

# **Monthly Noise Report**

### October 2016

### Contents

- Page 2 Introduction/Summary
- Page 3 Noise Complaints
- Page 4 Airport Operation Totals & Noise Monitoring Sites
- Page 5 Fly Friendly Procedures
- Page 7 "Early Turns" Grand Avenue

### 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:**

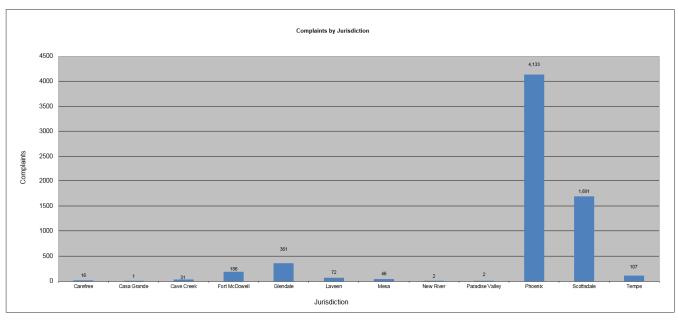
- •The Airspace and Noise Section received 6,417 complaints from 187 households with regard to PHX, DVT, & GYR airports for the month of October 2016, and 231 noise complaints for aircraft arriving or departing other airports around Phoenix.
- •PHX had 35,361 operations in October 2016. This is a 7.2% increase from September 2016. Phoenix Deer Valley Airport (DVT) had 33,506 operations in October 2016. This is a 2.9% increase from September 2016. Phoenix Goodyear Airport (GYR) had 12,508 operations in October 2016. This is a 27.8% increase from September 2016.
- •The 4 DME Compliance Rate for September 2016 was 99.61%.
- •PHX operated 36.94% westerly and 63.06% easterly in the month of October 2016.

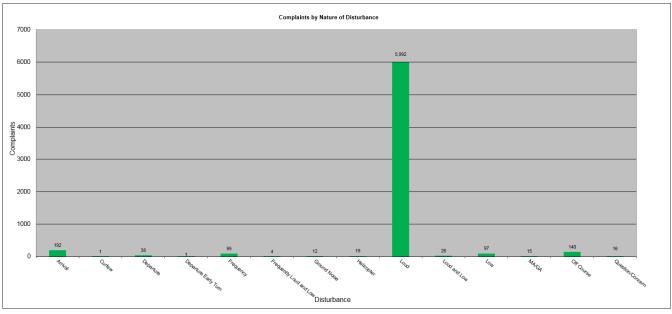
## October 2016 Noise Complaints

**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**

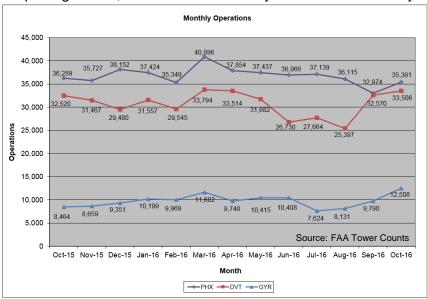
	Oct-15		 Oct-16	
	Households	Complaints	 Households	Complaints
PHX- Sky Harbor	224	2,655	 172	6,361
DVT- Deer Valley	20	184	 15	56
GYR- Goodyear	4	10	0	0
Totals	248	2,849	187	6,417





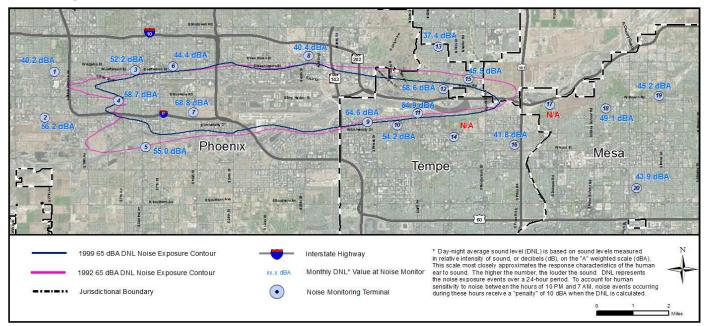
### **Airport Operations**

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**

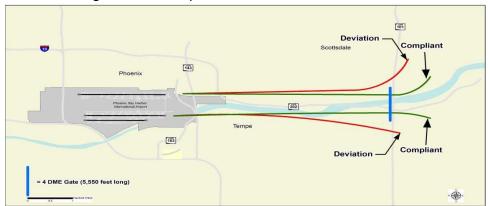
**Noise Monitors:** PHX has 20 noise monitors in the communities surrounding the Airport. They are located underneath the arrival and departure paths and in areas close to the Airport's noise contours. The monitors record aircraft noise events on a continual basis which then are compared with actual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

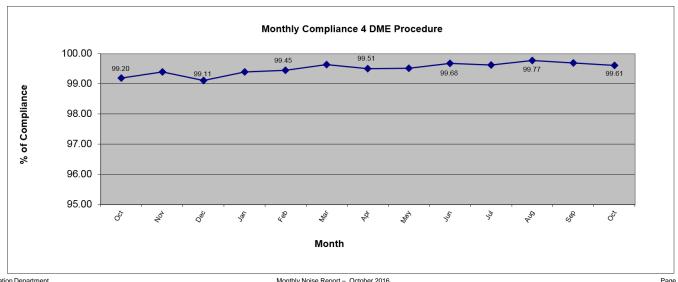
### Fly Friendly Procedures

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.



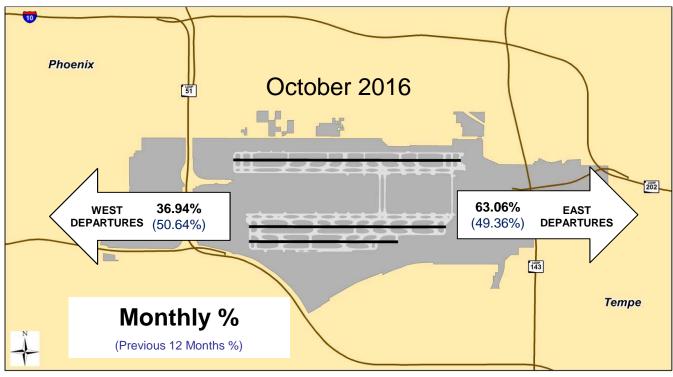
October 2016 4DME compliance rate: 99.61%

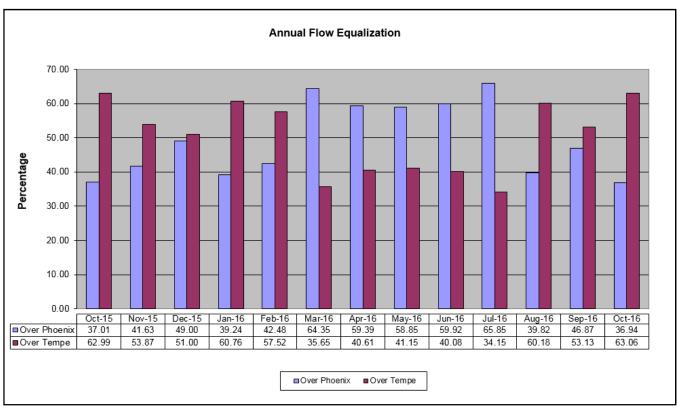
October 2016 4 DME Deviations						
Operators with 75 or more jet flights to the east shown						
Airline Name	Deviations	Total Departures to the East	% Compliance			
Southwest Airlines	9	3,037	99.70			
American Airlines	2	3,097	99.94			
Mesa Airlines	2	928	99.78			
SkyWest Airlines	0	921	100.00			
Delta Airlines	0	472	100.00			
United Airlines	0	444	100.00			
General Aviation	14	190	92.63			
Frontier Airlines	1	157	99.36			
FedEx Airlines	0	92	100.00			
Alaska Airlines	0	132	100.00			
UPS Airlines	1	77	98.70			



### 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 October 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	38			
October	10			
November				
December				
Year To Date	337			

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

#	Operation Time	Туре	ACID	AC Type	Runway	<b>Destination Airport</b>
1	2016-10-03 19:37:57	Commercial	AAL490	A319	25R	OMA
2	2016-10-13 14:56:23	Commercial	AAL498	A320	25R	DCA
3	2016-10-05 19:40:16	Commercial	FFT420	A320	25R	DEN
4	2016-10-12 15:13:27	Privately Registered	N431MS	C550	25L	GPI
5	2016-10-18 17:23:18	Privately Registered	N849WC	LJ60	25L	GEG
6	2016-10-11 15:11:45	Commercial	SWA2125	B738	25R	MDW
7	2016-10-13 14:36:19	Commercial	SWA523	B737	25R	MDW
8	2016-10-25 14:33:32	Commercial	SWA523	B737	25R	MDW
9	2016-10-04 19:40:49	Commercial	SWA857	B733	25R	BNA
10	2016-10-23 00:09:48	Commercial	UAL242	B739	25R	ORD