2017 Annual Noise Report
DeKalb Peachtree Airport
Noise Information Office

Prepared by: Nate Schattner, Airport Noise & Environmental Analyst
February 12, 2018
Introduction

The DeKalb Peachtree Airport (PDK) opened as Naval Air Station Atlanta on March 22, 1941 following the use of the land as a World War I training camp (Camp Gordon). PDK became a civilian airport in February of 1959.

As the metropolitan Atlanta area exploded in residential, commercial, and industrial growth throughout the past few decades, so did PDK.

The Good Neighbor Program was developed to reduce aircraft noise levels and disturbances in the vicinity of the airport using a variety of approaches. The program focuses on engaging in constructive dialogue between pilots & aircraft owners and members of the community, so that each party understands and respects the other’s concerns. Education is a key principle of the Good Neighbor Program.

The Airport Noise staff responds to noise complaints and takes appropriate action by verifying the source of the complaints using our Noise Operating Monitoring System (NOMS).

We continue to work daily with our community, pilots, and the Federal Aviation Administration (FAA) in an effort to lesson the impact of aircraft operations on our neighbors.

This report contains a summary of airport operations, noise disturbances, and overall comments on an annual basis. For more information on PDK’s Good Neighbor Program, please contact the Noise Information Office at (770) 936-5440 or visit the airport’s web site at: www.pdkairport.org.
Why is PDK so busy?

- Location, Location, Location! PDK is located only 8 miles from downtown Atlanta and even closer to many of Atlanta’s suburbs, such as Buckhead, Brookhaven, Chamblee, Doraville, Dunwoody, Peachtree Corners, Norcross, Sandy Springs, Tucker, Decatur, etc. Many businesses have offices, stores, distribution centers, and manufacturing plants in the ever-growing metropolitan Atlanta area.

- As ATL, or the Hartsfield-Jackson Atlanta International Airport (the world’s busiest airport), is full of heavy airline and cargo traffic, PDK is the ideal location for other forms of aviation, known as General Aviation.

- What types of general aviation operate at PDK?
  - Charter Services
  - Business/Corporate
  - Flight Schools (PDK has 10 fixed-wing and 3 helicopter flight schools, which is an unusually high amount for any airport)
  - Medical Transportation (MedEvac, organ, tissue & blood transport, and pharmaceuticals.)
  - Police & Firefighting
  - News
  - Tours & Sightseeing
  - Recreational Aviation

- PDK is Georgia’s 2nd busiest-airport, surpassed only by ATL.
Good Neighbor Program Noise Reduction Practices

† **High Noise Events** – A single, high noise event is an aircraft operation over:
  † 90.0 dBA Lmax registered by any of the three southern noise monitors (NMS 2-4)
  † 93.0 dBA Lmax by PDK’s northern noise monitor (NMS 1).
  † Operators who exceed the threshold will be contacted by Airport Management.

† **Voluntary Night Curfew** – All operators are strongly encouraged not to operate between the hours of 11:00 p.m. to 6:00 a.m. local time. With the exception of medical & emergency operators, all owners will receive written notice from the airport if operations are conducted during the voluntary curfew period.

† **Traffic Pattern Altitudes** –
  † 2,000’ Mean Sea Level (MSL) or 1,000’ Above Ground Level (AGL) for Single Engine Aircraft
  † 2,500’ MSL (1,500 AGL) for Multi Engine/Turbine

† **Touch-and-Go Operations** – The practice of touch-and-go operations at outlying fields whenever possible is highly encouraged (*when practical*). These operations are discouraged from 10:00 p.m. to 7:00 a.m. daily and Sundays between 11:00 a.m. and 12 noon. It is recommend that all pilots climb to at least 500 feet above ground level (AGL) prior to turning into the crosswind. Aircraft should vary the pattern of flight so as not to overfly the same area each time.

† **Prior Permission Required (PPR)** – Aircraft with a certificated maximum take-off weight (MTOW) of 75,000 lbs or higher and all military aircraft must contact Airport Management prior to landing at PDK.
**Good Neighbor Program Noise Reduction Practices**

- **Run-ups** - Maintenance and pre-flight run-ups are discouraged from 10:00 p.m. to 7:00 a.m. Specific areas in the center of the airport are designated for run-up operations.

- **Use of Reverse-Thrust** – Due to the noise generated by aircraft utilizing reverse-thrust upon landing, particularly during night hours, Airport Management recommends minimizing the use of reverse thrust (within the bounds of safety).

- **Climb Profile** – Pilots should fly Vx or Vy (Vx is preferred) at max power until reaching the airport boundary. Upon crossing the airport boundary, pilots should slightly reduce power while maintaining a safe rate of climb until reaching 3000’ MSL, resuming normal climb procedures thereafter.

- **Preferential Runway Use** – When the Air Traffic Control (ATC) Tower is closed and safety permits, Runway 3R is preferred for departures.

- **Final Descent** – Commensurate with safety procedures, all aircraft should maintain 2000’ MSL until reaching the final descent point. Try low power or gliding landings and avoid low, dragged-in approaches (jet aircraft may use NBAA procedures instead).

- **Helicopter Procedures** – All helicopter operators are encouraged not to over-fly residential neighbors and to use highways, MARTA, and/or CSX railroad tracks into and out of the airport when practical and ATC permits.
Decibels (dB) are the unit of measurement on the loudness scale. Decibels that a human can hear are called “A-weighted” or “dBA” on the sound frequency scale.

The decibel scale is logarithmic, not linear. The smallest detectable change is typically 3 dB for a human. A change of 10 dB seems twice as loud.

Lmax – is the maximum A-weighted sound level for a given event – the highest level registered on the scale or meter; is not related to the duration for the event.

LDN (DNL) – is a 24-hour time-averaged sound exposure level (SEL). It includes a 10 dBA penalty for noise events occurring during the nighttime hours of 10p.m. - 7a.m. It is the noise metric of choice in aircraft sound level measurement per the Federal Aviation Administration. DNL is also used to define noise contours of equal exposure. All Federal agencies have adopted DNL (LdnA) as the metric for airport noise analysis. (DNL stands for Day-Night Average Level)

SEL is the total sound energy of a single sound event compressed into a reference duration of one second

Leq – is the steady A-weighted sound level over any specified period. It is used to identify the average sound level over a given period of time.
Common Complainant Concerns of 2017

✩ Flight School Operations/Pattern work (areas west of the airport)
  ✩ Memo sent on November 3rd from Airport Administration reminding flight schools of best noise abatement practices and soliciting feedback for improvement

✩ Helicopter Operations (areas west of the airport)

✩ ILS 21L Approach
  ✩ Specifically, areas of Fulton County (e.g., Alpharetta & John’s Creek) and Gwinnett County (Norcross/Peachtree Corners)
Total Annual Operations 1970 – 2017
Past 47 Years

Number of Operations vs. Year
- Total Operations from 1970 to 2017
- Average Operations 1970-2017

- Year 1970: 159,066
- Year 1975: 208,509
- Year 1980: 159,066
- Year 1985: 208,509
- Year 1990: 208,509
- Year 1995: 208,509
- Year 2000: 208,509
- Year 2005: 208,509
- Year 2010: 208,509
- Year 2015: 208,509

Graphs show the trend of annual operations over the past 47 years, with a peak in 1980 followed by a decline towards 2017.
Snapshot of Past 10 Years
Annual Operations vs Average

Annual Operations

Year


Annual Operations

187,006 151,714 160,948 155,189 144,912 144,555 140,548 138,251 158,144 159,066

Moving Average since 1970
Average Operations of Past 10 Years (2008-2017); 154,033 Operations
2017 Aircraft Operations Summary - By type

<table>
<thead>
<tr>
<th>2017</th>
<th>JAN</th>
<th>FEB</th>
<th>MAR</th>
<th>APR</th>
<th>MAY</th>
<th>JUN</th>
<th>JUL</th>
<th>AUG</th>
<th>SEP</th>
<th>OCT</th>
<th>NOV</th>
<th>DEC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Itinerant</td>
<td>8,418</td>
<td>9,426</td>
<td>10,087</td>
<td>10,561</td>
<td>9,898</td>
<td>9,311</td>
<td>9,679</td>
<td>9,921</td>
<td>10,926</td>
<td>10,209</td>
<td>10,492</td>
<td>8,275</td>
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<tr>
<td>Local</td>
<td>2,597</td>
<td>3,406</td>
<td>3,415</td>
<td>3,277</td>
<td>3,547</td>
<td>3,439</td>
<td>4,564</td>
<td>4,800</td>
<td>3,540</td>
<td>2,994</td>
<td>3,983</td>
<td>2,301</td>
</tr>
<tr>
<td>Voluntary Curfew Ops</td>
<td>282</td>
<td>310</td>
<td>353</td>
<td>329</td>
<td>396</td>
<td>318</td>
<td>263</td>
<td>343</td>
<td>493</td>
<td>400</td>
<td>290</td>
<td>281</td>
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<tr>
<td>Total Operations</td>
<td>11,015</td>
<td>12,832</td>
<td>13,502</td>
<td>13,838</td>
<td>13,445</td>
<td>12,750</td>
<td>14,243</td>
<td>14,721</td>
<td>14,466</td>
<td>13,203</td>
<td>14,475</td>
<td>10,576</td>
</tr>
</tbody>
</table>
Monthly Aircraft Operations Summary

Month | 2016 | 2017
-----|------|------
JAN  |      |      
FEB  |      |      
MAR  |      |      
APR  |      |      
MAY  |      |      
JUN  |      |      
JUL  |      |      
AUG  |      |      
SEP  |      |      
OCT  |      |      
NOV  |      |      
DEC  |      |      

Monthly Operations
Noise Complaints by Month
2016-2017

<table>
<thead>
<tr>
<th>Month</th>
<th>January</th>
<th>February</th>
<th>March</th>
<th>April</th>
<th>May</th>
<th>June</th>
<th>July</th>
<th>August</th>
<th>September</th>
<th>October</th>
<th>November</th>
<th>December</th>
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<tbody>
<tr>
<td>2016</td>
<td>45</td>
<td>110</td>
<td>60</td>
<td>30</td>
<td>50</td>
<td>70</td>
<td>150</td>
<td>130</td>
<td>200</td>
<td>110</td>
<td>80</td>
<td>90</td>
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<tr>
<td>2017</td>
<td>50</td>
<td>120</td>
<td>70</td>
<td>40</td>
<td>60</td>
<td>80</td>
<td>200</td>
<td>150</td>
<td>250</td>
<td>130</td>
<td>90</td>
<td>100</td>
</tr>
</tbody>
</table>
2017 Voluntary Curfew Operations by Month

Voluntary Curfew Operations

Month:
- JAN
- FEB
- MAR
- APR
- MAY
- JUN
- JUL
- AUG
- SEP
- OCT
- NOV
- DEC

Voluntary Curfew Operations

2017 Average Voluntary Curfew Ops (338)
Annual Voluntary Curfew Ops Ratio

- Total 2017 Operations: 159,066
- All Other Ops: 155,008 (97%)
- Voluntary Curfew Ops: 4,058 (3%)
Nighttime Operations are operations occur when PDK’s FAA tower is closed. An operation qualifies as a nighttime operation if it occurs between the hours of 11pm-6:30 am Monday-Friday, and 11pm-7:00am Saturday – Sunday. Voluntary curfew operations occur between 11pm-6:00am daily.
High Noise Events 2014-2017

Year

2014: 142
2015: 165
2016: 105
2017: 150

Total 2017 Operations: 159,066
2017 Annual Directional Use of Runways

- **MARTA**: 44%
- **Clairmont**: 51%
- **Buford Hwy**: 5%
- **Cham.-Tuck.**: 44%
Annual Noise Levels at Noise Monitors

NMS 1: 62.1 dBA
NMS 2: 48.8 dBA
NMS 3: 55.7 dBA
NMS 4: 48.6 dBA
Community Outreach
Contact Information
How to reach us?

PDK Noise Analyst: Nate Schattner
Airport Phone: (770) 936-5440
Noise Hotline: (770) 936-5442

E-mail: pdknoise@dekalbcountyga.gov
PDK Website: pdkairport.org

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