MINUTES
Meeting of the KHHR Communities Network Committee (CNC)
4/20/2023
Hawthorne Memorial Center

Board Members:

Present: Shawn Fairbairn (JetCenter/Advanced Air/ HA LLC), Kathleen Teal (Gardena), Melvin Wagner (Holly Park Neighborhood Association), Laurelia Walker (North Hawthorne Community Association), Lynda Anderson (West Athens), Julie DeCoste (Hollyglen Neighborhood Association), and Robert E. Smith (Hawthorne Planning & Zoning).

Quorum present? NO

Others Present:
Guido Fernandez (Secretary) and Larri Frelow (FAA Community Engagement Officer).

Proceedings:
Meeting began by Mr. Shawn Fairbairn at 6:04 pm.

The minutes of the January 19, 2023 could not be officially approved without a quorum.

Oral Communications:

We did not receive any public oral communications.

Agenda Item #2: Jet Aircraft – Procedures and Operations/ Presentation by Advanced Air Pilot

Shawn Fairbairn We have a pilot representing Advanced Air based at the Hawthorne airport. He will be discussing jet operations and procedures and how these differ from other aircraft. He will also discuss how jet operations relate to noise impacts around the airport. We will have time for questions and answers after his presentation. Thank you for coming. Can you please introduce yourself.

Doug Galbraith Yes. Thank you for having me. I'm Doug Galbraith. Chief Pilot at Advanced Air. Right now I fly just one aircraft. The Challenger 300 is a twin engine jet aircraft capable of gross weight up to 38,000 pounds, 9 passengers. You probably see it taking off frequently out of the Hawthorne airport. As far as jets go it is probably one of the larger jets that operate in and out of Hawthorne airport but definitely not the largest. Most jets operate in the same manner, produce roughly the same amount of noise. Obviously taking off out of Hawthorne is always the noisiest point on any airport for any aircraft. The jet especially, the thrust it produces on take

off will create much larger decibel volume than on landing but the jet itself has the ability to climb very quickly and very fast out of the surrounding airport. When we do go to take off since Hawthorne's runway is relatively short say compared to say other airports like LAX, take off performance is very critical. So we are going to try and use all the available runway. When we line up to the runway for take-off we are going to start as far back as we possibly can versus maybe other airplanes that might kind of turn the corner from the taxiway on the runway and let the plane just naturally roll maybe a couple hundred feet down. We are going to line up using as much available runway as possible we are going to hold the brakes and the large majority of the time especially for the larger jets or if we are going further where we are at a heavier weight taking on more fuel we are going to hold the brakes and bring take-off power all the way up and then release the brakes and start rolling down the runway from there. Doing this procedure allows for a quick acceleration using less runway or allowing you the same amount of runway but at a heavier weight.

If you have flown commercially out of John Wayne this would be something you feel there on a commercial airline as well versus LAX where those pilots have a longer runway so it might allow some runway length to roll the plane and as they smoothly add power but since we are runway limited we are going to hold brakes and add as much power as possible to use that to take-off and release the brakes and start the roll and that is going to create quite a bit of noise on departure right at the take-off roll point. So typical operations out of Hawthorne runway 25 taking off towards the west you will see here driving by a blast fence that curves up that allows that jet blast to not go into the street but up into the atmosphere to prevent damage to people and cars going by but nonetheless it is going to create quite a bit of noise.

As we roll down the runway we are always going to rotate at the same point it is based on the speed not necessarily on the distance but when you look at formal charts it typically comes out to the same distance from there we have 2 different climb profiles. Our first climb profile is considered the normal profile and we are going to let the airplane accelerate naturally at a natural pitch angle usually at about 12 degrees on the horizon and then we are going to retract our flaps which is a device to help us take off at a short distance at about 800 feet. This procedure which we will call a normal procedure helps us to mitigate noise away from the airport. It's going to allow us to climb the quickest in a given time frame. So typically if we are not in a noise sensitive airport say I'm taking off in the middle of nowhere in the Midwest this is our typical climb profile because it is going to allow us to get to altitude time wise the quickest.

What we do in jets at Advanced Air through our jet fleet we really press hard is that we are in a noise sensitive area we need to climb as aggressively as possible on our initial climb out or right after we rotate off the runway and maintain that climb as long as we can but not to sacrifice more noise but to mitigate it so it's a fine balance that comes at about 1500 feet above the runway. So we are going to take off and we are going to pitch instead of about 12 degrees its going to be about 25 degrees pitch out which is much more aggressive and we are going to hold that climb until about 1500 feet and then we are going to lower the nose almost level off but not quite and this is going to allow us to start accelerating, we are going to retract the flaps and bring the power back and the key to reducing noise here is that power reduction. So though we

are leveling off we are starting to slow our climb at a lower altitude than we would in a normal operation we are going to bring the power back dramatically further back. Then we are going to complete that about 1,000 foot per minute climb rate up to our first initial altitude which out of Hawthorne would be that 3,000 feet. This is the same profile that Orange county John Wayne airport requires out of all pilots taking off out of there.

In smaller airplanes this profile it doesn't really change anything just because of lack of performance the airplane on its normal climb is its most aggressive climb where the jet has excess thrust and you can actually change its climb profile based on the excess thrust you have and have a few different techniques to mitigate noise. John Wayne uses this profile. NBAA (National Business Aviation Association) is the large committee that broadens corporate aviation this is their published procedure and they recommend all business jets fly this noise abatement procedure whenever they are in noise sensitive areas.

We don't have at Hawthorne this procedure published or in front of jet pilots coming in from other airports, people who don't fly locally out of Hawthorne, but I know that in talking to Donny in the last couple of weeks and showing him some of the flyers from John Wayne airport produces and I know that he was working with our design team at Advanced Air and at the FBO to create this flyer and put it in the FBO and talk to other jet pilots that come through. Nobody wants to make more noise but reducing noise is second to safety so we are not going to be able to force any pilots to follow this procedure. Some pilots are still going to just do their normal climb out regardless of what is told or what is said but I know that for Advanced Air pilots this is something that we put in front of them and this is what the jet pilots have been doing and as we grow the jet pilot fleet at Advanced Air and we add more airplanes this is stuff that we will teach the new pilots coming on, the crews, the new airplanes to keep them in line. We do feel that it is a very safe procedure. It is used kind of standard in the industry at the noise sensitive airports.

When Santa Monica was longer and were operating in and out of there jets this was the same procedure we used there, John Wayne, Van Nuys, and should be used here at Hawthorne. Lately obviously it's a lot less noise as the pilots reduce almost to nothing coming in. We still do produce a fair amount of noise down low based on the approaches. They bring us down in a normal operation when we are landing from the west ATC brings us underneath LAX. Just like when we take off we are limited to lower altitudes because of LAX's departures coming in to land we put down at a lower altitude sooner because of LAX's arrivals. This causes us at about 7 miles out to be at 1,500 feet and still having about 50% of the required power in the engines producing noise.

If you were to go to say a larger airport say like LAX those procedures were designed really for the jet to be 30 miles out at 10,000 feet and have the power reduced to idle and the pilots can still fly a constant descent from 30 miles out 10,000 feet above the airport all the way down to the runway. Flew into LAX just the other day and for example we were over Palm Springs at 35,000 feet and were clear to start our descent to LAX's runway and I pulled the power back to idle then and I didn't have to bring it back out of idle until at about 100 feet prior to landing.

Not only is it a very efficient way to operate the airplane because an engine at idle obviously doesn't burn a lot of gas but it is also not producing a lot of noise. Here at Hawthorne in that same place at Palm Springs instead of being at 35,000 feet I would have been at 16,000 feet. Coming in over San Bernardino where I would have been at about 12,000, 15,000 feet, you are at 6,000 coming to Hawthorne. That same trickle effect happens all the way down the runway. So for those residents probably outside of Hawthorne more over the Compton area they are hearing the aircraft coming in because they are so low at 1,500 feet produces so much power just to stay in level flight. Also that 10 miles for Hawthorne where we can start that final descent down the noise is dramatically reduced compared to what it was but since you have been at a low energy state there is still a little bit more power required than if you are coming in as if you were at LAX.

When the weather goes down based on our approaches there are a few more considerations obviously. Our approaches don't go as low as LAX's do. Our lowest I think is 500 feet. We have to see the airport 500 feet off the ground. Whereas at LAX you only have to see at 200 feet. That 500 feet when the marine layer is in or with the storms we've been having can really cause issues coming in to Hawthorne. It is probably going to result in more missed approaches. Where we get down at 500 feet you don't see the runway we are not going to land and we have to add take off power to start that climb out process. That missed approach process is going to generate a lot of noise regardless of any way you try to mitigate it. Usually everything is happening very fast. Even the most well planned missed approach and the best communicated crew is still probably not going to fly that missed approach like they would have flown a take-off where they are going to climb as aggressively as possible to 1,500 feet then lower the nose, reduce power, retract the flaps, and mitigate noise. When they are going to miss it is usually going to be we are at a lower energy state, we are 500 feet above the ground, we need to get power in, we need to reverse the energy state of the aircraft, get it climbing and get it away from the ground.

By no means is it a dangerous procedure. It is something we train, we talk about it daily, every time we fly, train every time we go to the simulator every 6 months, but it is definitely a noise causing event. Clear beautiful days like today was we should not have too many missed approaches. Now Hawthorne being a small airport a lot of GA aircraft like flight schools train on things like that can cause go arounds and missed approaches. I know I've had a couple just because there is a student learning to fly within the traffic pattern and they approach in too low. Maybe PD helicopters going up and down around the airport and that may cause too close of separation and you change your approach and start your go around. Again, nothing unsafe. It is usually planned from ATC or it's communicated. It's communicated through ATC where they are seeing the event transpire. They are communicating what needs to happen maybe telling the helicopter to hold position and hover and then telling the jet to go around and create more separation to keep everything as safe as possible.

When the winds come out of the east and Hawthorne turns around the same event of procedures with the exception of landing. When the airport is turned around landing at Hawthorne is very tough not only to get an approach into runway 7 the east bound runway

with ATC is a challenge. With the new approach built the runway distance, the landing distance that direction is much shorter where you have to be in the right conditions wind wise, load weight, a dry runway for it to work on most jets. So you will see a bit of noise reduction when the airport is turned around for that as opposed to those living in the west side versus the east side. The noise on the east side is going to pick up because now you are on the take-off path. That's about the difference flying the jets. It really comes down to more performance out of the engine allows you options to change your climb profile, to change your descent profile based on the conditions given to be able to manipulate how much noise is produced. I've yet to meet a pilot who is out there trying to make noise. Everyone tries to do it cautiously but in smaller airplanes whether it's the turbo props that take off out of Hawthorne, the KingAir or Pilatuses or even smaller than that the Cessnas the airplanes they do not have the excess power to change their climb profile for it to make a difference in noise. Usually they are trying to take-off just as aggressively as possible because that's the best their plane can do. Questions?

Larri Frelow What types of aircraft do you fly? You said jets.

Doug Galbraith We operate 2 Challenger 300s, a Gulfstream 450, and a Dornier 328 jet.

Melvin Wagner I have a question on descending with the jets. I live right in the flight path. When they are coming by Western they are pretty much by the time it gets to my house I could almost feel like I can reach out and touch it. It's pretty loud. What is, I know when they are descending coming in, I live in a hill, when they are coming in, what is the I guess you could say the height, are they lower than the 1,500 feet? Because I know they come in and I can see them landing from my backyard.

Doug Galbraith Which side of the 105 freeway are you on?

Melvin Wagner I'm on the south side of the 105 on 120th.

Guido Fernandez He is north of 120th St.

Doug Galbraith Yeah, they are below 1,500 feet at that point. Once we cross the freeway we are typically at 1,000, 1,500 feet over the freeway so then once we cross that then it is dropping down to anywhere from 1,500 feet it really depends on the approach the pilot has flying or the weather. If they are on the GPS based approach it has a vertical path that the pilot is going to follow and that is going to keep them at a 3 degree path from the runway to the 1,500 foot point about 8 miles out. So any pilot flying that they should cross your house roughly at the same height every time.

Melvin Wagner They do.

Doug Galbraith The localizer approach which is not GPS based. That is typically flown as what is called dive and drive. So they have from the 1,500 foot part down to the runway the pilot has protected space from the ground anywhere above I think it is 650 feet. I would have to look at

the chart. So what they are able to do is that once they cross that fix they can drop down 650 feet and drive it straight in from there. That approach will create the most noise for you.

Melvin Wagner It creates a lot of noise and then the area it's predominantly quiet 99 percent of the time and at night you can hear a pin drop this is all the time. When a jet comes through and it's 12, 12:30 at night it kind of upsets you.

Doug Galbraith There is a couple of issues. I don't know issues but how we got to this point. So Hawthorne as I'm sure everyone is familiar sits very close to LAX to the point where after 10 o'clock at night when the Hawthorne control tower closes if the pilot needs the instrument approach to get in as in the clouds are out and they can't see the runway they need LAX to stop arrivals and stop departures. So they built a hole for us. It's a 5 mile hole and it is nearly impossible to get because LAX is not doing that for us. When the tower is open. That same situation applies when the tower is open but now the tower has the authority to help maintain separation between the pilot and LAX because that separation is so close. So once the tower closes and there is no one to be able to maintain that separation you can't get the approach.

Part of the issue is the only approach that is authorized between when the tower is open, between LA tower and Hawthorne tower for the pilot to fly is that localizer approach that dives and drives. To summarize the agreement between Hawthorne tower and LAX is only authorized for one approach and it's the approach that produces the most noise. At the end of the day it is the approach that none, all the pilots would prefer to fly the GPS approach because it is more accurate, it is more stable, it is more automated too, it engrains with the technology of the airplane better. But the waiver between Hawthorne tower and LAX hasn't authorized that approach so ATC can only authorize the localizer approach. When it is that cloudy out and because the minimums are higher it is easier to cross what is called the final approach fix and then start your descent for the runway, that final approach fix is at 1,500 feet, they cross it and start their descent for the runway and they get down as quickly as possible because that buys them more time to look for the runway to be able to go down and land. Where on the GPS approach that has the glide path you don't need as much time to look for the runway because it sets you up in this perfect position where if you get it it's right there you can keep landing and if you don't get it add power and start your climb out.

Melvin Wagner I know we are on line with the runway. There is a mark going down Van Ness and 120th . If he is off by any amount I know when he is off. I see them from one end and they are right here and by the time they get to me they are right on me and it is real loud. I'm talking about the double pane windows, insulation, all this but it is still loud. The way I understand talking to another pilot Santa Monica supposed to be shutting down pretty soon and how much more traffic is it going to pick up here at Hawthorne.

Doug Galbraith I can't speak for when it is shutting down or anything. The amount of traffic picking up at Hawthorne from just my opinion, from landing at Santa Monica and smaller airplanes about a year ago or so there is not that much traffic over there left and it's all kind of Cessnas, Cirruses, non-jet, non-turbo prop aircraft, there are a few still left there. Phenom 100s,

similar to the one that hit the localizer at the end of Hawthorne. I don't see too many of them coming over to Hawthorne just based on the amount of space. The passengers that they are doing business on towards the south bay they would already be here. I imagine their business is probably more towards downtown LA or on the other side of the hills. They are trying to avoid Van Nuys or Burbank. I see more of that traffic going to Van Nuys.

Melvin Wagner So most of the Piper Cub things like that they are mostly what Compton and Long Beach airport?

Doug Galbraith Yeah, it's hit or miss. It depends where the gentleman or whoever owns the aircraft or wherever they are flying out. It's whatever airport is the closer. It could be Camarillo, could be Van Nuys, maybe not so much Long Beach. I imagine that is probably pretty far. Hawthorne here also, most of those aircraft owners are looking for hangar space, and what is nice about Hawthorne is that the airport is kind of tapped out. There is not much extra real estate for anyone to park any extra airplanes. I don't see too much more traffic adding from my perspective. Donny could answer that better.

Melvin Wagner So when you get the WiFi stadium and things like that it is going to start picking up even more. I noticed that since a lot of planes have been getting more jet traffic than we normally do. I can actually tell which plane, which jet is actually coming in by the engine sound. You got one that sounds like Rolls Royce, you got one that sounds like it needs a tune up. The props are always loud but the props have been coming in higher than they normally have. You got some that coming in hot which is very loud and you got one pilot that actually comes in really smooth and I know which one that is but I was just curious about their descent how that all comes together.

Doug Galbraith From the pilot's perspective a lot of it has to do with the approach. If we could get ATC to authorize the waiver between the RNAV approach with LA and we could get ATC to authorize that approach when they clear it for you. Part of this is the approaches are identical on fixes it's just that final approach segment how you descend. If ATC authorize you to fly the localizer approach and you tune up and fly the RNAV approach and something were to happen there is a lot of liability on the pilot that they were not following proper instructions. So, yes, I don't want to fly a localizer approach and when I do personally because I rather see the Airport set up in a nice stabilized position, there it is, and then go miss. We try to teach our pilots a more stabilized way of doing it. It is where the FAA is pushing the teaching of what is called the non-precision approaches. It is not how every pilot was taught, it's not how their fundamentals are so they kind of revert back to their fundamentals. Again, it is not unsafe, nothing inherently wrong with it. It just really creates more noise.

Melvin Wagner Just like a person driving a car.

Doug Galbraith Exactly.

Kathleen Teal First and foremost thank you so much for coming out here and presenting to us and answering all of our questions. To piggyback a lit bit on what Melvin was saying there at the end. One of the concerns of this roundtable has been that we are seeing an increase in jet travel and a lot of that is coming from transient pilots because we do recognize a lot of the work that Donny has done and Advanced Air has done in training the local pilots and really getting in front of the operators at Hawthorne who are there consistently and showing these guidelines and asking them to fly during quiet, giving us quiet hours. So first and foremost I do want to recognize that Donny and Advanced Air has done a wonderful job of that. The new stadium, Clipper stadium and SoFi and all this new business coming in to the area and we have the World Cup, the Olympics. It's a concern for us. We saw what happened after the Super Bowl last year. How many jets flew out of LAX, Hawthorne, Torrance, and Long Beach within 5 hours after the Super Bowl and it was just like kind of a nightmare right and that's the kind of stuff that we are concerned with and I think that's what also Melvin at the end was trying to say. We are concerned not so much about Advance Air pilots. You can tell the consistent pilots that are flying into Hawthorne are cognizant and you guys are to be applauded for helping with that because it definitely wasn't always like that.

You mentioned at John Wayne. They have this abatement procedure by NBAA, National Business Aviation Association. There's this flyer. How long has that flyer been out and has John Wayne seen any progress with that? Have they been able to say, oh we put out this flyer and here is how much jet noise has come down? Can you speak to that and I also have additional questions.

Doug Galbraith Yes. I believe John Wayne has seen progress on it. I was just talking to Donny about this this morning because my pitch was ban the old really gulfstreams and we will cut down a ton of noise but we can't do that. John Wayne from what he was telling me that airport is grandfathered in under the old noise abatement procedures where they can actually put enforcement out there. Nothing scares a pilot or an aircraft owner more than hearing that your airplane can get banned from coming to an airport. That really enforces the noise procedures. I've accidently violated one of the noise sensors and I got a letter saying, hey here is your one warning. You get 2 more and your done for 2 years. It really makes you think twice about it.

So unfortunately we can't do that but what they do very well and I've been searching online the last couple of days to get a digital copy of this form to put in one of our pilot bulletins we put out for each airport. Can't find it but it was at the front desk of the FBO. It spelled it out really well. We saw it. This is hands on information. When you go to the FBO and you pay your fuel bill and you gather your passengers the CSA, the front desk worker, hands you the form with your bill and hopefully you read it on the way out. Our crews did because we know the noise sensitivity is so important there and we followed those procedures out of John Wayne actually better than we have in the past because the information was made available better than it has in the past.

Again it's still going to depend on the pilot. Advanced Air pilots are pretty good because it is stressed hard, the noise abatement. It's preached from Donny, it's preached from Levi. It goes

back all the way back to Pat Carey. We have a lot of pilots who fly for us and promote from SEC to Captain and as they do that there is usually a bit of a learning curve but it is always preached harder and harder.

As far as the transient jet pilots it is really going to be thought dependent. What is nice about Hawthorne in talking to the local pilot community. You go to these SIM schools every 6 months and you're sitting in a room like this with 15 other pilots who fly all the same jet as you. You start talking what airports do you go to, where you out of. I know I always tell them I'm out of Hawthorne next to LAX and 9 out of 10 pilots go "oh I will never fly that airport." Because the runway is so short. So it really does deter a lot of the jet traffic to LAX. I think the Super Bowl and even more so the BCS Championship game kind of proof that though there is a lot of traffic coming through these events. It is not as much as you would think. Everyone is really going to LAX because when a typical charter client, passenger, aircraft owner, what have you, when they come up to a pilot and say hey I want to go to the Super Bowl or I want to go to this event at SoFi Stadium what is the best airport to go into. The pilots are going to look at LAX, they are going to look at Hawthorne, look at Santa Monica and Van Nuys, and most of the time they are going to pitch LA. Because you don't have to deal with the short runway. They know it's just going to be easier though you are going to have to handle the increased amount of traffic all the airline flights. LAX presents it's own maybe headaches or challenges. Pilots will typically take those challenges over a short runway. So the short runway really does deter a lot of pilots.

Now those pilots who will sit there and look at the runway and say hey look I've been trained to do this, it's in my performance, I can be a professional, I can do this, will be the ones who will say let's go to Hawthorne over LA. It's going to save you, might save the owner a couple of thousand dollars in fuel fees, landing fees, other things, it's an easier drive to the Stadium from Hawthorne. They are also the pilots who will probably look at that flyer and say they want me to do this, I will follow.

Kathleen Teal Thank you. I appreciate that answer. Hopefully you guys can find that flyer and be able to publish it and put it all over the Advanced Air website and all over the Hawthorne website. Guido, remind me, the fly quiet guide is available for download in the website, right?

Doug Galbraith Yes. So we have that one. Donny and our marketing team is taking the same one from John Wayne and scratching out John Wayne and writing Hawthorne on top. They are getting that printed and he said it should be at the FBO next week or so.

Kathleen Teal That would be great. That would be wonderful. A follow up question to that totally separate from your question, maybe a question for the FAA is what has other smaller regional airports like Hawthorne that are not protected under the ANCA act what are they also doing to help with transient pilots. Help really push out educational of noise procedures among transient pilots flying into other airports. Is there any learnings that we can pick up because I think this was a great incite to say hey we are not above reinventing the wheel. We don't need to do that. We can take what John Wayne is doing and use it here. Is there any other ideas that any other airports have seen like the flyer to really push that kind of education because I think

that is where we are getting this jet noise. People are flying over Melvin's house and taking the shingles off his roof because they are not familiar with these procedures. So if you have any, if there has been anything that your other officers have brought to you guys. Hey this other airport is doing this other great thing, maybe we can all use it. I don't know if you have an answer but I thought I would just throw it out there.

Larri Frelow (FAA) So I'm kind of new to the position since January. I'm only participating in several round tables but the one thing that I was going to ask Doug that they put the helicopters and it was something that they started to do which is the fly friendlier contract so you were saying that you are guys are trying to teach your pilots this is what we want to do, fly friendlier, but they actually, the HAI, I don't know if you are familiar with Chuck Street, so I just learned this because I was at a noise forum this week. He spoke about that. It is an actual contract that they have and even though they are training their pilots about that they are having them sign this contract to fly friendly. To try to fly friendly. So I was thinking I wonder if Doug, if you guys are doing that because it is right there and everyone is signing it. So the pilots are signing it and they are trying to honor it. That's the one thing that I just heard about this week. This is like their own little contract and I would be more than happy to share that little contract. I will forward it to you.

Lynda Anderson My question is as I think about the impending events that are coming we do have the Olympics and how Metro is getting prepared for all of that. But just as an example when we start talking about the transient pilots. I don't know if anyone else had this experience but for the Oscars they started coming in to the Hawthorne airport at 3:30 am and between 3:30 am and 6:45 am I counted 11 jets. A friend of mine that works in that industry the limousines where lined up to take them wherever in fact they where going but that was the airport that they were. I had never ever heard that much and in my next meeting that following Tuesday with the Taskforce everybody talked about knowing that I'm involved here. Now what was really going on. It was the Academy Awards, the Oscars. Those planes were just coming in with a frenzy and it was so annoying. Just one after.

Kathleen Teal So essentially you had pilots that looked at that short runway and that didn't deter them.

Lynda Anderson No, and I didn't know that there was such a category as transient pilots but know I get it.

Kathleen Teal Thank you Larri. I appreciate your response and maybe that can be like something ongoing. If you hear in the next meeting we have in July, if you hear something another airport is doing, and by all means please take these ideas to your airport meetings and say here's what Hawthorne is doing. We are happy to trade ideas. More people, more ideas. We are happy to trade ideas and figure out what works. So the other question that I wanted to ask was when you are talking about factors for descent which affects where I live which is over by Rowley Park, a little bit south of where Melvin is talking about. I'm at like El Segundo and Van Ness. So you mentioned that on the descent when you are looking at flying into LAX you

only need to see the runway from 200 feet away but from Hawthorne you need to see it 500 feet away. I guess I must have missed it but what it the methodology, why is that?

Doug Galbraith For the height, for LA it's 200 feet above the ground and for Hawthorne it's 500 feet above the ground. Where you are at from the runway relative to that is different. For Hawthorne it is about a mile and a half from the runway. At LA it is 1,800 feet from the runway to be able to see it and that is based on the landing equipment or the guidance equipment that is helping guide the pilot and the aircraft to the runway and its certification standards.

Kathleen Teal Just so I'm understanding this correctly. Wherever you are in the air as long as you are 500 feet from the ground you can start landing procedures if at 500 feet you can see the runway

Doug Galbraith Yes, correct. You have to see the runway to be able to land on it and not necessarily anywhere. It is within a very certain guidance tolerance as in basically we have to be over the Lowe's parking to give you an actual location, time, and space. We are lined up within the runway and I want say it's about 150 feet left or right of the runway center line and then we are a mile and a half from it and about 500 feet above it.

Kathleen Teal Got it, and when you are seeing it, it has to be visual sight.

Doug Galbraith Yes.

Kathleen Teal And does it have to be straight or can you visually sight it from the left or right.

Doug Galbraith Your aircraft has to be straight with it. Your visual based on wind, so say there's strong winds out of the north, the nose of the aircraft would have to be pointed to the north, the wing of the aircraft would be pointing towards the runway, and the pilot would be looking at it out the side window but that's what the airplane is doing so it doesn't get blown off course. Once they get to about 5 feet over the runway they are going to straighten the plane out for landing that's just what is called cross wind landing technique. Now you can't be headed north, you have to be headed towards the runway. The flight track has to be towards the runway. So that's what is called normal maneuvers and then you have to separate down to the runway from that point. You can't be more than about 1,000 feet per minute which that is on the high side. Normal descent is about 800 to 700 feet per minute.

Kathleen Teal And lastly when does night flying play a factor. You had mentioned that not being able to see this would sometimes cause these misses. Does that seem to happen more at night or is there a differential? Some of this is visual, right. I'm just wondering about that.

Doug Galbraith Yes. When you are looking for the runway you have to have what is called the required visibility and for Hawthorne on the lowest approach I think it's ¾ of a mile visibility. So obviously you are not going to be able to see even the control tower. You are only going to see about a third down the runway and half past. The lights that are around the airport shine bright

to help pick up and present where it is at and make it distinct versus other things. So it doesn't necessarily need to be day, it doesn't necessarily need to be very clear, it doesn't necessarily need to be able to see the whole runway in a very clear manner. It could be fuzzy through rain or fog but as long as you are picking up the runway and the lights around the runway you can continue down towards it. Most missed approaches I would say do happen at night but that is not necessarily because it is night. It is due to the weather patterns of the fog. Our fog comes in typically early in the morning and late at night and with the fog comes clouds and low visibility that prevents you from seeing the runway. So yes, unfortunately when everybody is asleep and no one wants noise to happen is when the fog is out and the pilots are going to be making the noise.

What does happen again from the hours of 10 till midnight when the fog is out and the visibility is down that's when Hawthorne becomes almost unusable because the tower is closed and ATC is not there to provide the separation with LA. Now if it's just a normal marine layer night, no storms coming in, our typical average night at midnight LAX will turn itself around and it will take-off over the ocean and land over the ocean. When that happens there are no departures inland so there's no separation issue. So that's when the pilots can start coming back at midnight. For my operations if I have to bring my passenger in at say at 11. I'll tell them we are not going to be able to land at 11. We will not get the approach but if we wait until midnight we'll be able to get the approach and we'll be able to get in. Now I can operate. Now that does kick arrivals later into the night when they could have been at 11 or 10 or so forth.

Julie DeCoste Just 2 questions. Where do the planes Advance Air primarily fly to?

Doug Galbraith Our turboprops primarily fly up and down California, bay area but then we have scheduled service routes into Merced CA from there over to Las Vegas, Hawthorne, out to Phoenix and then from Phoenix to Silver City, New Mexico, Albuquerque, Gallup and Las Cruces. Our Dornier, the really big high wing air plane we have scheduled service routes from Hawthorne to Mammoth and from Mammoth to Burbank and Mammoth to Carlsbad, CA. Then all the airplanes we sell what is called ad hoc charter. So anywhere the customer wants to go we'll end up going. Our larger jets like the Challenger 300 it's range profile is Alaska down to Costa Rica and Hawaii out to east coast. We were at Augusta 3 times last week and saw all the jets and what an event can bring and what it does to the surrounding community especially when it comes to noise because they were every 3 minutes a jet was either taking off or landing.

Julie DeCoste Thank you. That was a loaded question. I just always wondered so thank you. The other question is just in regards to safety if I'm Melvin I'm just wondering if what you call these transient pilots, not everyone is you or Donny train to land on this short runway so is there any requirements for them. Can anyone land at Hawthorne and that's probably for you Guido or possibly for you, I don't know.

Doug Galbraith Yes. Coming from the pilot's standpoint. Yes, anyone can land on the short runway as long as their aircraft if capable of doing it. We have a slew of performance charts

that we are required by law to run and comply and operate within and then with on that there are safety margins. Especially on what is called the charter side, companies like us, we have margins where when you plan your landing it has to be within 60 % of available runway or if you are a highly trained and qualified crew maybe 80% of the runway available. What things do and especially with the recent event we've all seen what makes things tricky is the condition of the runway and not always knowing what it is. The airplane is going to perform one way and land a certain way when it's dry and even warm out and the tires are pliable and the rubber grips better versus, we don't have it here, snow or ice things like that or the rain runways that creates the potential for hydroplaning. Though the airplane is certified to land on a wet runway and is certified to even land on a runway that has quite a bit of water, called standing water. It is not certified to land beyond a certain point.

So what does present a challenge and in talking to Donny about this is getting the runway condition reported. Whether that is through the airport or ATC or through Advanced Air itself. However we can do that and share information better. Not to speculate or anything but the Phenom that slid off the end they did not know how much water was on the runway. They should know that it was wet it was raining that night but was that just wet or was it an 1/8 inch thick of water or was it a ¼ inch of water. The Challenger 300 can land at Hawthorne when the runway is wet. No problem, almost at any given weight. It cannot land if there is an 1/8 inch of water. It cannot land at all regardless of the runway length even at LAX if there is a ¼ inch of water more and that's going to create issues like hydroplaning. Your breaking distance even if you are not hydroplaning takes longer because you can't slow the airplane down as quick. So there's factors like that that play into it now those are the same factors that go anywhere it's not just Hawthorne. Any airport you need to know that information. Some airports do a really good job at reporting that it's usually airports that are affected by weather, not in Southern California. That presents our own challenges.

But yes to answer the real quick question the pilots are trained on it, they are tested on it at a minimum of 12 months, if you are on the charter side it's every 6 months. You are tested on your ability to operate perform the airplane and then know all the information that goes into knowing the airplane because it's great you may be able to land the airplane very short distance but do you know how the performance affects it. Do you know how when the runway conditions how it affects it. They are tested on those items. If they are not passing those tests they are not certified to fly. Now is the pilot going to be able to show up and do it that day. Do they get unlucky on the scenarios that present themselves where you do have an airplane sliding towards the end of it.

The only challenge Hawthorne really brings to the pilot is the runway distance. The approaches are well built though they do create noise and they could be better for that scenario, as far as safety goes the approach into landing where houses are located or even after takeoff, after the plane is on the ground and is now airborne it's as safe as it could be.

Julie DeCoste Thank you.

Shawn Fairbairn Ok. We'll conclude the question and answer session. Mr. Secretary can we now have the status of the current city projects.

Agenda Item #3: Status of City's current projects:

Guido Fernandez Thank you Shawn. The project we are working on right now I mentioned it last time is the airport new lighting and signage project. At this point we are at 30% design. I just got done actually reviewing it that at 30% and sent it back to the engineers. At this point we are going to continue to have meetings. We are on schedule to be able to finish that design this year and after that we'll go ahead and plan for construction which would not be 2024 it would be 2025. We are actually hopeful to get the FAA grant for that design within a month of two. So what we do sometimes is actually we'll go ahead and upfront those costs prior to getting the grant from the FAA because if we don't do that it would take too long to do the construction but we do have a good working relationship with the FAA so we coordinate all of this with them so that everything is on track to hopefully within the next month get that signed grant and at this point we are at 30%. The goal is to replace all our lighting and signage at the airport. That's all I have to report.

Agenda Item #4: Comments/Discussion:

Shawn Fairbairn Ok, onto item 4. Is there any committee member that wishes to make any closing comments at this time?

Melvin Wagner I was always curious for jets how many pounds or gallons of fuel does it actually take. Basically how much does it take to put gas on these things, unleaded or leaded?

Doug Galbraith So the jets run on jet fuel which is actually closer to the kerosene that you put on your tiki torch in your back yard than what you put on your car. Each jet varies. The Challenger 300 and we measure fuel usually in pounds. The Challenger 300 takes 2100 gallons of gas and that could take us about 7 hours away from the airport. The gulfstream 550 and I only know this number because Mike Cardenas was just telling me that takes close to 6300 pounds of gas and that could get it going about 9 hours.

Melving Wagner I've had that question asked and I kind of put my hands up.

Doug Galbraith Going back to the Challenger that I fly. Because Hawthorne is weight limited we rarely take off with that much fuel on board but if we were empty we take-off full tanks so it's 2100 gallons. Typically when we come to land there is only 300 gallons of gas on board and that is enough for us to try to approach to Hawthorne one more time and then head to Long Beach or LAX.

Melving Wagner Do you guys do fuel dumps with your jets? Some of the LAX planes they fly pretty high but they have quite a few that do a fuel dump before they get to the airport and circle back around.

Doug Galbraith The ….. does not have that capability. The gulfstream does that have the capability to fuel dump but that's for emergency situations only because that's a lot money flying out the back of the airplane. If we had to fuel dump to come back around and land for an emergency it would be done out over the ocean.

Shawn Fairbairn Ok. This meeting is adjourned at 7:07 pm.

- Meeting ended at 7:07 pm.
- Minutes were recorded by City of Hawthorne.
- Minutes were reviewed and submitted by the Secretary, Guido Fernandez.