

Monthly Noise Report

July 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: https://www.skyharbor.com/FlightPaths/FileAConcernContactUs (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.

Staff has received an increased amount of complaints regarding "early turns". Upon further investigation, these flights were primarily go-arounds or missed approaches. Staff continues to collect data to analyze trends, as well as compare the amount of these procedures which occurred pre and post RNAV implementation. Staff will begin including this data next month.

Summary:

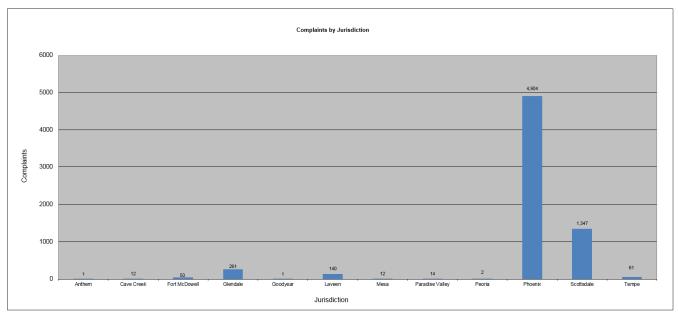
- •The Airspace and Noise Section received 6,591 complaints from 173 households with regard to PHX, DVT, & GYR airports for the month of July 2016, and 214 noise complaints for aircraft arriving or departing other airports around Phoenix.
- •PHX had 37,139 operations in July 2016. This is a 0.5% increase from June 2016. Phoenix Deer Valley Airport (DVT) had 27,664 operations in July 2016. This is a 3.5% increase from June 2016. Phoenix Goodyear Airport (GYR) had 7,624 operations in July 2016. This is a 26.7% decrease from June 2016.
- •The 4 DME Compliance Rate for July 2016 was 99.63%.
- •PHX operated 65.85% westerly and 34.15% easterly in the month of July 2016.

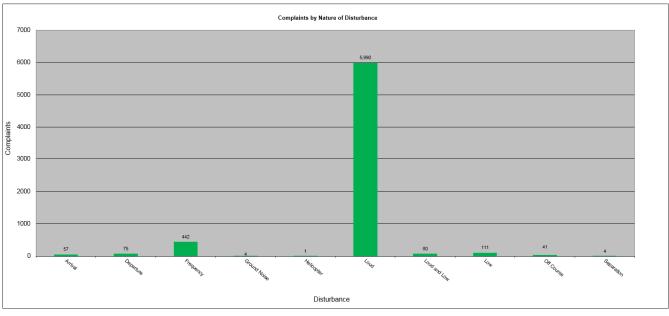
July 2016 Noise Complaints

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

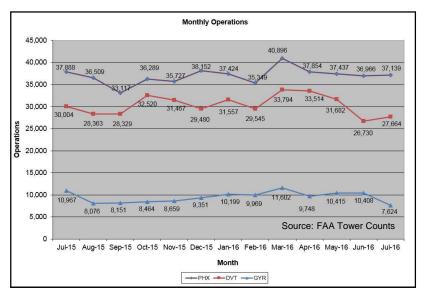
	Jul-15		 Jul-16		
	Households	Complaints	Households	Complaints	
PHX- Sky Harbor	157	1,158	 169	6,521	
DVT- Deer Valley	6	14	 3	69	
GYR- Goodyear	0	0	1	1	
Totals	163	1,172	173	6,591	





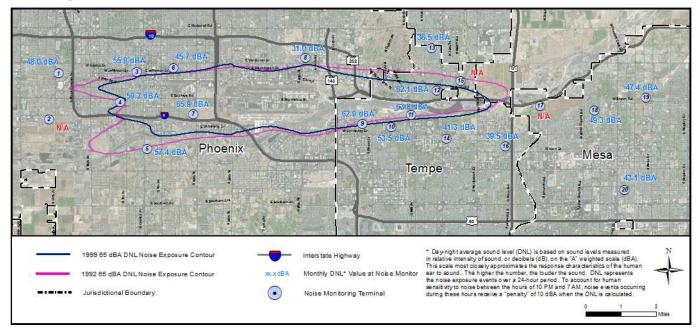
Airport Operations

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

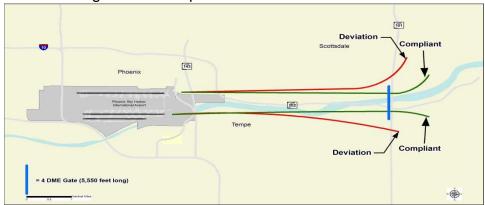
Noise Monitors: PHX has 20 noise monitors in the communities surrounding the Airport. They are located underneath the arrival and departure paths and in areas close to the Airport's noise contours. The monitors record aircraft noise events on a continual basis which then are compared with actual flight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

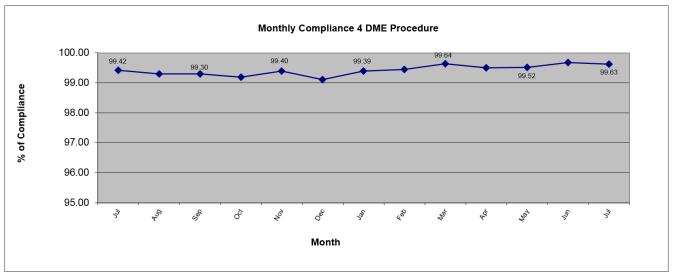
Fly Friendly Procedures

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.



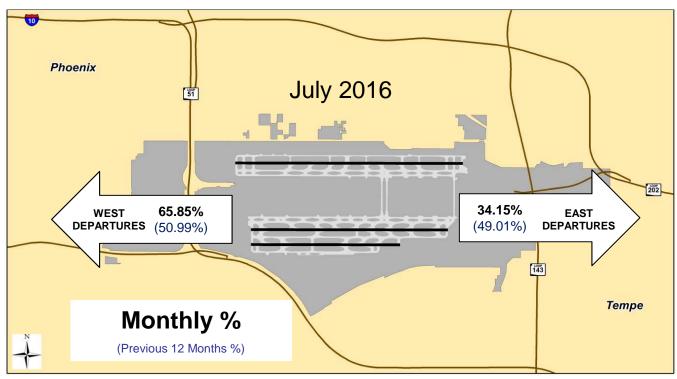
July 2016 4DME compliance rate: 99.63%

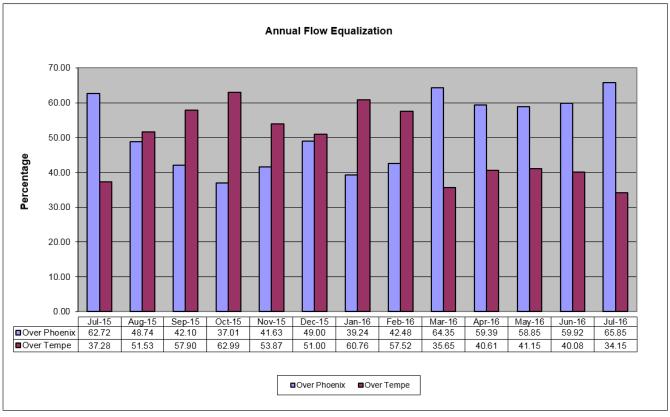
July 2016 4 DME Deviations						
Operators with 75 or more jet flights to the east shown						
Airline Name	Deviations	Total Departures to the East	% Compliance			
American Airlines	3	1,648	99.82			
Southwest Airlines	9	1,481	99.39			
Mesa Airlines	1	471	99.79			
SkyWest Airlines	1	360	99.72			
Delta Airlines	1	239	99.58			
United Airlines	0	159	100.00			
Frontier Airlines	0	93	100.00			
General Aviation	3	88	96.60			



Fly Friendly Procedures Continued

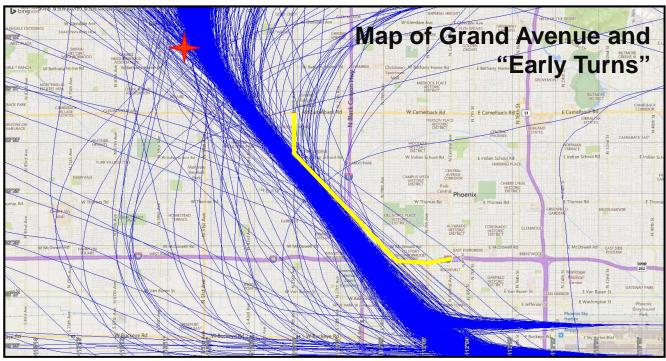
Equalization: Phoenix Sky Harbor International Airport has a goal to equalize the amount of aircraft departures between the east and west over an **annualized** period. Because aircraft need to fly into the wind for added lift, there are times when weather can cause longer periods of flow in one direction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





"Early Turns" - Grand Avenue Month of July 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				
September				
October				
November				
December				
Year To Date	255			

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

#	Operation Time	Туре	Flight	AC Type	RWY	Destination
1	2016-07-04 22:04:37	Commercial	AAL1280	B738	25R	EWR
2	2016-07-29 07:17:29	Commercial	AAL1856	A321	25R	PHL
3	2016-07-29 12:30:00	Commercial	AAL1976	A321	26	CLT
4	2016-07-17 14:29:49	Commercial	AAL413D	A320	25R	SEA
5	2016-07-20 20:36:38	Commercial	AAL547	A321	25R	DFW
6	2016-07-18 20:03:18	Commercial	AAL803	A319	25R	DSM
7	2016-07-19 13:03:02	Commercial	ASA659	B737	25R	PDX
8	2016-07-20 21:15:58	Commercial	ASH5714	CRJ9	25R	MEM
9	2016-07-30 05:05:35	Commercial	ATN3006	B762	25R	ILN
10	2016-07-08 12:46:41	Commercial	DAL136	B738	25R	DTW
11	2016-07-05 11:48:58	Commercial	DAL537	B738	25R	JFK
12	2016-07-29 10:02:59	Commercial	DAL715	A320	25R	DTW
13	2016-07-20 20:21:49	Commercial	FDX1118	B752	25R	AFW
14	2016-07-03 15:23:09	Commercial	SKW3049	CRJ2	25R	GJT
15	2016-07-20 19:25:59	Commercial	SWA1123	B737	25R	PIT
16	2016-07-29 12:20:19	Commercial	SWA1358	B737	25R	PIT
17	2016-07-29 06:54:28	Commercial	SWA1819	B737	25R	PHL
18	2016-07-20 19:45:11	Commercial	SWA1870	B737	25R	CLE
19	2016-07-20 21:20:37	Commercial	SWA2394	B737	25R	IND
20	2016-07-29 05:40:38	Commercial	SWA2568	B737	25R	SLC
21	2016-07-25 07:44:15	Commercial	SWA2584	B737	25R	MKE
22	2016-07-29 05:44:31	Commercial	SWA2655	B733	25R	ABQ
23	2016-07-07 18:06:06	Commercial	SWA2665	B738	25R	MCI
24	2016-07-29 10:41:17	Commercial	SWA2730	B738	25R	PHL
25	2016-07-03 20:11:33	Commercial	SWA3034	B737	25R	DEN
26	2016-07-20 19:27:49	Commercial	SWA818	B733	25R	DAL
27	2016-07-18 19:49:51	Commercial	SWA883	B738	25R	DAL
28	2016-07-17 14:18:50	Commercial	SWA903	B737	25R	DEN
29	2016-07-04 12:03:05	Commercial	UAL1552	B739	25R	EWR
30	2016-07-20 19:42:04	Commercial	UPS4853	A306	25R	SDF
31	2016-07-10 04:03:37	Commercial	UPS859	B763	25L	SDF