFR Part 36

- Added noise standards for propeller-driven small aircraft and propeller-driven commuter category aircraft.

1977 Amendment to 14 CR Part 36

- Defined more stringent noise limits for transport-category large and turbojet-powered aircraft.
- Introduction of the certification stages
  - Stage 1 – Never met noise standards
  - Stage 2 – Meet original limits set in 1969
  - Stage 3 – Meet more stringent limits established in 1977

# Are there FAA requirements around noise?

1978 Amendment to 14 CFR Part 36

- Applied same noise standards to civil supersonic jets as with subsonic jets.

1988 Amendment to 14 CFR Part 36

- Incorporated standards for helicopters
  - Stage 1 – Uncertified
  - Stage 2 – Certified

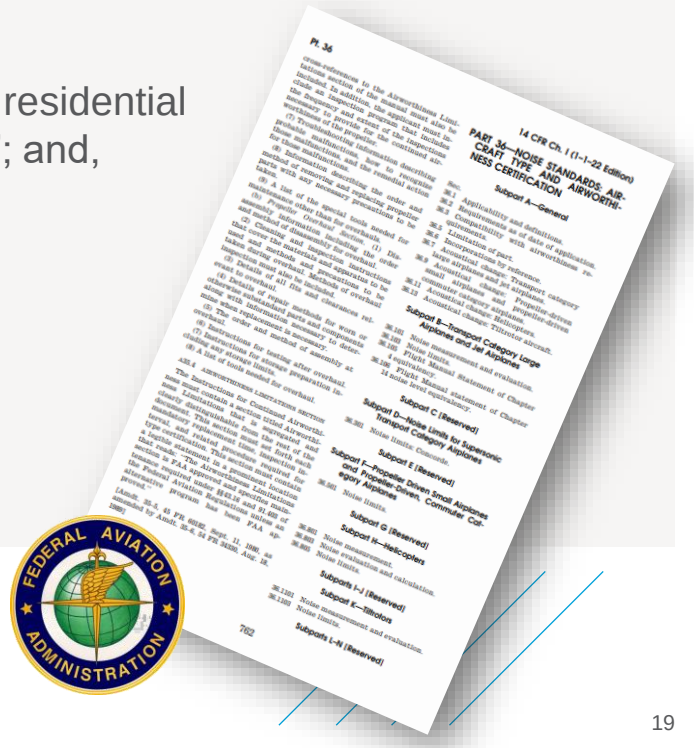
2005 Amendment to 14 CFR Part 36

- Adopted Stage 4 classification

*Note: Other revisions have occurred (22 as of December 13, 1999) which have focused on other certification-related matters.*

Aviation Noise Abatement Policy (ANAP)

- Implemented in 1976, the first comprehensive noise abatement policy in the United States.
- Defined the “Aircraft Noise Problem” as noise exposure of:
  - DNL 65 to 75 dBA in residential areas as “significant”; and,
  - DNL 75 dBA or more as “severe”.

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# Are there FAA requirements around noise?

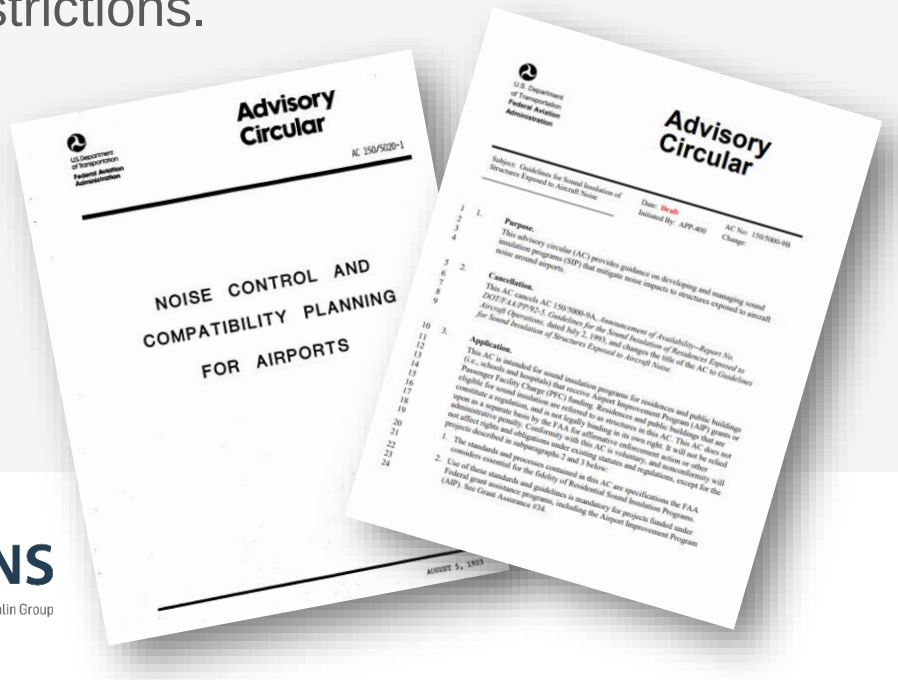
Aviation Safety and Noise Abatement Act of 1979 (ASNA | 49 U.S.C. § 47501 – 47509)

- Encourages airport operators to prepare and carry out noise compatibility programs.
- Encouraged FAA promote three key requirements:
  - Establish a single, uniform, repeatable system for considering aviation noise around airport communities.
  - Establish a single system for determining noise exposure from aircraft, which take into account noise intensity, duration of exposure, frequency of operations, and time of occurrence.
  - Identify land uses which are normally compatible with various exposures of individuals to noise.
- 14 CFR Part 150 was established to meet the requirements of ASNA.
- Part 150 established the DNL 65 dBA land use compatibility guidelines for residential and other land uses which formed the basis for Airport Improvement Program (AIP) and Passenger Facility Charge (PFC) program funding eligibility for noise mitigation.

# Are there FAA requirements around noise?

Airport Capacity Act of 1990

- Established a date for phasing out of stage two technology aircraft; and,
- Created a program for the mandatory review and approval of existing or proposed local airport noise or access restrictions.




Other FAA guidance and laws includes:

- AC 150/5020-1, Noise Control and Compatibility planning for Airports
- AC 150/5000-9, Guidelines for the Sound Insultation of Residences Exposed to Aircraft Operations (Currently being updated, draft of -9B is available online for review)
- 14 CFR Part 150: Airport Noise Compatibility Planning
- 14 CFR Part 161: Airport Noise and Access Restrictions

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Member of the SNC-Lavalin Group

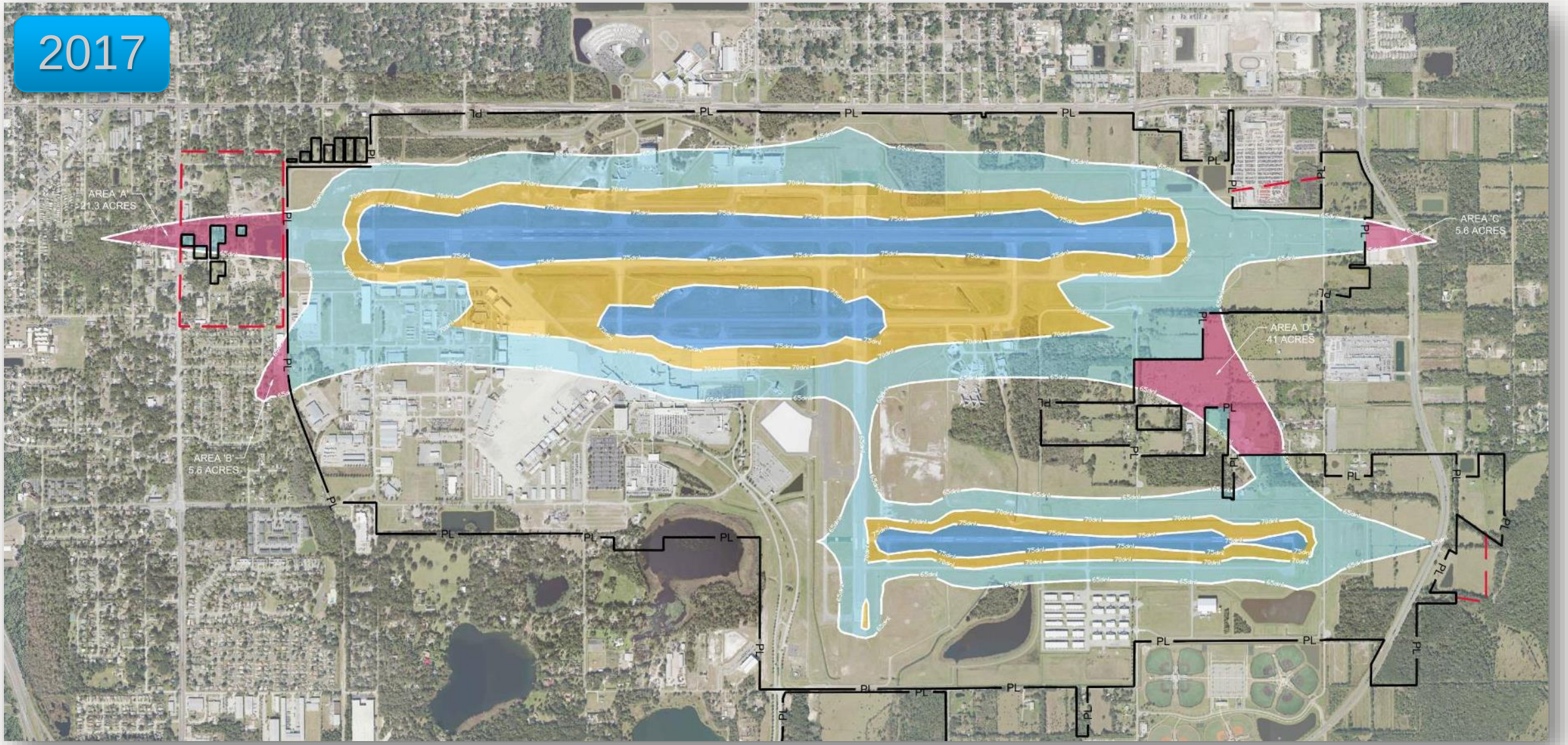
# Noise at Orlando Sanford International Airport

Sanford Aviation Noise Abatement Committee
April 24, 2023

ATKINS
Member of the SNC-Lavalin Group

# Noise at Orlando Sanford International Airport

- Noise contours were developed for the Orlando Sanford International Airport as part of the 2022 Airport Master Plan Update.
- Noise contours were developed based on existing conditions (2017 base year) and at various future planning levels.
  - A Planning Activity Level (PAL) provides a basis for future airport activity.
  - Airport operations, including changes to the aircraft types, frequency, and schedule, are forecast based on detailed statistical forecasting methodologies.

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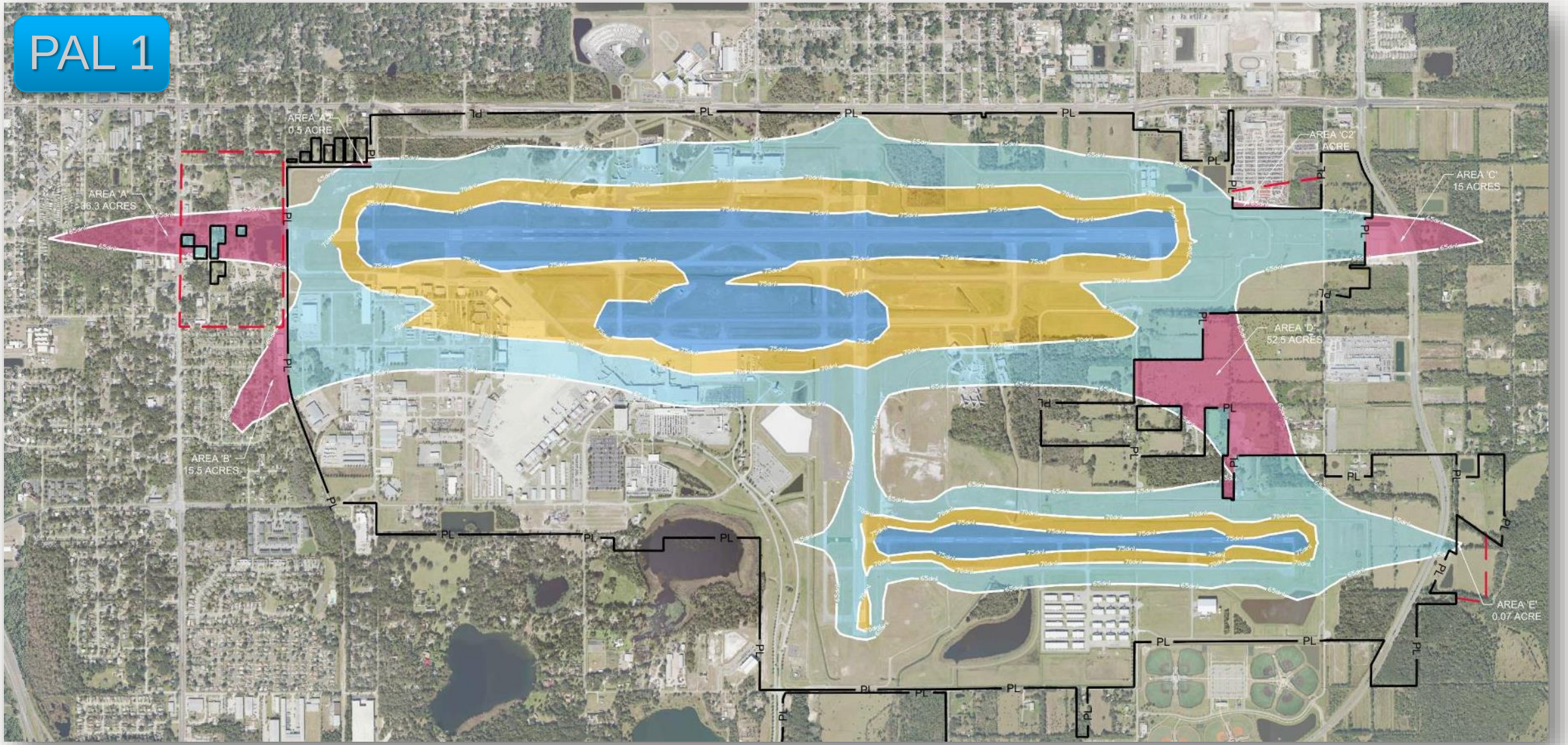
# PAL 1

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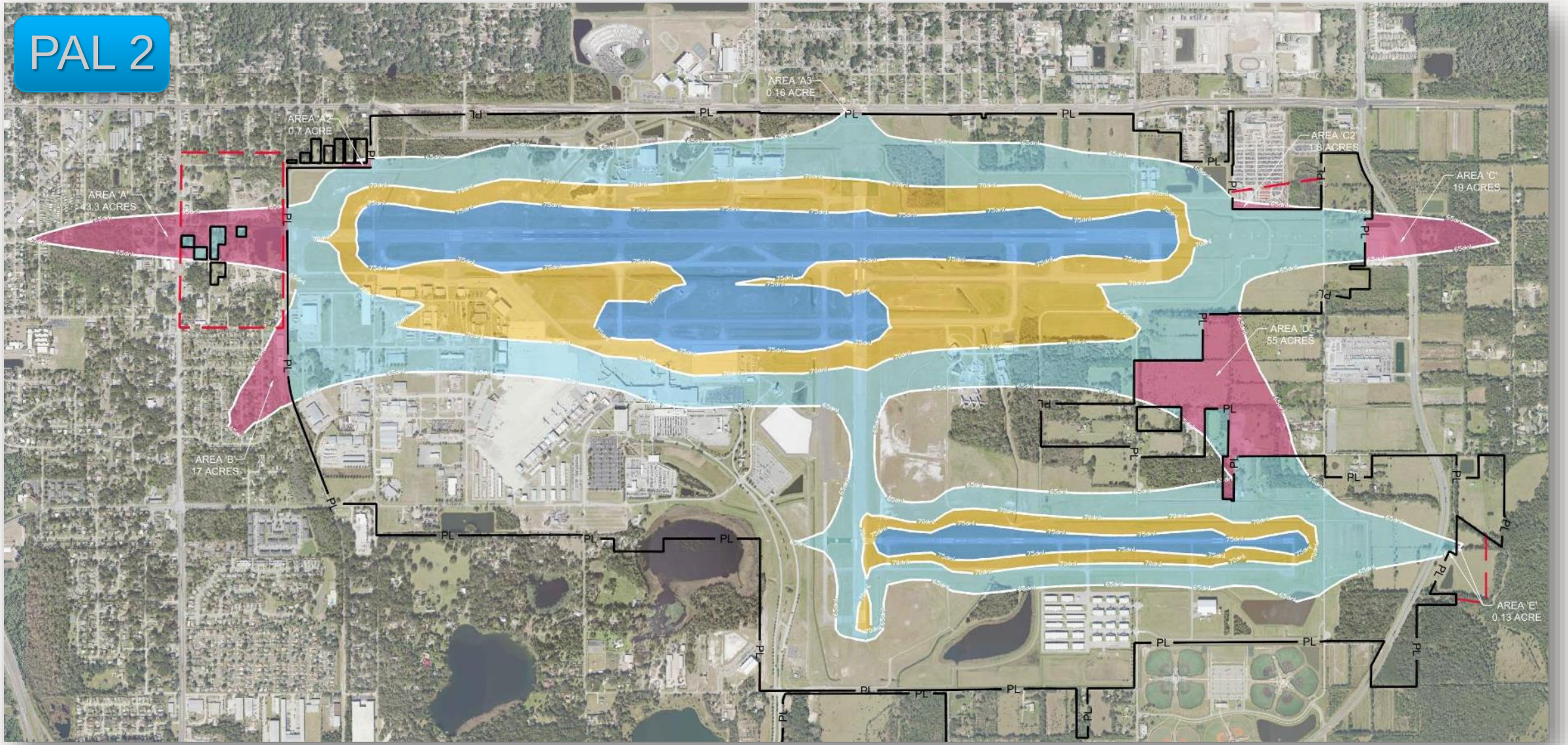
# PAL 2




ATKINS

Member of the SNC-Lavalin Group

# Do you have any Questions?

Thank you!