



FLIGHT EVALUATION REPORT 2010

YOUR LONDON AIRPORT
Gatwick

GATWICK AIRPORT LIMITED

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Gatwick Airport is the UK's second largest airport and the busiest single-runway international airport in the world. It has about 90 airlines serving more than 200 destinations in 90 countries. During 2010 over 31 million passengers passed through the airport.

It is also a major economic driver for the South-East region, generating around 23,000 on-airport jobs and a further 13,000 jobs through related activities. The airport is 28 miles south of London with excellent public transport links.

About this report

This report is produced by the Flight Evaluation Unit. This team is responsible for recording, investigating and responding to aircraft noise enquiries as well as monitoring airline compliance to noise mitigation measures as detailed in the UK Aeronautical Information Publication (UK AIP). This department also actively engages with the airlines to improve their adherence to the above noise mitigation measures and in addition manages the night-time restrictions on flying at Gatwick.

This report contains detailed data on aircraft activity at Gatwick including the fleet mix, direction of operation of the airport, the number and types of night flights that took place, aircraft adherence to the noise mitigation measures detailed in the UK AIP and also an analysis of complaints/enquiries received during the year.

The majority of this data is circulated throughout the year to various committees including the Flight Operations Performance & Safety Committee (FLOPSC), the Noise & Track Monitoring Advisory Group (NaTMAG) and the Gatwick Airport Consultative Committee (GATCOM).

Gatwick Airport is owned by group of international investment funds, of which Global Infrastructure Partners is the controlling shareholder. Over the next 10 years we want Gatwick to become London's airport of choice delivering great service to more than 40 million passengers each year.

Security, safety and responsibly managing our environmental impact are always our top priorities.

This report complements the noise section of Gatwick Airport Limited's 2010 Sustainability Performance Report which is available at www.gatwickairport.com.

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This section of Gatwick's FEU Report provides detailed statistics on the number and types of aircraft operating in and out of the airport, as well as relevant information about runway usage and westerly-easterly operations, during 2010 and the previous years.

Table A1 shows the average number of aircraft movements per day during the past three years. In 2010, the average number of movements per day was substantially lower than the previous year. The average number of movements per month was generally lower than those recorded in the previous four years. As is generally the case, the peak months were from July to September when there were more than 750 movements per day. In 2010 overall there were 240,500 aircraft movements at Gatwick and passenger figures fell to 31.4 million from 32.4 million in 2009.

Table A2 shows a breakdown of movements by aircraft type. The trend in increased numbers of modern aircraft operating at the airport continued in 2010 but the mix of the fleet remained largely the same. The Airbus 319 was again the aircraft type with the greatest number of movements, which are the primary aircraft used by EasyJet, Gatwick's largest operator. There were no 747-200 or DC10 movements respectively in 2010.

The number of movements by Embraer ERJ195s, introduced at the airport by Flybe in 2007, continued to rise in 2010. And as in recent years, there were fewer movements by older, noisier planes.

Table A2

Annual aircraft movements by aircraft type

Aircraft Type	2008	2009	2010
Airbus 319	61,895	74,826	70,484
Airbus 320	22,854	28,728	27,359
Airbus 321	13,400	11,600	9,214
Boeing 737-400	32,171	29,998	32,032
Boeing 737-800	16,213	17,415	16,915
DHC-8/Dash 8-300/400	9,320	17,029	18,665
Boeing 757	21,585	13,382	15,532
Embraer ERJ195	8,048	9,170	9,528
Boeing 737-300	12,016	7,170	5,607
Boeing 777	7,518	7,091	7,378
Airbus 330	5,851	4,867	5,316
Boeing 737-700	3,177	4,640	3,100
Boeing 767-300	8,185	4,565	3,147
Boeing 747-400	4,397	4,206	4,207
Boeing 737-500	19,577	4,180	1,183
ATR 72	2,836	3,234	3,240
Airbus 300	2,033	1,783	1,690
Canadair Jet	609	1,468	1,796
Arvliner RJ series	3,594	990	38
Fokker 100	358	984	248
Boeing 767-200	1,187	624	464
Others	884	619	780
Airbus 310	1,648	518	542
Cessna Citation	634	458	548
MD 80 all series	576	372	107
Boeing 737-600	828	358	292
Boeing 767-400	804	288	370
Gulfstream	230	244	208
Dassault Falcon	201	217	67
Airbus 340	248	192	42
Hawker 125	242	192	258
Learjet	212	160	182
Embraer EMB135	25	86	38
Ilyushin IL96	6	64	86
Embraer EMB145	32	62	22
DC10 all series	50	8	0
M90	16	6	0
Boeing 737-200	124	2	0
Boeing 747-300	6	0	0
ATR 42	86	0	0
Boeing 747-200	40	0	0
Total	263,716	251,786	240,505

Table A1

Average number of aircraft movements per day

	2008	2009	2010
January	644	580	542
February	654	598	618
March	687	624	619
April	712	673	549
May	769	721	695
June	815	763	744
July	841	809	771
August	851	822	793
September	812	800	766
October	722	717	704
November	561	587	583
December	574	575	517

Table A3

Monthly runway modal split, 2010

Month	Movements	Westerly	Easterly
January	16,815	54.3%	45.7%
February	17,305	53.8%	46.2%
March	19,177	65.0%	35.0%
April	16,476	58.0%	42.0%
May	21,538	46.0%	54.0%
June	22,331	47.0%	53.0%
July	23,913	97.0%	3.0%
August	24,583	85.0%	15.0%
September	23,975	74.0%	26.0%
October	21,826	61.0%	39.0%
November	17,494	59.0%	41.0%
December	16,029	44.0%	56.0%

Tables A3 and A4 show how the direction of the airport's operations varies from month to month due to the wind direction. In 2010, the highest percentage of westerly operations was July and the highest easterly usage was in December. The westerly-easterly split for 2010 was 64% in favour of westerly operations and that figure is generally comparable with the long-term average of 70% in favour of westerly operations.

In any month, the percentage of westerly operations can vary dramatically and there has been no set pattern over the years – as Table A4 shows. The month with the highest percentage of westerly operations since 1998 was recorded in July 2010. May 2008 remains the lowest percentage of westerly operations.

Table A5 shows the annual westerly-easterly split over the last five years. In 2010 the average split was lower in favour of westerly operations than in the previous year, namely 63.5% westerly and 36.5% easterly.

Northern runway use

During any given year, there are occasions when Gatwick's main runway is temporarily closed for use (for example during maintenance projects). When this happens, operations are switched to the northern (standby) runway. The two runways are not used simultaneously.

Table A6 shows northern runway usage during the past four years. In 2010, the usage of the runway was up from the previous year, although it was used on fewer days. The northern runway is usually used at night during periods when routine maintenance is being carried out on the main runway. Usage of the northern runway, particularly during the night period, usually has an adverse affect on Gatwick's joining point and Continuous Descent Approach performance (CDA reduces noise from arriving aircraft by keeping them higher for longer). The reason for this is that the northern runway is not equipped with Instrument Landing System (ILS) equipment.

Aircraft go-arounds

There are some occasions when it is not possible for an inbound aircraft to land. In such circumstances aircraft will abort the landing, carrying out a procedure known as a go-around. There are a number of reasons why go-arounds occur, but the most common are when arriving aircraft are slow to leave the runway, departing aircraft are slow to roll and when some aircraft are unstable in the final stages of approach due to adverse weather.

Table A4
Variations in monthly runway modal split,
April 1998-December 2010

Month	Highest	Westerly	Lowest	Westerly	Range
January	2008	90.2%	2006	43.1%	47.1%
February	2000	97.9%	2003	52.6%	45.3%
March	1999	84.9%	2001	54.6%	30.3%
April	2001	82.9%	2007	36.3%	46.6%
May	2003	86.9%	2008	15.1%	71.8%
June	2002	89.9%	2006	54.3%	35.6%
July	2010	96.9%	2006	57.6%	39.3%
August	2009	93.2%	2003	50.4%	42.8%
September	2001	80.6%	2002	32.0%	48.6%
October	2000	93.1%	2007	42.6%	50.5%
November	2006	92.1%	2003	63.4%	28.7%
December	1999	84.3%	2001	48.5%	35.8%

Table A5
Annual split in easterly and westerly operations (%)

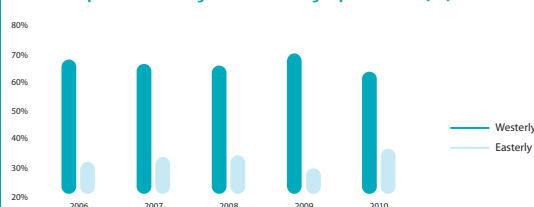


Table A6
Use of northern runway

Year	Days used	Movements	% of annual movements
2007	70	1,286	0.48
2008	71	1,008	0.38
2009	101	904	0.36
2010	73	1,012	0.42

Table A7
Aircraft go-arounds

Year	Go-arounds	% of total arrivals
2007	434	0.33
2008	415	0.31
2009	455	0.36
2010	364	0.30

Table A7 shows that compared to recent years the number and percentage of go-arounds decreased. Historically the percentage of go-arounds has remained relatively constant between 0.30% and 0.35%.

Night flights are classified as those which take off and land between 23:00 and 07:00 (known as the night restrictions period). Government restrictions specify that between 23:30 and 06:00 (the night quota period), aircraft movements are restricted by both a movements limit and a noise quota.

During the night quota period, a limited number of flights are allowed and the noisiest aircraft are not allowed to fly. This system encourages the airlines who want to fly at night to use quieter aircraft.

The noise quota of an individual type of aircraft is based on its official certification data, with separate classifications for landing and take-off in the form of quota count (QC) values. **Table B1** shows the different QC categories. The new night restriction period, which began in Winter 2006/07, established a new QC0.25 category which reclassified some QC0.5 and QC1 aircraft as QC0.25.

Generally speaking, the smaller or newer the aircraft, the lower its QC value. For each aircraft type, the departure QC tends to be higher than that for arrival. The total number of all aircraft movements in the night quota period over the last 20 seasons is shown in **Table B2** (see next page). The table is subdivided into arrivals and departures and the totals include all aircraft subject to movement and quota limits, as well as those exempt or granted dispensation.

There was a year-on-year increase in flights during the Summer 2010 night quota period, however this figure still fell well short of the peak recorded in Summer 2008. The percentage of arrivals against departures showed a small increase compared to 2009.

The number of movements during the Winter 2009/10 season was slightly lower than the previous year and marks the smallest number of winter night flights for 10 years.

Planes with a QC0.0 classification are also known as exempt aircraft as they do not count against either the movement or QC limits. Aircraft can also be granted a dispensation to operate during the night quota period but only in special circumstances.

Tables B3 and **B4** show exempt aircraft and dispensed movements. The reduction in the overall number of movements from the Winter 2006/07 season onwards shown in **Table B3** is the result of some previously exempt aircraft being reclassified as QC0.25 aircraft. **Table B4** shows that in 2010/11 there were 33 dispensations granted by the Department for Transport (DfT). These occurred during the major snowfalls in December 2010 and were allowed to alleviate terminal congestion and prevent further passenger hardship as per the DfT guidelines.

Movement limits and noise quotas

The usage and allocation of night movements and quota counts for the previous 18 seasons are shown in **Tables B5** and **B6**. The Winter 2006/07 season was the first to operate under the DfT's new quotas and movement limits and also includes the new 0.25 category.

The introduction of the new quota and movement limits meant a reduction in the number of movements permitted and QC allowance. **Figure B7** shows that Summer 2010 continued the general downward trend since 2000, this was reversed in the Winter 2010/11 season. This mirrors the gradual shift towards quieter, more modern aircraft operating at Gatwick. The introduction of the new QC0.25 category has also impacted this trend. The average QC has now remained fairly consistent for the last eight seasons.

Table B8 (on page 8) shows a breakdown of night movements and QC usage by category. As previously mentioned, more airlines are now operating in the QC0.25 category. Although QC4 aircraft can still operate at night, they have not been allowed to operate scheduled flights since October 2006. There were no QC4 movements in the Summer 2010 and Winter 2010/11 seasons.

Table B9 (on page 7) shows the percentage of movements in each QC category over the past 18 seasons. Compared to previous seasons, Summer 2010 saw an increased percentage of QC0.25 and QC1.0 movements and a decline in QC2.0 usage. This trend was reversed in Winter 2010/11 with a decrease of QC0.25 movements and an increase in QC2.0 movements. Even so, around 80% of all movements were classified as QC0.5 or below.

Table B1
QC categories

Certificated noise level (EPNdB)	Quota count QC
Less than 84	0
84 to 86.9	0.25
87 to 89.9	0.5
90 to 92.9	1
93 to 95.9	2
96 to 98.9	4
99 to 101.9	8
Greater than 101.9	16

Table B2

Arrivals and departures in the night quota period

Season	Arrivals	Departures	Total	% arrivals	% departures	Weeks
Summer 2001	8,812	2,726	11,538	76.40	23.60	31
Winter 2001/02	2,504	775	3,279	76.40	23.60	22
Summer 2002	7,457	2,488	9,946	75.00	25.00	30
Winter 2002/03	2,638	727	3,365	78.40	21.60	22
Summer 2003	7,352	2,151	9,503	77.40	22.60	30
Winter 2003/04	2,283	776	3,059	74.60	25.40	22
Summer 2004	8,451	2,227	10,678	79.10	20.90	31
Winter 2004/05	2,328	828	3,155	73.80	26.20	21
Summer 2005	9,061	2,077	11,138	81.40	18.60	31
Winter 2005/06	2,883	737	3,620	79.60	20.40	21
Summer 2006	9,442	1,873	11,315	83.45	16.55	31
Winter 2006/07	2,475	309	2,784	88.90	11.10	21
Summer 2007	8,866	1,416	10,282	86.20	13.80	31
Winter 2007/08	2,575	416	2,991	86.10	13.90	22
Summer 2008	8,883	1,735	10,618	83.66	16.34	30
Winter 2008/09	1,993	274	2,267	87.91	12.09	22
Summer 2009	7,084	1,371	9,175	85.06	14.94	30
Winter 2009/10	2,013	289	2,302	87.45	12.55	22
Summer 2010	8,893	1,102	9,995	88.97	11.01	31
Winter 2010/11	1,790	281	2,251	87.52	12.48	21

Table B3

Exempt aircraft movements

Season	Movements
Summer 2000	711
Winter 2000/1	339
Summer 2001	645
Winter 2001/2	415
Summer 2002	584
Winter 2002/03	389
Summer 2003	525
Winter 2003/04	329
Summer 2004	429
Winter 2004/05	156
Summer 2005	199
Winter 2005/06	363
Summer 2006	379
Winter 2006/07	50
Summer 2007	107
Winter 2007/08	50
Summer 2008	83
Winter 2008/09	62
Summer 2009	74
Winter 2009/10	103

Table B4

Dispensations

Year	Number of dispensations
2001/02	3
2002/03	4
2003/04	0
2004/05	0
2005/06	0
2006/07	18
2007/08	14
2008/09	7
2009/10	2
2010/11	33

Table B5

Night movements limits and usage

Season	Movements limit	Actual movements	Percentage use of movements
Summer 2002	11,200	9,358	83.55
Winter 2002/03	5,250	2,976	56.69
Summer 2003	11,200	8,978	80.16
Winter 2003/04	5,250	2,730	52.00
Summer 2004	11,200	10,249	91.50
Winter 2004/05	5,250	3,000	57.14
Summer 2005	11,200	10,939	97.67
Winter 2005/06	5,250	3,257	62.04
Summer 2006	11,200	10,918	97.48
Winter 2006/07	3,250	2,734	84.12
Summer 2007	11,200	10,173	90.83
Winter 2007/08	3,250	2,240	68.92
Summer 2008	11,200	10,618	94.8
Winter 2008/09	3,250	2,145	66.00
Summer 2009	11,200	9,099	81.24
Winter 2009/10	3,250	2,199	67.66
Summer 2010	11,200	9,875	88.17
Winter 2010/11	3,250	2,160	66.46

Table B6

Night QC allocation and usage

Season	QC allocation	QC use	% use
Summer 2002	9,060	6,905.0	76.21
Winter 2002/03	6,660	2,358.0	35.41
Summer 2003	9,030	6,357.5	70.40
Winter 2003/04	6,640	2,468.0	37.17
Summer 2004	9,000	7,863.0	87.36
Winter 2004/05	6,640	2,614.5	39.38
Summer 2005	9,000	8,255.5	91.72
Winter 2005/06	6,640	2,677.0	40.32
Summer 2006	9,000	7,749.5	86.11
Winter 2006/07	2,300	1,355.3	58.92
Summer 2007	6,700	5,328.5	79.53
Winter 2007/08	2,240	1,542.3	68.85
Summer 2008	6,600	5,659.8	85.76
Winter 2008/09	2,180	1,169.0	53.62
Summer 2009	6,500	4,786.50	73.64
Winter 2009/10	2,120	1,236.75	58.34
Summer 2010	6,400	4,824	75.38
Winter 2010/11	2,060	1280.8	62.17

Figure B7

Average QC per movement by season

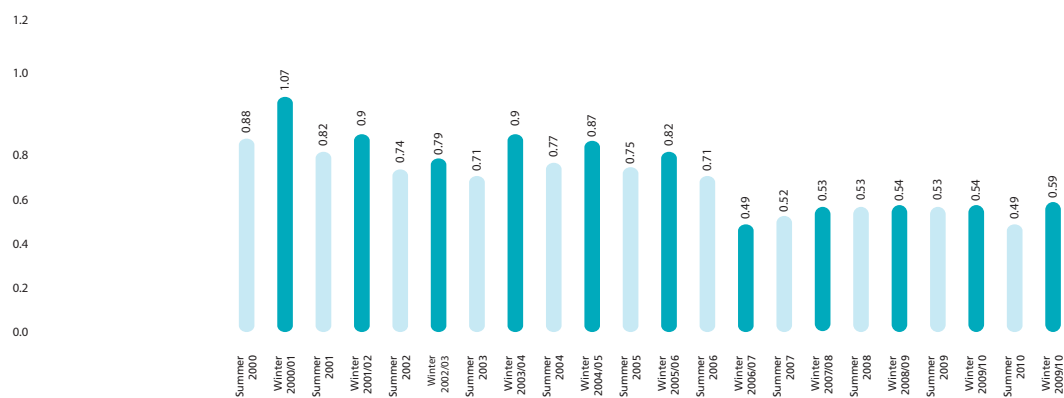


Table B9

Percentage movements by QC category

Season	QC0.25	QC0.5	QC1	QC2	QC4	QC8	QC16	Earlies
Summer 2001	n/a	63.85	25.42	8.87	1.70	0.01	0.00	0.16
Winter 2001/02	n/a	66.06	18.58	11.31	3.98	0.00	0.00	0.07
Summer 2002	n/a	73.01	19.35	5.67	1.65	0.00	0.00	0.26
Winter 2002/03	n/a	73.42	17.81	4.84	3.76	0.00	0.00	0.13
Summer 2003	n/a	76.44	17.96	3.71	1.80	0.00	0.00	0.09
Winter 2003/04	n/a	70.55	13.96	9.74	5.42	0.00	0.00	0.33
Summer 2004	n/a	70.09	22.82	4.51	2.46	0.00	0.00	0.12
Winter 2004/05	n/a	73.70	10.90	10.57	4.57	0.00	0.00	0.27
Summer 2005	n/a	71.98	22.75	4.45	0.76	0.00	0.02	0.04
Winter 2005/06	55.93	28.68	9.62	5.74	0.04	0.00	0.00	*n/a
Summer 2007	51.82	24.45	20.52	3.08	0.13	0.00	0.00	*n/a
Winter 2007/08	51.86	29.19	12.80	6.15	0.00	0.00	0.00	*n/a
Summer 2008	48.63	28.65	18.65	3.99	0.04	0.00	0.00	*n/a
Winter 2008/09	42.75	40.37	10.12	6.76	0.00	0.00	0.00	*n/a
Summer 2009	47.70	32.54	15.44	4.29	0.01	0.00	0.02	*n/a
Winter 2009/10	52.16	28.58	9.23	9.78	0.00	0.00	0.00	*n/a
Summer 2010	59.12	21.11	16.02	3.75	0.00	0.00	0.00	*n/a
Winter 2010/11	49.68	30.60	7.87	11.85	0.00	0.00	0.00	*n/a

*Earlies no longer counted in new regime

Table B8
Night movements and QC usage, by QC category

Category	Movements Summer 2005	Movements Winter 2005/06	Quota Summer 2005	Quota Winter 2005/06
0.5	7815	2384	39075	1192
1	2332	437	2332	437
2	550	302	1100	604
4	229	111	916	444
8	0	0	0	0
16	0	0	0	0
Earlies	13	22	0	0
Total:	10,939	3,256	8,255.5	2,677
Category	Movements Summer 2006	Movements Winter 2006/07	Quota Summer 2006	Quota Winter 2006/07
0.25	n/a	1529	0	382.25
0.5	7859	784	3929.5	392
1	2484	263	2484	263
2	486	157	972	314
4	83	1	332	4
8	0	0	0	0
16	2	0	32	0
Earlies	4	n/a	0	n/a
Total:	10,918	2,734	7,749.5	1,355.25
Category	Movements Summer 2007	Movements Winter 2007/8	Quota Summer 2007	Quota Winter 2007/8
0.25	5,272	1519	1318	379.75
0.5	2,487	855	1243.5	42750
1	2,087	375	2087	375
2	314	180	628	360
4	13	0	52	0
8	0	0	0	0
16	0	0	0	0
Total:	10,173	2,929	5,328.5	1,542.25
Category	Movements Summer 2008	Movements Winter 2008/09	Quota Summer 2008	Quota Winter 2008/09
0.25	5,164	917	1,291	229
0.5	3,042	866	1,521	433
1	1,984	217	1,984	217
2	424	145	848	290
4	4	0	16	0
8	0	0	0	0
16	0	0	0	0
Total:	10,618	2,145	5,644	1,169
Category	Movements Summer 2009	Movements Winter 2009/10	Quota Summer 2009	Quota Winter 2009/10
0.25	4,340	1,147	1,085	286.75
0.5	2,961	317	1,480.5	634
1	1,405	203	1,405	317
2	390	430	780	215
4	1	0	4	0
8	0	0	0	0
16	2*	0	0	0
Total:	9,097	2,097	4,786.5	1,452.75
Category	Movements Summer 2010	Movements Winter 2010/11	Quota Summer 2010	Quota Winter 2010/11
0.25	5,838	1,073	1,459.5	268.25
0.5	2,085	661	1,042.5	330.5
1	1,582	170	1,582	170
2	370	256	740	512
4	0	0	0	0
8	0	0	0	0
16	0	0	0	0
Total:	9,875	2,160	4,824	1,280.75

* Unclassified military aircraft

As Gatwick is a designated airport, the Department for Transport (DfT) has overall responsibility for its noise policies. The DfT has established a number of key procedures and measures to help minimise the disturbance caused by aircraft taking off and landing at all UK airports. Gatwick's Flight Evaluation Unit (FEU) plays a key role in monitoring and enhancing its performance against these key measures.

Figures C1 and **C2** illustrate a typical day of westerly and easterly operations at Gatwick. These maps show that the operational patterns for arriving aircraft (shown in red) are very different to those for departing aircraft (green). It should be remembered that Gatwick does not operate in isolation – its day-to-day operations are integrated with traffic travelling to and from other airports.

If you would like to find out more information about specific aircraft flights flying over where you live, visit www.gatwickairport.com/noise, enter your postcode and you will be able to access detailed information.

Figure C1
Gatwick westerly operations – typical day

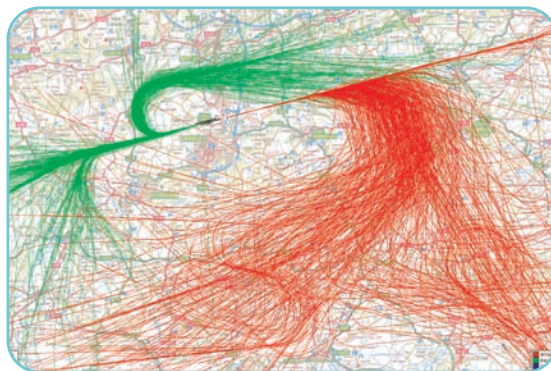


Figure C2
Gatwick easterly operations – typical day



Departing aircraft

All departing aircraft from Gatwick follow one of a number of noise preferential routes (NPRs) on leaving the runway.

Table C3 shows the deviations from these NPRs as a percentage of departures per route since 2006. The way that track deviations are recorded was changed in October 2008. Prior to this date, aircraft that were instructed to leave the NPR early by Air Traffic Control, due to weather avoidance, and also propeller-driven aircraft that are not required to follow the normal NPRs, were not included within the statistics.

Historically the majority of deviations occur on the westerly wrap around NPR designated 26LAM. This route has the tightest turn of all the NPRs and presents the greatest challenge for modern aircraft to adhere to. During the year 6.93% of all departures on this route were deviations.

Table C4 (on page 11) shows the annual average of on-track aircraft as a percentage of departures from the westerly and easterly runways. In 2010, there was a reduction of track-keeping performance on runway 26 and a small decrease in performance for runway 08. There was a greater percentage of deviations on the westerly routes due to technical issues on the 26LAM route mentioned above.

Tables C5 and **C6** show track deviations by airline and aircraft type respectively. Both tables show increases in deviations in 2010, however this is partly explained by the change in reporting procedures in October 2008. Prior to October 2008, aircraft that were instructed to leave the NPR early by ATC, due to weather avoidance, and also propeller-driven aircraft that are not required to follow the normal NPRs, were not included within the statistics. This change has contributed to the increase in the number of recorded off-track departures since that date, although it was felt this method more accurately reflects the experiences of the local community. When compared with 2009, there was a small improvement in track-keeping performance in 2010.

Table C5 shows that Gatwick's largest airlines – Easyjet, British Airways and Flybe – all have above average track-keeping performances. The Flight Evaluation Unit continues to work with Gatwick's airlines to improve track-keeping performances.

Table C3

Deviations from NPRs as percentage of departures per route

Year	Runway 26 (Westerly)					Runway 08 (Easterly)			
	LAM	SAM	SFD	BOG	WIZ	08KEN	08DTY	08CLN	08SFD
2006	5.26	0.03	0.00	0.21	13.32	1.36	0.19	0.06	0.45
2007	4.12	0.06	0.18	0.16	12.66	0.80	0.07	0.04	0.40
2008	4.27	0.54	0.51	0.26	7.38	0.80	0.28	0.15	0.55
2009	6.91	2.36	1.73	0.90	29.57	1.82	0.77	0.36	1.60
2010	6.93	2.41	1.25	0.72	13.87	1.57	0.42	0.16	2.23

Table C5

Track deviations by airline

Airline	Total	Total	%	Total	Total	%	Total	Total	%	Total	Total	%	Total	Total	%
	departures	deviations	deviations	departures	deviations	deviations	departures	deviations	deviations	departures	deviations	deviations	departures	deviations	deviations
	2006	2006	2006	2007	2007	2007	2008	2008	2008	2009	2009	2009	2010	2010	2010
EasyJet	19,959	83	0.42	22,573	66	0.29	23,391	172	0.74	34,290	840	2.45	37,909	895	2.36
British Airways	36,586	534	1.46	33,992	331	0.97	31,401	401	1.28	25,930	483	1.86	20,459	379	1.85
Others	15,321	443	2.89	15,730	362	2.30	18,375	1,270	6.91	12,000	1,091	9.09	3,414	171	5.01
Flybe	3,970	82	2.07	5,495	116	2.11	8,284	163	1.97	11,269	155	1.38	12,040	134	1.11
Thomsonfly	4,396	66	1.50	4,478	80	1.79	4,531	112	2.47	7,001	251	3.59	7,036	246	3.50
Monarch Airlines	5,631	77	1.37	5,792	49	0.85	5,444	112	2.06	5,644	181	3.22	5,008	105	2.10
Ryanair	3,162	33	1.04	2,885	3	0.10	3,173	28	0.88	4,627	23	0.50	4,405	21	0.48
Thomas Cook	3,706	67	1.81	3,704	54	1.46	3,196	118	3.69	4,575	339	7.41	4,676	270	5.77
Virgin Atlantic	2,271	114	5.02	2,201	74	3.36	2,024	89	4.40	2,085	83	3.98	1,987	43	2.16
Norwegian Air Shuttle	-	-	-	-	-	-	522	23	4.41	2,045	114	5.57	3,074	206	6.70
Easyjet Switzerland	1,379	4	0.29	356	0	0.00	1,377	8	0.58	1,693	15	0.89	1,577	7	0.44
Air Southwest	-	-	-	-	-	-	1,384	110	7.95	1,602	74	4.62	1,611	89	5.52
Aurigny	-	-	-	-	-	-	1,384	110	7.95	1,602	74	4.62	1,611	89	5.52
Emirates	1,102	50	4.54	1,096	78	7.12	1,074	76	7.08	1,093	45	4.12	1,086	19	1.75
Viking Airlines	-	-	-	-	-	-	-	-	-	-	-	-	1,014	9	0.89
Cimber Air	-	-	-	-	-	-	26	0	0.00	1,039	26	2.50	812	24	2.96
TAP Portugal	-	-	-	-	-	-	1,533	26	1.70	1,024	16	1.56	1,177	4	0.34
GB Airways	7,730	47	0.61	8,010	54	0.67	7,979	128	1.60	888	8	0.90	-	-	-
Malev	-	-	-	-	-	-	757	13	1.72	719	6	0.83	649	3	0.46
Air Malta	-	-	-	-	-	-	681	7	1.03	714	7	0.98	586	10	1.71
Meridiana	-	-	-	-	-	-	781	3	0.38	678	4	0.59	650	3	0.46
SN Brussels	617	45	7.29	621	23	3.70	485	21	4.33	634	17	2.68	11	0	0.00
Air Europa	-	-	-	-	-	-	43	0	0.00	599	2	0.33	688	1	0.15
Astraeus	1,809	88	4.86	1,720	40	2.33	789	23	2.92	426	25	5.87	433	29	6.70
Air Baltic	-	-	-	-	-	-	700	11	1.57	422	10	2.37	531	8	1.51
Transavia Airlines	-	-	-	-	-	-	-	-	-	-	-	-	492	7	1.42
Croatia Airlines	-	-	-	-	-	-	399	12	3.01	389	29	7.46	233	9	3.86
Saga Airlines	-	-	-	-	-	-	-	-	-	-	-	-	202	2	0.99
First Choice	4,541	127	2.80	4,397	85	1.93	4,089	94	2.30	377	7	1.86	-	-	-
Delta Airlines	1,402	37	2.64	1,627	23	1.41	1,148	20	1.74	369	5	1.36	354	1	0.28
Afriqiyah Airways	-	-	-	-	-	-	336	5	1.49	366	2	0.55	349	13	3.72
Qatar Airways	90	3	3.33	276	9	3.26	361	24	6.65	362	23	6.35	358	32	8.94
Adria Airways	79	3	3.80	259	2	0.77	306	4	1.31	355	4	1.13	267	4	1.50
Ukraine International	88	2	2.27	279	3	1.08	395	6	1.52	344	4	1.16	390	5	1.28
Royal Air Maroc	-	-	-	-	-	-	-	-	-	-	-	-	380	1	0.26
BMI	-	-	-	-	-	-	252	28	11.11	326	46	14.11	102	8	7.84
Air Transat	-	-	-	-	-	-	444	6	1.35	250	7	2.80	249	2	0.80
Onur Air	-	-	-	-	-	-	331	26	7.85	237	35	14.77	176	25	14.20
My Travel	1,738	74	4.26	1,686	45	2.67	1,537	101	6.57	171	3	1.75	-	-	-
US Airways	719	7	0.97	719	28	3.89	702	28	3.99	171	2	1.17	347	19	5.48
Northwest Airlines	660	26	3.94	715	85	11.89	432	58	13.43	160	19	11.88	-	-	-
Estonian Air	99	1	1.01	330	6	1.82	337	5	1.48	126	2	1.59	101	4	3.96
Bulgaria Air	134	2	1.49	328	4	1.22	391	8	2.05	115	2	1.74	51	0	0.00
Jet2.com	808	49	6.06	719	8	1.11	258	8	3.10	75	4	5.33	107	1	0.93
American Airlines	1,096	44	4.01	1,081	33	3.05	393	30	7.63	66	4	6.06	-	-	-
Maersk Air/Sterling	1,597	25	1.57	2,150	22	1.02	1,853	49	2.64	63	2	3.17	-	-	-
Olympic Air	329	25	7.60	410	19	4.63	215	11	5.12	52	3	3.85	66	3	4.55
Centralwings	875	28	3.20	786	11	1.40	289	7	2.42	-	-	-	-	-	-
Continental Airlines	1,691	25	1.48	1,722	38	2.21	1,037	19	1.83	-	-	-	-	-	-
Lithuanian Airlines	126	2	1.59	273	4	1.47	357	9	2.52	-	-	-	-	-	-
XL Airways	3,897	120	3.08	3,225	48	1.47	2,172	48	2.21	-	-	-	-	-	-
Totals	127,608	2,333	1.83	129,665	1,803	1.39	125,680	3,113	2.48	125,361	4,018	3.21	116,416	3,585	3.00

Table C4

Annual average of on-track aircraft as percentage of departures by runway direction

Year	Runway 26 (Westerly)	Runway 08 (Easterly)
2006	97.60	99.40
2007	98.10	99.60
2008	98.00	99.50
2009	98.08	99.12
2010	95.94	98.88

Table C6

Track deviations by all aircraft – by aircraft type

Aircraft type	Departures 2009	Deviations 2009	% Deviations 2009	%On Track 2009	Departures 2010	Deviations 2010	% Deviations 2010	%On Track 2010
A319	37,078	589	1.59	98.41	34,934	523		98.50
B737-400	14,931	287	1.92	98.08	15,934	302		98.10
A320	14,335	612	4.27	95.73	13,650	530		96.12
DHC-8/8-400/300	8,436	822	9.74	90.26	9,280	844	9.09	90.99
B737-800	8,394	138	4.66	95.34	8,317	181	2.18	97.92
D757	6,654	310	4.66	95.34	7,731	301	3.89	96.11
A321	5,756	237	4.12	95.88	4,584	157		96.58
EMB195	4,569	54	1.18	98.82	4,694	70		98.51
B737-300	3,657	100	2.73	97.27	2,864	109	3.70	96.30
B777	3,523	73	2.07	97.93	3,663	50	1.37	98.63
A330	2,415	210	8.70	91.30	2,639	187	7.09	92.91
B737-700	2,263	53	2.34	97.66	1,500	26	1.73	98.27
B767-300	2,260	59	2.61	97.39	1,565	30	1.92	98.08
B747-400	2,080	81	3.89	96.11	1,989	43		97.84
B737-500	2,057	41	1.99	98.01	547	5		99.09
ATR 72 (prop)	1,606	74	4.61	95.39	1,607	89		94.46
A300	890	18	2.02	97.98	838	1		98.88
Canadair RJ	665	18	2.71	97.29	848	25	2.95	97.05
Fokker 100	485	23	4.74	95.26	123	4		96.75
Avro RJ	484	17	3.51	96.49	0	0		n/a
Others	450	60	13.33	86.67	415	33	8.67	91.33
Cessna Citation	339	47	13.86	86.14	306	24	7.84	92.16
B767-200	311	29	9.32	90.68	230	13		94.35
A340	269	13	4.83	95.17	86	5		94.19
A310	241	8	3.32	96.68	270	4	1.48	98.52
B767-600	210	1	0.48	99.52	166	0		100.00
B767-400	143	2	1.40	98.60	185	0		100.00
Gulfstream	128	6	4.69	95.31	110	8	7.27	92.73
MD81/82/83	106	6	5.66	94.34	45	1		97.98
Dassault Falcon	101	7	6.93	93.07	127	5	3.94	96.06
Hawker 125	92	5	5.43	94.57	145	7		95.17
MD87/88	78	2	2.56	97.44	0	0		n/a
Learjets	65	7	10.77	89.23	72	3		95.83
EMB135/145	43	5	11.63	88.37	27	1	3.70	92.30
Canadair CL600/601/604	41	4	9.76	90.24	63	3	4.76	95.24
Ilyushin 96	32	0	0.00	100.00	43	1		97.67
BA 146-200	10	0	0.00	100.00	0	0		n/a
Totals	125,197	4,018	3.21	96.79	119,597	3,585	3.00	97.00

As already mentioned, the majority of track deviations occur on the westerly wrap-around route 26LAM, with this route accounting for more deviations than all of the other routes combined. The NPRs were designated in 1968, but the aircraft types have changed significantly since then and the acute 180-degree turn on the 26LAM route is more difficult for faster modern jets to negotiate.

The A319 is the most commonly used aircraft at the airport: from nearly 35,000 departures in 2010, there were only 523 deviations (1.5%). When planes deviate from the NPRs, the relevant airlines are notified and ongoing performance is monitored by Gatwick's Flight Operations Performance and Safety Committee (FLOPSC).

Arriving aircraft

There are no set routes for arriving aircraft but there are long-established procedures to mitigate the disturbance they can cause when landing. These procedures focus on night-time operations and are aimed at keeping aircraft as high as possible for as long as possible. For example, there are specific distances and heights that aircraft need to maintain on the final approach or instrument landing system (ILS).

Collectively, these distances and heights are known as the joining point criteria. Between 23:30 and 06:00, aircraft must not join the ILS below 3,000 feet or closer than ten nautical miles (nm). **Table C7** shows the joining point criteria adherence from 2006 to 2010. Fewer aircraft joined the ILS closer than 10nm in 2010 than in any previous years and the % average for 2010 was comparable to 2009. From June 2007 the data was collected in a slightly different way when the new noise and track system was introduced, which goes some way to explain the reduction in achievement for 2007 compared to 2006.

Table C8 shows consistently high levels of compliance in 2010 (94%) with regard to the height requirements, a 1% improvement on the previous year.

Table C7

Aircraft joining the ILS at distances greater than 10nm (23:30-06:00)

	2006		2007		2008		2009		2010	
	Number	%	Number	%	Number	%	Number	%	Number	%
January	493	95	440	93	415	91	362	98	264	97
February	500	96	397	91	389	87	316	97	219	97
March	642	97	536	86	564	94	336	96	240	97
April	792	95	716	94	745	92	721	94	627	95
May	1,067	97	1,067	96	1,116	96	965	96	869	97
June	1,254	94	1,205	93	1,332	95	1,077	95	982	96
July	1,462	94	1,481	98	1,122	98	1,470	97	1,373	97
August	1,637	97	1,450	96	1,588	98	1,422	97	1,325	97
September	1,434	96	1,302	96	1,318	94	1,236	98	1,138	97
October	1,070	95	1,029	89	1,037	96	911	97	814	98
November	383	98	348	85	327	97	288	97	191	98
December	6571	97	515	90	366	97	416	97	319	95
Year total	11,305	96	10,486	92	10,319	95	9,520	97	8,361	97

Table C8

Aircraft joining the ILS above an altitude of 2,900 feet (23:30-06:00)

	2006		2007		2008		2009		2010	
	Number	%	Number	%	Number	%	Number	%	Number	%
January	513	98	451	96	370	81	309	85	401	93
February	511	98	420	96	379	85	292	92	337	91
March	651	99	603	96	508	85	291	87	401	93
April	827	99	758	98	704	87	655	91	580	95
May	1,079	98	1,099	99	1,803	93	890	92	1,064	97
June	1,316	99	1,184	91	1,256	89	1,001	93	1,203	93
July	1,510	97	1,405	93	1,063	93	1,388	94	1,541	95
August	1,677	99	1,423	94	1,494	93	1,354	95	1,585	95
September	1,475	98	1,238	91	1,259	90	1,165	94	1,318	92
October	1,123	99	955	83	982	91	842	92	1,020	93
November	389	99	345	85	295	88	256	89	297	89
December	569	97	465	81	338	90	380	91	526	91
Year total	11,640	98	10,346	92	9,731	89	8,823	93	102,273	94

Figure C9
Example of a CDA and non-CDA approach profile

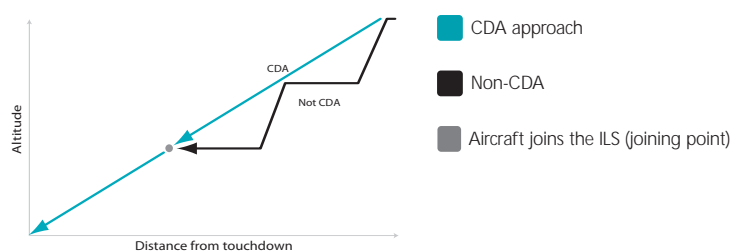


Table C10
Monthly core night-time arrivals (23:30-06:00) and achievement of CDAs

	2006		2007		2008		2009		2010	
	Arrivals	% CDA	Arrivals	% CDA	Arrivals	% CDA	Arrivals	% CDA	Arrivals	%CDA
January	521	82	472	84	446	88	362	85	399	92
February	523	81	439	86	441	85	316	87	369	88
March	667	85	626	85	599	83	333	86	427	95
April	837	89	760	91	800	90	717	90	619	95
May	1,104	92	1,108	90	1,142	90	951	88	1,085	96
June	1,336	91	1,301	90	1,416	89	1,073	91	1,287	94
July	1,560	92	1,512	92	1,180	92	1,466	95	1,594	96
August	1,688	91	1,508	94	1,567	92	1,426	95	1,698	95
September	1,502	92	1,354	90	1,423	89	1,246	93	1,439	93
October	1,132	89	1,151	86	1,078	91	906	92	1,100	94
November	391	87	408	79	370	89	312	91	361	91
December	588	86	571	86	377	88	420	89	570	92
Year Total	11,849	90	11,210	89	10,839	89	9,528	92	109,48	94

Table C11
CDA achievement

	2008		2009		2010	
	%CDA	%CDA	Change	%CDA	%CDA	Change
Period						
Core night (23:30-06:00)	89	92	+3	92	94	+2
Night and shoulder (23:00-07:00)	85	89	+4	89	89	0
Daytime (07:00-23:00)	83	88	+5	88	89	+1
24-hour period	84	88	+4	88	89	+1

All arriving aircraft should aim to achieve a CDA wherever practical as this is an important noise mitigation method.

Put simply, a CDA keeps the aircraft higher for longer, avoiding periods of prolonged level flight at lower altitudes. Achieving a CDA is not a precise art – it relies on a combination of the pilot's skill, the quality of information provided by NATS and weather and operational conditions.

Figure C9 illustrates CDA and non-CDA approach profiles. There are no set approach angles or heights for an arrival to be classified as following a CDA.

The Arrivals Code of Practice is a technical document aimed at reducing the noise created by arriving aircraft. The code, allied with subsequent communications and analysis by airlines, NATS and the FEU, has resulted in significant improvements in the CDA achievement rate across all time periods.

Not surprisingly, the most sensitive time is the night quota period. In 2010 Gatwick improved its night quota CDA performance, recording a 94% achievement compared to 92% the previous year – see **Table C10**. **Table C11** shows the overall CDA achievement for the last three years.

Figures C12 and **C13** illustrate the track density plots of night-time westerly arriving aircraft to 4,000 feet for July 1996 and July 2010. The area covered by aircraft below 4,000 feet in 2010 is notably smaller than in 1996 – underlining the significant improvement in CDA achievement during that period.

CDA achievement in 2010 for the whole night restriction period (**Table C14**) followed the trend of previous years with the achievement being greater in the summer months. The performance throughout 2010 shows a similar performance to 2009. In the daytime period (**Table C15**), CDA achievement has improved over the last four years and the average achievement rate of 89% represents an 9% improvement on the 2007 performance.

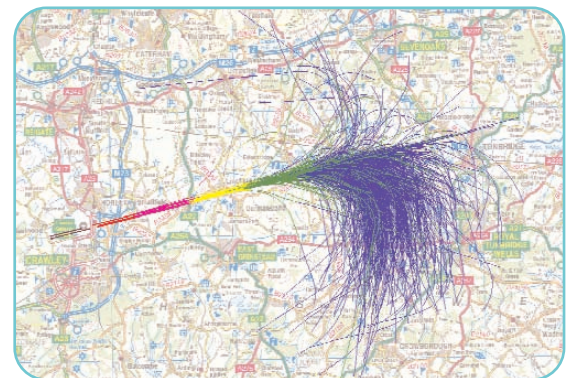
Figure C16 shows the seasonal nature of CDA achievement across the three key time periods, 2002-2010.

The Arrivals Code of Practice contains further noise mitigation measures related to arriving aircraft. For more details visit: www.gatwickairport.com/noise.

Figure C12
Colour by height plots of westerly (23:30-06:00) arriving aircraft to 4,000ft for July 1996



Figure C13
Colour by height plots of westerly (23:30-06:00) arriving aircraft to 4,000ft for July 2010



0-800ft 801-1,600ft 1,601-2,400ft 2,401-3,200ft 3,201-3,999ft

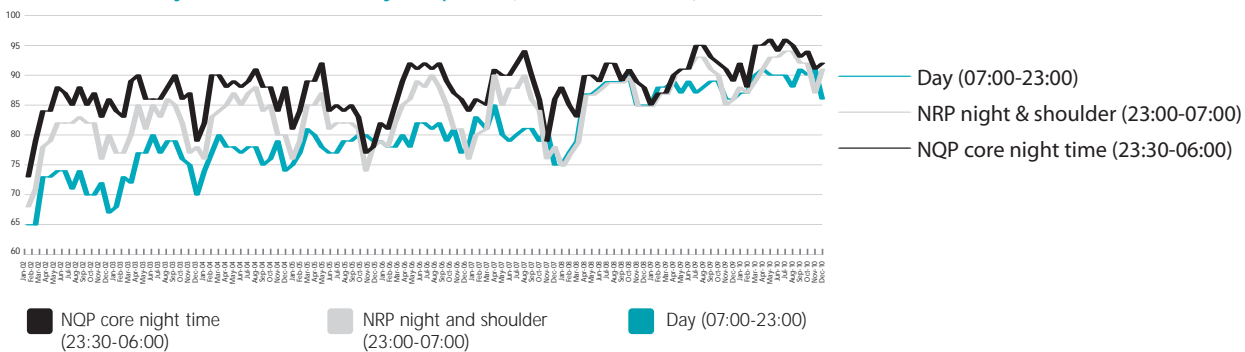
Table C14
Monthly core night & shoulder arrivals (23:00-07:00) and achievement of CDAs

	2007		2008		2009		2010	
	Arrivals	%	Arrivals	%	Arrivals	%	Arrivals	%
January	1,086	76	1,047	75	786	84	772	88
February	1,024	80	992	77	709	84	776	87
March	1,262	81	1,197	79	763	83	811	89
April	1,415	90	1,378	87	1,224	87	996	91
May	1,850	85	1,775	87	1,474	88	1,581	93
June	1,971	88	2,148	88	1,656	90	1,846	93
July	2,339	88	1,807	89	2,151	93	2,209	94
August	2,309	90	2,379	89	2,150	93	2,345	94
September	2,182	86	2,178	89	1,864	91	1,995	92
October	1,850	84	1,706	90	1,444	90	1,642	92
November	981	76	752	85	730	85	702	87
December	1,175	78	825	85	814	86	926	91
Year total	19,444	85	18,184	85	15,765	89	16,601	89

Table C15
Monthly day arrivals (07:01-22:59) and achievement of CDAs

	2007		2008		2009		2010	
	Arrivals	% CDAs	Arrivals	% CDAs	Arrivals	CDAs %	Arrivals	CDAs %
January	8,715	78	1,047	75	8,187	85	7,618	87
February	8,012	83	992	77	8,363	89	7,856	87
March	9,034	81	1,197	79	9,651	88	8,719	90
April	9,249	85	1,378	87	9,965	89	7,223	91
May	9,853	80	1,775	87	11,157	87	9,139	90
June	10,078	79	2,148	88	11,394	89	9,308	90
July	10,446	80	1,807	89	10,238	87	9,687	90
August	10,656	81	2,379	89	10,565	88	9,958	88
September	10,158	81	2,178	89	10,110	89	9,485	91
October	9,980	79	1,706	90	9,623	89	9,043	90
November	8,518	81	752	85	8,059	86	8,039	92
December	8,727	75	825	85	8,101	86	7,096	86
Year total	113,426	80	18,184	85	109,587	88	103,171	89

Figure C16
CDA achievement by month for the three key time periods (Jan 2002 to Dec 2010)



The FEU assesses aircraft noise in three different ways:

- annual air noise contours
- mobile noise monitoring studies
- departure noise limit compliance.

The DfT is responsible for issuing noise contours and full details are available on the DfT website: www.dft.gov.uk. The noise contours for 2010 have not yet been published.

Mobile noise monitoring data is recorded at several community locations close to the airport (see **Figure D1**). Members of the FEU team meet on a quarterly basis with local Environmental Health Officers to discuss the results.

Noise limits

All take-offs from the airport are subject to departure noise limits set by the DfT. Since 2001, there have been three limits in place at Gatwick for the day, shoulder and night-time periods.

Departure noise limits are based on the assumption that the noise monitors are exactly 6.5km from the start of roll point on the runway and at the same elevation as the airfield. In practice, this is seldom possible and adjustments are made to the limits to account for any variances in monitor position. There is a margin of error for the microphone which is also taken into account (+/- 0.7dBA). **Table D2** summarises the limits that apply to the five permanent monitors.

In 2010 there were no night or daytime noise infringements, the lowest figure for the last five years (**Figure D3**). This reflects Gatwick FEU's continued work with airlines operating at the airport and the growth in recent years of a fleet of smaller, more modern aircraft operating at the airport. In 2009 there was one night-time infringement and none during the daytime.

Airlines are charged for noise infringements, with all proceeds going to the independently-run Gatwick Airport Community Trust. **Table D5** lists the different infringements during the past six years and the amount of money raised for the Community Trust.

Figure D1
Noise monitoring sites

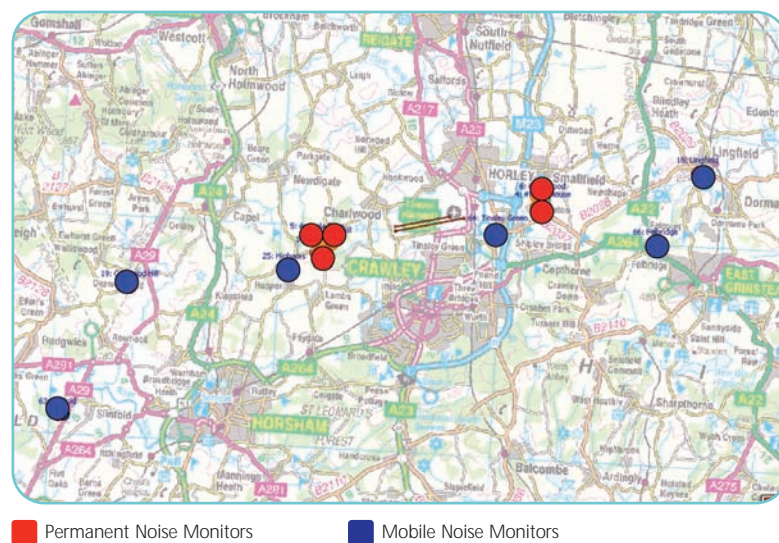


Table D2

Noise limits as adjusted for individual monitoring sites

Site	Adjustments specific to monitoring sites			Adjusted limit values at monitoring sites		
	Positional	Equipment	Total	Day	Shoulder	Night
1	+5.0	+0.7	+5.7	99.7	94.7	92.7
3	+1.9	+0.7	+2.6	96.6	91.6	89.6
4	+1.9	+0.7	+2.6	96.6	91.6	89.6
5	0.0	+0.7	+0.7	94.7	89.7	87.7
6	-0.2	+0.7	+0.5	94.5	89.5	87.5

Figure D3 Total noise Infringements

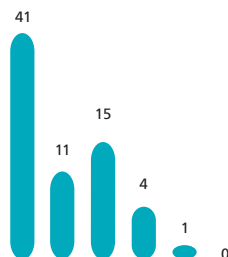


Table D4

All noise infringements 2010

Number	Date/Time	Flight No	A/C Type	Reg	R/W	Monitor	Lmax	Limit at Monitor	Excess	Tailwind Adjustment	Adj Limit	Fine (£)	Day/Night
0	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

Table D5

Departure noise limit infringements

	2005	2006	2007	2008	2009	2010
Night-time infringements	12	2	2	2	1	0
Shoulder hour infringements	0	0	0	0	0	0
Day-time infringements	29	9	13	2	0	0
Total	41	11	15	4	1	0
Total Gatwick departures	130,638	131,677	133,272	127,552	125,889	120,249
Infringements as % of departures	0.031%	0.008%	0.011%	0.003%	0.001%	0.00%
Total surcharges	£21,500	£5,500	£8,500	£2,000	£500	£0

Callers and enquiries

The number of different people calling Gatwick's FEU has generally been falling in recent years from 580 in 2006 to 409 in 2010. In 2010 the number of enquiries increased compared to 2009, but it should be taken into consideration that four individuals account for 80% of the total number of enquiries.

Table E1 shows the total number of callers and enquiries in the last five years. Gatwick's noise website, which allows people to log complaints online and find out exactly which aircraft was flying over their house at any given time, went live in 2007 and is now a valuable tool to help monitor and manage enquiries. For more details, visit www.gatwickairport.com/noise

Figure E2 shows the differing levels of enquiries by quarter over the last five years. The peak number of enquiries tend to be in the summer months when more people spend more time outside. However the recorded figures can be distorted due to a single caller who accounts for almost 30% of all enquiries.

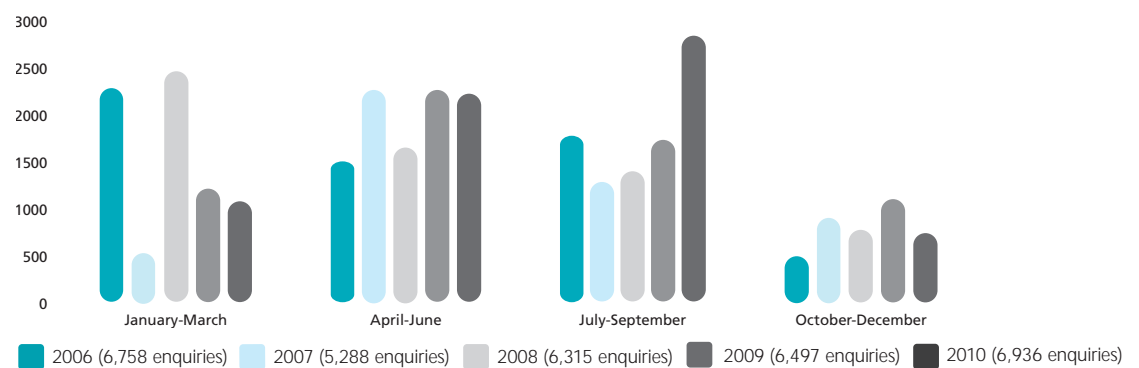
Reasons for enquiries

The five most common reported causes for contacting the FEU were aircraft noise, low flying, arrivals, increased number of flights and night flights.

Table E1
Callers and enquiries relating to airport operations

	2006	2007	2008	2009	2010
Callers	580	482	406	473	409
Enquiries	6,758	5,288	6,315	6,497	6,936

Figure E2
Enquiries by quarter



Caller locations

The FEU's investigation of enquiries and complaints is helped by quick address postcoding and geographic mapping, which can locate a caller's postcode on an Ordnance Survey map (see **Figure E5**). This figure also shows Gatwick's NPRs. In addition, radar data supplied by NATS can be overlaid, enabling accurate airline, aircraft type, height and noise data to be extracted.

Table E3 shows locations with ten or more callers. All these locations lie within approximately 10 miles of the airport. Many other locations record only one caller and enquiry.

Table E4 shows locations recording 50 or more events. Some of these locations are further away from the airport than those listed in **Table E3** (which shows locations with 10 or more callers) and suggests that some outlying, more sparsely populated areas can be more sensitive to noise disturbance than the areas closer to Gatwick.

Table E3

Locations with 10+ callers

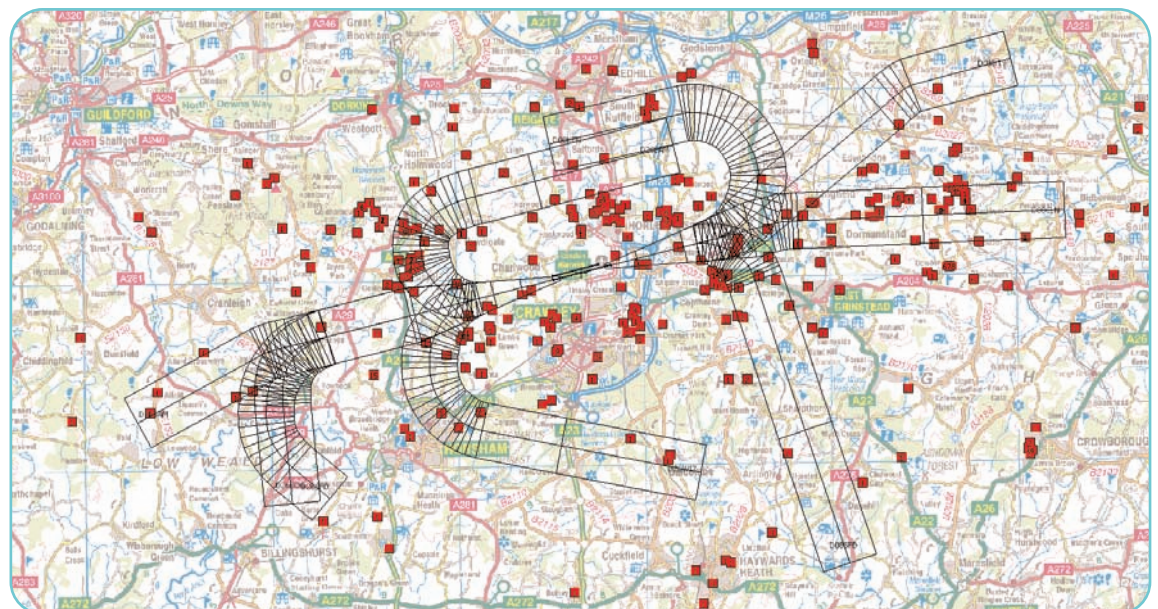
Crawley	45
Dorking	42
Edenbridge	39
Horley	33
Horsham	22
East Grinstead	14

Table E4

Locations with 50+ enquiries

	Enquiries	Callers
Hever	1,593	4
Marsh Green	1,294	2
Edenbridge	1,061	39
Lingfield	313	9
Dorking	291	42
Crawley	80	45

Figure E5
Postcode locations of complaint enquiries in 2010 (NPRs shown)



Glossary of terms

08R: Main runway used when aircraft are departing towards the east and arriving from the west.

26L: Main runway used when aircraft are departing towards the west and arriving from the east.

08L: Northern or standby runway used when aircraft are departing towards the east and arriving from the west.

26R: Northern or standby runway used when aircraft are departing towards the west and arriving from the east.

Air Traffic Control (ATC) (see NATS on page 22)

Altitude: The distance of an aircraft above sea level (asl).

ANOMS: Airport Noise and Operations Management System. Used for accurate monitoring and management airport operations and the associated noise.

Civil Aviation Authority (CAA) is the UK's independent specialist aviation regulator. Its activities include economic regulation, airspace policy, safety regulation and consumer protection.

Continuous Descent Approach CDA: A noise abatement procedure for arrivals. Avoids periods of level flight, reducing noise and emissions. Advisory, but not compulsory.

Decibels (dBA): Noise measurement that takes closest account of human hearing. Used to measure aircraft noise.

Department for Transport (DfT) is the government department responsible for the English transport network and a limited number of transport matters in Scotland, Wales and Northern Ireland which are not devolved. The department is run by the Secretary of State for Transport.

Dispensations: Granted to aircraft not normally permitted to fly during the night. Exceptional circumstances are (a) delays likely to lead to serious congestion at the airport or serious hardship or suffering to passengers or animals and (b) delays resulting from widespread and prolonged disruption to Air Traffic Control. Further dispensations may be granted in respect of VIP flights, relief flights carrying supplies, military aircraft operations in the event of war and civil aircraft affected by hostilities.

Flight Evaluation Unit (FEU) is responsible for recording, investigating and responding to aircraft noise enquiries as well as to monitor and report airline compliance to noise mitigation measures as detailed in the UK Aeronautical Information Publication. The FEU also manages a number of fixed and mobile noise monitors within the local area. They are regularly relocated, the data analysed and the findings reported.

Flight Operations Performance and Safety Committee (FLOPSC). This Committee ensures the development of best practice in flight operations by all airlines using Gatwick Airport in order to minimise their effect on the local community. Matters discussed include departure track-keeping, continuous descent approaches and noise infringements. FLOPSC meets bi-monthly and is chaired by GAL and is attended by the FEU, DfT, NATS, airlines and a representative of GATCOM.

Gatwick Airport Consultative Committee (GATCOM) is a committee set up in 1956 in order to meet statutory requirements for public consultation. GATCOM discusses issues relating to employment, surface access and resource use as well as aircraft performance. It is comprised of members of local authorities, local interest groups, business and airline representatives and the DfT and is advised by senior managers from GAL.

Gatwick Airport Limited (GAL) is the company licensed to operate Gatwick Airport by the Civil Aviation Authority. Gatwick is wholly-owned by Ivy Bidco Limited (Ivy), a company formed to undertake the acquisition of Gatwick. Ivy is ultimately controlled by funds managed by Global Infrastructure Management, LLC, part of Global Infrastructure Partners (GIP).

Go-around: An aborted landing of an aircraft that is on final approach. The aircraft turns and gets back in the queue to land.

Height: The distance of an aircraft above airfield level (aal). Gatwick is 202ft asl.

Holding stack: Area where aircraft circle at a minimum 7,000ft awaiting approach instructions during busy periods.

Glossary of terms (continued)

Instrument Landing System (ILS): Precision approach aid consisting of a number of elements, principally a localiser radio beam and glide path aeralis. Guides aircraft through final approach to touchdown.

Leq – Equivalent Continuous Sound Level: The notional sound pressure level which, if maintained constant over a given time, delivers the same amount of acoustic energy at some point as the time-varying sound pressure level would deliver at the same point and over the same period of time.

Movements limits: The number of movements permitted during the night period, differing between seasons.

NATS is the main air navigation service provider in the United Kingdom. It provides en-route air traffic control services to flights within the UK Flight Information Regions and the Shanwick Oceanic Control Area, and provides air traffic control services to 15 UK airports and Gibraltar Airport.

Night period: the period from 23:00 to 07:00

Night quota: the period is the period from 23:30 to 06:00

NM: Nautical mile

Noise and Track Monitoring Advisory Group (NaTMAG) is chaired by GAL with membership drawn from DfT, NATS, GATCOM, the airline industry, local Environmental Health Officers and GAL's acoustic consultants. It oversees the administration of the environmental monitoring systems used by the FEU and discusses local issues concerning aircraft noise and track keeping.

Noise monitors (fixed): Sited at either end of the runway to measure the noise of departing aircraft. The readings from these are the only ones that can determine a noise infringement.

Noise monitors (mobile): Sited in various locations around Gatwick to aid studies into the local noise climate.

Noise limits: Levels fixed by the Department for Transport which should not be exceeded by departing aircraft.

Noise infringements: If the above level is exceeded, the airline concerned receives a financial surcharge.

Noise Preferential Route (NPR): A 3-kilometre wide corridor in which departing aircraft must remain to an altitude of 3,000 or 4,000ft. These are used to provide set routes aircraft must follow and so provide some certainty as to which areas will be over flown by departing aircraft.

NRP: Night Restrictions Period

NTK: Noise and Track Keeping System – see ANOMS on page 20

Restrictions: Formulated by the Department for Transport relating to types of aircraft that can fly at night and placing limits on movements. Strictly monitored by Gatwick Airport Limited.

Reverse thrust: braking procedure used by older landing aircraft. Noisy, so use is discouraged at night.

Quota count – QC : Points ranging from 0.25 to 16, allocated to aircraft types. The quieter the type, the lower the quota count. Aircraft with a rating of QC4, 8 or 16 may not be scheduled to take off or land during the night quota period. QC8 and 16 types may not be scheduled to take off or land in the night period.

Seasons: There are two seasons, winter and summer. Determined by use of GMT / BST.

Start of roll: Point where a departing aircraft releases its parking brakes to commence take-off roll.

Standard Instrument Departure (SID): This is a published flight procedures followed by aircraft on an Instrument Flight Rules flight plan immediately after take-off from an airport. The first section of a SID is an NPR.

Vectoring: Air Traffic Control procedure turning a departing aircraft off an NPR on to a more direct heading to its destination.

Contact us

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