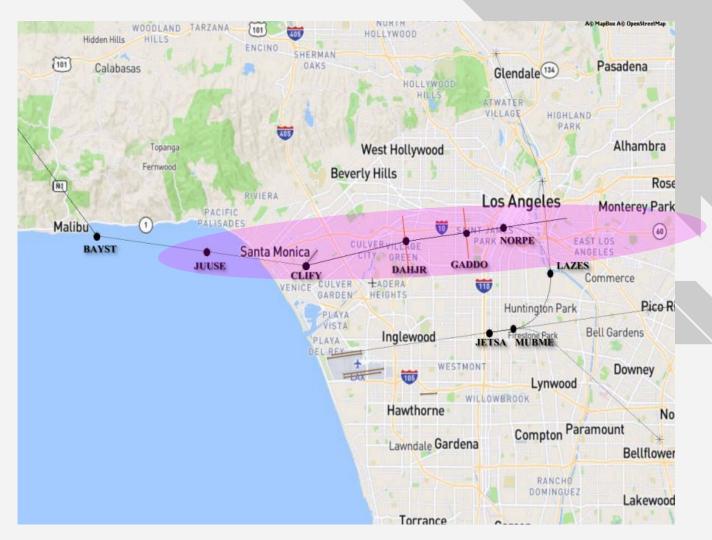


LAX Metroplex / Wide Area Ad Hoc Committee

LAX Community Noise Roundtable May 2019

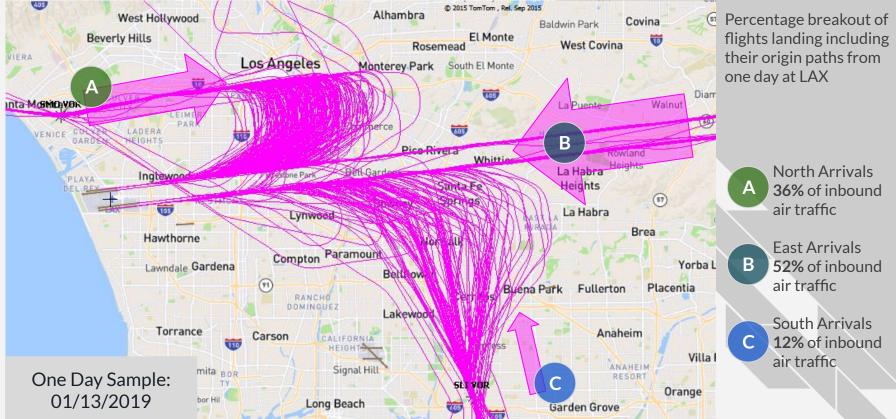
- 1. North Downwind Arrival Flight Paths
- 2. LAX and Other Airports
- 3. DAHJR Flight Data 24 hours
- 4. DAHJR 0100 to 0500 hours
- 5. GADDO Flight Data 24 hours
- 6. Preliminary Response to CA Quiet Skies on North Downwind Near DAHJR
- 7. JUUSE, CLIFY Heat Maps
- 8. Proposed Actions on North Downwind at JUUSE
- 9. FAA Commitments to the Noise Roundtable



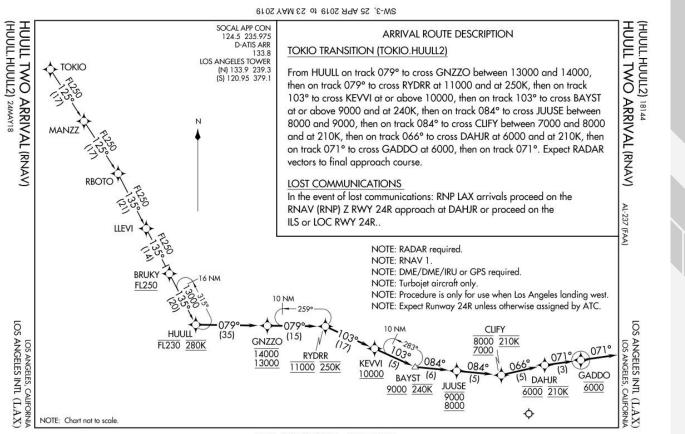
1. North Downwind Arrival Flight Paths

Area in **pink** affected by North Downwind Arrival and has been studied more extensively in prior and current initiatives undertaken by the Metroplex Ad Hoc Committee of the LAX Community Noise Roundtable

1. North Downwind Arrival Flight Paths - Merges

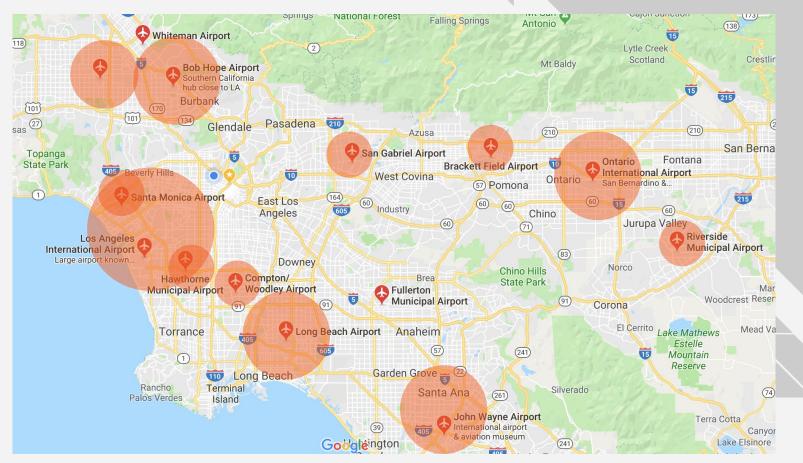


1. North Downwind Arrival Flight Paths - HUULL



SW-3, 25 APR 2019 to 23 MAY 2019

2. LAX and Other Airports



3. 6000 Foot Alt +/- 300 at DAHJR - 24 hours

ANOMS Gate Penetration - DAHJR

September 1-30, 2018

Altitude MSL (ft)	Count of Ops*	% of Ops	% of Ops Between Altitudes	% of Ops At o		r Above Altitudes			
>6300	797	8.4%							
6000-6299	2456	25.8%							
5700-5999	2837	29.8%	64.1%						
5500-5699	1268	13.3%	35.9%						
5000-5499	1606	16.9%					94.3%		
4500-4999	429	4.5%							
4000-4499	79	0.8%				99.6%			
3500-3999	25	0.3%							
3000-3499	8	0.1%			100.0%				
2500-2999	2	0.0%							
<2500	0	0.0%		100.0%					
Grand Total	9507	100%							

Prepared by: LAWA Noise Management

*Data source: LAX ANOMS

ANOMS Gate Penetration - DAHJR

November 1-30, 2018

Altitude MSL (ft)	Count of Ops*	% of Ops	% of Ops Between Altitudes	% of	Ops At or	Above Alti	tudes
>6300	727	8.2%				-	
6000-6299	2124	23.9%					
5700-5999	2463	27.7%	59.8%				
5500-5699	1169	13.2%	40.2%				
5000-5499	1660	18.7%					91.6%
4500-4999	517	5.8%					
4000-4499	173	1.9%				99.4%	
3500-3999	37	0.4%				1	
3000-3499	11	0.1%			100.0%		
2500-2999	4	0.0%					
<2500	0	0.0%		100.0%			
Grand Total	8885	100%		1			

Prepared by: LAWA Noise Management

*Data source: LAX ANOMS

ANOMS Gate Penetration - DAHJR

October 1-31, 2018

Altitude MSL (ft)	Count of Ops*	% of Ops	% of Ops Between Altitudes	% of	Ops At or A	Above Altit	ove Altitudes		
>6300	591	6.4%							
6000-6299	2193	23.8%							
5700-5999	2673	29.0%	59.2%						
5500-5699	1203	13.1%	40.8%						
5000-5499	1774	19.3%					91.59		
4500-4999	598	6.5%							
4000-4499	145	1.6%				99.6%			
3500-3999	27	0.3%							
3000-3499	7	0.1%			100.0%				
2500-2999	1	0.0%							
<2500	1	0.0%		100.0%					
Grand Total	9213	100%		2	4				

*Data source: LAX ANOMS

ANOMS Gate Penetration - DAHJR

December 1-31, 2018

Altitude MSL (ft)	Count of Ops*	% of Ops	% of Ops Between Altitudes	% of	% of Ops At or Above		tudes
>6300	711	8.3%					
6000-6299	2061	24.2%					
5700-5999	2429	28.5%	61.0%				
5500-5699	1072	12.6%	39.0%				
5000-5499	1572	18.4%					92.0%
4500-4999	488	5.7%					
4000-4499	142	1.7%				99.4%	
3500-3999	35	0.4%					
3000-3499	15	0.2%			99.9%		
2500-2999	5	0.1%					
<2500	0	0.0%		100.0%			
Grand Total	8530	100%					

Prepared by: LAWA Noise Management *Data source: LAX ANOMS

3. 6000 Foot Alt +/- 300 at DAHJR - 24 hours

ANOMS Gate Penetration - DAHJR

January 1-31, 2019

Altitude MSL (ft)	Count of Ops*	% of Ops	% of Ops Between Altitudes	% of	Ops At or Above Altitudes				
>6300	552	7.6%							
6000-6299	1636	22.5%							
5700-5999	1958	26.9%	56.9%						
5500-5699	979	13.4%	43.1%						
5000-5499	1423	19.5%					89.9%		
4500-4999	522	7.2%							
4000-4499	156	2.1%				99.2%			
3500-3999	50	0.7%							
3000-3499	10	0.1%			100.0%				
2500-2999	1	0.0%							
<2500	0	0.0%		100.0%					
Grand Total	7287	100%							

ANOMS Gate Penetration - DAHJR

February 1-28, 2019

Prepared by: LAWA Noise Management

*Data source: LAX ANOMS

Altitude MSL (ft)	Count of Ops*	% of Ops	% of Ops Between Altitudes	% of	% of Ops At or Above Altitud			
>6300	765	9.9%						
6000-6299	1996	25.9%						
5700-5999	2214	28.7%	64.6%					
5500-5699	968	12.6%	35.4%					
5000-5499	1251	16.2%					93.4%	
4500-4999	368	4.8%						
4000-4499	98	1.3%				99.4%		
3500-3999	34	0.4%						
3000-3499	8	0.1%			99.9%			
2500-2999	4	0.1%						
<2500	0	0.0%		100.0%				
Grand Total	7706	100%						

Prepared by: LAWA Noise Management

*Data source: LAX ANOMS

ANOMS Gate Penetration - DAHJR

March 1-31, 2019

Altitude MSL (ft)	Count of Ops*	% of Ops	% of Ops Between Altitudes	% of	% of Ops At or Above Altitude			
>6300	713	8.0%						
6000-6299	2220	24.9%						
5700-5999	2595	29.1%	62.0%					
5500-5699	1113	12.5%	38.0%					
5000-5499	1574	17.7%					92.1%	
4500-4999	524	5.9%						
4000-4499	136	1.5%				99.5%		
3500-3999	33	0.4%						
3000-3499	7	0.1%			100.0%			
2500-2999	1	0.0%			-			
<2500	0	0.0%		100.0%				
Grand Total	8916	100%						

Prepared by: LAWA Noise Management

*Data source: LAX ANOMS

			Time o	f Night			
Altitude MSL (ft)	12:00 to 12:59 AM	1:00 to 1:59 AM	2:00 to 2:59 AM	3:00 to 3:59 AM	4:00 to 4:59 AM	5:00 to 5:59 AM	Totals by Height
>6000	15	5	2	5	14	36	77
5750-6000	18	2	1	7	7	10	45
5500-5749	6	1	1	2	1	7	18
5250-5499	2	1	2	2	0	4	11
5000-5249	5	0	2	2	1	4	14
4750-4999	1	1	0	0	0	0	2
<4750	1	1	0	0	2	2	6
Total of All Flights	48	11	8	18	25	63	173
		1 to 5	Total	1	9		

Oct 2018 19 flights

			Time o	f Night				
Altitude MSL (ft)	12:00 to 12:59 AM	1:00 to 1:59 AM	2:00 to 2:59 AM	3:00 to 3:59 AM	4:00 to 4:59 AM	5:00 to 5:59 AM	Totals by Height	
>6000	24	13	11	9	58	72	187	
5750-6000	13	4	3	0	9	19	48	
5500-5749	6	0	1	1	2	6	16	
5250-5499	3	2	1	1	2	8	17	
5000-5249	2	1	1	1	1	3	9	
4750-4999	3	0	0	0	0	0	3	
<4750	6	1	0	0	2	6	15	
Total of All Flights	57	21	17	12	74	114	295	
		1 to 5	Total	1	.7			

Nov 2018 17 flights

> Prepared by: LAWA Noise Management Data Source : LAX ANOMS

			Time o	f Night			
Altitude MSL (ft)	12:00 to 12:59 AM	1:00 to 1:59 AM	2:00 to 2:59 AM	3:00 to 3:59 AM	4:00 to 4:59 AM	5:00 to 5:59 AM	Totals by Height
>6000	27	10	8	6	28	48	127
5750-6000	13	1	2	1	15	32	64
5500-5749	11	1	0	1	7	10	30
5250-5499	6	0	2	0	8	3	19
5000-5249	6	0	1	0	3	4	14
4750-4999	0	0	0	0	1	2	3
<4750	2	0	0	1	0	3	6
Total of All Flights	65	12	13	9	62	102	263
		1 to 5	Total	2	5		

Dec 2018 25 flights

			Time o	f Night			
	12:00 to	1:00 to	2:00 to	3:00 to	4:00 to	5:00 to	Totals by
Altitude MSL (ft)	12:59 AM	1:59 AM	2:59 AM	3:59 AM	4:59 AM	5:59 AM	Height
>6000	10	6	6	4	3	13	42
5750-6000	6	2	0	0	5	6	19
5500-5749	9	0	1	1	2	3	16
5250-5499	2	0	1	0	3	4	10
5000-5249	2	0	0	1	0	0	3
4750-4999	1	0	0	1	0	1	3
<4750	2	0	0	2	0	1	5
Total of All Flights	32	8	8	9	13	28	98
8	50 O	1 to 5	Total	1	2		

Jan 2019 12 flights

> Prepared by: LAWA Noise Management Data Source : LAX ANOMS

	0.		Time o	f Night			
	12:00 to	1:00 to	2:00 to	3:00 to	4:00 to	5:00 to	Totals by
Altitude MSL (ft)	12:59 AM	1:59 AM	2:59 AM	3:59 AM	4:59 AM	5:59 AM	Height
>6000	10	4	3	1	7	9	34
5750-6000	5	0	0	4	1	2	12
5500-5749	3	0	0	0	3	2	8
5250-5499	2	1	0	0	1	0	4
5000-5249	1	0	0	1	0	2	4
4750-4999	24	6	11	2	26	40	109
<4750	1	0	0	0	0	3	4
Total of All Flights	46	11	14	8	38	58	175
	10	1 to 5	Total	5	1		4

Feb 2019 51 flights

		Time of Night						
	12:00 to	1:00 to	2:00 to	3:00 to	4:00 to	5:00 to	Totals by	
Altitude MSL (ft)	12:59 AM	1:59 AM	2:59 AM	3:59 AM	4:59 AM	5:59 AM	Height	
>6000	15	5	2	4	10	11	47	
5750-6000	38	12	2	17	45	52	166	
5500-5749	7	0	0	0	3	0	10	
5250-5499	1	0	1	0	3	5	10	
5000-5249	1	0	0	0	2	3	6	
4750-4999	1	1	0	0	1	0	3	
<4750	2	0	0	0	1	0	3	
Total of All Flights	65	18	5	21	65	71	245	
		1 to 5 Total		1	2		0	

Mar 2019 12 flights

> Prepared by: LAWA Noise Management Data Source : LAX ANOMS

		÷	Time o	f Night			
	12:59	1:00 to	2:00 to	3:00 to	4:00 to	5:00 to	Totals by
Altitude MSL (ft)	AM	1:59 AM	2:59 AM	3:59 AM	4:59 AM	5:59 AM	Height
>6000	26	20	10	22	58	56	192
5750-6000	23	3	2	7	6	25	66
5500-5749	5	2	0	1	1	3	12
5250-5499	1	0	0	0	0	1	2
5000-5249	1	0	0	0	1	2	4
4750-4999	0	0	0	0	0	0	0
<4750	2	0	1	0	0	0	3
Total of All Flights	58	25	13	30	66	87	279
		1 to 5	Total	(5		

Apr 2019 6 flights

5. 6000 Foot Alt +/- 300 at GADDO - 24 hours

ANOMS Gate Penetration - GADDO

September 1-30, 2018

Altitude MSL (ft)	Count of Ops*	% of Ops	% of Ops Between Altitudes	% of	Ops At or Above Altitudes				
>6300	55	1%							
6000-6299	227	2%							
5700-5999	526	6%	8.5%						
5500-5699	462	5%	91.5%						
5000-5499	2454	26%					39.2%		
4500-4999	2841	30%							
4000-4499	1784	19%	-			88.0%			
3500-3999	790	8%							
3000-3499	264	3%	-		99.1%				
2500-2999	84	1%							
<2500	5	0%		100.0%					
Grand Total	9492	100%							

ANOMS Gate Penetration - GADDO

October 1-31, 2018

Altitude MSL (ft)	Count of Ops*	% of Ops	% of Ops Between Altitudes	% of	Ops At or Above Altitudes			
>6300	47	0.5%						
6000-6299	151	1.6%						
5700-5999	448	4.9%	7.0%					
5500-5699	389	4.2%	93.0%					
5000-5499	2166	23.5%					34.8%	
4500-4999	2633	28.6%						
4000-4499	1888	20.5%				83.9%		
3500-3999	948	10.3%						
3000-3499	419	4.6%			98.8%			
2500-2999	107	1.2%						
<2500	5	0.1%		100.0%				
Grand Total	9201	100%						

% of Ops Between

Altitudes

7.6% 92.4% % of Ops At or Above Altitudes

98.5%

83.1%

35.2%

ANOMS Gate Penetration - GADDO

December 1-31, 2018

os*	% of Ops	% of Ops Between Altitudes	% of	Ops At or /	Above Altit	udes		Co
-	0.8%						Altitude MSL (ft)	+
	2.1%						>6300	
							6000-6299	
_	5.2%	8.0%					5700-5999	
_	4.2%	92.0%					5500-5699	
_	23.1%					35.3%	5000-5499	
_	29.1%						4500-4999	
	19.7%				84.1%		4000-4499	
	10.2%						3500-3999	
	4.0%			98.4%			3000-3499	
	1.6%						2500-2999	
	0.0%		100.0%				<2500	
	100%						Grand Total	

ANOMS Gate Penetration - GADDO

November 1-30, 2018

Altitude MSL (ft)	Count of Ops*	% of Ops	% of Ops Between Altitudes	% of	Ops At or Above Altitudes				
>6300	67	0.8%							
6000-6299	184	2.1%							
5700-5999	459	5.2%	8.0%						
5500-5699	372	4.2%	92.0%						
5000-5499	2053	23.1%					35.3%		
4500-4999	2581	29.1%							
4000-4499	1744	19.7%				84.1%			
3500-3999	907	10.2%							
3000-3499	359	4.0%			98.4%				
2500-2999	142	1.6%							
<2500	4	0.0%		100.0%					
Grand Total	8872	100%							

5. 6000 Foot Alt +/- 300 at GADDO - 24 hours

ANOMS Gate Penetration - GADDO

January 1-31, 2019

Altitude MSL (ft)	Count of Ops*	% of Ops	% of Ops Between Altitudes	% of	Ops At or Above Altitudes				
>6300	41	0.6%							
6000-6299	120	1.6%							
5700-5999	335	4.6%	6.8%						
5500-5699	320	4.4%	93.2%						
5000-5499	1572	21.6%	and there is a start of A				32.8%		
4500-4999	1992	27.4%							
4000-4499	1577	21.7%				81.9%			
3500-3999	799	11.0%							
3000-3499	375	5.2%			98.0%				
2500-2999	138	1.9%							
<2500	5	0.1%		100.0%					
Grand Total	7274	100%							

ANOMS Gate Penetration - GADDO

February 1-28, 2019

Altitude MSL (ft)	Count of Ops*	% of Ops	% of Ops Between Altitudes	% of	Ops At or Above Altitudes			
>6300	66	0.9%						
6000-6299	156	2.0%						
5700-5999	437	5.7%	8.6%					
5500-5699	440	5.7%	91.4%					
5000-5499	1984	25.8%					40.1%	
4500-4999	2145	27.9%						
4000-4499	1387	18.0%				86.0%		
3500-3999	676	8.8%						
3000-3499	314	4.1%			98.8%			
2500-2999	83	1.1%						
<2500	7	0.1%		100.0%				
Grand Total	7695	100%						

ANOMS Gate Penetration - GADDO

February 1-28, 2019

Altitude MSL (ft)	Count of Ops*	% of Ops	% of Ops Between Altitudes	% of	Ops At or	udes	
>6300	66	0.9%					
6000-6299	156	2.0%]				
5700-5999	437	5.7%	8.6%				
5500-5699	440	5.7%	91.4%				
5000-5499	1984	25.8%					40.1%
4500-4999	2145	27.9%					
4000-4499	1387	18.0%				86.0%	
3500-3999	676	8.8%					
3000-3499	314	4.1%			98.8%		
2500-2999	83	1.1%					
<2500	7	0.1%		100.0%			
Grand Total	7695	100%					

ANOMS Gate Penetration - GADDO

March 1-31, 2019

Altitude MSL (ft)	Count of Ops*	% of Ops	% of Ops Between Altitudes	% of	f Ops At or Above Altitudes			
>6300	52	0.6%						
6000-6299	154	1.7%						
5700-5999	397	4.5%	6.8%					
5500-5699	413	4.6%	93.2%					
5000-5499	2259	25.4%					36.8%	
4500-4999	2531	28.4%						
4000-4499	1739	19.5%				84.7%		
3500-3999	873	9.8%						
3000-3499	375	4.2%			98.7%			
2500-2999	107	1.2%						
<2500	7	0.1%		100.0%				
Grand Total	8907	100%						

- 6. Preliminary Response to CA Quiet Skies on North Downwind Near DAHJR
- In April, CA Quiet Skies (Dianne Lawrence) engaged RT leadership proposing changes to heights and distances flown on the North Downwind near DAHJR
- The proposal included raising heights at DAHJR and GADDO to mitigate noise for the communities below
- In order to compensate for raising heights, the proposal also included allowing aircraft flying the North Downwind Arrival procedures into LAX to fly as much as 60 miles farther to the east in order to allow for merging of aircraft flying east arrivals

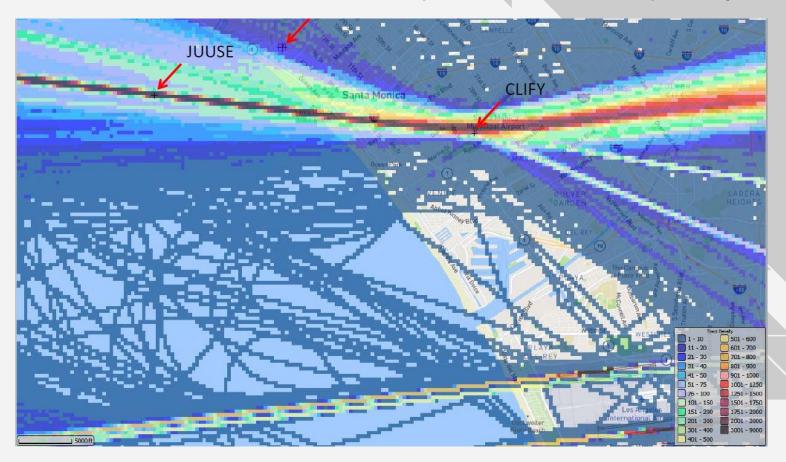
6. Preliminary Response to CA Quiet Skies on North Downwind Near DAHJR

The Ad Hoc Metroplex/Area Wide Committee of the LAX Community Noise Roundtable discussed this proposal with FAA officials present at the last Ad Hoc Committee meeting on April 25. We have determined as the Ad Hoc Committee that we cannot take action on the proposal for the following reason:

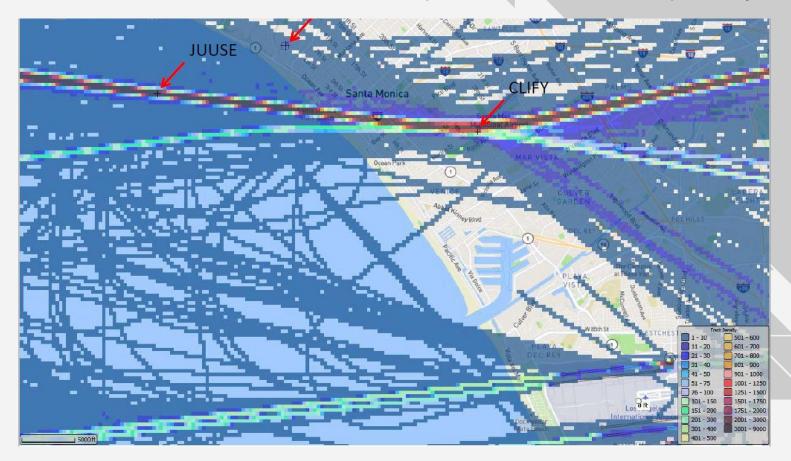
Article II - Mission

The Los Angeles International Airport/Community Noise Roundtable (herein after referred to as Roundtable) is an association of local communities, Los Angeles World Airports, the Federal Aviation Administration (FAA), and airline industry representatives. These parties are interested in participating in an interactive forum to address current aircraft noise issues associated with aircraft operations to, from and at Los Angeles International Airport. It is the intent of the Roundtable to identify noise concerns in the surrounding communities and to recommend courses of action to LAWA, the FAA, or other responsible entity that could reduce noise over affected communities without shifting noise from one community to another.

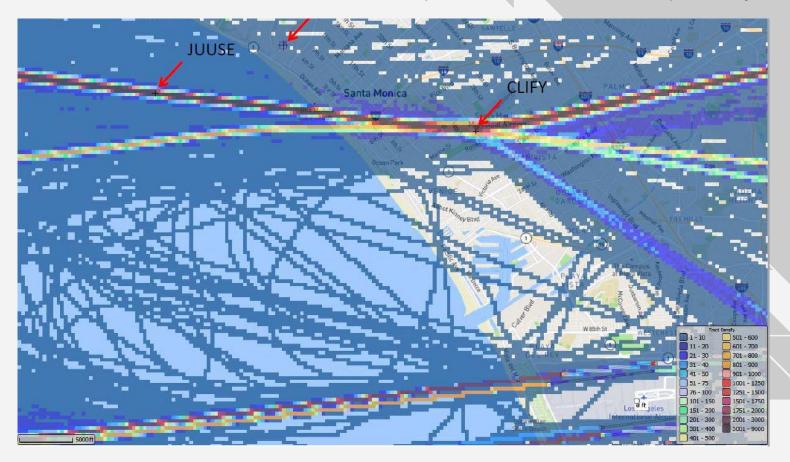
7. JUUSE, CLIFY Heat Maps - Pre-Metroplex | Jan 2017



7. JUUSE, CLIFY Heat Maps - Post-Metroplex | Jan 2018



7. JUUSE, CLIFY Heat Maps - Post-Metroplex | Jan 2019



8. Proposed Actions on North Downwind at JUUSE



May 8, 2019

Raquel Girvin Regional Administrator Federal Aviation Administration Western-Pacific Regional Office 777 S Aviation Blvd, Suite 150 El Segundo, CA 90245

Subject: Request Relocating JUUSE Waypoint Farther Offshore

Dear Ms. Girvin

The FAA has been working cooperatively for the past several months with the Metroplex/Wide Area Ad Hoc Committee of the Los Angeles International Altoprof/community Noise Roundatable (LAX Roundtable). This committee has been tasked to explore ways of reducing aircraft noise exposure on residents under or near the North Downind arrival noutes. Aircraft following these routes have been fing on a concentrated flight path since the implementation of Social Metroplex flight procedures, resulting in most aircraft now Rying offshore as they traverse over communities between the City of Mailbu and the City of Santa Monics. The Metroplex Ad Hoc Committee and the full LAX Roundtable believe that moving aircraft farther offshore will reduce aircraft noise exposure for residents that live in affected coarsil communities.

The JUUSE waypoint is associated with the three published NNAV arrival procedures known as IRNMN, HUULL, and RVRR. The JUUSE waypoint is currently located over the Pacific Creating the JUUSE waypoint farther offshore would not shift noise from one community to another, but has the potential for reducing noise on affected communities. To this end, the LAK Roundtable request that the FAA consider relocating the JUUSE waypoint farther offshore in an effort to move aircraft farther away from affected costail communities. Though we are not proposing an exact distance, we would like the FAA to investigate the viability of moving JUUSE approximately 1 mile South or Southwest from its current location, or whichever distance would more directly line up JUUSE with CUFF and waypoints beyond like DAHR.

Thank you for your consideration of this request. Your work to address aircraft noise concerns that arcse from the FAA's implementation of SoCal Metroplex procedures is appreciated. I look forward to your response.

Sincerely

Denny Schneider, Chair LAX/Community Noise Roundtable

cc: LAX/Community Noise Roundtable Members

LAX/Community Noise Roundtable c/o Los Angeles World Airports loise Management, 1 World Way, P.O: Box 92216, Los Angeles, CA 90009-2216 • The JUUSE waypoint is associated with the three published RNAV arrival procedures known as IRNMN, HUULL, and RYDRR. The JUUSE waypoint is currently located over the Pacific Ocean just south of the Pacific Palisades area. Therefore, relocating the JUUSE waypoint farther offshore would not shift noise from one community to another, but has the potential for reducing noise on affected communities. To this end, the LAX Roundtable requests that the FAA consider relocating the JUUSE waypoint farther offshore in an effort to move aircraft farther away from affected coastal communities. Though we are not proposing an exact distance, we would like the FAA to investigate the viability of moving JUUSE approximately 1 mile South or Southwest from its current location, or whichever distance would more directly line up JUUSE with CLIFY and waypoints beyond like DAHJR.

Thank you for your consideration of this request. Your work to address aircraft noise concerns that arose from the FAA's implementation of SoCal Metroplex procedures is appreciated. I look forward to your response.

9. FAA Commitments to the Noise Roundtable

- As of March 2019, all nighttime flights between 0100 and 0500 are assigned a minimum height of 6000 feet or above at DAHJR, per previous communications here
- Ad Hoc expressed wish for additional analysis with an eventual goal to extend night time height restrictions beyond 0100 to 0500 in hour increments 0000 to 0100, 0500 to 0600, etc.
- FAA has begun convening a working group to create at CVFP, a Charted Visual Flight Procedure - this is additional guidance for air traffic controllers to keep flights around 6000 ft at DAHJR when flying visual approaches during the daytime
- FAA will be attending Roundtable meetings going forward and the Ad Hoc Metroplex Committee has requested and will continue to request reports from the FAA on progress for the RT