

PHX DVT GYR

 CITY OF PHOENIX AVIATION DEPARTMENT

Monthly Noise Report

September 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:

<https://www.skyharbor.com/FlightPaths/FileAConcernContactUs>

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:

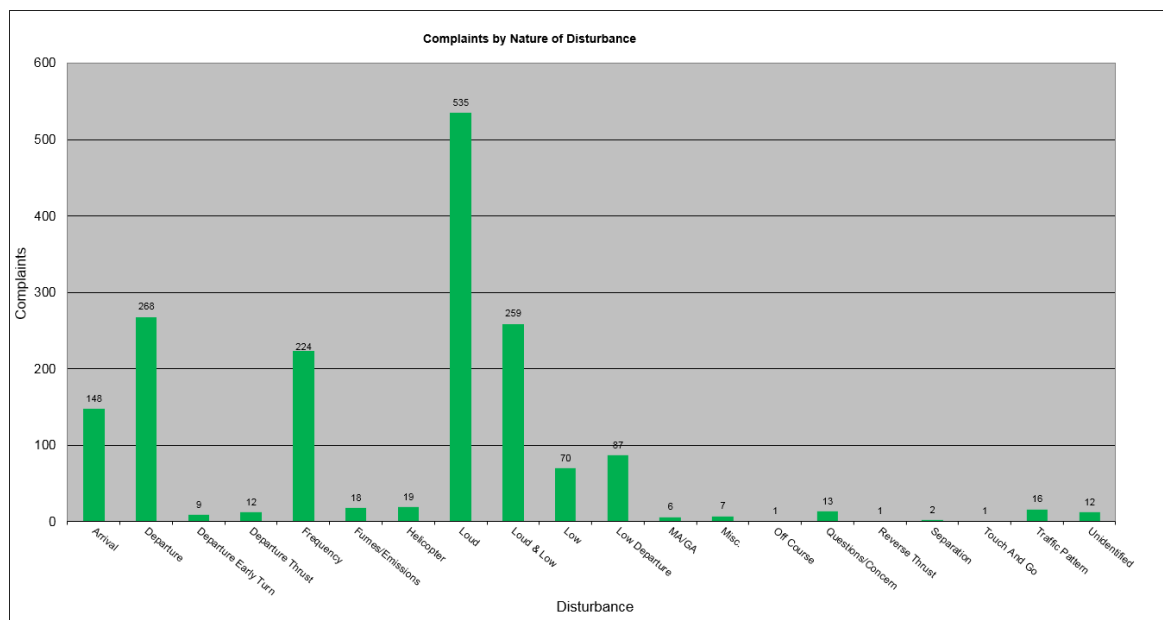
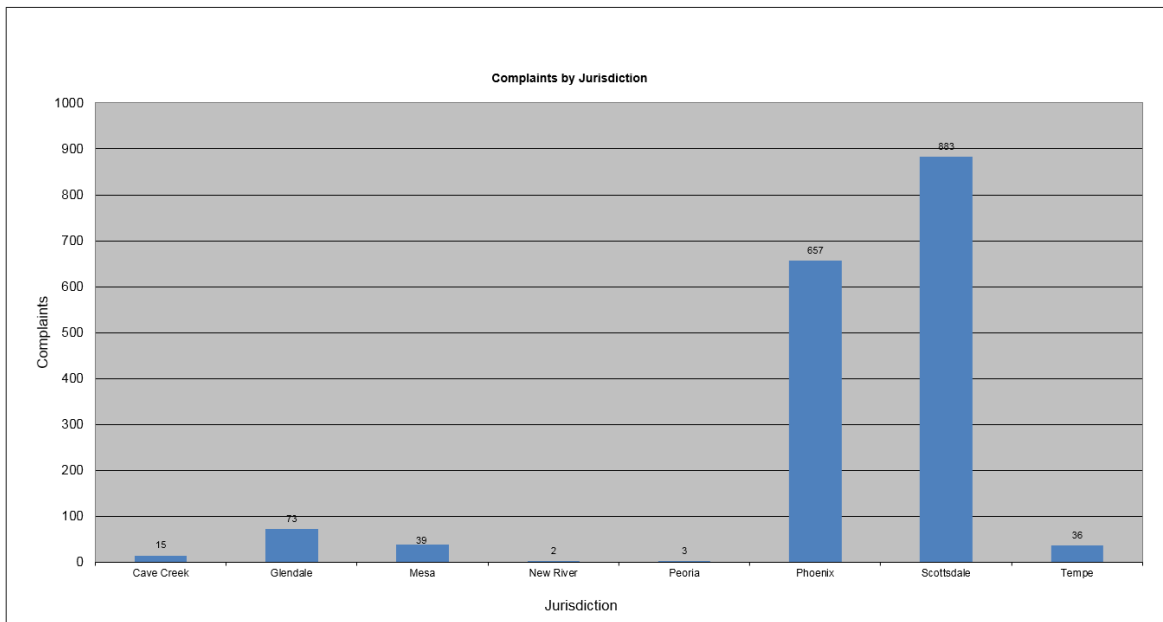
- The Airspace and Noise Section received 1,683 complaints from 178 households in September 2015.
- PHX had 33,117 operations in September 2015. This is a 9.3% decrease from August 2015. Phoenix Deer Valley Airport (DVT) had 28,329 operations in September 2015. This is a 0.1% decrease from August 2015. Phoenix Goodyear Airport (GYR) had 8,151 operations in September 2015. This is a 0.9% increase from August 2015.
- The 4 DME Compliance Rate for September 2015 was 99.30%.
- PHX operated 42.10% westerly and 57.90% easterly in the month of September 2015.

September 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.

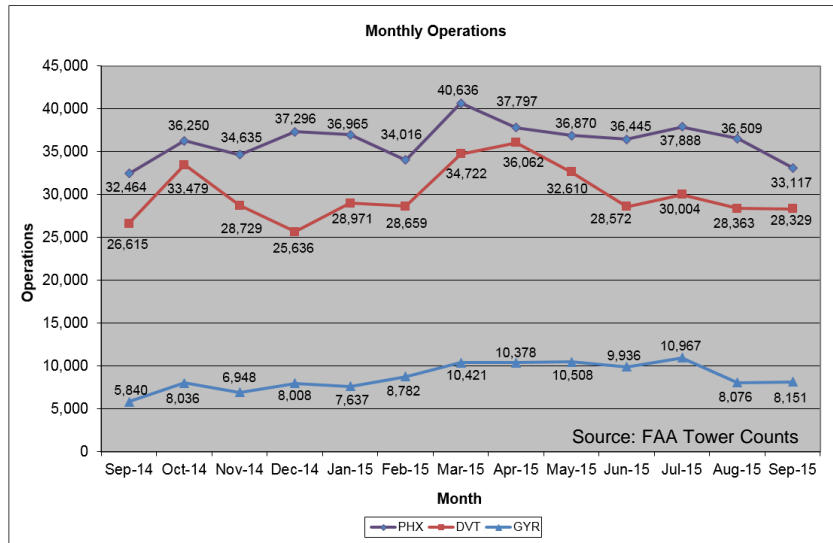
Complaint Statistics

	Sep-14			Sep-15	
	Households	Complaints		Households	Complaints
PHX- Sky Harbor	180	255		182	1,606
DVT- Deer Valley	4	4		15	75
GYR- Goodyear	0	0		2	2
Totals	184	259		178	1,683



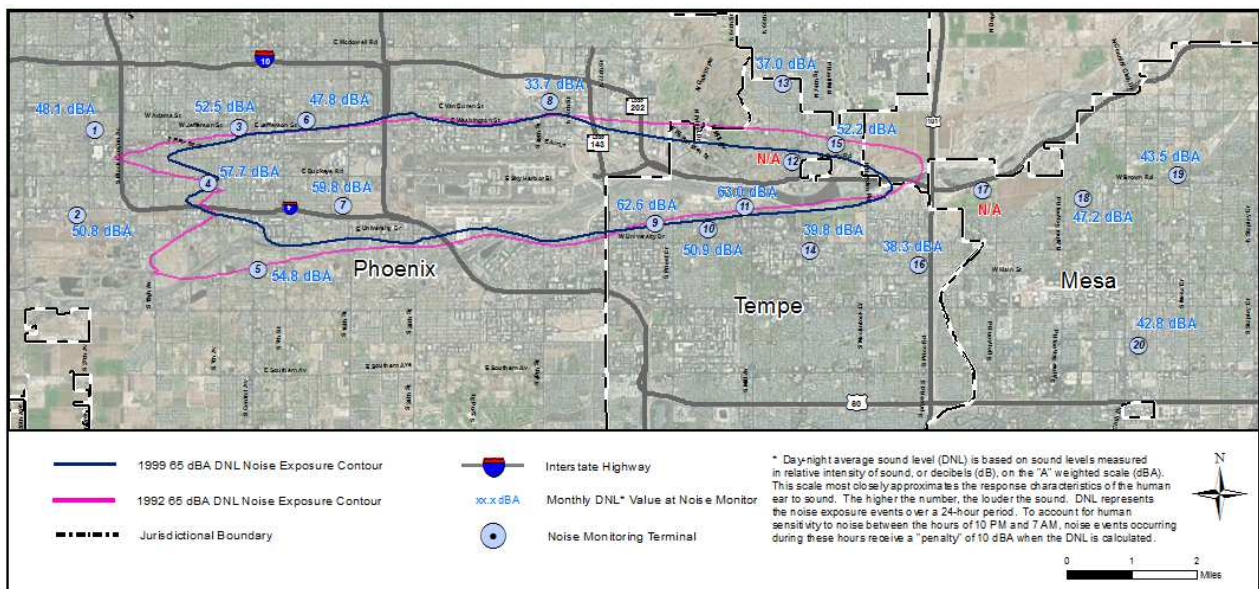
Airport Operations

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

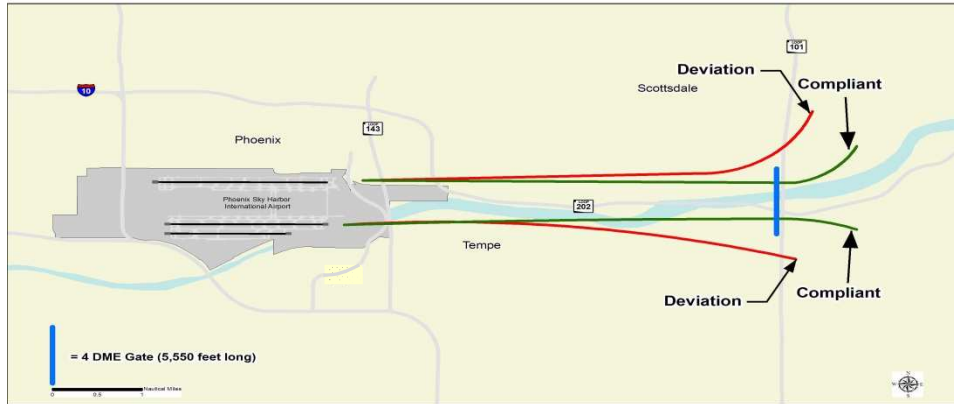
Noise Monitors: PHX has 20 noise monitors in the communities surrounding the Airport. These are located underneath the arrival and departure paths and in areas close to the Airport’s noise contours. The monitors record aircraft noise events on a continual basis which then are compared with actual flight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

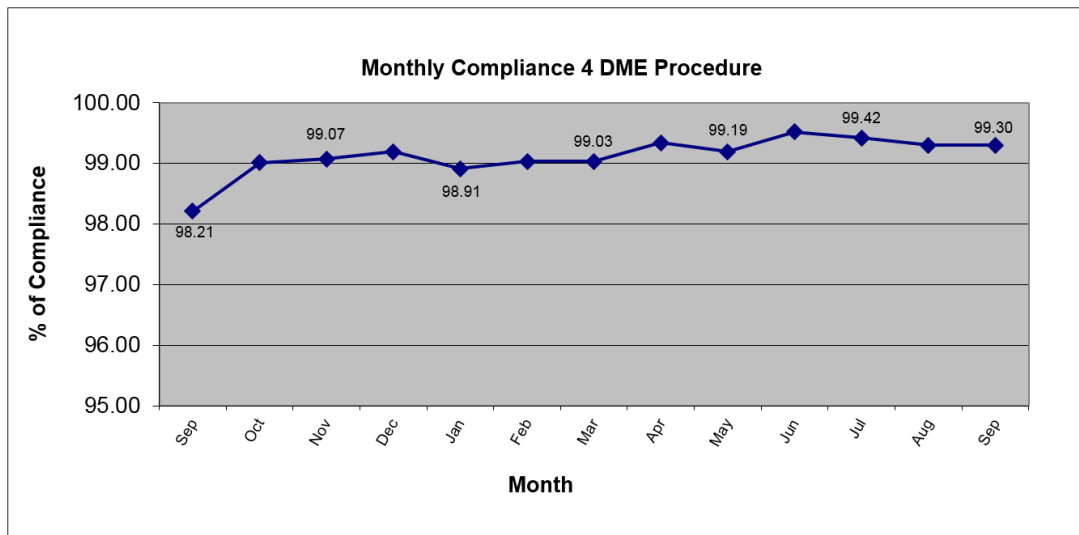
Fly Friendly Procedures

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.



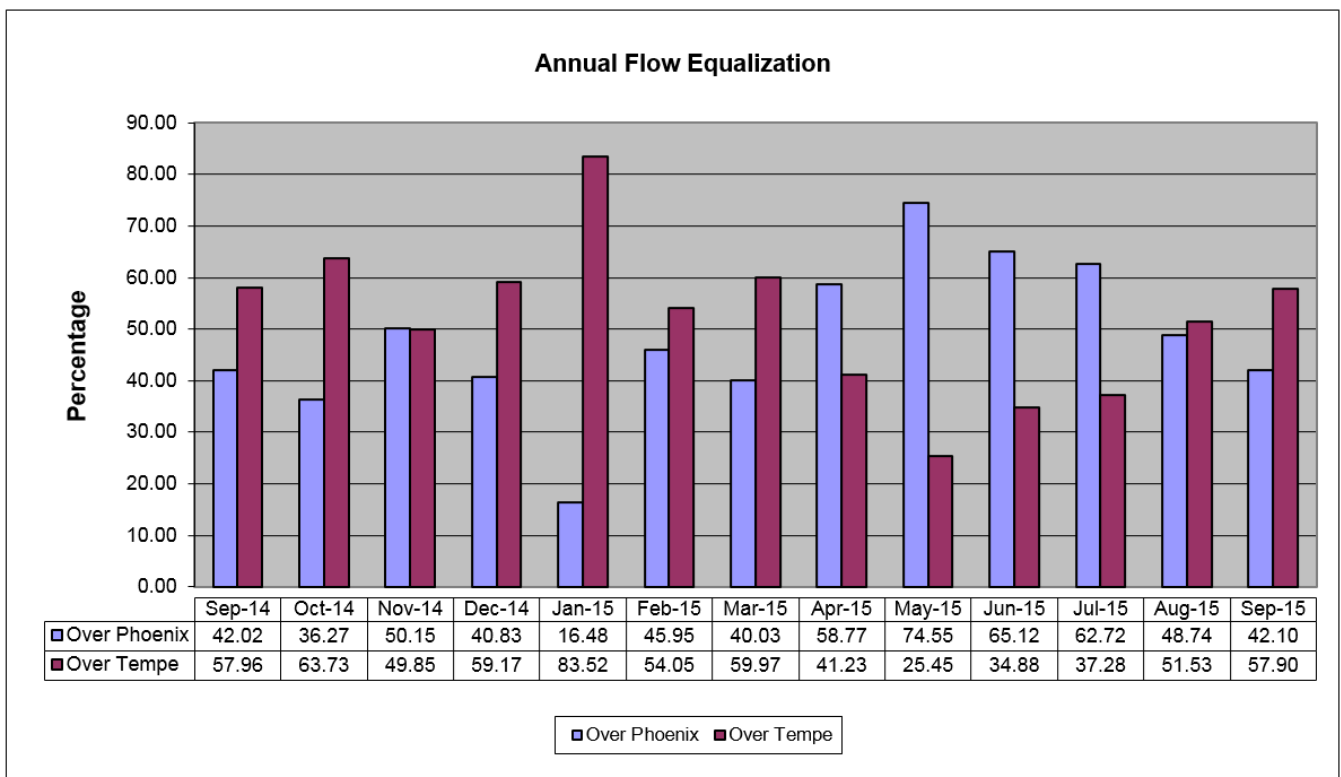
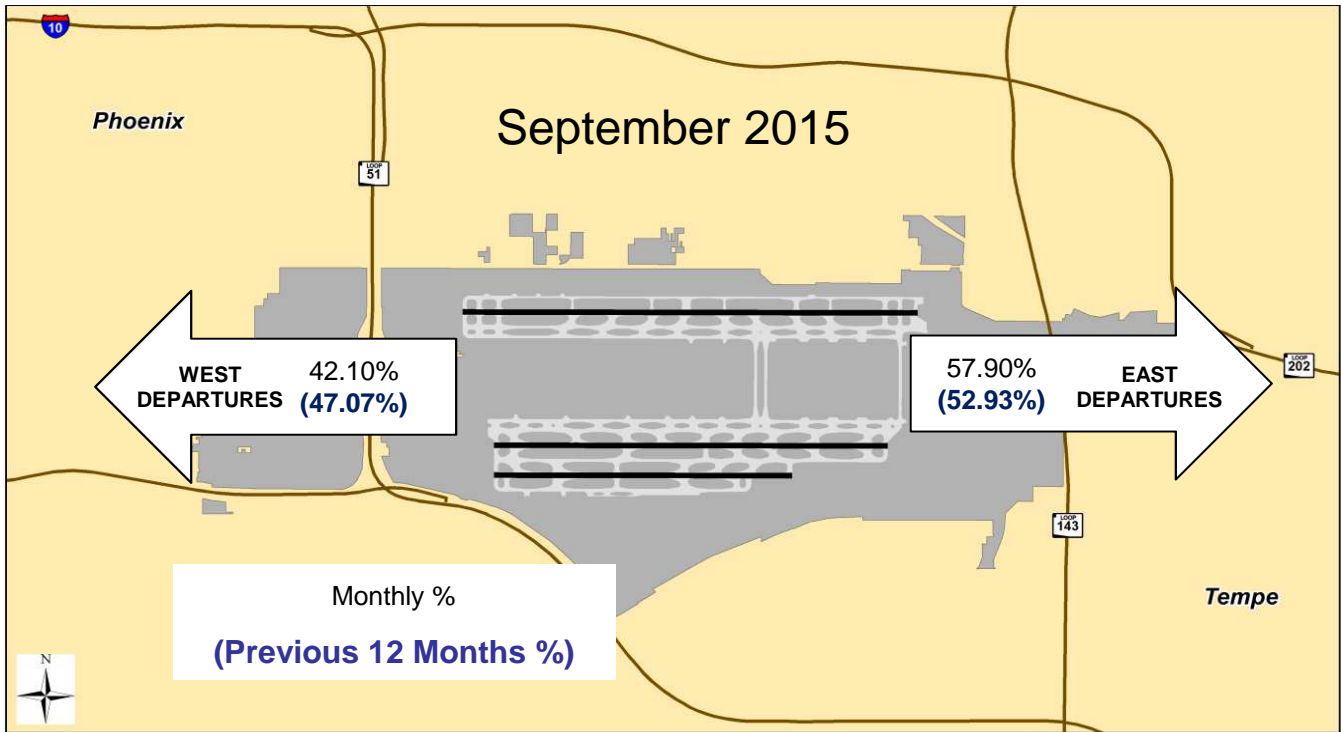
September 2015 4 DME compliance rate: 99.30%

September 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	10	2,868	99.65
Southwest Airlines	14	2,535	99.45
Mesa Airlines	2	798	99.75
SkyWest Airlines	4	747	99.46
Delta Airlines	2	361	99.45
United Airlines	1	307	99.67
General Aviation	12	158	92.41
FedEx	2	115	98.26
Alaska Airlines	0	103	100.00
UPS Airlines	1	77	98.70



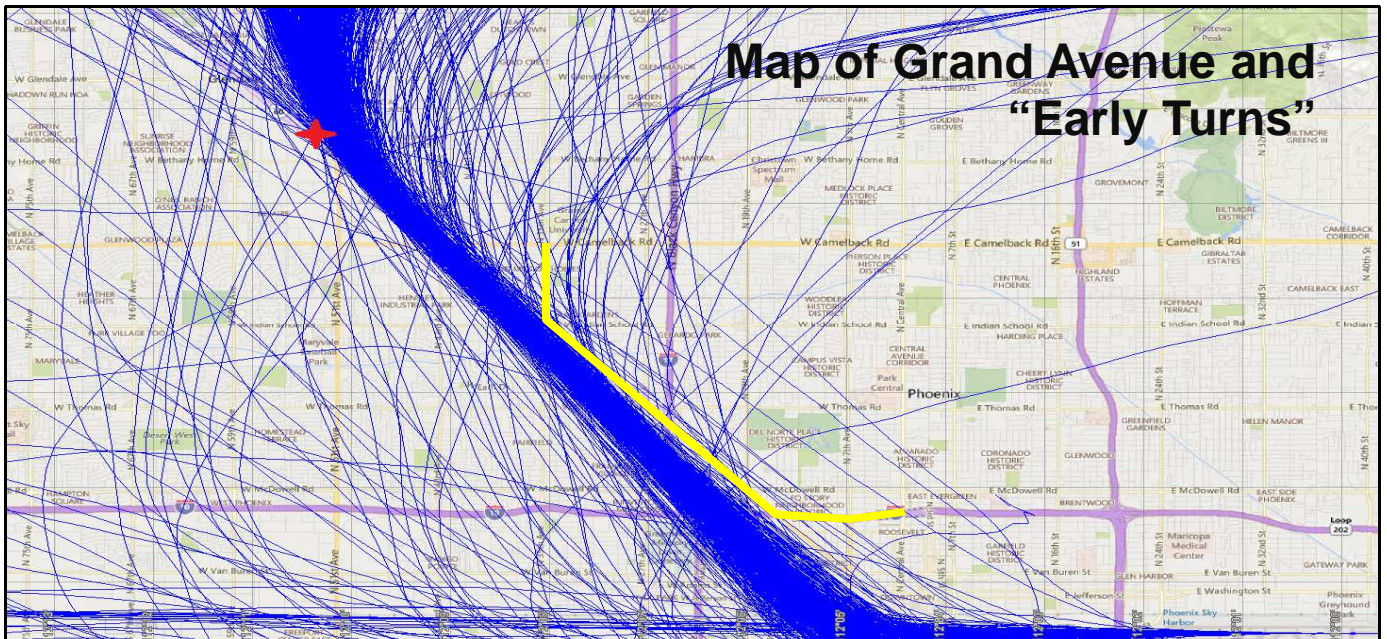
Fly Friendly Procedures Continued

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 September 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	-
November	-
December	-
Year To Date	715

“Early Turns” - Grand Avenue

Month of September 2015 Continued

September 1-15 “Early Turns” FAA Info Table

Line #	2015 Sept 1-15	Time UTC	ACID	Info
1	1	2252	AAL634	Appears to turn early then corrects to fly over TWNSD followed by a tight turn NE, No WX present.
2	2	2227	SKW2964	Track is within .24 NM of TWSND - Not an early turn
3	3	1932	SWA2355	WX in area, track is still .25 NM from TWSND @80 - Not an early turn
4	3	2212	SWA2860	Track goes over TWSND - Not an early turn
5	3	2213	N508KD	RWY26, Track goes over TWSND @70
6	4	9/5 0021	SKW2970	WX- TSTM immediately West of PHX
7	4	9/5 0201	SKW4831	WX- TSTM immediately West of PHX
8	4	9/5 0255	BAW288	WX- TSTM immediately West of PHX
9	4	9/5 0258	AAL653	WX- TSTM immediately West of PHX
10	4	9/5 0259	SWA2027	WX- TSTM immediately West of PHX
11	4	9/5 0300	SKW2982	WX- TSTM immediately West of PHX
12	4	9/5 0301	SKW2989	WX- TSTM immediately West of PHX
13	4	9/5 0305	AAL605D	WX- TSTM immediately West of PHX
14	4	9/5 0307	AAL627	WX- TSTM immediately West of PHX
15	4	9/5 0302	SWA1016	WX- TSTM immediately West of PHX
16	4	9/5 0340	SWA9017	WX- TSTM immediately West of PHX
17	4	9/5 0344	SWA435	WX- TSTM immediately West of PHX
18	4	9/5 0346	AAL504	WX- TSTM immediately West of PHX
19	4	9/5 0350	SWA559	WX- TSTM immediately West of PHX
20	6	2019	SKW2952	Track is within .14 NM of TWSND - Not an early turn
21	7	9/8 0226	SWA1381	WX- TSTM West of PHX
22	8	1341	N75WP	Track is within .22 NM of TWSND - Not an early turn
23	8	2335	SWA2767	Track is within .22 NM of TWSND - Not an early turn
24	9	9/10 0302	SKW2976	Track is within .25 NM of TWSND - Not an early turn
25	10	1826	NKS976	WX in area- track still overflew TWSND
26	10	2132	SWA350	WX in area – turned prior to TWSND
27	10	2201	SWA2040	WX in area- track still overflew TWSND
28	10	2357	SKW4848	WX in area- track still within .25NM of TWSND
29	11	2229	SWA3020	WX in region, vector to climb
30	11	9/12 0209	AAL548	RWY26- track appears close to Coliseum then proceeds over TWSND
31	12	9/13 0015	SKW4848	WX in area- track still within .25NM of TWSND
32	13	2141	AAL604	WX in region but not close to PHX, turned 1.2NM E of TWNSD
33	14	759	AAL1746	WX- TSTM turned prior to TWSND
34	14	813	NKS972	WX- TSTM turned prior to TWSND
35	14	2135	SWA350	Track is over TWSND - Not an early turn
36	14	9/15 0114	SKW4799	WX- TSTM turned prior to TWSND
37	14	9/15 0129	SWA2029	WX in area- track still overflew TWSND
38	15	2125	UAL2000	Track is within .25 NM of TWSND - Not an early turn
39	15	2214	N508KD	Turned for traffic
40	15	2358	AAL456	WX in area – turned prior to TWSND
41	15	9/16 0405	SWA1563	Track is over TWSND - Not an early turn

“Early Turns” - Grand Avenue

Month of September 2015 Continued

September 16-30 “Early Turns” FAA Info Table

Line #	2015	Time UTC	ACID	Info
	Sept 16-30			
1	16	2208	AAL1712	ATC did not turn early. Clearance was “depart TWSND direct FORPE”
2	16	2216	AAL473	ATC did not turn early. Clearance was “depart TWSND direct FORPE”
3	16	2226	ASH5675	ATC did not turn early. Clearance was “depart TWSND direct FORPE”
4	16	2234	SWA302 0	ATC did not turn early. Clearance was “depart TWSND direct FORPE”
5	16	2246	AAL562	ATC did not turn early. Clearance was “depart TWSND direct FORPE”
6	17	1916	SKW295 2	Track is within .24 NM of TWSND - Not an early turn
7	17	1916	SKW295 2	Track is within .24 NM of TWSND - Not an early turn (DUPE)
8	17	9/18 0408	SWA156 3	Track goes over TWSND - Not an early turn
9	19	9/20 0236	SWA133 1	Track goes over TWSND - Not an early turn
10	19	9/20 0245	SWA787	Track goes over TWSND - Not an early turn
11	20	2149	SWA150 3	Track makes turn N then proceeds over TWSND- Not an early turn
12	20	9/21 0449	SWA128	Track turns prior to TWSND for conflicting overflight traffic
13	20	9/21 0629	DAL2492	Track is within .9 NM of TWSND – Not an early turn
14	22	2156	SWA298 2	WX- TSTM immediately West of PHX
15	22	2229	SWA302 0	WX- TSTM immediately West of PHX
16	22	2234	N75WP	WX- TSTM immediately West of PHX
17	22	2349	N800GH	WX- TSTM immediately West of PHX
18	23	2319	EJA369P	Not on SID PHX-SDL on Vectors
19	23	2355	SWA276 7	Turned prior to TWSND for traffic - Traffic operating West of PHX
20	27	2158	PMM129	Track is within .46 NM of TWSND - Not an early turn
21	27	9/28 0201	SKW294 0	Track is within .21 NM of TWSND - Not an early turn
22	28	1947	N390JV	Not on SID PHX-SDL on Vectors
23	30	2113	N604DT	Track is within .68 NM of TWSND - Not an early turn
24	30	2350	N729JV	Not on SID, Track goes 6.5 NM West then turns NE towards INW above 70 passing 2.27NM E of TWSND at 9500 ft.