

# **Monthly Noise Report**

# August 2016

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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 addresses noise concerns received from residents through either the noise hotline (844-244-7430) or the electronic complaint forms available on the Phoenix Sky Harbor International Airport's (PHX) webpage: <a href="https://www.skyharbor.com/FlightPaths/FileAConcernContactUs">https://www.skyharbor.com/FlightPaths/FileAConcernContactUs</a> (PublicVue, Webform, or Mobile App).

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:**

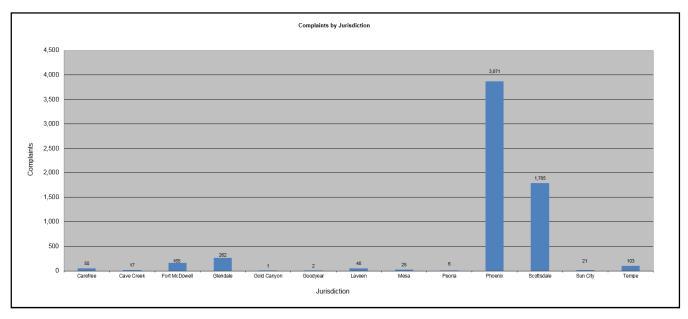
- •The Airspace and Noise Section received 5,847 complaints from 201 households with regard to PHX, DVT, & GYR airports for the month of August 2016, and 509 noise complaints for aircraft arriving or departing other airports around Phoenix.
- •PHX had 36,115 operations in August 2016. This is a 2.8% decrease from July 2016. Phoenix Deer Valley Airport (DVT) had 25,397 operations in August 2016. This is a 8.2% decrease from July 2016. Phoenix Goodyear Airport (GYR) had 8,131 operations in August 2016. This is a 6.7% increase from July 2016.
- •The 4 DME Compliance Rate for August 2016 was 99.77%.
- •PHX operated 39.82% westerly and 60.18% easterly in the month of August 2016.

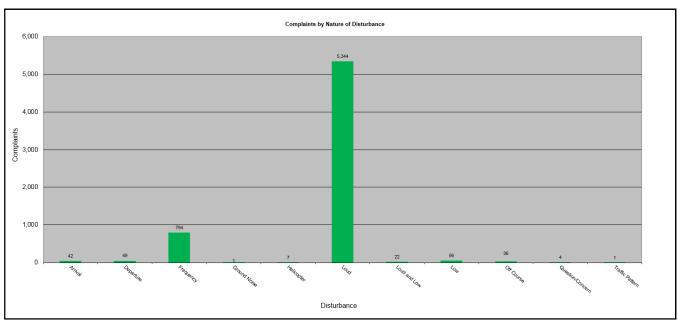
## August 2016 Noise Complaints

**Complaints**: Many factors contribute to the amount of complaints received each month and by how many people. Complaint totals vary 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**

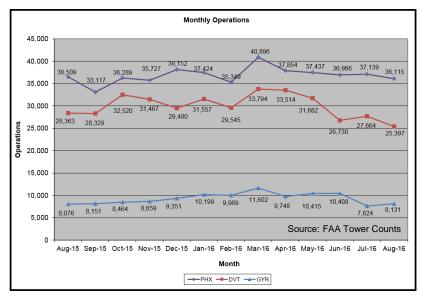
	Aug-15		Aug-16	
	Households	Complaints	Households	Complaints
PHX- Sky Harbor	138	1,542	 186	5,816
DVT- Deer Valley	14	75	 12	27
GYR- Goodyear	2	2	3	4
Totals	154	1,619	201	5,847





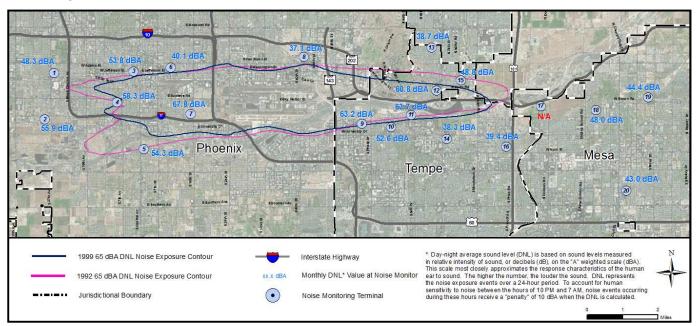
### **Airport Operations**

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**

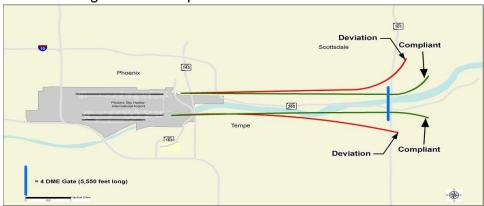
**Noise Monitors:** PHX has 20 noise monitors in the communities surrounding the Airport. They are located underneath the arrival and departure paths and in areas close to the Airport's noise contours. The monitors record aircraft noise events on a continual basis which then are compared with actual 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.

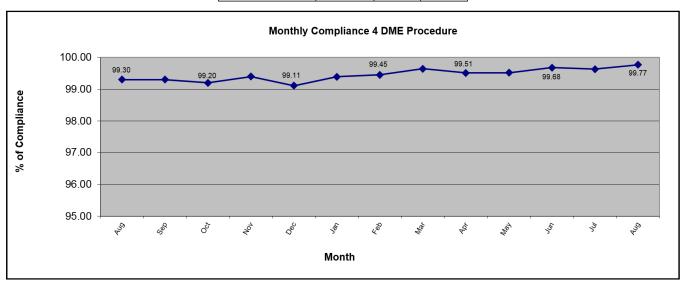
### Fly Friendly Procedures

**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 6 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.



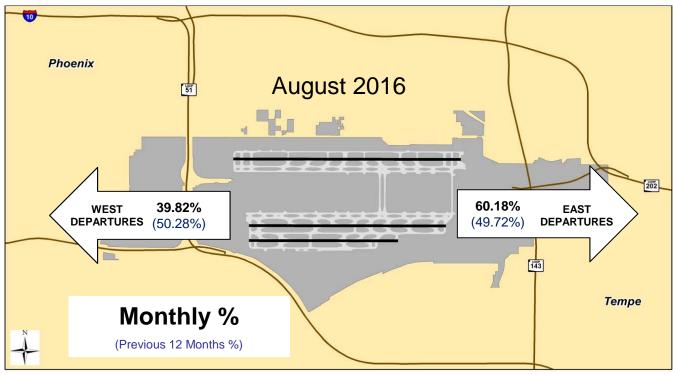
August 2016 4DME compliance rate: 99.77%

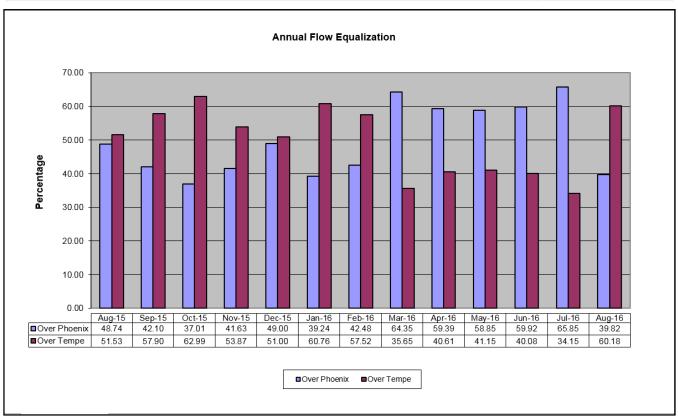
August 2016 4 DME Deviations						
Operators with 75 or more jet flights to the east shown						
Airline Name	Deviations	Total Departures to the East	% Compliance			
American Airlines	3	3,030	99.90			
Southwest Airlines	7	2,899	99.76			
Mesa Airlines	1	951	99.87			
SkyWest Airlines	1	818	99.88			
Delta Airlines	0	411	100.00			
United Airlines	1	267	99.63			
General Aviation	4	156	97.44			
Frontier Airlines	0	154	100.00			
FedEx Airlines	0	119	100.00			
Alaska Airlines	0	104	100.00			
UPS Airlines	1	101	99.01			
Sprit Airlines	1	87	98.85			



### Fly Friendly Procedures Continued

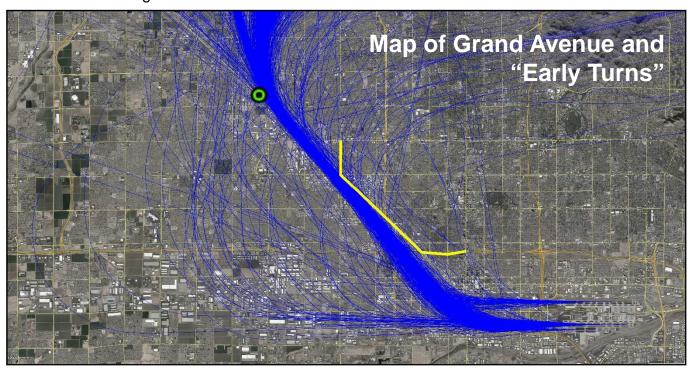
**Equalization:** Phoenix Sky Harbor International Airport has a goal to equalize the amount of aircraft departures between the east and west over an **annualized** period. Because aircraft need to fly into the wind for added lift, there are times when weather can cause longer periods of flow in one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





## "Early Turns" - Grand Avenue Month of August 2016

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 flight tracks that deviate from the RNAV corridor.



"Early Turns" - Grand Avenue 2016				
Counts derived from subjective analysis and subject to change				
Month	Counts			
January	69			
February	21			
March	25			
April	49			
May	31			
June	29			
July	31			
August	34			
September				
October				
November				
December				
Year To Date	289			

# "Early Turns" - Grand Avenue Month of August 2016 Continued August 1-31 "Early Turns" Info Table

#	Operation Time	Туре	Flight	AC Type	Runway	Destination
1	2016-08-22 15:46:07	Commercial	AAL1095	B738	25R	JFK
2	2016-08-10 22:37:55	Commercial	AAL1280	B738	25R	EWR
3	2016-08-22 15:38:46	Commercial	AAL1467	B738	25R	EWR
4	2016-08-18 16:05:12	Commercial	AAL1597	B738	25R	BWI
5	2016-08-10 22:49:21	Commercial	AAL2026	A321	25R	PHL
6	2016-08-22 15:11:55	Commercial	AAL2341	B738	25R	BOS
7	2016-08-18 05:37:11	Commercial	AAL2380	B738	26	ORD
8	2016-08-22 15:40:54	Commercial	AAL429	A321	25R	ORD
9	2016-08-10 21:15:49	Commercial	AAL528	A320	25R	RNO
10	2016-08-10 20:19:31	Commercial	AAL580	A319	25R	GEG
11	2016-08-02 16:28:48	Commercial	AAL634	A320	25R	PIT
12	2016-08-18 16:23:41	Commercial	AAL634	A320	25R	PIT
13	2016-08-10 20:14:54	Commercial	BAW38P	B744	26	LHR
14	2016-08-21 16:44:45	Commercial	DAL2046	B752	25R	ATL
15	2016-08-15 14:23:21	Commercial	DAL2134	B752	26	MSP
16	2016-08-10 22:43:32	Commercial	DAL2477	B738	25R	JFK
17	2016-08-02 16:39:22	Commercial	DAL899	MD90	25R	MSP
18	2016-08-10 20:23:53	Commercial	FFT756	A320	25R	DEN
19	2016-08-18 17:46:41	Privately Registered	N403DP	LJ35	25L	ABQ
20	2016-08-18 09:24:27	Privately Registered	N577AC	LJ35	25R	APA
21	2016-08-23 13:44:53	Privately Registered	N619TC	C525	25L	BUR
22	2016-08-18 05:58:57	Commercial	SWA116	B738	26	ABQ
23	2016-08-18 16:18:16	Commercial	SWA1335	B733	25R	DAL
24	2016-08-01 12:13:41	Commercial	SWA1358	B737	25R	PIT
25	2016-08-10 20:20:54	Commercial	SWA1678	B733	25R	LAS
26	2016-08-02 16:31:10	Commercial	SWA1698	B737	25R	BWI
27	2016-08-18 16:21:47	Commercial	SWA1924	B737	25R	STL
28	2016-08-10 21:17:32	Commercial	SWA3002	B738	25R	DEN
29	2016-08-11 17:34:55	Commercial	SWA441	B737	25R	LAS
30	2016-08-25 16:55:17	Commercial	SWA441	B733	25R	LAS
31	2016-08-19 23:04:19	Commercial	SWA540	B737	25R	ABQ
32	2016-08-10 22:16:04	Commercial	SWA540	B737	25R	ABQ
33	2016-08-03 13:36:48	Commercial	SWA756	B737	25R	TUL
34	2016-08-18 04:50:03	Commercial	UPS850	B763	25L	ABQ