

MAY 2015



2013/14 AIRCRAFT OPERATIONS COUNTING PROGRAM

**PENNRIDGE
AIRPORT, PA**

**QUAKERTOWN
AIRPORT, PA**

**TRENTON-
ROBBINSVILLE
AIRPORT, NJ**



The Delaware Valley Regional Planning Commission is dedicated to uniting the region's elected officials, planning professionals, and the public with a common vision of making a great region even greater. Shaping the way we live, work, and play, DVRPC builds consensus on improving transportation,

promoting smart growth, protecting the environment, and enhancing the economy. We serve a diverse region of nine counties: Bucks, Chester, Delaware, Montgomery, and Philadelphia in Pennsylvania; and Burlington, Camden, Gloucester, and Mercer in New Jersey. DVRPC is the federally designated Metropolitan Planning Organization for the Greater Philadelphia Region — leading the way to a better future.



The symbol in our logo is adapted from the official DVRPC seal and is designed as a stylized image of the Delaware Valley. The outer ring symbolizes the region as a whole while the

diagonal bar signifies the Delaware River. The two adjoining crescents represent the Commonwealth of Pennsylvania and the State of New Jersey.

DVRPC is funded by a variety of funding sources including federal grants from the U.S. Department of Transportation's Federal Highway Administration (FHWA) and Federal Transit Administration (FTA), the Pennsylvania and New Jersey departments of transportation, as well as by DVRPC's state and local member governments. The authors, however, are solely responsible for the findings and conclusions herein, which may not represent the official views or policies of the funding agencies.

DVRPC fully complies with Title VI of the Civil Rights Act of 1964 and related statutes and regulations in all programs and activities. DVRPC's website (www.dvrpc.org) may be translated into multiple languages. Publications and other public documents can be made available in alternative languages and formats, if requested. For more information, please call (215) 238-2871.

Acknowledgements

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Executive Summary

The Delaware Valley Regional Planning Commission (DVRPC) has conducted aircraft operations counts at the non-towered airports in the 12-county, four-state Delaware Valley Regional Airport System Plan area (RASP) since 1986 (see RASP map on page 2). In 2012, the Federal Aviation Administration (FAA) continued funding this program to include three of the 20 non-towered facilities (all general aviation airports and all reliever airports except Northeast Philadelphia are non-towered). From April 2013 to March 2014, the following airports were surveyed: Quakertown and Penridge in Pennsylvania and Trenton-Robbinsville in New Jersey.

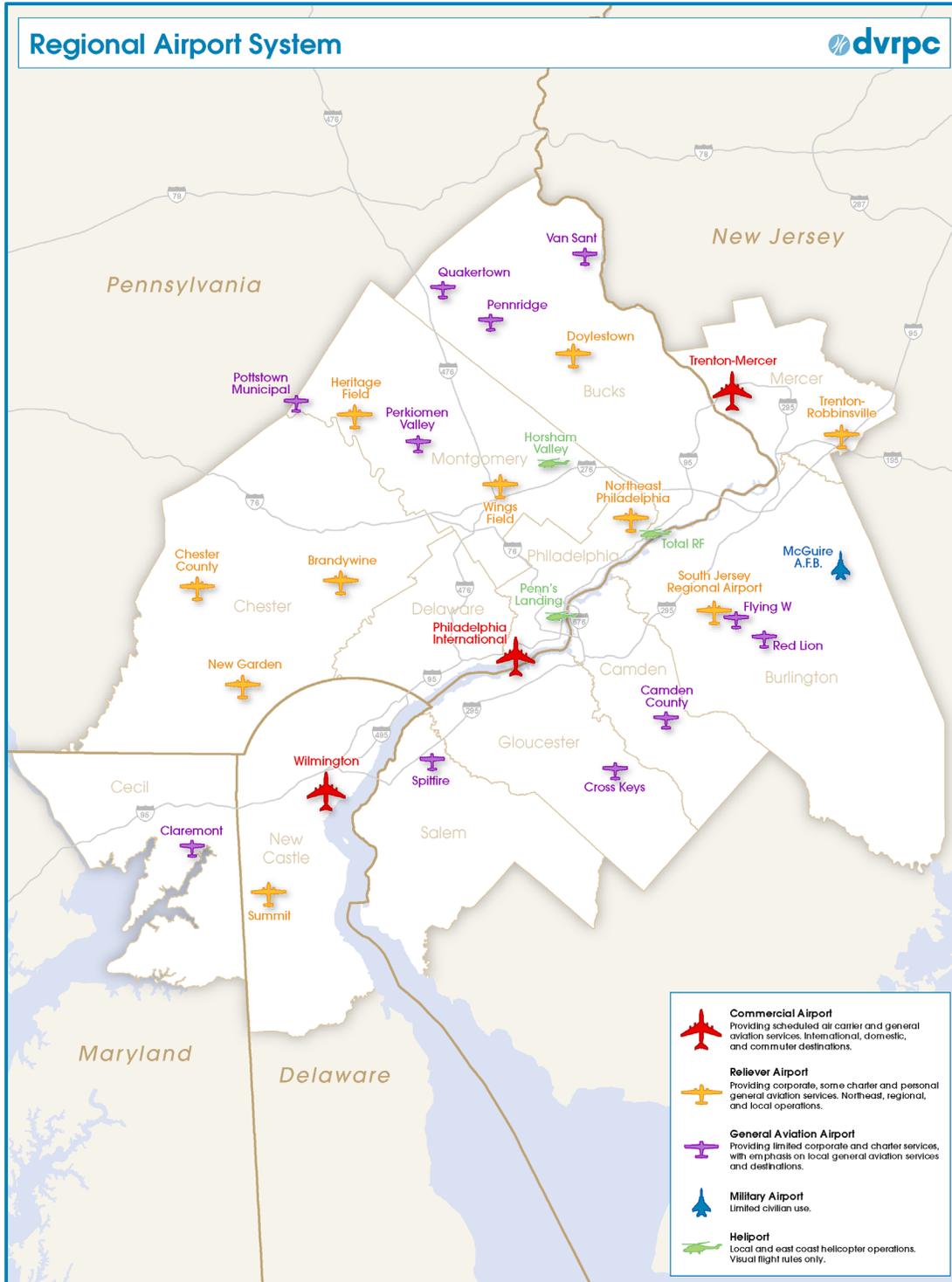
This report uses the Larson Davis Acoustic Counter Software to monitor takeoff data at each airport for eight weeks apportioned throughout the year. This data is reviewed and compiled into Airport Activity Reports. The Airport Activity Reports are then used to project seasonal and annual takeoff and landing totals, as estimated by DVRPC counting software, for each surveyed airport during 2013/2014.

In the 2013/2014 counting period, there were 58,315 annual aircraft operations estimated for the three regional airports. The DVRPC report for the same three airports in the 2010/2011 counting program had 62,404 annual aircraft operations, which indicates a 7 percent decrease in total operations over a three-year period. The decrease was primarily the result of continual high aviation fuel charges, national economic conditions, and a growing pilot shortage.

Historic counting data since 1986 is available through the DVRPC Office of Freight and Aviation Planning web site at www.dvrpc.org/Aviation/AircraftTrafficCounts.htm.

2013/14 Aircraft Operations Counting Program

Figure ES-1: Delaware Valley Regional Airport System



Annual Operations Summaries

As an integral part of its ongoing aviation planning efforts, the Delaware Valley Regional Planning Commission (DVRPC) has conducted aircraft operations counts at non-towered airports in the region since 1986. In 2012, the Federal Aviation Administration (FAA) continued funding this program to include three of 20 DVRPC Regional Airport System Plan facilities. From April 2013 to March 2014, the following airports were surveyed: Quakertown and Pennridge in Pennsylvania and Trenton-Robbinsville in New Jersey.

The Annual Operations Summaries provide tabular and graphical displays of annual aircraft operations for fixed-wing aircraft, helicopters, and their combined totals (see pp. 4–6). The data is projected based on the daily flight counts collected during eight one-week sampling periods throughout the year.

The following procedure is applied to all counts during the entire program. Eight one-week counting surveys are taken over the course of one year. These counting surveys are scheduled twice each season at four- to six-week intervals for each airport. Keeping the intervals between setting and resetting of the counters at each airport as consistent as possible ensures the most accurate statistical operations estimate. At the start of each interval, a DVRPC staff member selects a location near the airport runway to base an LDL 820 Sound Level Meter. The meter is activated by set minimum noise levels only during aircraft takeoff activity. The data collected is saved to the LDL 820 memory, and the staff member retrieves the meter after each week of counts.

After equipment retrieval, the data is downloaded to the Aircraft Counting System software and then checked manually for event-related errors. The Aircraft Counting System report displays weekly aircraft takeoffs (since most propeller landings are nearly silent) by hour and day for each week counted. Finally, the data is entered into and extrapolated by DVRPC counting formulas, which estimate seasonal and annual total takeoffs and landings.

The result shows a total of 58,315 annual aircraft operations for these three airports. The 2010/2011 counting report had 62,404 annual aircraft operations at these three facilities, a decrease of seven percent. The decrease was primarily the result of continual high aviation fuel charges, national economic conditions, and qualified pilot shortages.

During this same timeframe, there was an increase in helicopter operations, primarily the result of a new helicopter maintenance tenant at Quakertown that increased helicopter operations from 1,043 in 2010/2011 to 2,400 in 2013/2014.

2013/14 Aircraft Operations Counting Program

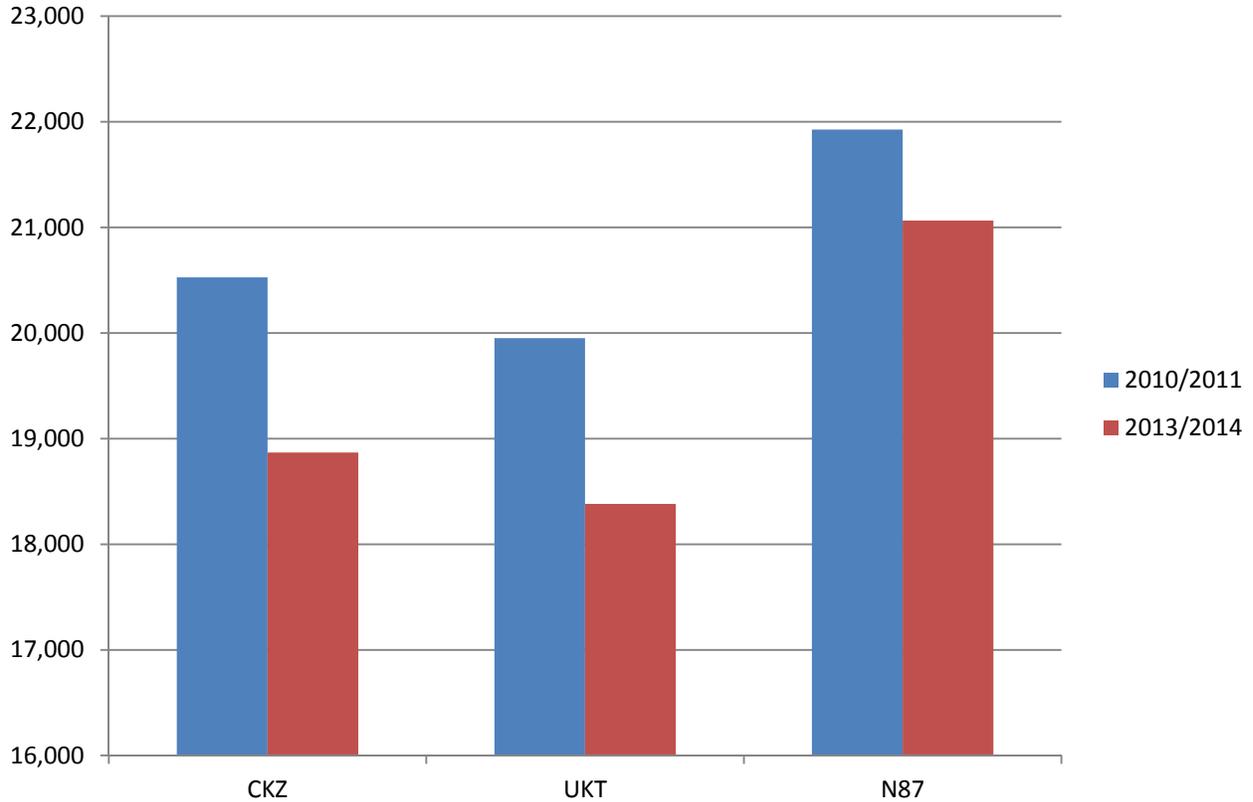
Annual Aircraft Operations

Table 1: 2010/2011 Total Counts vs. 2013/2014 Total Counts

Airport	2010/2011 Operations	2013/2014 Operations	Absolute Change	Percent Change
Pennridge Airport (CKZ)	20,527	18,869	-1,658	-8%
Quakertown Airport (UKT)	19,951	18,382	-1,569	-8%
Trenton-Robbinsville Airport (N87)	21,926	21,064	-862	-4%
Total Operations	62,404	58,315	-4,089	-7%

Source: DVRPC

Figure 1: 2010/2011 Total Counts vs. 2013/2014 Total Counts



Source: DVRPC

2013/14 Aircraft Operations Counting Program

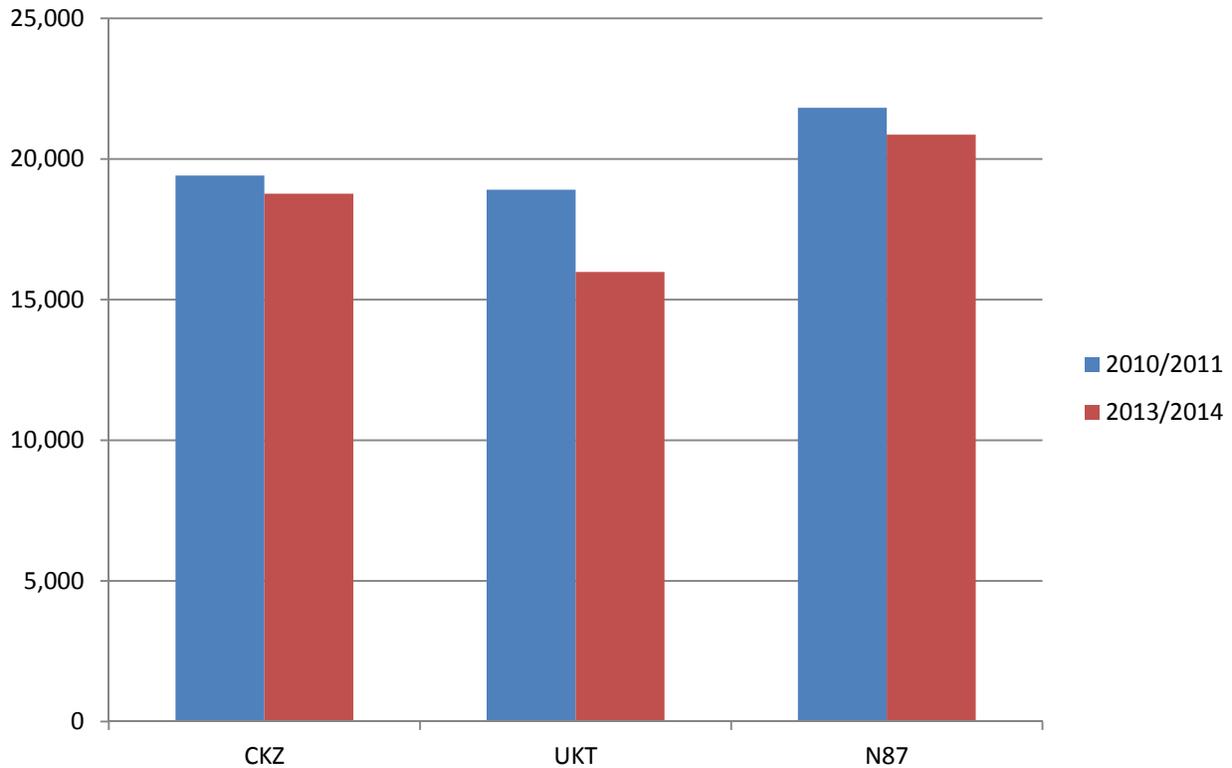
Annual Fixed-Wing Operations

Table 2: 2010/2011 Fixed-Wing Counts vs. 2013/2014 Fixed-Wing Counts

Airport	2010/2011 Operations	2013/2014 Operations	Absolute Change	Percent Change
Pennridge Airport (CKZ)	19,413	18,765	-648	-3%
Quakertown Airport (UKT)	18,908	15,982	-2,926	-15%
Trenton-Robbinsville Airport (N87)	21,820	20,864	-956	-4%
Total Operations	60,141	55,611	-4,530	-8%

Source: DVRPC

Figure 2: 2010/2011 Fixed-Wing Counts vs. 2013/2014 Fixed-Wing Counts



Source: DVRPC

2013/14 Aircraft Operations Counting Program

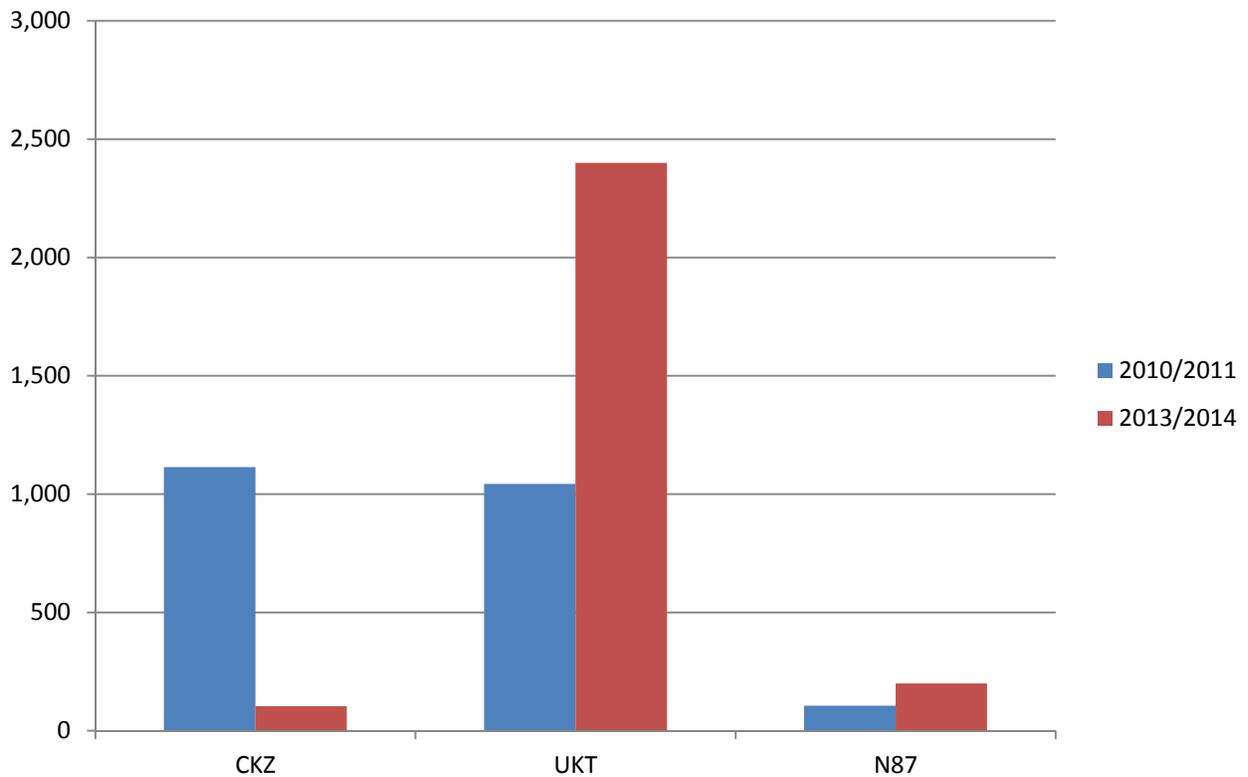
Annual Helicopter Operations

Table 3: 2010/2011 Helicopter Counts vs. 2013/2014 Helicopter Counts

Airport	2010/2011 Operations	2013/2014 Operations	Absolute Change	Percent Change
Pennridge Airport (CKZ)	1,114	104	-1,010	-91%
Quakertown Airport (UKT)	1,043	2,400	1,357	130%
Trenton-Robbinsville Airport (N87)	106	200	94	89%
Total Operations	2,263	2,704	441	19%

Source: DVRPC

Figure 3: 2010/2011 Helicopter Counts vs. 2013/2014 Helicopter Counts



Source: DVRPC

Airport Activity Reports

This section of the report displays the weekly activity data collected during the eight-week counting surveys conducted for each of the three individual airports. Each airport summary provides a brief narrative along with an inventory of based aircraft. The based aircraft data is provided by airport management; when DVRPC has been unable to obtain this information directly from airport management, we have used data from FAA Form 5010, Airport Master Record, available on AirNav.com for the particular airport.

Airport activity summaries list estimated annual flight operations and a seasonal operations chart. Daily takeoffs collected from each airport are displayed in spreadsheet format by season, date, and time of day. All weekly activity data pages express only aircraft takeoffs and do not include the landing phase of flight due to the near silence of propeller landings. At the bottom of each weekly activity data page, subtotals of aircraft activity are also expressed as takeoffs only. In the activity summary at the beginning of each Airport Activity Report, takeoffs are converted into estimated annual and seasonal operations, which include takeoffs and landings, by the DVRPC counting software.

Helicopter data is not collected by the Acoustic Counter Software devices but is prorated from the annual estimate given by the airport operator at the completion of the counting cycle, and it is only expressed as a subtotal for each day.

2013/14 Aircraft Operations Counting Program

Penncast Airport (CKZ)

Bucks County

Perkasie, PA 18944

Runway Orientation: 8/26

Runway Length: 4,215 ft.

Table 4: Penncast Airport (CKZ) Based Aircraft

Based Aircraft Fleet Mix	
Single Engine	39
Multi-engine	3
Jet	2
Helicopter	1
Glider	0
Total	45

Source: Penncast Airport

Penncast Airport is a privately owned, public use airport located one mile north of Perkasie, in Bucks County. Traffic at Penncast Airport declined eight percent since the previous count in 2010/2011. This decline in operations is attributed to the high cost of aviation fuel and a decline in flight training operations resulting from the death of the long-time operator of the flight school.

Winter flight operations were negatively affected by the extreme snowfall this past winter. Penncast Airport was hit especially hard as it does not own snow removal equipment and relies on private contractors for this work. Costs and availability of private contractors during the abnormally snowy winter became an issue for airport management.

Figure 4: Pennridge Airport (CKZ) Aerial Photo



2013/14 Aircraft Operations Counting Program

DVRPC Aircraft Counting Program

Airport: Pennridge Airport (CKZ)

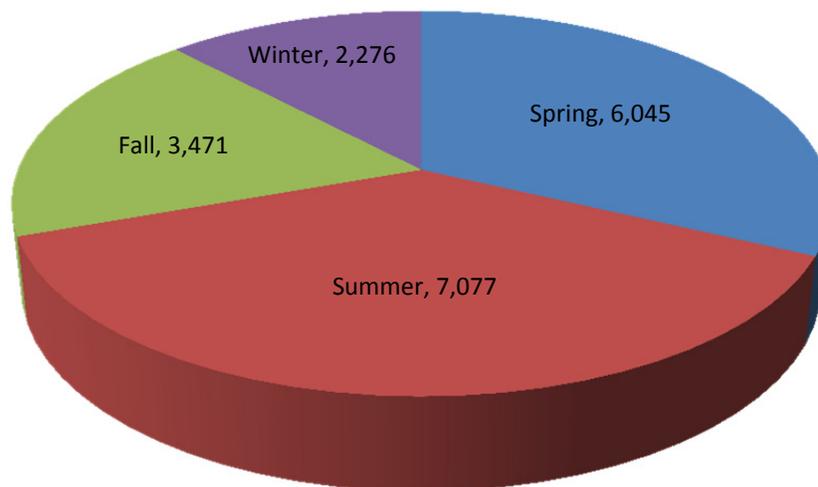
County: Bucks

Table 5: Pennridge Airport (CKZ) Annual Summary

Season	Year	Average Daily Operations	Total Operations	Percentage of Annual Operations
Spring	2013	65.00	6,045	32%
Summer	2013	75.29	7,077	38%
Fall	2013	39.00	3,471	18%
Winter	2014	25.57	2,276	12%
Annual Operations:		2013/14	18,869	
Margin of Error: 10.74 at 95% confidence				

Source: DVRPC

Figure 5: Pennridge Airport (CKZ) Seasonal Summary



Source: DVRPC

2013/14 Aircraft Operations Counting Program

Weekly Activity Report
 CKZ Pennridge Airport
 CKZ Spring I 2013

For: 11 April 2013–17 April 2013

Day->	Thurs 11-Apr	Fri 12-Apr	Sat 13-Apr	Sun 14-Apr	Mon 15-Apr	Tues 16-Apr	Wed 17-Apr
12 am							
1 am							
2 am							
3 am							
4 am							
5 am							
6 am							
7 am							
8 am						3	
9 am			1	4	2	8	
10 am	4	2	3	3	2	5	
11 am	1	2	6	5	4	2	2
12 pm	3	3	4	3	1	5	4
1 pm	1	2	4	5	1		
2 pm	1	1	5	3	4	1	6
3 pm		3	2	5	2		4
4 pm			3	3			3
5 pm	1	1	3	2	1	2	2
6 pm	1	2	4	1			3
7 pm		1	4		2		1
8 pm		1	1	1			3
9 pm							
10 pm				1			1
11 pm						1	
Prorated Daily Helio Activity				1			
Total Daily Aircraft Takeoffs	12	18	40	37	19	27	29
Prorated Total Helio Activity	1						
Total Fixed Wing Activity	181						
Total Aircraft Takeoffs	182						

Source: DVRPC

2013/14 Aircraft Operations Counting Program

Weekly Activity Report
 CKZ Penridge Airport
 CKZ Spring II 2013

For: 29 May 2013–4 June 2013

Day->	Wed 29-May	Thurs 30-May	Fri 31-May	Sat 1-Jun	Sun 2-Jun	Mon 3-Jun	Tues 4-Jun
12 am					1		
1 am							
2 am							
3 am							
4 am							
5 am							
6 am							
7 am		2					
8 am	3	12		4	4		1
9 am	1	7	4	5	5		1
10 am	4	7	4	7	7		7
11 am	3	4	3	6	6		2
12 pm	6	4	8	9	5		
1 pm	5	6	5	3			
2 pm	6	3	5	4			1
3 pm	6	6	6	9		1	
4 pm	6	4	1	5		4	2
5 pm		2	1	6		2	4
6 pm	1	2		4		3	2
7 pm						2	
8 pm	2					4	
9 pm						5	
10 pm		1					
11 pm				1			
Prorated Daily Helio Activity				1			
Total Daily Aircraft Takeoffs	43	60	37	64	28	21	20
Prorated Total Helio Activity	1						
Total Fixed Wing Activity	272						
Total Aircraft Takeoffs	273						

Source: DVRPC

2013/14 Aircraft Operations Counting Program

Weekly Activity Report
 CKZ Pennridge Airport
 CKZ Summer I 2013

For: 13 July 2013–19 July 2013

Day->	Sat 13-Jul	Sun 14-Jul	Mon 15-Jul	Tues 16-Jul	Wed 17-Jul	Thurs 18-Jul	Fri 19-Jul
12 am							
1 am							
2 am							
3 am							
4 am							
5 am							
6 am			1	1	1	1	
7 am	1	2	1				2
8 am	3	1	1	2		2	1
9 am	1	3	2	5	2	1	
10 am	3		5	9	5	9	10
11 am	2	6	5	6	6	6	5
12 pm	5	3	4	6	6	5	5
1 pm	2	6	4	8	2	7	8
2 pm	3	5	4	5	7	3	3
3 pm	5	3	3	2	3	5	2
4 pm	7	6	4		5		
5 pm	2	3	2	2			
6 pm	3	5	3			1	
7 pm	1	3	3	1		1	
8 pm		1	2				
9 pm							
10 pm	1				3		
11 pm							
Prorated Daily Helio Activity				1			
Total Daily Aircraft Takeoffs	39	47	44	48	40	41	36
Prorated Total Helio Activity	1						
Total Fixed Wing Activity	294						
Total Aircraft Takeoffs	295						

Source: DVRPC

2013/14 Aircraft Operations Counting Program

Weekly Activity Report
 CKZ Pennridge Airport
 CKZ Summer II 2013

For: 4 September 2013–10 September 2013

Day->	Wed 4-Sep	Thurs 5-Sep	Fri 6-Sep	Sat 7-Sep	Sun 8-Sep	Mon 9-Sep	Tues 10-Sep
12 am							
1 am							
2 am							
3 am							
4 am							
5 am							
6 am							
7 am		2	2	1			
8 am		2	1	2	1		
9 am	5	1	3	7	7	6	
10 am	6	5	4	5	7	12	
11 am	8	2	5	7	3	5	
12 pm	3	2	4	4	1	3	2
1 pm	5	3	6	5	1	1	
2 pm	2	3	5	5		7	
3 pm	1		3	6	2		
4 pm		1	3	4		3	1
5 pm	2	1	1	3	1		
6 pm	5			2		1	2
7 pm	1	6					7
8 pm	1	1			1		1
9 pm							
10 pm							
11 pm							
Prorated Daily Helio Activity				1			
Total Daily Aircraft Takeoffs	39	29	37	52	24	38	13
Prorated Total Helio Activity	1						
Total Fixed Wing Activity	231						
Total Aircraft Takeoffs	232						

Source: DVRPC

2013/14 Aircraft Operations Counting Program

Weekly Activity Report
 CKZ Pennridge Airport
 CKZ Fall I 2013

For: 17 October 2013–23 October 2013

Day->	Thurs 17-Oct	Fri 18-Oct	Sat 19-Oct	Sun 20-Oct	Mon 21-Oct	Tues 22-Oct	Wed 23-Oct
12 am							
1 am							
2 am							
3 am							
4 am							
5 am							
6 am							
7 am					1		
8 am	1			3		2	
9 am	2	1	6	2		1	
10 am	1	2	8	6	1	2	
11 am		1	9	5	4	6	
12 pm	1	1	6	3	7		
1 pm		1	5	1	6		
2 pm		1	5	2	5		
3 pm			5		8		
4 pm			3	4	1		
5 pm		3		3	3		1
6 pm	8	1		1			2
7 pm	2	1		1			
8 pm	1						
9 pm				1			
10 pm							
11 pm							
Prorated Daily Helio Activity				1			
Total Daily Aircraft Takeoffs	16	12	47	33	36	11	3
Prorated Total Helio Activity	1						
Total Fixed Wing Activity	157						
Total Aircraft Takeoffs	158						

Source: DVRPC

2013/14 Aircraft Operations Counting Program

Weekly Activity Report
 CKZ Penridge Airport
 CKZ Fall II 2013

For: 20 November 2013–26 November 2013

Day->	Wed 20-Nov	Thurs 21-Nov	Fri 22-Nov	Sat 23-Nov	Sun 24-Nov	Mon 25-Nov	Tues 26-Nov
12 am							
1 am							
2 am							
3 am							
4 am							
5 am							
6 am							
7 am					1		
8 am	1			1	3		1
9 am			1	2	1		
10 am	3	5		3	3	1	1
11 am		2		2	5	3	3
12 pm	1	2	1	2	4	3	2
1 pm		2		1		1	1
2 pm	3	5		1	1		3
3 pm			5	2	1	1	2
4 pm	4	2	5	1	1	2	
5 pm	2	1					1
6 pm	3						
7 pm	6						
8 pm							
9 pm							
10 pm							
11 pm							
Prorated Daily Helio Activity				1			
Total Daily Aircraft Takeoffs	23	19	12	16	20	11	14
Prorated Total Helio Activity	1						
Total Fixed Wing Activity	114						
Total Aircraft Takeoffs	115						

Source: DVRPC

2013/14 Aircraft Operations Counting Program

Weekly Activity Report
 CKZ Pennridge Airport
 CKZ Winter I 2014

For: 16 January 2014–22 January 2014

Day->	Thurs 16-Jan	Fri 17-Jan	Sat 18-Jan	Sun 19-Jan	Mon 20-Jan	Tues 21-Jan	Wed 22-Jan
12 am							
1 am							
2 am							
3 am							
4 am							
5 am							
6 am							
7 am					1	2	
8 am			1			1	
9 am		1		6			2
10 am	1	1			2		1
11 am			2	2	3		
12 pm			1	1	2		
1 pm		1		2	3		
2 pm	1	2		5	1	2	
3 pm	5	4				2	
4 pm	1	4					2
5 pm		1					1
6 pm			1				1
7 pm							
8 pm							
9 pm							
10 pm							
11 pm							
Prorated Daily Helio Activity				1			
Total Daily Aircraft Takeoffs	8	14	5	17	12	7	7
Prorated Total Helio Activity	1						
Total Fixed Wing Activity	69						
Total Aircraft Takeoffs	70						

Source: DVRPC

2013/14 Aircraft Operations Counting Program

Weekly Activity Report
 CKZ Penridge Airport
 CKZ Winter II 2014

For: 18 March 2014–24 March 2014

Day->	Tues 18-Mar	Wed 19-Mar	Thurs 20-Mar	Fri 21-Mar	Sat 22-Mar	Sun 23-Mar	Mon 24-Mar
12 am							
1 am							
2 am							
3 am							
4 am							
5 am							
6 am							1
7 am	1			1	2	1	
8 am				1	5	2	1
9 am		2	1	4	1	1	
10 am	6	1	1	5	2	4	1
11 am	1	1			3	5	
12 pm		2	3	1	3	3	
1 pm			2	2	1	3	
2 pm		1		1	2	1	
3 pm		1	1	1	1	2	2
4 pm				2		1	2
5 pm	1			2			
6 pm	6			4			3
7 pm							
8 pm							
9 pm							
10 pm							
11 pm							
Prorated Daily Helio Activity				1			
Total Daily Aircraft Takeoffs	15	8	8	25	20	23	10
Prorated Total Helio Activity	1						
Total Fixed Wing Activity	108						
Total Aircraft Takeoffs	109						

Source: DVRPC

2013/14 Aircraft Operations Counting Program

Quakertown Airport (UKT)

Bucks County

Quakertown, PA 18951

Runway Orientation: 11/29

Runway Length: 3,210 ft.

Table 6: Quakertown Airport (UKT) Based Aircraft

Based Aircraft Fleet Mix	
Single Engine	84
Multi-engine	4
Jet	1
Helicopter	0
Glider	0
Total	89

Source: Quakertown Airport

Quakertown Airport, two miles west of Quakertown, is a public use airport owned by the Bucks County Airport Authority. Overall flight operations decreased eight percent for this counting period from the previous period in 2010/2011. It is speculated that flight operations were challenged by the lack of fuel service during part of the year and with a lack of flight instruction activities. The airport has completed improvements to their fuel farm, and there is a strong Quakertown Pilots Association that plans regular flight activities—with their Young Eagles program it is hoped that new pilot startup flight training will occur.

Figure 6: Quakertown Airport (UKT) Aerial Photo



2013/14 Aircraft Operations Counting Program

DVRPC Aircraft Counting Program

Airport: Quakertown Airport (UKT)

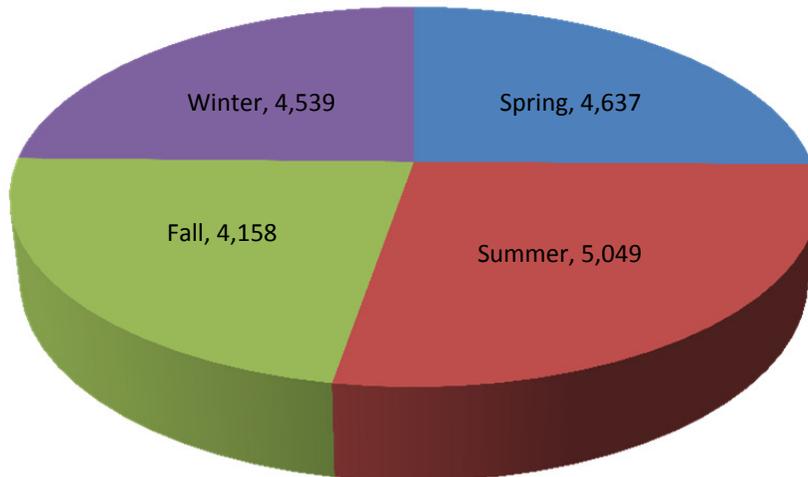
County: Bucks

Table 7: Quakertown Airport (UKT) Annual Summary

Season	Year	Average Daily Operations	Total Operations	Percentage of Annual Operations
Spring	2013	49.86	4,637	25%
Summer	2013	53.71	5,049	27%
Fall	2013	46.71	4,158	23%
Winter	2014	51.00	4,539	25%
Annual Operations:		2013/14	18,382	
Margin of Error: 10.32 at 95% confidence				

Source: DVRPC

Figure 7: Quakertown Airport (UKT) Seasonal Summary



Source: DVRPC

2013/14 Aircraft Operations Counting Program

Weekly Activity Report
 UKT Quakertown Airport
 UKT Spring I 2013

For: 11 April 2013–17 April 2013

Day->	Thurs 11-Apr	Fri 12-Apr	Sat 13-Apr	Sun 14-Apr	Mon 15-Apr	Tues 16-Apr	Wed 17-Apr
12 am							
1 am							
2 am							
3 am							
4 am							
5 am							
6 am							
7 am							
8 am						2	
9 am	1	1	2	6	1		1
10 am	3	3	4	4	1	1	
11 am	5		7	3	1	1	2
12 pm		2	4	1	4		
1 pm	1	1	4	5	1	3	
2 pm		1	5	3		1	4
3 pm	1		2	5			
4 pm		1	1	6		1	3
5 pm		2	1	2	6	2	1
6 pm			2	1	2		6
7 pm		1	1	3	1		4
8 pm			2	1	2		
9 pm			1				
10 pm			1	1			
11 pm							
Prorated Daily Helio Activity	4	4	3	3	3	4	4
Total Daily Aircraft Takeoffs	15	16	40	44	22	15	25
Prorated Total Helio Activity	25						
Total Fixed Wing Activity	152						
Total Aircraft Takeoffs	177						

Source: DVRPC

2013/14 Aircraft Operations Counting Program

Weekly Activity Report
 UKT Quakertown Airport
 UKT Spring II 2013

For: 29 May 2013–4 June 2013

Day->	Wed 29-May	Thurs 30-May	Fri 31-May	Sat 1-Jun	Sun 2-Jun	Mon 3-Jun	Tues 4-Jun
12 am							
1 am							
2 am							
3 am							
4 am							
5 am							
6 am							
7 am		1					1
8 am	1	1	5	7	2		2
9 am	3	3	6	13	2		1
10 am	2	3	9	4	3		
11 am	1	2	3	5	1	1	1
12 pm	1	3	4		2		1
1 pm		1	2	1	1		
2 pm	2		2	2	1	2	
3 pm	2	4		2		1	
4 pm	3	2	2	1			1
5 pm	3		2	1	1	3	1
6 pm		1				2	
7 pm	3						
8 pm	2	1					
9 pm						1	
10 pm							
11 pm							
Prorated Daily Helio Activity	4	4	3	3	3	4	4
Total Daily Aircraft Takeoffs	27	26	38	39	16	14	12
Prorated Total Helio Activity	25						
Total Fixed Wing Activity	147						
Total Aircraft Takeoffs	172						

Source: DVRPC

2013/14 Aircraft Operations Counting Program

Weekly Activity Report
 UKT Quakertown Airport
 UKT Summer I 2013

For: 13 July 2013–19 July 2013

Day->	Sat 13-Jul	Sun 14-Jul	Mon 15-Jul	Tues 16-Jul	Wed 17-Jul	Thurs 18-Jul	Fri 19-Jul
12 am							
1 am							
2 am							
3 am							
4 am							
5 am							
6 am			1				1
7 am				1	3	2	
8 am			1	3	5	3	1
9 am		1		1		5	5
10 am	1	7	1	3	8	2	2
11 am		7			1		
12 pm	3	1	1	3	1		
1 pm	1	1		4		2	1
2 pm	4	5		1		1	2
3 pm	2	1			1		
4 pm	1	1			3		1
5 pm	3	2		4	2		3
6 pm	3	5			4	1	4
7 pm	2	2		1			1
8 pm	1			2		1	1
9 pm	1					1	
10 pm							
11 pm							
Prorated Daily Helio Activity	4	4	3	3	3	4	4
Total Daily Aircraft Takeoffs	26	37	7	26	31	22	26
Prorated Total Helio Activity	25						
Total Fixed Wing Activity	150						
Total Aircraft Takeoffs	175						

Source: DVRPC

2013/14 Aircraft Operations Counting Program

Weekly Activity Report
 UKT Quakertown Airport
 UKT Summer II 2013

For: 4 September 2013–10 September 2013

Day->	Wed 4-Sep	Thurs 5-Sep	Fri 6-Sep	Sat 7-Sep	Sun 8-Sep	Mon 9-Sep	Tues 10-Sep
12 am							
1 am							
2 am							
3 am							
4 am							
5 am							
6 am							
7 am		4	1	4			
8 am	1	4	8	5	4		
9 am	2	3	1	12	5		2
10 am	2		10	3	3	1	1
11 am	3			1	5	3	
12 pm	2	6	1	1	4	2	
1 pm	2	1	1	2		2	
2 pm	1	1	3	7	4	1	1
3 pm	1		2	1	4		4
4 pm	2		1	4		1	4
5 pm			2	3	1	2	1
6 pm	3	1				3	3
7 pm		1					
8 pm					1	1	
9 pm							
10 pm							
11 pm							
Prorated Daily Helio Activity	4	4	3	3	3	4	4
Total Daily Aircraft Takeoffs	23	25	33	46	34	20	20
Prorated Total Helio Activity	25						
Total Fixed Wing Activity	176						
Total Aircraft Takeoffs	201						

Source: DVRPC

2013/14 Aircraft Operations Counting Program

Weekly Activity Report
 UKT Quakertown Airport
 UKT Fall I 2013

For: 19 October 2013–25 October 2013

Day->	Sat 19-Oct	Sun 20-Oct	Mon 21-Oct	Tues 22-Oct	Wed 23-Oct	Thurs 24-Oct	Fri 25-Oct
12 am							
1 am							
2 am							
3 am							
4 am							
5 am							
6 am							1
7 am	2	1					
8 am	3	7	2	2			
9 am	2	4	3				1
10 am	4			2			10
11 am	13	1	2				
12 pm	3		1		1		3
1 pm	5	1	1	2			5
2 pm	2	1	2		2	2	2
3 pm	7		1	2	1		1
4 pm	1		2		5		
5 pm	2	5	1	4	5		
6 pm		1		1			1
7 pm			1		2	3	
8 pm						3	
9 pm							
10 pm							
11 pm							
Prorated Daily Helio Activity	4	4	3	4	3	4	4
Total Daily Aircraft Takeoffs	48	25	19	17	19	12	28
Prorated Total Helio Activity	26						
Total Fixed Wing Activity	142						
Total Aircraft Takeoffs	168						

Source: DVRPC

2013/14 Aircraft Operations Counting Program

Weekly Activity Report
 UKT Quakertown Airport
 UKT Fall II 2013

For: 20 November 2013–26 November 2013

Day->	Wed 20-Nov	Thurs 21-Nov	Fri 22-Nov	Sat 23-Nov	Sun 24-Nov	Mon 25-Nov	Tues 26-Nov
12 am							
1 am							
2 am							
3 am							
4 am							
5 am							
6 am							
7 am	1						
8 am		1			2		4
9 am	2		2	3	2		
10 am		1	2	5	3	4	2
11 am	3	3	3	3	1	2	3
12 pm	1	2	1	2	1	1	3
1 pm	3		1	2	1	2	1
2 pm	5	4	1	2	3	3	
3 pm	1	4	2	4	1	3	1
4 pm	1	3	1	1	3	2	3
5 pm	2			1	1		2
6 pm		1			1	2	
7 pm						1	1
8 pm							
9 pm							
10 pm							
11 pm							
Prorated Daily Helio Activity	4	4	3	4	3	4	4
Total Daily Aircraft Takeoffs	23	23	16	27	22	24	24
Prorated Total Helio Activity	26						
Total Fixed Wing Activity	133						
Total Aircraft Takeoffs	159						

Source: DVRPC

2013/14 Aircraft Operations Counting Program

Weekly Activity Report
 UKT Quakertown Airport
 UKT Winter I 2014

For: 16 January 2014 to 22 January 2014

Day->	Thurs 16-Jan	Fri 17-Jan	Sat 18-Jan	Sun 19-Jan	Mon 20-Jan	Tues 21-Jan	Wed 22-Jan
12 am							
1 am							
2 am							
3 am							
4 am							
5 am							
6 am							
7 am					1		
8 am	1	1	1	3	7	1	3
9 am			2		1	2	1
10 am	1		3	6	2	3	4
11 am	8	2	2	3	1	2	1
12 pm	2	3	1	5	1	1	3
1 pm	3	2	1	1	6		2
2 pm	5			4	4	2	2
3 pm	3	6	1	4	1	3	6
4 pm	6	3	1	1			5
5 pm		1		2	2	1	3
6 pm			3				1
7 pm	7						
8 pm	1						
9 pm							
10 pm							
11 pm							
Prorated Daily Helio Activity	2	2	2	3	2	2	2
Total Daily Aircraft Takeoffs	39	20	17	32	28	17	33
Prorated Total Helio Activity	15						
Total Fixed Wing Activity	171						
Total Aircraft Takeoffs	186						

Source: DVRPC

2013/14 Aircraft Operations Counting Program

Weekly Activity Report
 UKT Quakertown Airport
 UKT Winter II 2014

For: 17 March 2014 to 23 March 2014

Day->	Mon 17-Mar	Tues 18-Mar	Wed 19-Mar	Thurs 20-Mar	Fri 21-Mar	Sat 22-Mar	Sun 23-Mar
12 am							
1 am							
2 am							
3 am							
4 am							
5 am							
6 am		1					1
7 am			1			1	14
8 am	1	1			3		6
9 am	3	1		2	3	5	2
10 am		2	2	3		6	8
11 am	2		3	1	5	7	6
12 pm	1	2	1	3	2		7
1 pm	3	2	3		1	1	4
2 pm	3			2	1	1	2
3 pm	6		2	2			3
4 pm	5		2		1		
5 pm		1			2		
6 pm					2		
7 pm							
8 pm	1						
9 pm							
10 pm							
11 pm							
Prorated Daily Helio Activity	2	2	2	3	2	2	2
Total Daily Aircraft Takeoffs	27	12	16	16	22	23	55
Prorated Total Helio Activity	15						
Total Fixed Wing Activity	156						
Total Aircraft Takeoffs	171						

Source: DVRPC

Trenton-Robbinsville Airport (N87)

Mercer County

Robbinsville, NJ 08691

Runway Orientation: 11/29

Runway Length: 4,275 ft.

Table 8: Trenton-Robbinsville Airport (N87) Based Aircraft

Based Aircraft Fleet Mix	
Single Engine	53
Multi-engine	3
Jet	0
Helicopter	1
Glider	0
Total	57

Source: AirNav.com

Trenton-Robbinsville Airport is a privately owned, public use airport located one mile east of Robbinsville, in Mercer County. Trenton-Robbinsville's overall flight operations decreased by eight percent for this counting period compared to the 2010/2011 period. This decrease is attributed to the high cost of fuel and a reduction in based aircraft.

There are many active aircraft businesses located at Trenton-Robbinsville airport, such as

- Posey Brothers, a specialist in the care and restoration of antique aircraft;
- Reese Aircraft (KD Aviation), a highly regarded aircraft painting business that has been based at Trenton-Robbinsville airport since 1981;
- Air-Mods, a specialized Mooney aircraft repair facility that offers repairs and custom modifications to Mooney as well as other aircraft;
- Air-Mods Flight Center, a flight instruction and aircraft rentals business.

Combined, these successful businesses are responsible for maintaining a healthy business climate at Trenton-Robbinsville airport.

Figure 8: Trenton-Robbinsville Airport (N87) Aerial Photo



2013/14 Aircraft Operations Counting Program

DVRPC Aircraft Counting Program

Airport: Trenton-Robbinsville Airport (N87)

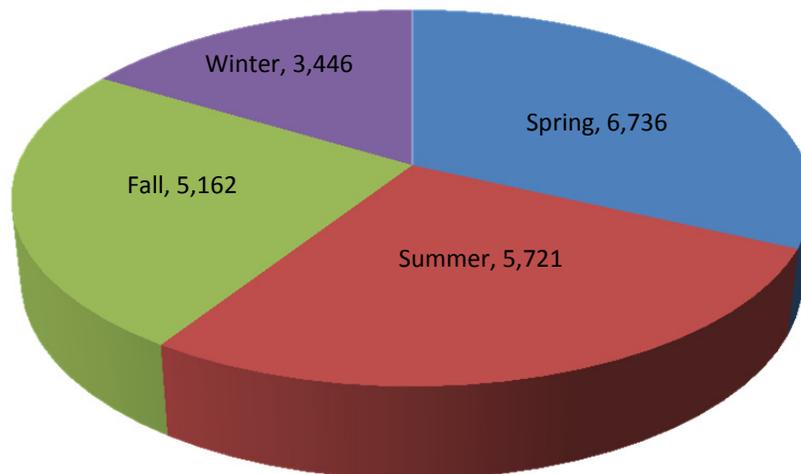
County: Mercer

Table 9: Trenton-Robbinsville Airport (N87) Annual Summary

Season	Year	Average Daily Operations	Total Operations	Percentage of Annual Operations
Spring	2013	72.43	6,736	32%
Summer	2013	60.86	5,721	27%
Fall	2013	58.00	5,162	25%
Winter	2014	38.71	3,446	16%
Annual Operations:		2013/14	21,064	
Margin of Error: 12.35 at 95% confidence				

Source: DVRPC

Figure 9: Trenton-Robbinsville Airport (N87) Seasonal Summary



Source: DVRPC

2013/14 Aircraft Operations Counting Program

Weekly Activity Report For: 25 April 2013–1 May 2013
 N87 Trenton-Robbinsville Airport
 N87 Spring I 2013

Day->	Thurs 25-Apr	Fri 26-Apr	Sat 27-Apr	Sun 28-Apr	Mon 29-Apr	Tues 30-Apr	Wed 1-May
12 am							
1 am							
2 am							
3 am							
4 am							
5 am							
6 am		2					
7 am			1				
8 am			1	5			
9 am		4	5	8	1	1	5
10 am	8	5	2	19	5	2	4
11 am	4	3	8	5	2	6	1
12 pm	1	5	15	13	5		1
1 pm	1	3	6	7	1	3	2
2 pm	4	4	11	6		1	2
3 pm	9	2	12	5	5	3	1
4 pm	2	2	3	4	5		5
5 pm	6	8	6			2	2
6 pm	8	2	1		5	1	2
7 pm		13	1		3		7
8 pm	1					2	
9 pm							
10 pm	1					1	
11 pm	1						
Prorated Daily Helio Activity	0	1	0	1	0	0	0
Total Daily Aircraft Takeoffs	46	54	72	73	32	22	32
Prorated Total Helio Activity	2						
Total Fixed Wing Activity	329						
Total Aircraft Takeoffs	331						

Source: DVRPC

2013/14 Aircraft Operations Counting Program

Weekly Activity Report For: 12 June 2013–18 June 2013
 N87 Trenton-Robbinsville Airport
 N87 Spring II 2013

Day->	Wed 12-Jun	Thurs 13-Jun	Fri 14-Jun	Sat 15-Jun	Sun 16-Jun	Mon 17-Jun	Tues 18-Jun
12 am							
1 am							
2 am							
3 am							
4 am							
5 am							
6 am					1		
7 am	1			1			
8 am		2		5	3	3	
9 am	2	1	2	3	5		
10 am	3	3	2	3	1	7	2
11 am	4		1	5	6	2	6
12 pm		3	1	3	3	2	4
1 pm	2		1	4	2	2	3
2 pm		1	1	4	1	1	2
3 pm			3	7		4	
4 pm	1	2	1	2	1	1	1
5 pm	2	3		2	3	2	1
6 pm	1		2	1			
7 pm	3	1	2	4		2	1
8 pm	2		1		1		
9 pm	1			1			
10 pm				1			
11 pm							
Prorated Daily Helio Activity	0	0	1	0	0	1	0
Total Daily Aircraft Takeoffs	22	16	18	46	27	27	20
Prorated Total Helio Activity	2						
Total Fixed Wing Activity	174						
Total Aircraft Takeoffs	176						

Source: DVRPC

2013/14 Aircraft Operations Counting Program

Weekly Activity Report For: 26 July 2013–1 August 2013
 N87 Trenton-Robbinsville Airport
 N87 Summer I 2013

Day->	Fri 26-Jul	Sat 27-Jul	Sun 28-Jul	Mon 29-Jul	Tues 30-Jul	Wed 31-Jul	Thurs 1-Aug
12 am							
1 am							
2 am							
3 am							
4 am							
5 am							
6 am						1	
7 am	2			1	2	3	1
8 am	3	3	1	1			2
9 am	1	8	3	4	1		1
10 am	4	6	5			4	3
11 am	1	3	3		1	4	2
12 pm	3	1	3	2	4	2	5
1 pm	5		3	2	8	2	3
2 pm	6	7	1		3		1
3 pm	3	7	4	1	2	2	2
4 pm	5	2	1	1	6		2
5 pm	5	1	1	3	1		3
6 pm	2	1	1	10	1	1	1
7 pm	2		2	1	1	2	1
8 pm	1				2	3	
9 pm	1						1
10 pm			1				
11 pm							
Prorated Daily Helio Activity		1					1
Total Daily Aircraft Takeoffs	44	40	29	26	32	24	29
Prorated Total Helio Activity	2						
Total Fixed Wing Activity	222						
Total Aircraft Takeoffs	224						

Source: DVRPC

2013/14 Aircraft Operations Counting Program

Weekly Activity Report For: 13 September 2013–19 September 2013
 N87 Trenton-Robbinsville Airport
 N87 Summer II 2013

Day->	Fri 13-Sep	Sat 14-Sep	Sun 15-Sep	Mon 16-Sep	Tues 17-Sep	Wed 18-Sep	Thurs 19-Sep
12 am							
1 am							
2 am							
3 am							
4 am							
5 am							
6 am							
7 am							
8 am	1	4	2	1	1		2
9 am	3	4	8		3	2	1
10 am	1	2	2				1
11 am	3	3	2	1	1	3	5
12 pm	6	2	7		2	3	6
1 pm	2	1	4	2	3	4	9
2 pm	1	4	2		1	8	1
3 pm		3			1	11	2
4 pm	1	1	3		3	2	3
5 pm	3	1	3		1	2	2
6 pm	3	2	6	3	4	3	1
7 pm	1	1	1	1	1		2
8 pm				2			2
9 pm	1						
10 pm							
11 pm							
Prorated Daily Helio Activity			1			1	
Total Daily Aircraft Takeoffs	26	28	41	10	21	39	37
Prorated Total Helio Activity	2						
Total Fixed Wing Activity	200						
Total Aircraft Takeoffs	202						

Source: DVRPC

2013/14 Aircraft Operations Counting Program

Weekly Activity Report For: 24 October 2013–30 October 2013
 N87 Trenton-Robbinsville Airport
 N87 Fall I 2013

Day->	Thurs 24-Oct	Fri 25-Oct	Sat 26-Oct	Sun 27-Oct	Mon 28-Oct	Tues 29-Oct	Wed 30-Oct
12 am							
1 am							
2 am							
3 am							
4 am							
5 am							
6 am							
7 am					1	1	1
8 am		1		2			
9 am	2		1	10		2	2
10 am	5	2	2	8		3	4
11 am	6	2	7	3	10	5	5
12 pm	1		4	10	2	7	3
1 pm	2		2	2	2	12	11
2 pm		3	4	2	2	5	8
3 pm			2	3	13	3	7
4 pm	1	1		1	4	2	3
5 pm				1	4		2
6 pm					1	3	
7 pm					2		1
8 pm		1			1		
9 pm		1					
10 pm							
11 pm							
Prorated Daily Helio Activity				1			1
Total Daily Aircraft Takeoffs	17	11	22	43	42	43	48
Prorated Total Helio Activity	2						
Total Fixed Wing Activity	224						
Total Aircraft Takeoffs	226						

Source: DVRPC

2013/14 Aircraft Operations Counting Program

Weekly Activity Report For: 16 December 2013–22 December 2013
 N87 Trenton-Robbinsville Airport
 N87 Fall II 2013

Day->	Mon 16-Dec	Tues 17-Dec	Wed 18-Dec	Thurs 19-Dec	Fri 20-Dec	Sat 21-Dec	Sun 22-Dec
12 am							
1 am							
2 am							
3 am							
4 am							
5 am							
6 am							
7 am							
8 am	1					2	
9 am					1	14	3
10 am	3	5	2	1		7	2
11 am	2		3	1	4	9	
12 pm	2	2	3	2	1	12	
1 pm	4	3	3	1	3	5	2
2 pm	8		1	4	5	7	2
3 pm	3	3	1		2	6	
4 pm	3	2	1	3	3	1	2
5 pm	1					1	3
6 pm			2	3	2	2	2
7 pm		1					
8 pm				1			
9 pm							
10 pm							
11 pm							
Prorated Daily Helio Activity	1				1		
Total Daily Aircraft Takeoffs	28	16	16	16	22	66	16
Prorated Total Helio Activity	2						
Total Fixed Wing Activity	178						
Total Aircraft Takeoffs	180						

Source: DVRPC

2013/14 Aircraft Operations Counting Program

Weekly Activity Report For: 24 February 2014–2 March 2014
 N87 Trenton-Robbinsville Airport
 N87 Winter I 2014

Day->	Mon 24-Feb	Tues 25-Feb	Wed 26-Feb	Thurs 27-Feb	Fri 28-Feb	Sat 1-Mar	Sun 2-Mar
12 am							
1 am				1			
2 am							
3 am							
4 am							
5 am							
6 am							
7 am							
8 am	2		2				2
9 am	1	1	3	2		1	3
10 am	1	4	2		5	5	
11 am	3			3	5	5	1
12 pm	2	1			2	2	2
1 pm				2	1	5	3
2 pm	1	2	2	2	3	6	2
3 pm	1		1			9	1
4 pm					1	4	1
5 pm		1					
6 pm			1		2	5	1
7 pm							
8 pm							
9 pm						1	
10 pm							
11 pm							
Prorated Daily Helio Activity		1					1
Total Daily Aircraft Takeoffs	11	10	11	10	19	43	17
Prorated Total Helio Activity	2						
Total Fixed Wing Activity	119						
Total Aircraft Takeoffs	121						

Source: DVRPC

2013/14 Aircraft Operations Counting Program

Weekly Activity Report For: 18 March 2014–24 March 2014
 N87 Trenton-Robbinsville Airport
 N87 Winter II 2014

Day->	Tues 18-Mar	Wed 19-Mar	Thurs 20-Mar	Fri 21-Mar	Sat 22-Mar	Sun 23-Mar	Mon 24-Mar
12 am							
1 am							
2 am							
3 am							
4 am							
5 am							
6 am							
7 am						1	
8 am				3	2	2	
9 am		1		3	2	6	
10 am	2			2	2	6	7
11 am	1	1			2	3	4
12 pm			2	3	1	5	
1 pm	2		3	1	5	4	1
2 pm	2	3	1	1	1	5	1
3 pm	2	2	2	1	1	5	
4 pm	1	1	1	2	1	10	
5 pm		3	2		1	2	1
6 pm		2	2	1		2	4
7 pm		1		1		1	4
8 pm					1		
9 pm							
10 pm							
11 pm							
Prorated Daily Helio Activity			1		1		
Total Daily Aircraft Takeoffs	10	14	14	18	20	52	22
Prorated Total Helio Activity	2						
Total Fixed Wing Activity	148						
Total Aircraft Takeoffs	150						

Source: DVRPC

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Publication Number: 13065

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Geographic Area Covered: Mercer County in New Jersey; Bucks County in Pennsylvania.

Key Words: Aircraft operations, helicopter operations, airports, fixed-wing airplane, rotorcraft, takeoffs, landings, count, activity, estimate, seasonal, annual, acoustic counter, based aircraft, runway length.

Abstract: This technical report presents aircraft operations estimates for three non-towered airports in the Delaware Valley aviation planning area. Eight acoustic counts were taken at each airport, starting in April 2013 and ending in March 2014; each sample covered seven continuous days. The samples were extrapolated over the entire year, and the results are presented in this report. Results are used by multiple sources to monitor aircraft activity levels in the Delaware Valley and as a base for planning and forecasting documents.

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