

# **Monthly Noise Report**

## December 2015

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### Introduction/Summary

The City of Phoenix Aviation Department Airspace and Noise Section collects aircraft noise monitoring and flight operations data to provide the community with up-to-date information concerning aircraft noise exposure. Additionally, staff receive and address noise concerns from residents through either the noise hotline (844-244-7430) or the electronic complaint form available on the Phoenix Sky Harbor International Airport (PHX) webpage: <a href="https://www.skyharbor.com/FlightPaths/FileAConcernContactUs">https://www.skyharbor.com/FlightPaths/FileAConcernContactUs</a>

The following report provides a summary of the data collected for the preceding month. Each component of the report is intended to show observable trends in operation counts, flight direction, complaints, and adherence to noise abatement procedures.

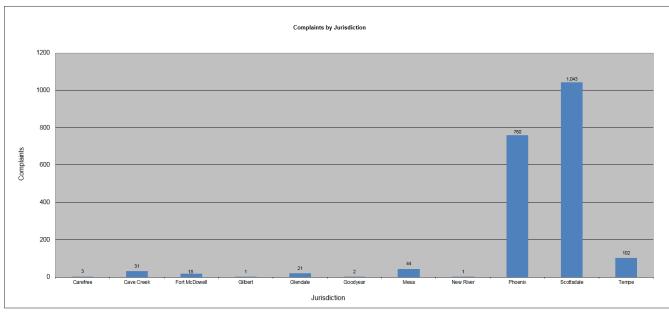
#### **Summary:**

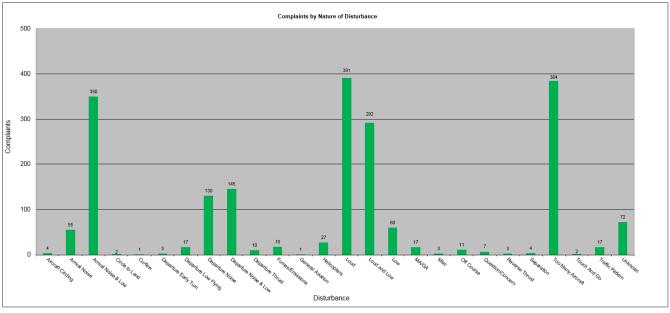
- •The Airspace and Noise Section received 1,969 complaints from 165 households in November 2015.
- •PHX had 38,152 operations in December 2015. This is a 6.8% increase from November 2015. Phoenix Deer Valley Airport (DVT) had 29,480 operations in December 2015. This is a 6.3% decrease from November 2015. Phoenix Goodyear Airport (GYR) had 9,351 operations in December 2015. This is a 8.0% increase from November 2015.
- •The 4 DME Compliance Rate for December 2015 was 99.11%.
- •PHX operated 49.00% westerly and 51.00% easterly in the month of December 2015.

## December 2015 Noise Complaints

**Complaints**: Many factors contribute to the amount of complaints received each month and by how many people. Complaint totals are rarely consistent due to factors ranging from one unusual flight event that generates multiple complaints from a large group of people, a bad weather day or change in the weather, or a new homeowner that did not notice the flight paths before they purchased their home. **Complaint Statistics** 

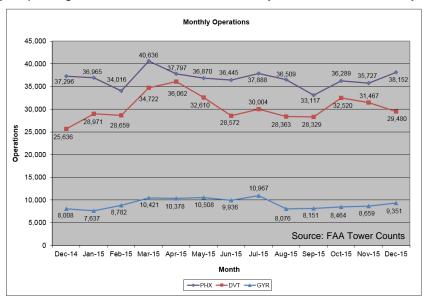
	Dec	:-14		Dec-15			
	Households Complaints			Households	Complaints		
PHX- Sky Harbor	291	1,307		152	1,906		
DVT- Deer Valley	3 8			12	60		
GYR- Goodyear	0	0		1	3		
Totals	294	1,315		165	1,969		





### **Airport Operations**

Aircraft operations generally fluctuate due to seasonal and passenger demand. The graphic below depicts operation totals at Phoenix Sky Harbor International Airport (PHX), Phoenix Deer Valley Airport (DVT) and Phoenix Goodyear Airport (GYR). Examples of peak travel times are spring break, major sporting events, the end of the school year and winter holidays.



### **Noise Monitoring Sites**

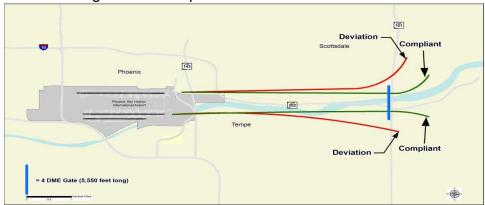
**Noise Monitors:** PHX has 20 noise monitors in the communities surrounding the Airport. These are located underneath the arrival and departure paths and in areas close to the Airport's noise contours. The monitors record aircraft noise events on a continual basis which then are compared with actual flight data from the FAA. Staff can then tie noise complaints to aircraft operations and any noise events correlated with those flights. Staff also monitors changes in monthly and annual noise readings at each location.



Note: Noise Monitoring Sites with an "N/A" did not provide usable data for the preceding month due to maintenance or operational testing, or non-aircraft noise events around the site.

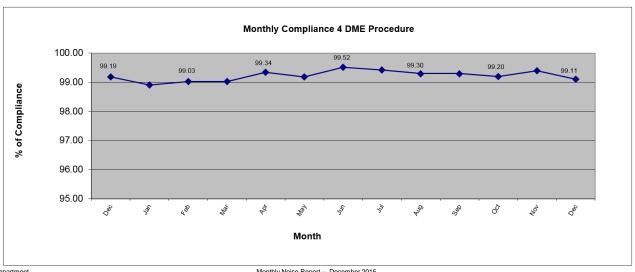
## Fly Friendly Procedures

**4 DME:** The 4 DME (Distance Measuring Equipment) departure procedure directs jet aircraft departing to the east to travel generally along the Salt River for approximately 5 miles from the airport before turning. In the event that an aircraft deviates from the 4 DME departure procedure, Airspace and Noise Section staff will contact the carrier to determine the reason for the deviation and encourage future compliance.



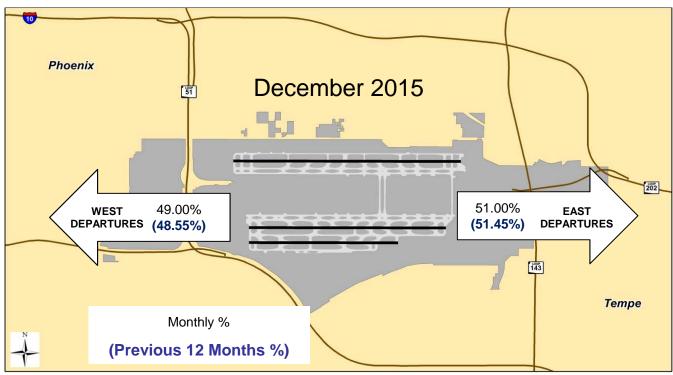
December 2015 4 DME compliance rate: 99.11%

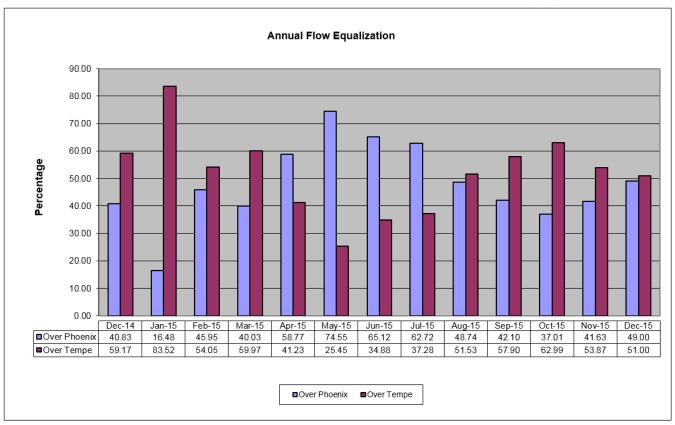
December 2015 4 DME Deviations								
Operators with 75 or more jet flights to the east shown								
Airline Name	Deviations	Total Departures to the East	% Compliance					
American Airlines	11	2,853	99.61					
Southwest Airlines	22	2,459	99.11					
Mesa Airlines	1	852	99.88					
SkyWest Airlines	4	665	99.40					
Delta Airlines	1	407	99.75					
United Airlines	0	319	100.00					
FedEx Airlines	1	178	99.44					
General Aviation	18	155	88.39					
UPS Airlines	1	129	99.22					
Alaska Airlines	0	116	100.00					



### Fly Friendly Procedures Continued

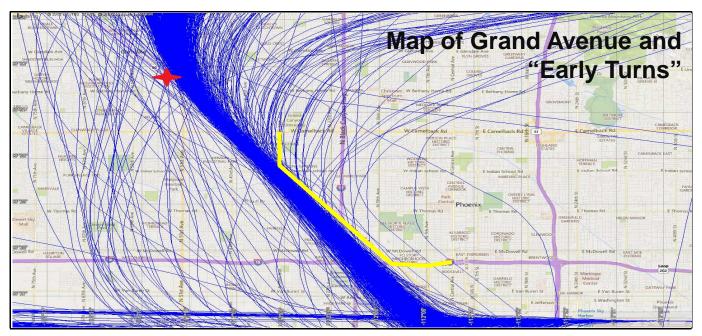
**Equalization:** Phoenix Sky Harbor International Airport has a goal to equalize the amount of aircraft departures between the east and west over an annualized period. Because aircraft need to fly into the wind for added lift, there are times when weather can cause longer periods of flow in one direction versus the other.





### "Early Turns" - Grand Avenue Month of December 2015

While a formal turning "gate" does not exist for RNAV northwest departures, the City has informally established a gate for monitoring purposes; generally depicted by the yellow line on the map below. Staff monitors the amount of jet aircraft that turn back to due north or east before going past the informal gate and publishes that data so that the community has a sense of aircraft flight paths that deviate from the RNAV corridor; which is consistent with the November 14, 2014 FAA instruction to PHX air traffic controllers to not issue early turns to aircraft unless doing so for safety purposes. Staff continues to work with the FAA on defining Northwest route "early turn" criteria so it is representative of FAA and reflective of community issues.



"Early Turns" - Grand Avenue 2015					
Counts derived from subjective analysis and subject to change					
Month	Counts				
January	71				
February	40				
March	69				
April	71				
May	154				
June	85				
July	115				
August	45				
September	65				
October	84				
November	40				
December	45				
Year To Date	884				

# "Early Turns" - Grand Avenue Month of December 2015 Continued December 1-15 "Early Turns" FAA Info Table

#	Operation Time	Туре	Flight	AC Type	RWY	Destination	FAA Info.
1	2015-12-14 12:12:13	Commercial	AAL1803	A321	25R	PHL	On route as filed until TWSND
2	2015-12-11 10:53:19	Commercial	EJA268	F2TH	25L	OGD	FAA turned the aircraft
3	2015-12-14 16:40:32	Privately Registered	N21NV	LJ60	25L	LAS	On route as filed until TWSND
4	2015-12-15 15:51:02	Privately Registered	N773HA	C650	25L	BJC	On route as filed until TWSND
5	2015-12-12 14:23:24	Commercial	SKW4494	CRJ9	25R	SLC	Pilot requested vectors to avoid weather
6	2015-12-02 19:21:14	Commercial	SWA1593	B737	25R	MDW	On route as filed until TWSND
7	2015-12-11 18:25:57	Commercial	SWA1695	B737	25R	SLC	FAA turned the aircraft for traffic
8	2015-12-14 20:43:22	Commercial	SWA2484	B733	25R	MKE	On route as filed until TWSND
9	2015-12-01 19:43:22	Commercial	SWA2694	B737	25R	ABQ	On route as filed until TWSND
10	2015-12-02 20:19:24	Commercial	SWA287	B737	25R	MSP	On route as filed until TWSND
11	2015-12-07 22:48:52	Commercial	SWA3206	B733	25R	ABQ	On route as filed until TWSND
12	2015-12-15 23:26:28	Commercial	SWA3206	B737	25R	ABQ	FAA turned the aircraft
13	2015-12-02 19:31:13	Commercial	SWA438	B737	25R	СМН	On route as filed until TWSND
14	2015-12-07 19:16:04	Commercial	SWA438	B737	25R	СМН	On route as filed until TWSND
15	2015-12-09 19:15:24	Commercial	SWA438	B737	25R	СМН	On route as filed until TWSND
16	2015-12-14 20:50:29	Commercial	UPS857	MD11	25R	SDF	On route as filed until TWSND

# "Early Turns" - Grand Avenue Month of December 2015 Continued December 16-30 "Early Turns" FAA Info Table

#	Operation Time	Туре	ACID	AC Type	RWY	Destination	FAA Info.
1	2016-01-01 00:21:16	Commercial	AAL2020	A321	26	CLT	No Early Turn Given
2	2015-12-31 01:12:09	Commercial	AAL2092	A319	25R	IND	No Early Turn Given
3	2015-12-20 01:43:41	Commercial	AAL415	A321	25R	ORD	No Early Turn Given
4	2015-12-26 01:40:30	Commercial	AAL415	A321	26	ORD	No Early Turn Given
5	2015-12-30 01:56:49	Commercial	AAL415	A321	25R	ORD	No Early Turn Given
6	2015-12-26 00:39:38	Commercial	AAL420	A319	25R	CLE	No Early Turn Given
7	2016-01-01 00:35:32	Commercial	AAL420	A319	26	CLE	No Early Turn Given
8	2015-12-30 02:07:50	Commercial	AAL453	A321	25R	BWI	No Early Turn Given
9	2015-12-30 01:12:17	Commercial	AAL466	A319	25R	DTW	No Early Turn Given
10	2015-12-17 16:08:06	Commercial	AAL498	A320	25R	DCA	No Early Turn Given
11	2015-12-20 23:49:58	Commercial	AAL581	A319	25R	RNO	Flew Directly Over TWNSD
12	2015-12-30 01:15:00	Commercial	AAL626	A320	25R	BOS	No Early Turn Given
13	2015-12-17 16:25:03	Commercial	ASH5592	CRJ9	25R	ABQ	No Early Turn Given
14	2015-12-17 15:31:39	Commercial	ASH5600	CRJ2	25R	DRO	Classic Departures
15	2015-12-31 01:02:56	Commercial	ASH5850	CRJ9	25R	ABQ	No Early Turn Given

# "Early Turns" - Grand Avenue Month of December 2015 Continued December 16-30 "Early Turns" FAA Info Table

16	2015-12-20 01:53:03	Commercial	DAL1272	MD90	26	MSP	No Early Turn Given
17	2015-12-26 00:01:21	Commercial	DAL2224	B738	26	DTW	No Early Turn Given
18	2015-12-20 00:16:36	Commercial	JBU136	A320	25R	JFK	No Early Turn Given
19	2015-12-26 00:28:42	Commercial	JBU136	A320	26	JFK	No Early Turn Given
20	2015-12-20 12:33:51	Privatly Registered	N560DW	C56X	25L	UNK	Classic Departures
21	2015-12-25 18:59:17	Commercial	SCM75	C550	25L	BUR	Flew Directly Over TWNSD
22	2015-12-31 16:23:39	Commercial	SKW2960	CRJ2	26	FLG	Flew Directly Over TWNSD
23	2015-12-16 21:09:27	Commercial	SKW2974	CRJ2	26	MRY	Flew Directly Over TWNSD
24	2015-12-21 20:47:48	Commercial	SWA1593	B737	25R	MDW	No Early Turn Given
25	2015-12-21 20:50:36	Commercial	SWA287	B737	25R	MSP	No Early Turn Given
26	2015-12-24 19:32:39	Commercial	SWA3083	B737	25R	OMA	Early Turn
27	2015-12-30 01:23:24	Commercial	SWA3206	B737	25R	ABQ	No Early Turn Given
28	2015-12-31 23:28:50	Commercial	UPS803	B763	25L	SDF	Early Turn
29	2015-12-21 21:51:30	Commercial	UPS804	B752	25L	RFD	No Early Turn Given