

Noise

Mitigation Monitoring Report



January 2007

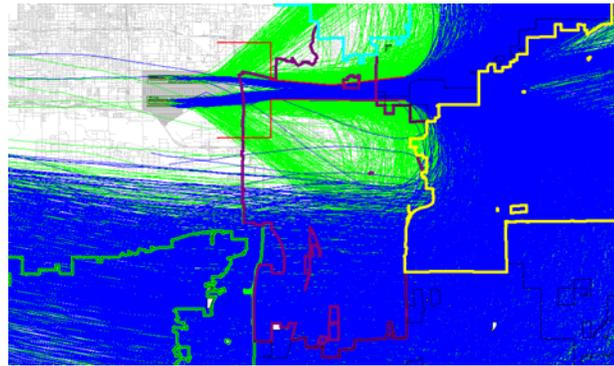
Hot Button Issue!

Most Compliant Airline
this month:

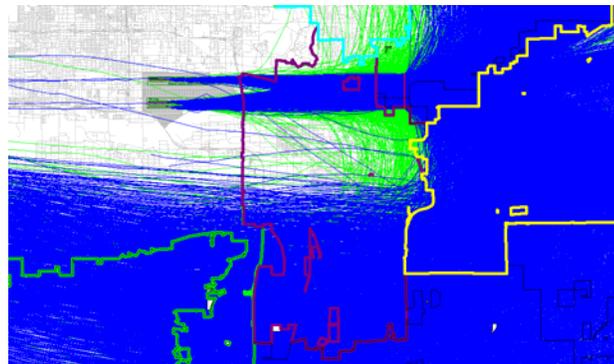
US Airways!

Learn about noise
mitigation procedures
over Tempe on p.6

Tempe Corridor: **58.1%** in compliance with 4-DME



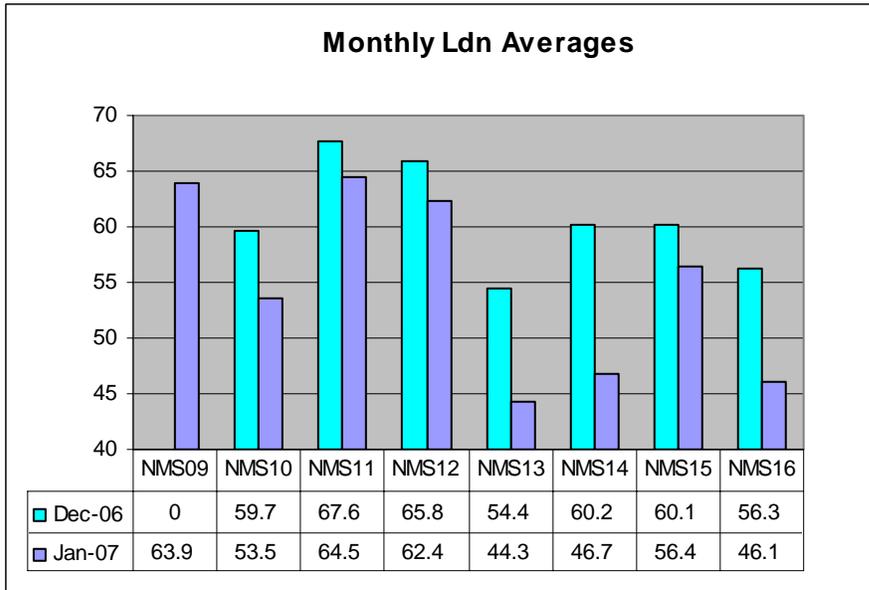
Phoenix Gate: **94.0%** in compliance with 4-DME



Tempe Aviation Commission

This report is assembled for the Tempe Aviation Commission (TAVCO) to monitor the monthly compliance of operations at Phoenix Sky Harbor International Airport with certain noise mitigation flight procedures over the City of Tempe. TAVCO consists of 13 Tempe residents appointed by the Tempe Mayor with approval of the City Council to assist and advice on aviation noise and other issues relating to the Phoenix Sky Harbor International Airport, which is owned and operated by the City of Phoenix. The City of Tempe is located directly east of the airport's 3 parallel runways.

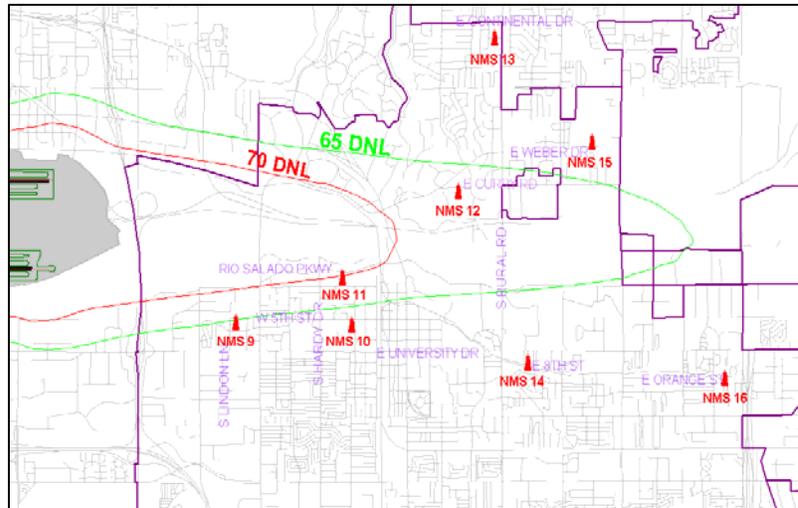
Aircraft Noise Energy Levels:



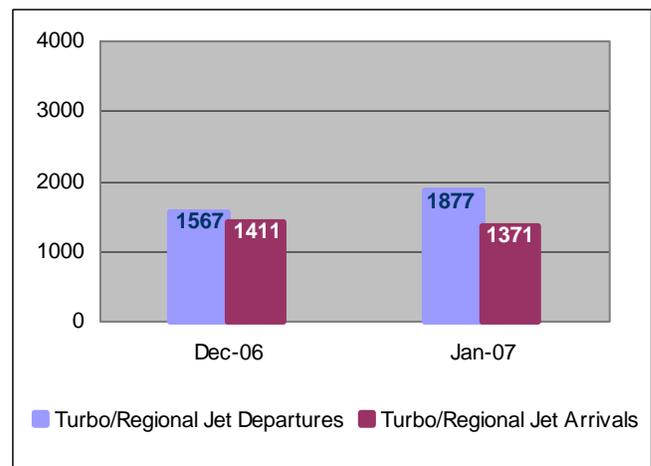
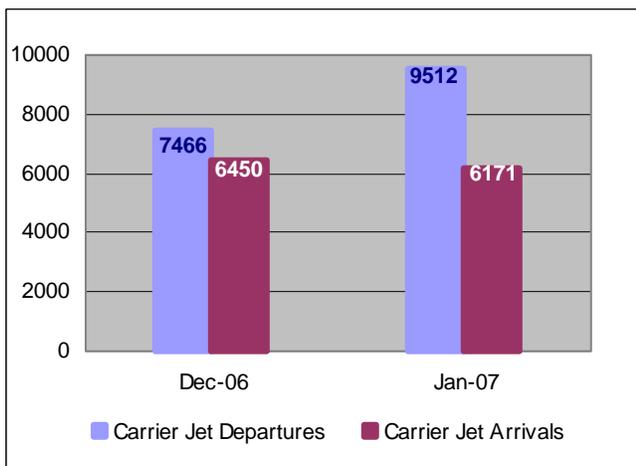
LdnA or day-night level (DNL), is a descriptor of noise level based on energy equivalent noise level (Leq) over the whole day with a penalty of 10 dB(A) for night time noise (22.00-7.00 hrs). DNL is used to forecast noise exposure contour lines around airports.

NMS 9 was down in December 06 and parts of January 07.

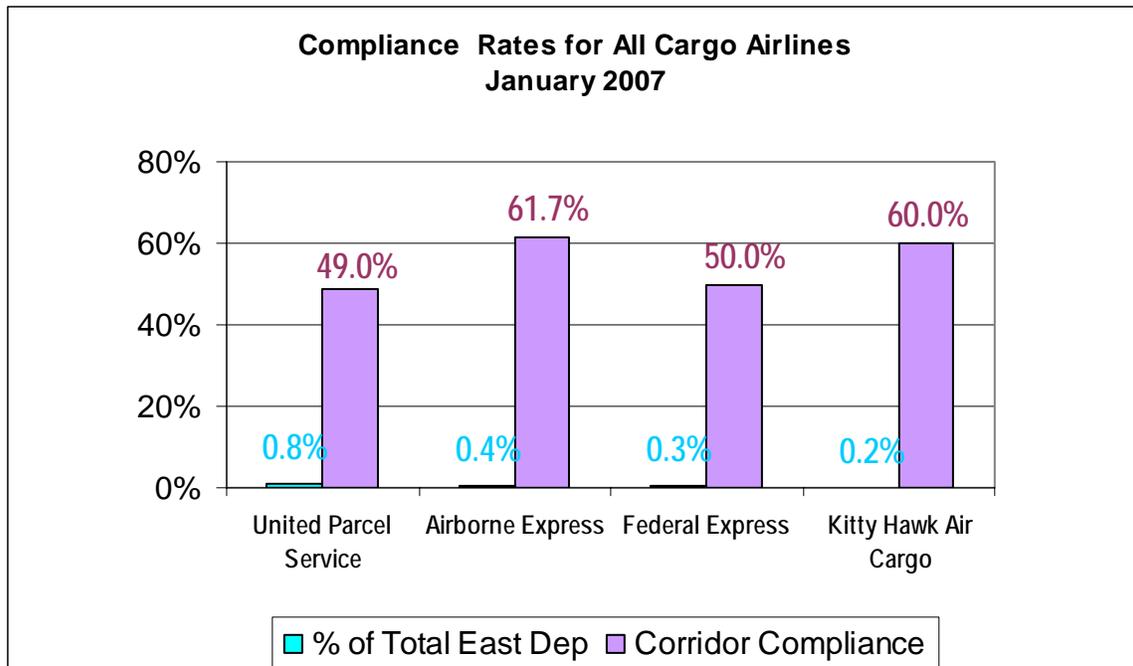
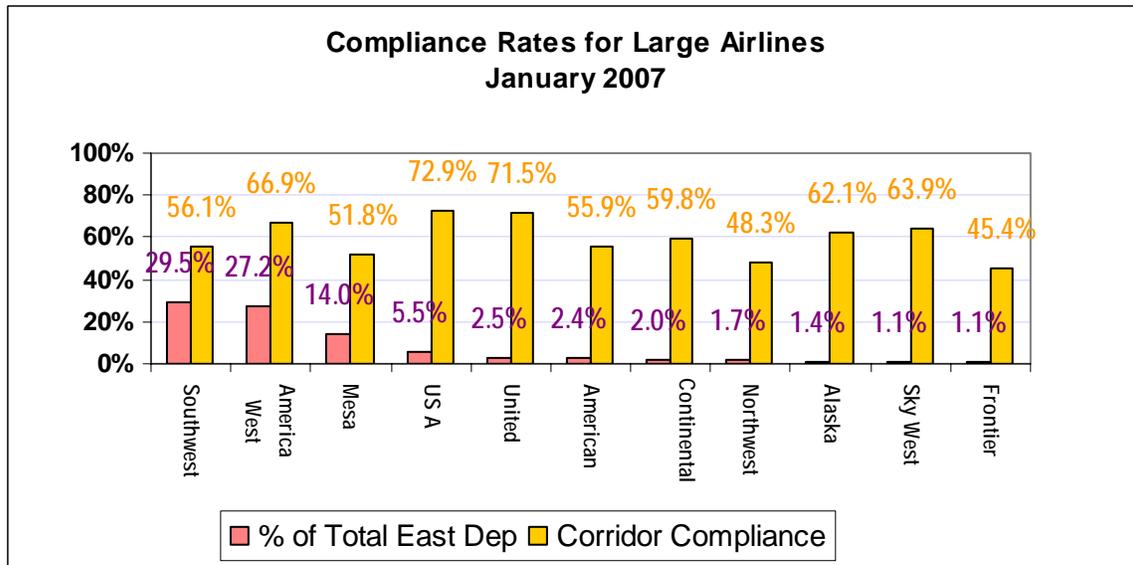
PHX Noise Monitors in Tempe:



East Operations Summary:

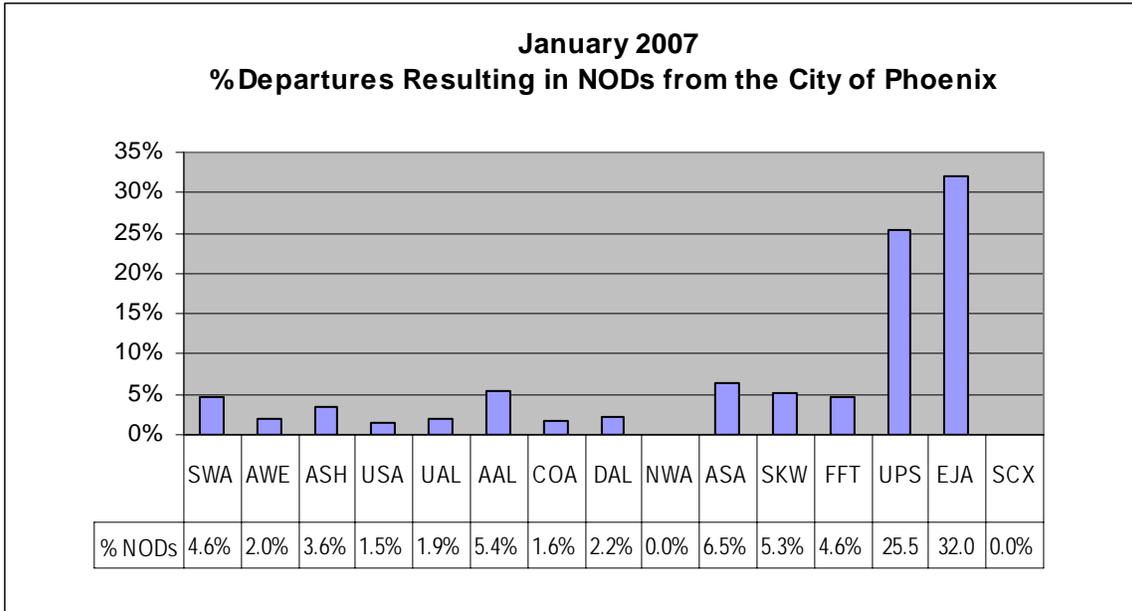


Compliance with 4-DME Standard Instrument Departure procedure:

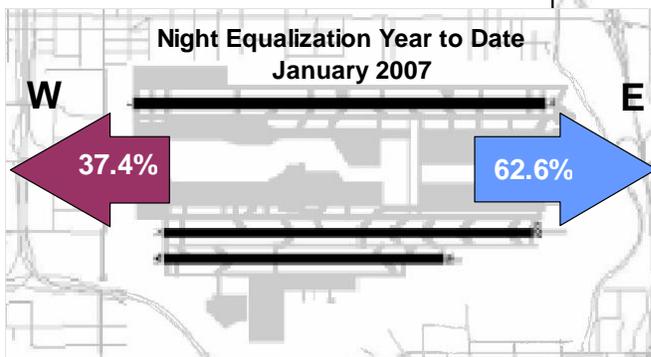
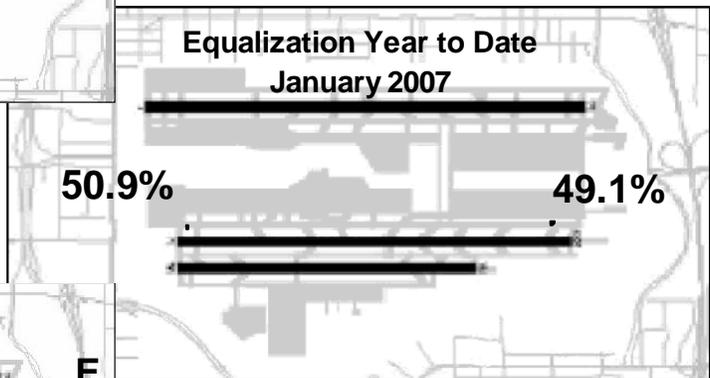
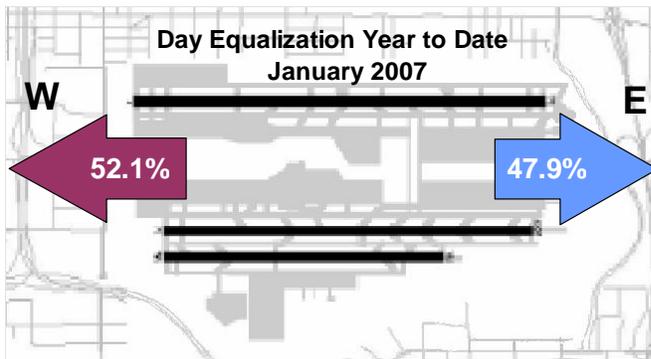


4-DME deviations not included during the following hours when cross winds <10 knots:							
01/05/2007	20:00	01/18/2007	11:00, 14:00, 16:00	01/16/2007	9:00 - 11:00, 13:00	01/30/2007	10:00, 13:00
01/09/2007	2:00, 11:00, 12:00	01/21/2007	18:00	01/17/2007	11:00	01/31/2007	21:00
01/15/2007	20:00, 21:00	01/25/2007	11:00, 22:00				

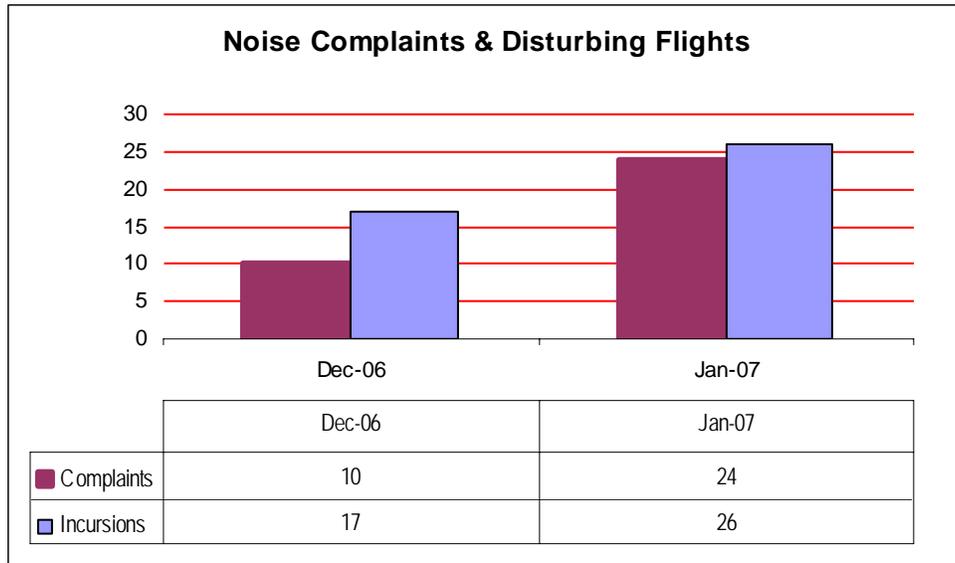
Notices of Deviation:



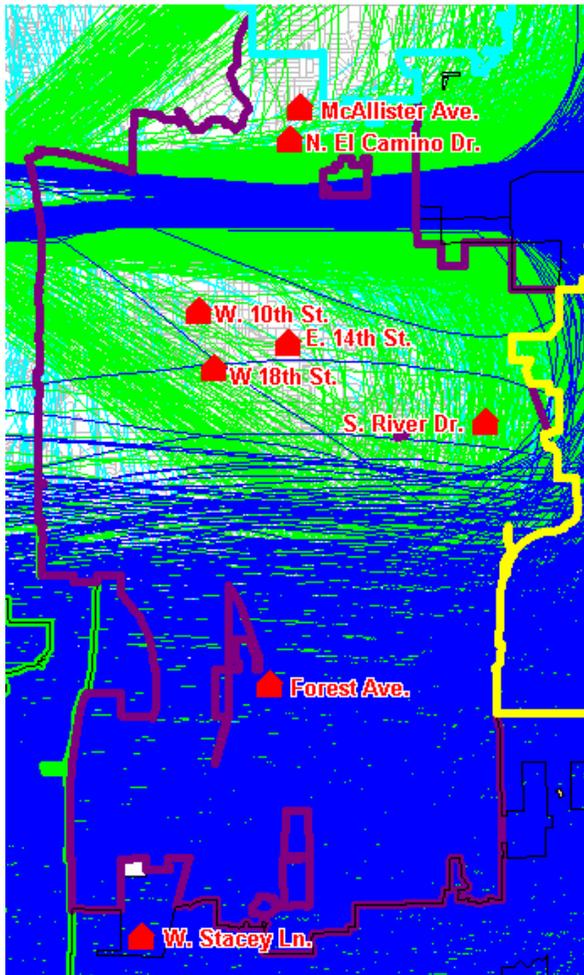
East/West Departure Split:



Received Complaints:



Incursions = Over flights identified to individual aircraft.



8 Tempe residents filing complaints with the City of Tempe in January 2007.

Helicopter operations:
 Hovering helicopters on the border to Scottsdale and transition flights north/south on the border to Chandler.

Late Night Departure Flow:
 Departure frequencies at night at about 10:30 and 11:00 p.m. are up, are disturbing sleep.

Close-in Arrivals:
 North Tempe, short final approaches bringing large aircraft north of the regular approach path.

IGA on Noise Mitigation Flight Procedures:

In 1994 the City of Phoenix and the City of Tempe agreed to continue noise mitigation flight procedures already in use over Tempe from the Phoenix Sky Harbor International Airport:

- Have jets and large aircraft depart to the east over the Salt River.
- Equalize the noise burden from jets and large aircraft departures between east and west during daytime and nighttime hours on an annual basis.



According to the 1993 Environmental Impact Statement for Phoenix Sky Harbor International Airport master plan improvements that included construction of the third runway, the 1-DME Standard Instrument Departure Procedure was to be continued for noise mitigation purposes. After the VORTAC was moved, it became the 4-DME SID.



The Tempe Aviation Commission used the SID to come with a "Corridor" to measure airline compliance with the 4-DME SID. The airport uses a 5,500 feet long imaginary line, "Gate", running north south at 4-DME or approximately at Price Road. Turns by carrier jets north or south away from the Salt riverbed before reaching this line results in a notice of deviation from the airport to the responsible airline.

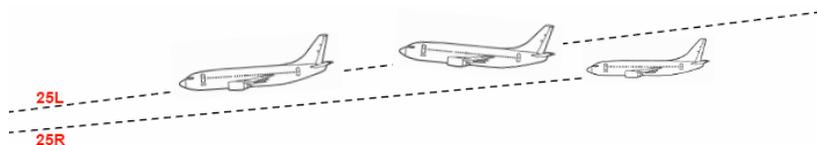
The agreement also included a new procedure for mitigation noise from arriving jets and large turboprop aircraft to the proposed third runway (25L).



On March 27, 2002 the FAA suspended formalization of a "side step" procedure that had been in use after the third runway opened in October 2000. Presently the FAA is clearing jets and large turboprop aircraft for straight-in approaches to Runway 25L from the east. 4 contributing factors led to negative effects on flight safety and the decision to suspend the side step procedure:

1. The destabilizing effect on the approach.
2. The inability to intercept the glide slope for the third runway.
3. Computer reprogramming going on in the cockpit.
4. Loss of visual reference, particularly at night (Sun Devil Stadium not always being lit).

The IGA was made after City of Tempe had challenged the plans for the construction of a third runway because of inadequate assessment of the environmental impacts, and the legal challenge was mediated and settled. The City of Phoenix agreed to submit a F.A.R. Part 150 Noise Compatibility study for the Phoenix Sky Harbor International Airport where the above measures were implemented. The plan was approved by the FAA in 2001.



Because the threshold for Runway 25L is located farther west than the threshold for Runway 25R, the glide slope is higher up than the glide slope to Runway 25R. Using the Runway 25R glide slope a pilot would need to apply power and both turn and climb close to landing to intercept the glide slope for Runway 25L when executing the side step maneuver.