

METROPOLITAN WASHINGTON AIRPORTS AUTHORITY

2010 Annual Aircraft Noise Report for

Washington Dulles International Airport (IAD) and

Ronald Reagan National Airport (DCA)

In 2010, Washington Dulles International Airport and Ronald Reagan Washington National Airport served approximately 42 million passengers and handled over 609 thousand flight operations.* The Metropolitan Washington Airports Authority, operator of both airports, frequently receives inquires about flight operations and aircraft noise. The purpose of this report is to provide information regarding flight operations, monitored noise levels, and community complaint statistics.

Typical Daily Flight Tracks

On a typical day over 4,000 airplanes will fly in the skies over the Washington region. Most of these flights are to, or from, Dulles, National, Baltimore Washington, or Andrews Air Force base. Many flight operations occur at the numerous general aviation airfields in the region. Included are two flight track maps (Figures 1 and 2) which each depict a 24 hour day of flight activity at each airport. Red lines represent departures, blue lines represent arrivals, and green lines represent overflights that are not using the airport in the figure.

* To access detailed Air Traffic Statistics, please click the Airport Services tab from the black menu bar on the mwaa.com homepage.

Figure 1 - Typical mixed flow operations for a 24 hour day at Dulles International Airport (3,589 tracks). Arrivals are in Blue (555 tracks), departures are in Red (478 tracks), and overflights are in Green (2556 tracks).

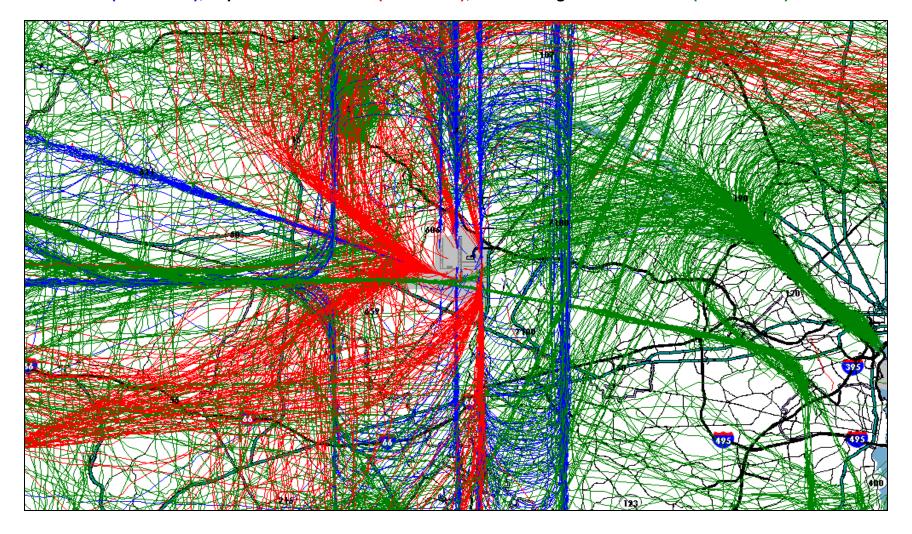
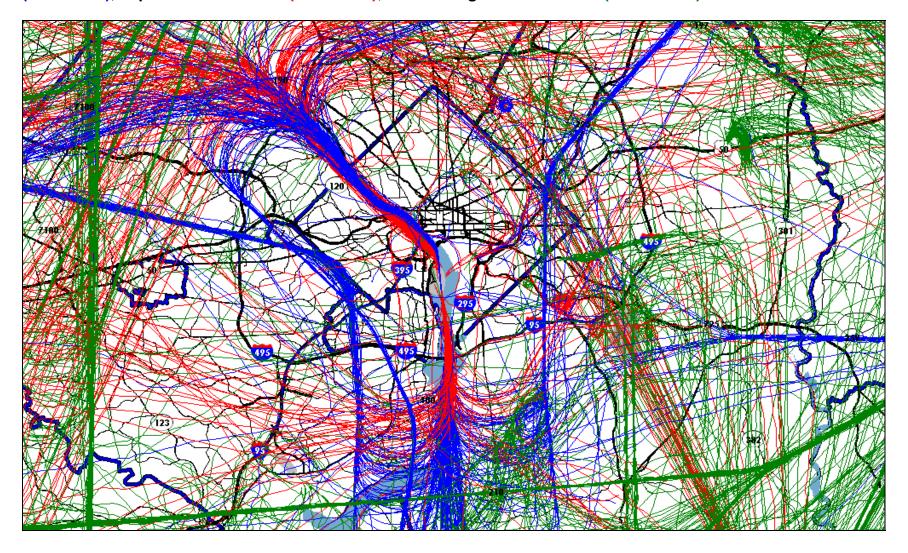


Figure 2 – Typical mixed flow operations for a 24 hour day at Ronald Reagan National Airport. Arrivals are in Blue (447 tracks), departures are in Red (454 tracks), and overflights are in Green (1800 tracks).





Regional Noise Levels

The Airports Authority has installed 36 of the planned 40 noise monitors around both airports and we are currently monitoring aircraft and community noise levels around the clock at 35 of these locations (see Figures 3 and 4). The monitoring equipment evaluates sound events and system software separates those events likely to have been caused by an aircraft from the remaining events, which are attributed to the community.

There are many ways to measure the impact of aircraft noise. For this report, all noise levels are displayed in DNL. DNL is the day-night annual average sound level in "A" weighted decibels (dBA). This 24 hour average sound level takes into account the maximum levels of noise, the duration of each noise event, and the time each noise event occurred. Each event that occurs between 10pm and 7am is increased by 10 dB to account for the increased annoyance normally associated with night time noise. This is the Federal Aviation Administration's preferred metric and is the standard metric for assessing the impact of aircraft noise exposure around airports in the United States.

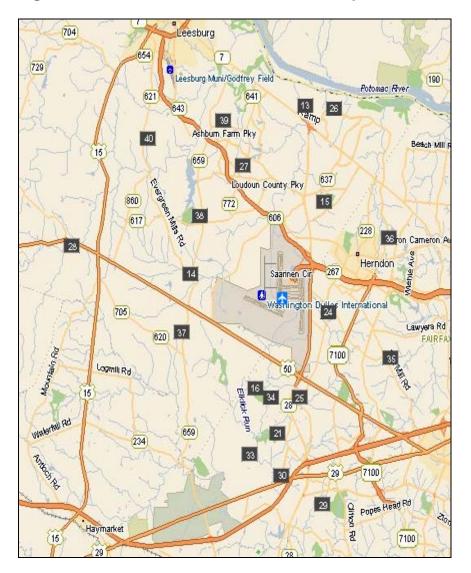
This report provides three different DNL values for each site. The data in the "Total DNL" column is the result of combining the aircraft and the community DNL noise values. The "Aircraft DNL" column shows the noise levels determined by our noise and flight track monitoring system to have been caused by aircraft and the "Community DNL" column shows the noise levels caused by other noise sources in the community.

From time to time, due to technical or other problems with the noise monitoring equipment and or associated software, and construction, noise data may not be available from a particular site. When these and other issues cause there to be more than several weeks of data to be lost, or cause the integrity of the data to be questioned, the sites involved will have that data excluded from the report.

- One (1) month of data from site 14 was removed from this report due to a microphone calibration issue. (Dulles).
- Three (3) months of data from site 25 have been removed from this report due to power problems at the monitoring site. (Dulles)
- Seven (7) months of data from site 40 have been excluded from this annual report because of maintenance issues. These issues have been recently resolved and noise data from this site will be included in the 2011 annual noise report. (Dulles).
- Site 1 was de-commissioned. (National).
- 4 months of data from site 5 were lost due to hardware failure.
- One (1) month of data from site 11 was removed from this report due to a microphone calibration issue. (National)
- Site 23 was excluded from this report because the monitor had to be removed from the roof to accommodate a school expansion project. We anticipate this site to be re-installed in 2011. (National)



Figure 3 – Noise Monitors around Dulles Airport.



| <u>Site</u> | <u>Location</u> |
|-------------|--|
| 13 | Dairy Lane and Youngs Cliff Rd, Sterling, VA |
| 14 | Belmont Ridge and Evergreen Mills Rd |
| 15 | Guilford Elem. School |
| 16 | Pleasant Valley Golf Club |
| 21 | Cub Run Elem. School |
| 24 | Floris Elem. School |
| 25 | Willard rd and Brookfield Cor. Dr. |
| 26 | 20196 Carter Ct, Sterling, VA |
| 27 | Broad Run High School |
| 28 | Aldie Elem. School |
| 29 | Union Village Cir and Otter Run Rd |
| 30 | London Towne Elem. School |
| 33 | Virginia Run Elem. School |
| 34 | Westfield High School |
| 35 | Crossfield Elem. School |
| 36 | Armstrong Elem. School |
| 37 | Mercer Middle School |
| 38 | Briar Woods High School |
| 39 | Stone Bridge High School |
| 40 | Sycolin Creek Elem. School |



| Site | | | | |
|--------|------------|------|--------|-------|
| Number | Month/Year | DNL | DNL-ac | DNL-c |
| 13 | Jan-10 | 57.7 | 48.5 | 57.2 |
| 13 | Feb-10 | 56.6 | 46.7 | 56.2 |
| 13 | Mar-10 | 58.0 | 50.4 | 57.2 |
| 13 | Apr-10 | 58.3 | 50.4 | 57.6 |
| 13 | May-10 | 60.4 | 51.1 | 59.8 |
| 13 | Jun-10 | 57.6 | 49.3 | 56.9 |
| 13 | Jul-10 | 60.1 | 49.8 | 59.6 |
| 13 | Aug-10 | 67.6 | 52.2 | 67.5 |
| 13 | Sep-10 | 65.6 | 48.3 | 65.5 |
| 13 | Oct-10 | 59.3 | 47.4 | 59.0 |
| 13 | Nov-10 | 57.5 | 49.9 | 56.6 |
| 13 | Dec-10 | 57.4 | 48.7 | 56.8 |
| | | | | |
| 14 | Jan-10 | 71.7 | 62.3 | 71.2 |
| 14 | Feb-10 | 71.1 | 61.6 | 70.6 |
| 14 | Mar-10 | 71.3 | 63.1 | 70.6 |
| 14 | Apr-10 | 71.6 | 64.3 | 70.7 |
| 14 | May-10 | 71.4 | 63.2 | 70.7 |
| 14 | Jun-10 | 71.4 | 63.1 | 70.7 |
| 14 | Jul-10 | 71.2 | 62.7 | 70.5 |
| 14 | Aug-10 | 71.3 | 62.5 | 70.6 |
| 14 | Sep-10 | 71.2 | 62.2 | 70.6 |
| 14 | Oct-10 | NA | NA | NA |
| 14 | Nov-10 | 72.0 | 64.3 | 71.2 |
| 14 | Dec-10 | 72.0 | 63.3 | 71.4 |
| | | | | |
| 15 | Jan-10 | 60.4 | 43.9 | 60.3 |
| 15 | Feb-10 | 59.5 | 42.5 | 59.5 |
| 15 | Mar-10 | 60.8 | 42.1 | 60.7 |
| 15 | Apr-10 | 60.8 | 44.3 | 60.7 |
| 15 | May-10 | 62.5 | 49.2 | 62.2 |
| 15 | Jun-10 | 62.9 | 47.6 | 62.8 |
| 15 | Jul-10 | 63.0 | 44.5 | 63.0 |
| 15 | Aug-10 | 62.9 | 48.5 | 62.8 |
| 15 | Sep-10 | 62.6 | 39.8 | 62.6 |
| 15 | Oct-10 | 61.6 | 46.0 | 61.5 |
| 15 | Nov-10 | 60.2 | 45.6 | 60.1 |
| 15 | Dec-10 | 60.4 | 44.7 | 60.2 |



| Site | | | | |
|--------|------------|------|--------|-------|
| Number | Month/Year | DNL | DNL-ac | DNL-c |
| 16 | Jan-10 | 60.7 | 48.3 | 60.5 |
| 16 | Feb-10 | 58.8 | 45.9 | 58.5 |
| 16 | Mar-10 | 60.2 | 53.7 | 59.1 |
| 16 | Apr-10 | 59.4 | 54.2 | 57.8 |
| 16 | May-10 | 61.8 | 55.0 | 60.8 |
| 16 | Jun-10 | 59.4 | 51.2 | 58.7 |
| 16 | Jul-10 | 63.1 | 51.6 | 62.8 |
| 16 | Aug-10 | 66.8 | 53.5 | 66.6 |
| 16 | Sep-10 | 63.6 | 50.4 | 63.4 |
| 16 | Oct-10 | 58.6 | 52.8 | 57.3 |
| 16 | Nov-10 | 57.1 | 50.8 | 56.0 |
| 16 | Dec-10 | 56.6 | 45.9 | 56.2 |
| | | | | |
| 21 | Jan-10 | 62.4 | 55.2 | 61.5 |
| 21 | Feb-10 | 62.7 | 53.4 | 62.2 |
| 21 | Mar-10 | 59.4 | 47.6 | 59.1 |
| 21 | Apr-10 | 59.1 | 50.2 | 58.6 |
| 21 | May-10 | 61.0 | 47.9 | 60.8 |
| 21 | Jun-10 | 59.7 | 50.9 | 59.0 |
| 21 | Jul-10 | 60.1 | 52.4 | 59.3 |
| 21 | Aug-10 | 60.2 | 52.9 | 59.3 |
| 21 | Sep-10 | 60.8 | 55.5 | 59.2 |
| 21 | Oct-10 | 75.2 | 74.8 | 64.5 |
| 21 | Nov-10 | 60.6 | 55.3 | 59.1 |
| 21 | Dec-10 | 61.5 | 55.5 | 60.2 |
| | | | | |
| 24 | Jan-10 | 59.3 | 40.7 | 59.3 |
| 24 | Feb-10 | 58.2 | 36.4 | 58.1 |
| 24 | Mar-10 | 59.1 | 41.4 | 59.1 |
| 24 | Apr-10 | 59.4 | 41.8 | 59.4 |
| 24 | May-10 | 60.9 | 40.5 | 60.8 |
| 24 | Jun-10 | 62.5 | 38.0 | 62.5 |
| 24 | Jul-10 | 62.9 | 38.5 | 62.9 |
| 24 | Aug-10 | 63.5 | 42.1 | 63.4 |
| 24 | Sep-10 | 62.1 | 34.5 | 62.1 |
| 24 | Oct-10 | 59.9 | 39.3 | 59.9 |
| 24 | Nov-10 | 59.7 | 41.7 | 59.6 |
| 24 | Dec-10 | 59.6 | 41.5 | 59.5 |



| Site | B.B. (1.57 | D.111 | 5 | 5 |
|--------|------------|-------|------------|----------|
| Number | Month/Year | DNL | DNL-ac | DNL-c |
| 25 | Jan-10 | NA | NA | NA |
| 25 | Feb-10 | NA | NA NA | NA |
| 25 | Mar-10 | NA | NA 50.0 | NA |
| 25 | Apr-10 | 64.7 | 59.8 | 63.0 |
| 25 | May-10 | 65.1 | 58.7 | 64.0 |
| 25 | Jun-10 | 64.1 | 58.6 | 62.7 |
| 25 | Jul-10 | 64.1 | 58.5 | 62.8 |
| 25 | Aug-10 | 64.3 | 58.0 | 63.1 |
| 25 | Sep-10 | 62.6 | 55.7 | 61.7 |
| 25 | Oct-10 | 63.1 | 56.0 | 62.1 |
| 25 | Nov-10 | 63.7 | 57.6 | 62.4 |
| 25 | Dec-10 | 64.1 | 57.2 | 63.1 |
| | | Г | | |
| 26 | Jan-10 | 58.5 | 40.5 | 58.4 |
| 26 | Feb-10 | 59.6 | 44.5 | 59.5 |
| 26 | Mar-10 | 60.7 | 36.1 | 60.7 |
| 26 | Apr-10 | 57.2 | 41.5 | 57.1 |
| 26 | May-10 | 59.3 | 45.4 | 59.1 |
| 26 | Jun-10 | 58.1 | 43.1 | 58.0 |
| 26 | Jul-10 | 59.2 | 39.6 | 59.1 |
| 26 | Aug-10 | 70.0 | 38.3 | 70.0 |
| 26 | Sep-10 | 57.5 | 39.6 | 57.5 |
| 26 | Oct-10 | 57.1 | 40.9 | 57.0 |
| 26 | Nov-10 | 55.9 | 40.8 | 55.8 |
| 26 | Dec-10 | 59.3 | 42.3 | 59.2 |
| | | | | |
| 27 | Jan-10 | 59.1 | 47.2 | 58.8 |
| 27 | Feb-10 | 58.9 | 45.2 | 58.7 |
| 27 | Mar-10 | 57.4 | 38.7 | 57.4 |
| 27 | Apr-10 | 56.5 | 43.9 | 56.2 |
| 27 | May-10 | 58.2 | 38.7 | 58.2 |
| 27 | Jun-10 | 56.5 | 35.2 | 56.4 |
| 27 | Jul-10 | 57.7 | 44.1 | 57.5 |
| 27 | Aug-10 | 57.6 | 34.3 | 57.6 |
| 27 | Sep-10 | 57.3 | 42.1 | 57.2 |
| 27 | Oct-10 | 57.7 | 42.8 | 57.6 |
| 27 | Nov-10 | 55.9 | 39.8 | 55.8 |
| 27 | Dec-10 | 59.4 | 44.4 | 59.2 |



| Site Number | Month/Year | DNI | DNI oo | DNI o |
|----------------|------------|-----------------|--------------------|-------------------|
| 28 | Jan-10 | DNL 55.7 | DNL-ac 35.7 | DNL-c 55.6 |
| 28 | Feb-10 | 52.6 | 0.0 | 52.6 |
| 28 | Mar-10 | 52.4 | 34.9 | 52.4 |
| 28 | Apr-10 | 53.7 | 38.9 | 53.6 |
| 28 | May-10 | 59.0 | 34.0 | 59.0 |
| 28 | Jun-10 | 56.0 | 40.3 | 55.9 |
| 28 | Jul-10 | 55.0 | 31.6 | 55.0 |
| 28 | Aug-10 | 59.0 | 32.2 | 59.0 |
| 28 | Sep-10 | 57.1 | 30.7 | 57.1 |
| 28 | Oct-10 | 53.3 | 33.2 | 53.2 |
| 28 | Nov-10 | 51.8 | 26.8 | 51.8 |
| 28 | Dec-10 | 53.5 | 0.0 | 53.5 |
| 20 | Dec-10 | 55.5 | 0.0 | 33.3 |
| 29 | Jan-10 | 57.2 | 44.1 | 57.0 |
| 29 | Feb-10 | 56.1 | 39.1 | 56.0 |
| 29 | Mar-10 | 56.6 | 42.0 | 56.5 |
| 29 | Apr-10 | 56.4 | 41.1 | 56.2 |
| 29 | May-10 | 58.0 | 39.1 | 57.9 |
| 29 | Jun-10 | 60.7 | 41.1 | 60.7 |
| 29 | Jul-10 | 60.3 | 42.5 | 60.3 |
| 29 | Aug-10 | 60.3 | 38.3 | 60.3 |
| 29 | Sep-10 | 59.1 | 38.8 | 59.1 |
| 29 | Oct-10 | 56.9 | 40.6 | 56.8 |
| 29 | Nov-10 | 56.9 | 42.7 | 56.8 |
| 29 | Dec-10 | 57.5 | 43.1 | 57.3 |
| 30 | Jan-10 | 60.0 | 50.0 | 59.5 |
| 30 | Feb-10 | 57.6 | 46.3 | 57.3 |
| 30 | Mar-10 | 59.3 | 45.6 | 59.1 |
| 30 | Apr-10 | 59.2 | 45.8 | 59.0 |
| 30 | May-10 | 61.0 | 44.5 | 60.9 |
| 30 | Jun-10 | 60.0 | 46.8 | 59.8 |
| 30 | Jul-10 | 60.9 | 48.6 | 60.6 |
| 30 | Aug-10 | 63.8 | 47.0 | 63.7 |
| 30 | Sep-10 | 60.9 | 51.3 | 60.4 |
| 30 | Oct-10 | 60.5 | 51.7 | 59.8 |
| 30 | Nov-10 | 60.2 | 50.0 | 59.8 |
| 30 | Dec-10 | 59.8 | 49.2 | 59.4 |



| Site Number | Month/Year | DNL | DNL-ac | DNL-c |
|----------------|------------|------|--------|-------|
| 33 | Jan-10 | 58.2 | 38.7 | 58.2 |
| 33 | Feb-10 | 55.9 | 34.1 | 55.9 |
| 33 | Mar-10 | 58.5 | 42.9 | 58.4 |
| 33 | Apr-10 | 58.0 | 44.3 | 57.8 |
| 33 | May-10 | 59.7 | 42.3 | 59.6 |
| 33 | Jun-10 | 57.2 | 40.9 | 57.1 |
| 33 | Jul-10 | 57.8 | 41.6 | 57.7 |
| 33 | Aug-10 | 58.9 | 39.6 | 58.9 |
| 33 | Sep-10 | 58.0 | 40.5 | 58.0 |
| 33 | Oct-10 | 58.1 | 38.6 | 58.1 |
| 33 | Nov-10 | 58.1 | 41.4 | 58.0 |
| 33 | Dec-10 | 58.6 | 41.2 | 58.5 |
| | | | | |
| 34 | Jan-10 | 64.3 | 59.2 | 62.7 |
| 34 | Feb-10 | 62.7 | 56.2 | 61.6 |
| 34 | Mar-10 | 61.3 | 54.6 | 60.3 |
| 34 | Apr-10 | 60.3 | 55.0 | 58.8 |
| 34 | May-10 | 61.6 | 55.4 | 60.4 |
| 34 | Jun-10 | 61.3 | 57.5 | 59.0 |
| 34 | Jul-10 | 62.6 | 57.5 | 61.1 |
| 34 | Aug-10 | 63.5 | 58.1 | 62.1 |
| 34 | Sep-10 | 62.1 | 58.2 | 59.8 |
| 34 | Oct-10 | 63.2 | 59.9 | 60.4 |
| 34 | Nov-10 | 61.8 | 58.4 | 59.1 |
| 34 | Dec-10 | 65.4 | 61.0 | 63.4 |
| | | | | |
| 35 | Jan-10 | 59.8 | 39.3 | 59.8 |
| 35 | Feb-10 | 59.4 | 40.5 | 59.3 |
| 35 | Mar-10 | 59.9 | 37.0 | 59.8 |
| 35 | Apr-10 | 58.1 | 39.4 | 58.1 |
| 35 | May-10 | 61.4 | 36.0 | 61.4 |
| 35 | Jun-10 | 59.1 | 33.0 | 59.0 |
| 35 | Jul-10 | 58.6 | 39.5 | 58.5 |
| 35 | Aug-10 | 59.5 | 39.4 | 59.4 |
| 35 | Sep-10 | 58.1 | 33.7 | 58.1 |
| 35 | Oct-10 | 57.1 | 33.1 | 57.1 |
| 35 | Nov-10 | 57.5 | 39.4 | 57.4 |
| 35 | Dec-10 | 59.1 | 34.1 | 59.1 |



| Site Number | Month/Year | DNL | DNL-ac | DNL-c |
|----------------|------------|------|--------|-------|
| 36 | Jan-10 | 60.1 | 40.0 | 60.0 |
| 36 | Feb-10 | 59.6 | 37.4 | 59.6 |
| 36 | Mar-10 | 59.8 | 35.7 | 59.8 |
| 36 | Apr-10 | 59.5 | 40.6 | 59.5 |
| 36 | May-10 | 59.6 | 42.0 | 59.5 |
| 36 | Jun-10 | 59.1 | 35.8 | 59.0 |
| 36 | Jul-10 | 59.7 | 35.7 | 59.7 |
| 36 | Aug-10 | 60.8 | 35.1 | 60.8 |
| 36 | Sep-10 | 59.9 | 35.7 | 59.9 |
| 36 | Oct-10 | 59.5 | 37.3 | 59.5 |
| 36 | Nov-10 | 59.8 | 37.1 | 59.7 |
| 36 | Dec-10 | 60.5 | 29.1 | 60.5 |
| | | | | |
| 37 | Jan-10 | 60.9 | 54.5 | 59.7 |
| 37 | Feb-10 | 60.8 | 53.4 | 59.9 |
| 37 | Mar-10 | 59.8 | 55.5 | 57.7 |
| 37 | Apr-10 | 59.0 | 53.1 | 57.7 |
| 37 | May-10 | 61.2 | 52.9 | 60.5 |
| 37 | Jun-10 | 59.7 | 54.4 | 58.3 |
| 37 | Jul-10 | 61.1 | 54.4 | 60.0 |
| 37 | Aug-10 | 61.0 | 55.3 | 59.6 |
| 37 | Sep-10 | 60.4 | 55.3 | 58.8 |
| 37 | Oct-10 | 60.2 | 55.9 | 58.2 |
| 37 | Nov-10 | 59.6 | 55.6 | 57.3 |
| 37 | Dec-10 | 60.5 | 54.7 | 59.2 |
| | | | | |
| 38 | Jan-10 | 65.0 | 52.0 | 64.8 |
| 38 | Feb-10 | 65.3 | 55.0 | 64.8 |
| 38 | Mar-10 | 59.9 | 52.3 | 59.1 |
| 38 | Apr-10 | 57.7 | 46.7 | 57.3 |
| 38 | May-10 | 59.2 | 48.7 | 58.8 |
| 38 | Jun-10 | 56.6 | 47.6 | 56.0 |
| 38 | Jul-10 | 57.7 | 48.0 | 57.2 |
| 38 | Aug-10 | 58.9 | 47.1 | 58.6 |
| 38 | Sep-10 | 58.4 | 49.8 | 57.8 |
| 38 | Oct-10 | 59.0 | 49.5 | 58.5 |
| 38 | Nov-10 | 57.9 | 50.8 | 57.0 |
| 38 | Dec-10 | 64.7 | 54.6 | 64.2 |





| Site | | | | |
|--------|------------|------|--------|-------|
| Number | Month/Year | DNL | DNL-ac | DNL-c |
| 39 | Jan-10 | 60.3 | 48.8 | 60.0 |
| 39 | Feb-10 | 60.6 | 47.4 | 60.4 |
| 39 | Mar-10 | 58.7 | 46.0 | 58.4 |
| 39 | Apr-10 | 57.1 | 41.4 | 57.0 |
| 39 | May-10 | 59.7 | 48.3 | 59.4 |
| 39 | Jun-10 | 59.1 | 36.8 | 59.0 |
| 39 | Jul-10 | 59.2 | 40.0 | 59.1 |
| 39 | Aug-10 | 65.6 | 39.5 | 65.6 |
| 39 | Sep-10 | 58.5 | 42.1 | 58.4 |
| 39 | Oct-10 | 59.5 | 41.0 | 59.5 |
| 39 | Nov-10 | 60.0 | 44.1 | 59.9 |
| 39 | Dec-10 | 68.3 | 54.2 | 68.1 |
| | | | | |
| 40 | Jan-10 | 62.5 | 47.1 | 62.4 |
| 40 | Feb-10 | 58.1 | 45.9 | 57.8 |
| 40 | Mar-10 | NA | NA | NA |
| 40 | Apr-10 | NA | NA | NA |
| 40 | May-10 | NA | NA | NA |
| 40 | Jun-10 | NA | NA | NA |
| 40 | Jul-10 | NA | NA | NA |
| 40 | Aug-10 | NA | NA | NA |
| 40 | Sep-10 | NA | NA | NA |
| 40 | Oct-10 | 73.6 | 40.6 | 73.6 |
| 40 | Nov-10 | 55.4 | 42.8 | 55.1 |
| 40 | Dec-10 | 56.7 | 39.0 | 56.7 |



METROPOLITAN WASHINGTON AIRPORTS AUTHORITY

Figure 4 – Noise Monitors locations around National Airport.



| Site | <u>Location</u> |
|------|---|
| 2 | Cabin John |
| 3 | Langley Forest |
| 4 | Potomac Palisades |
| 5 | Chain Bridge |
| 6 | Georgetown |
| 7 | Rosslyn |
| 8 | Founders Park |
| 9 | Springfield |
| 10 | Fort Foote |
| 11 | Marlan Forest |
| 12 | Tantallon |
| 17 | Southwest, D.C. |
| 19 | North Mt. Vernon |
| 20 | Dumbarton |
| 22 | Avenel |
| 23 | Great Falls Elem. School – removed during |
| | construction project |



| Site | | | | |
|--------|------------|------|--------|-------|
| Number | Month/Year | DNL | DNL-ac | DNL-c |
| 2 | Jan-10 | 57.9 | 40.6 | 57.8 |
| 2 | Feb-10 | 56.7 | 38.0 | 56.6 |
| 2 | Mar-10 | 59.1 | 45.6 | 58.9 |
| 2 | Apr-10 | 60.7 | 44.8 | 60.6 |
| 2 | May-10 | 62.0 | 41.5 | 62.0 |
| 2 | Jun-10 | 60.6 | 42.0 | 60.5 |
| 2 | Jul-10 | 61.6 | 41.4 | 61.5 |
| 2 | Aug-10 | 65.4 | 43.6 | 65.3 |
| 2 | Sep-10 | 62.7 | 41.0 | 62.7 |
| 2 | Oct-10 | 58.7 | 42.5 | 58.6 |
| 2 | Nov-10 | 59.1 | 46.9 | 58.9 |
| 2 | Dec-10 | 58.4 | 46.8 | 58.1 |
| | | | | |
| 3 | Jan-10 | 58.4 | 54.4 | 56.2 |
| 3 | Feb-10 | 56.3 | 46.7 | 55.8 |
| 3 | Mar-10 | 56.3 | 40.0 | 56.2 |
| 3 | Apr-10 | 58.8 | 50.5 | 58.1 |
| 3 | May-10 | 58.6 | 49.2 | 58.0 |
| 3 | Jun-10 | 57.2 | 47.0 | 56.8 |
| 3 | Jul-10 | 60.3 | 48.7 | 60.0 |
| 3 | Aug-10 | 65.1 | 48.9 | 65.0 |
| 3 | Sep-10 | 62.8 | 49.0 | 62.7 |
| 3 | Oct-10 | 58.2 | 48.0 | 57.8 |
| 3 | Nov-10 | 60.8 | 48.7 | 60.5 |
| 3 | Dec-10 | 58.4 | 47.8 | 58.0 |
| | | | | |
| 4 | Jan-10 | 60.1 | 54.1 | 58.9 |
| 4 | Feb-10 | 60.7 | 50.7 | 60.3 |
| 4 | Mar-10 | 61.4 | 55.1 | 60.3 |
| 4 | Apr-10 | 62.1 | 54.7 | 61.3 |
| 4 | May-10 | 62.3 | 54.6 | 61.5 |
| 4 | Jun-10 | 61.7 | 54.4 | 60.8 |
| 4 | Jul-10 | 61.8 | 54.0 | 61.0 |
| 4 | Aug-10 | 64.7 | 54.1 | 64.3 |
| 4 | Sep-10 | 62.5 | 53.7 | 61.9 |
| 4 | Oct-10 | 60.9 | 54.6 | 59.8 |
| 4 | Nov-10 | 61.1 | 56.0 | 59.5 |
| 4 | Dec-10 | 60.3 | 53.8 | 59.2 |



| Site | | | | |
|--------|------------|------|--------|-------|
| Number | Month/Year | DNL | DNL-ac | DNL-c |
| 5 | Jan-10 | 59.9 | 52.5 | 59.1 |
| 5 | Feb-10 | 58.6 | 48.3 | 58.2 |
| 5 | Mar-10 | 60.7 | 53.6 | 59.8 |
| 5 | Apr-10 | 61.5 | 53.3 | 60.7 |
| 5 | May-10 | 61.4 | 54.6 | 60.3 |
| 5 | Jun-10 | 60.8 | 53.9 | 59.8 |
| 5 | Jul-10 | 62.5 | 54.4 | 61.7 |
| 5 | Aug-10 | 65.0 | 52.9 | 64.7 |
| | | | | |
| 6 | Jan-10 | 60.2 | 50.5 | 59.8 |
| 6 | Feb-10 | 60.9 | 50.2 | 60.5 |
| 6 | Mar-10 | 61.2 | 51.3 | 60.7 |
| 6 | Apr-10 | 61.6 | 52.2 | 61.1 |
| 6 | May-10 | 62.1 | 52.6 | 61.5 |
| 6 | Jun-10 | 62.2 | 55.2 | 61.2 |
| 6 | Jul-10 | 64.1 | 59.3 | 62.4 |
| 6 | Aug-10 | 65.9 | 51.4 | 65.8 |
| 6 | Sep-10 | 64.9 | 52.2 | 64.7 |
| 6 | Oct-10 | 64.4 | 54.3 | 64.0 |
| 6 | Nov-10 | 62.4 | 53.5 | 61.8 |
| 6 | Dec-10 | 61.3 | 52.9 | 60.6 |
| | | | | |
| 7 | Jan-10 | 64.8 | 59.4 | 63.3 |
| 7 | Feb-10 | 63.5 | 56.1 | 62.6 |
| 7 | Mar-10 | 67.3 | 61.1 | 66.1 |
| 7 | Apr-10 | 67.7 | 60.6 | 66.8 |
| 7 | May-10 | 65.2 | 60.3 | 63.6 |
| 7 | Jun-10 | 64.4 | 58.9 | 63.0 |
| 7 | Jul-10 | 65.2 | 58.8 | 64.1 |
| 7 | Aug-10 | 68.2 | 59.8 | 67.6 |
| 7 | Sep-10 | 65.2 | 59.1 | 64.0 |
| 7 | Oct-10 | 65.7 | 62.4 | 63.1 |
| 7 | Nov-10 | 63.9 | 60.4 | 61.3 |
| 7 | Dec-10 | 62.8 | 59.0 | 60.5 |



| Site | | | | |
|--------|------------|------|--------|-------|
| Number | Month/Year | DNL | DNL-ac | DNL-c |
| 8 | Jan-10 | 62.1 | 55.1 | 61.1 |
| 8 | Feb-10 | 60.6 | 51.3 | 60.0 |
| 8 | Mar-10 | 62.5 | 56.5 | 61.3 |
| 8 | Apr-10 | 62.7 | 57.2 | 61.2 |
| 8 | May-10 | 62.3 | 56.7 | 60.9 |
| 8 | Jun-10 | 62.3 | 57.7 | 60.4 |
| 8 | Jul-10 | 64.0 | 58.4 | 62.7 |
| 8 | Aug-10 | 65.0 | 61.7 | 62.3 |
| 8 | Sep-10 | 62.1 | 56.9 | 60.5 |
| 8 | Oct-10 | 62.4 | 56.0 | 61.3 |
| 8 | Nov-10 | 63.2 | 57.3 | 61.9 |
| 8 | Dec-10 | 62.0 | 55.0 | 61.0 |
| | | | | |
| 9 | Jan-10 | 59.1 | NA | 59.1 |
| 9 | Feb-10 | 59.3 | NA | 59.3 |
| 9 | Mar-10 | 60.1 | NA | 60.1 |
| 9 | Apr-10 | 61.4 | NA | 61.4 |
| 9 | May-10 | 63.6 | NA | 63.6 |
| 9 | Jun-10 | 62.8 | NA | 62.8 |
| 9 | Jul-10 | 61.4 | NA | 61.4 |
| 9 | Aug-10 | 64.5 | NA | 64.5 |
| 9 | Sep-10 | 62.4 | NA | 62.4 |
| 9 | Oct-10 | 60.7 | NA | 60.7 |
| 9 | Nov-10 | 60.6 | NA | 60.6 |
| 9 | Dec-10 | 59.8 | NA | 59.8 |
| | | | | |
| 10 | Jan-10 | 60.7 | 53.0 | 59.9 |
| 10 | Feb-10 | 59.9 | 50.1 | 59.5 |
| 10 | Mar-10 | 61.5 | 53.6 | 60.7 |
| 10 | Apr-10 | 61.1 | 53.7 | 60.3 |
| 10 | May-10 | 61.7 | 53.1 | 61.1 |
| 10 | Jun-10 | 61.7 | 53.6 | 60.9 |
| 10 | Jul-10 | 61.9 | 53.7 | 61.2 |
| 10 | Aug-10 | 66.0 | 55.2 | 65.6 |
| 10 | Sep-10 | 64.4 | 53.6 | 64.1 |
| 10 | Oct-10 | 76.3 | 54.8 | 76.2 |
| 10 | Nov-10 | 62.0 | 52.9 | 61.4 |
| 10 | Dec-10 | 61.8 | 54.0 | 61.0 |



| Site | Site | | | | |
|--------|------------|------|--------|-------|--|
| Number | Month/Year | DNL | DNL-ac | DNL-c | |
| 11 | Jan-10 | 55.4 | 42.1 | 55.2 | |
| 11 | Feb-10 | 54.4 | 39.5 | 54.2 | |
| 11 | Mar-10 | 56.8 | 45.5 | 56.5 | |
| 11 | Apr-10 | 62.1 | 52.3 | 61.6 | |
| 11 | May-10 | 66.8 | 49.6 | 66.7 | |
| 11 | Jun-10 | 57.0 | 44.6 | 56.7 | |
| 11 | Jul-10 | 60.9 | 44.7 | 60.8 | |
| 11 | Aug-10 | 62.6 | 44.2 | 62.6 | |
| 11 | Sep-10 | NA | NA | NA | |
| 11 | Oct-10 | 56.9 | 44.8 | 56.6 | |
| 11 | Nov-10 | 57.7 | 48.8 | 57.1 | |
| 11 | Dec-10 | 58.3 | 45.3 | 58.1 | |
| | | | | _ | |
| 12 | Jan-10 | 57.9 | 47.2 | 57.5 | |
| 12 | Feb-10 | 57.9 | 48.6 | 57.4 | |
| 12 | Mar-10 | 57.6 | 39.9 | 57.5 | |
| 12 | Apr-10 | 58.5 | 48.4 | 58.1 | |
| 12 | May-10 | 60.3 | 47.4 | 60.0 | |
| 12 | Jun-10 | 58.7 | 44.8 | 58.6 | |
| 12 | Jul-10 | 60.3 | 45.9 | 60.2 | |
| 12 | Aug-10 | 63.6 | 47.8 | 63.5 | |
| 12 | Sep-10 | 61.7 | 44.1 | 61.6 | |
| 12 | Oct-10 | 59.0 | 44.9 | 58.8 | |
| 12 | Nov-10 | 58.1 | 46.6 | 57.8 | |
| 12 | Dec-10 | 58.5 | 46.3 | 58.3 | |
| | | | | | |
| 17 | Jan-10 | 64.1 | 54.8 | 63.6 | |
| 17 | Feb-10 | 65.0 | 56.2 | 64.4 | |
| 17 | Mar-10 | 62.5 | 55.1 | 61.7 | |
| 17 | Apr-10 | 63.6 | 57.0 | 62.5 | |
| 17 | May-10 | 62.8 | 54.1 | 62.2 | |
| 17 | Jun-10 | 62.0 | 54.7 | 61.1 | |
| 17 | Jul-10 | 63.2 | 55.8 | 62.4 | |
| 17 | Aug-10 | 61.4 | 53.0 | 60.7 | |
| 17 | Sep-10 | 61.3 | 52.6 | 60.7 | |
| 17 | Oct-10 | 62.5 | 54.8 | 61.6 | |
| 17 | Nov-10 | 62.6 | 55.2 | 61.7 | |
| 17 | Dec-10 | 64.7 | 57.3 | 63.8 | |



| Site | | | | |
|---------|-------------------|------|--------|-------|
| Number | Number Month/Year | | DNL-ac | DNL-c |
| 19 | Jan-10 | 55.3 | 35.7 | 55.2 |
| 19 | Feb-10 | 53.3 | 18.1 | 53.3 |
| 19 | Mar-10 | 48.7 | 24.9 | 48.6 |
| 19 | Apr-10 | 46.2 | NA | 46.2 |
| 19 | May-10 | 51.2 | NA | 51.2 |
| 19 | Jun-10 | 51.8 | NA | 51.8 |
| 19 | Jul-10 | 48.6 | NA | 48.6 |
| 19 | Aug-10 | 69.1 | 65.2 | 66.8 |
| 19 | Sep-10 | 68.8 | 55.9 | 68.5 |
| 19 | Oct-10 | 64.4 | 51.5 | 64.2 |
| 19 | Nov-10 | 57.0 | 38.1 | 56.9 |
| 19 | Dec-10 | 59.5 | 42.9 | 59.4 |
| | | | | |
| 20 | Jan-10 | 56.6 | 44.8 | 56.3 |
| 20 | Feb-10 | 53.7 | 30.4 | 53.7 |
| 20 | Mar-10 | 55.5 | 37.7 | 55.4 |
| 20 | Apr-10 | 56.3 | 47.7 | 55.7 |
| 20 | May-10 | 57.5 | 45.4 | 57.3 |
| 20 | Jun-10 | 56.1 | 44.8 | 55.8 |
| 20 | Jul-10 | 60.5 | 46.0 | 60.4 |
| 20 | Aug-10 | 64.0 | 48.3 | 63.9 |
| 20 | Sep-10 | 59.8 | 42.0 | 59.7 |
| 20 | Oct-10 | 56.3 | 45.4 | 55.9 |
| 20 | Nov-10 | 55.5 | 46.1 | 55.0 |
| 20 | 20 Dec-10 | | 38.6 | 54.4 |
| <u></u> | | | | |
| 22 | Jan-10 | 55.2 | 40.7 | 55.1 |
| 22 | Feb-10 | 57.6 | 42.8 | 57.5 |
| 22 | Mar-10 | | 36.2 | 55.9 |
| 22 | 2 Apr-10 | | 44.3 | 55.1 |
| 22 | May-10 | 57.7 | 44.3 | 57.5 |
| 22 | Jun-10 | 56.0 | 42.2 | 55.8 |
| 22 | Jul-10 | 58.2 | 44.0 | 58.0 |
| 22 | Aug-10 | 59.1 | 51.8 | 58.2 |
| 22 | Sep-10 | 56.5 | 43.3 | 56.3 |
| 22 | Oct-10 | 54.6 | 39.6 | 54.4 |
| 22 | Nov-10 | 54.5 | 40.2 | 54.4 |
| 22 | Dec-10 | 54.1 | 38.1 | 54.0 |

Complaint Summary

In 2010, the Metropolitan Washington Airports Authority recorded a total of 798 aircraft noise complaints from 180 residents. For Dulles Airport, there were 606 complaints from 100 callers. At Dulles, 423 of these 603 complaints came from 5 callers.

For National Airport, there were 197 complaints from 82 callers and 61 of these complaints came from 5 callers. The following three (3) pages provide an analysis of complaints received in 2010 by the Airports Authority Noise Office.

2010 Noise Complaints received at Washington Dulles International Airport

| <u>City</u> | <u>Callers</u> | <u>Complaints</u> |
|-------------|----------------|-------------------|
| Aldie | 8 | 183 |
| Ashburn | 30 | 45 |
| Brambleton | 1 | 1 |
| Broadlands | 2 | 2 |
| Centreville | 7 | 21 |
| Chantilly | 15 | 157 |
| Clifton | 5 | 135 |
| Fairfax | 3 | 10 |
| Gainesville | 1 | 2 |
| Great Falls | 1 | 2 2 2 |
| Haymarket | 1 | 2 |
| Herndon | 5 | 14 |
| Lansdowne | 1 | 1 |
| Leesburg | 1 | 1 |
| Marshall | 1 | 1 |
| Middleburg | 1 | 5 |
| Oak Hill | 1 | 1 |
| Oakton | 5 | 25 |
| Purcerville | 1 | 1 |
| Reston | 3 | 4 |
| South | 1 | 1 |
| Riding | | |
| Sterling | 6 | 22 |
| Total: | 100 | 636 |



2010 Noise Complaints received at Ronald Reagan Washington National Airport

| <u>Callers</u> | Complaints |
|----------------|--|
| 8 | 32 |
| | 65 |
| | 4 |
| 1 | 1 |
| 4 | 4 |
| | |
| 1 | 1 |
| 1 | 1 |
| 7 | 35 |
| 1 | 1 |
| 1 | 8 |
| 19 | 45 |
| 82 | 197 |
| | 8 36 3 1 4 1 1 7 1 |



2010 Noise Complaint Statistics

Washington Dulles International Airport

| Number of Callers | Complaints per Caller | Number of Complaints | Percent of All Callers | Percent of All Complaints |
|-------------------|-----------------------|----------------------|------------------------|------------------------------|
| 58 | 1 | 58 | 58% | 9.1% |
| 21 | 2 | 42 | 21% | 6.6% |
| 2 | 3 | 6 | 2% | 0.9% |
| 2 | 4 | 8 | 2% | 1.3% |
| 4 | 5 | 20 | 4% | 3.1% |
| 1 | 6 | 6 | 1% | 0.9% |
| 2 | 7 | 14 | 2% | 2.2% |
| 1 | 8 | 8 | 1% | 1.3% |
| 1 | 9 | 9 | 1% | 1.4% |
| 1 | 10 | 10 | 1% | 1.6% |
| 1 | 15 | 15 | 1% | 2.4% |
| 1 | 17 | 17 | 1% | 2.7% |
| 1 | 57 | 57 | 1% | 9.0% |
| 1 | 67 | 67 | 1% | 10.5% |
| 1 | 77 | 77 | 1% | 12.1% |
| 1 | 94 | 94 | 1% | 14.8% |
| 1 | 128 | 128 | 1% | 20.1% |

Ronald Reagan Washington National Airport

| Number of Callers | Complaints per Caller | Number of Complaints | Percent of all Callers | Percent of All Complaints |
|-------------------|-----------------------|----------------------|------------------------|------------------------------|
| 14 | 2 | 28 | 17% | 14.2% |
| 3 | 3 | 9 | 4% | 4.6% |
| 3 | 4 | 12 | 4% | 6.1% |
| 2 | 5 | 10 | 2% | 5.1% |
| 3 | 6 | 18 | 4% | 9.1% |
| 2 | 7 | 14 | 2% | 7.1% |
| 1 | 8 | 8 | 1% | 4.1% |
| 1 | 20 | 20 | 1% | 10.2% |
| 1 | 26 | 26 | 1% | 13.2% |