Gatwick Airport Flight Performance Report

Q4 Data 2014



Introduction

ABOUT THIS REPORT

This report is produced by the Gatwick Flight Performance Team (FPT). 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 (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 adherence to the noise mitigation measures detailed in the UK AIP, a report on night flying during the quarter, and an analysis of noise complaints received during the period.

KEY MONITORING INDICATORS - 4TH QUARTER 2014

		12 month	averages*		
Parameter		Year to date	Previous year	2011	2006
Track keeping performance (% on track)	A	99.29%	98.04%	97.47	98.17
24hr CDA (% achievement)	A	91.06%	91.36%	90.49	80.79
Day/Shoulder CDA (% achievement)	A	90.73%	88.72%	90.19	79.9
Core night CDA (% achievement)	A	94.29%	94.04%	93.96	89.6
1000ft Infringements (No.)	•	0	0	3	11
1000ft Infringements (No. below 900ft)	•	0	0	1	6
Departure Noise Infringements (Day)	-	0	0	0	10
Departure Noise Infringements (Night/Shoulder)	_	0	0	4	2
Callers	A	3459	533	343	587
Noise complaints	A	21981	2296	2673	4791
Enquiry response performance target is 95% within 8 days (quarterly)	•	74.01%	99.24%	KPI 95%	
West/East Runway Split (%)	-	67/33	63/37	67/33	68/32

^{*}The colour indicates the most recent 12 month performance compared to 2011, with green showing improvement and red a decline in performance.

** This figure did not include deviations from prop types or those due to weather.

PERFORMANCE HEADLINES

Continuous Descent Approach (CDA) performance indicators for all time periods remain green, as performance levels have continued to improve. Gatwick continues to be a world class leader for this noise mitigation technique. The rate of CDA performance has shown year on year improvement over the past several years, although there was a drop in performance in 2012 as a consequence of the main runway resurfacing works carried out throughout much of the period. It should also be noted that historically CDA performance during the winter months does decrease due to instances of inclement weather. Track keeping performance has improved again on the previous year's performance, details of which will follow later in this report. As part of our continuing commitment to increase on track performance the FPT also continues to engage with the airlines directly and through the Flight Operations Performance and Safety Committee on a range of initiatives. Both the number of complaints and the number of individual callers has increased significantly compared to the previous twelve months. This increase has been caused by a number of contributing factors. As well as the publicity surrounding a potential 2nd runway at Gatwick, last year was the busiest in the Airport's history. A more accurate navigation method, PRNAV was also introduced on all departure routes.. Last year also saw the emergence of a number of new anti-airport campaign groups' that are actively campaigning against expansion and any changes to flight paths. The postcode areas with the greatest number of enquiries this quarter were, Betchworth, Dorking, Tunbridge Wells, Holmwood, Reigate and Dorking.

AIRPORT OPERATIONS

During the quarter, there were a total of 58834 fixed wing aircraft movements at Gatwick, an increase in traffic of about 1.5% compared to the same period in 2013. The direction of operation is determined by wind direction and this quarter was split 74% on the westerly runway and 26% on the easterly runway. The rolling 20 year average for the split in runway usage is approximately 68% westerly and 32% easterly.

NORTHERN RUNWAY (26R/08L) USAGE

Although Gatwick has the main runway and the 'reserve' or northern runway, they cannot be operated simultaneously.

The northern runway is normally only utilised during the night when maintenance on the main runway is planned. During these three months there were a total of 201 movements from the northern runway.

WOULD YOU LIKE TO KNOW MORE ABOUT AIRCRAFT NOISE OR TRACK A FLIGHT?

To track aircraft, see noise readings or make a complaint about aircraft noise at Gatwick you can visit our website: www.gatwickairport.com/noise

The website provides detailed maps on aircraft traffic around the airport as well as useful information on noise and statistics on aircraft movements. It also details the work we undertake with others in the aviation industry to try and alleviate the impact of our operations on both the local and wider community.

COMMUNITY NOISE MONITORING

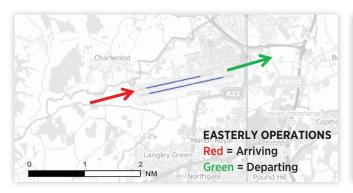
In addition to fixed monitors located close to the ends of the runway there are currently mobile noise monitors deployed at sites in Lingfield, Rusper, Okewood Hill, Hever, Bidborough, and Cowden.

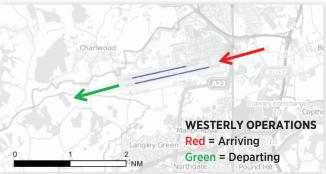
RUNWAY DIRECTION

The following graph represents the direction of runway operation at Gatwick. Aircraft operating in a westerly direction take off towards the west and land from the east. Aircraft operating in an easterly direction take off towards the east and land from the west.

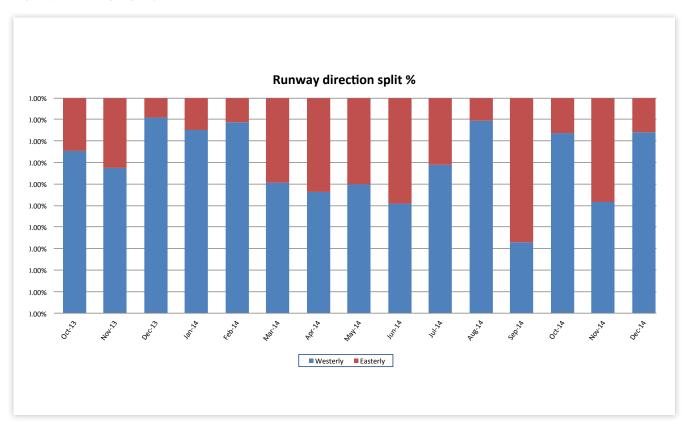
This quarter the direction of runway operation was split 74% in a westerly mode, against 26% in an easterly mode.

Although the long term average is approximately 70:30 in favour of westerly operations, it is not unusual to experience long periods of prolonged operation in either one direction or another.





RUNWAY DIRECTION SPLIT %



THE AERONAUTICAL INFORMATION PUBLICATION

An Aeronautical Information Publication (or AIP) is defined by the International Civil Aviation Organisation (ICAO) as a publication issued by or with the authority of a state and containing aeronautical information of a lasting character essential to air navigation.

It is designed to be a manual containing thorough details of regulations, procedures and other information pertinent to flying aircraft in the particular country to which it relates. It is usually issued by or on behalf of the respective civil aviation administration.

The structure and contents of AIPs are standardized by international agreement through ICAO. AIPs normally have three parts - GEN (general), ENR (en route) and AD (aerodromes).

The Gatwick Aerodrome AIP contains details regarding the noise mitigation measures in place and adherence to these is reported in this section.

ADHERENCE TO NOISE MITIGATION MEASURES AS DETAILED IN THE GATWICK AIP

Each element of this report is preceded where applicable by the relevant Aeronautical Information Publication (AIP) reference and summary text detailing the purpose of the requirement. Data is then presented on current performance.

It should be noted that Gatwick is 202ft above mean sea level and the NTK system measures height relative to Gatwick elevation and not sea level.

References in the AIP are usually above sea level (quoted as Gatwick QNH) and therefore need to be reduced by 202ft to be comparable with heights as measured by the Noise and Track keeping system. For example the requirement to join the ILS at 3000ft would equate to 2798ft in the Noise and Track keeping system.

No account is taken of the variability of heights as measured by the radar which, depending on the distance from the radar head, can be +/- 200ft from that indicated. This is obviously allowed for by NATS when managing operations.

FOR THE PURPOSES OF THIS REPORT ANY REFERENCE TO HEIGHT SHOULD BE READ AS ABOVE AIRFIELD ELEVATION UNLESS OTHERWISE STATED.

ALL DATA CONTAINED WITHIN THIS REPORT SHOULD BE CONSIDERED IN LIGHT OF THE PRECEDING TEXT AND THE COMMENTARY THAT FOLLOWS.

DEPARTURES - INITIAL CLIMB PERFORMANCE

EGKK AD 2.21 (3 (1)). After take-off the aircraft shall be operated in such a way that it is at a height of not less than 1000 ft aal (above airfield level) at 6.5 km from start of roll as measured along the departure track of the aircraft. This is to ensure departing aircraft achieve at least that climb gradient in order to reduce the impact on the ground.

Comment:

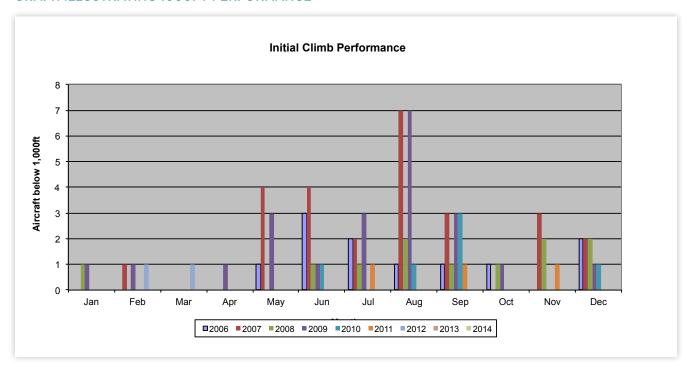
There were no infringements of the 1000ft rule during this quarter.

Historically the summer months are typically the peak period for aircraft failing to meet the 1,000ft requirement primarily due to the warmer weather, which reduces aircraft climb performance.

1000ft INFRINGEMENT TABLE

Year	Total Infringements	Year	Total Infringements	Year	Total Infringements
2006	11	2009	22	2012	2
2007	26	2010	6	2013	0
2008	11	2011	3	2014	0

GRAPH ILLUSTRATING 1000FT PERFORMANCE



DEPARTURES - NOISE INFRINGEMENTS

Departure Noise Limits (Daytime)

EGKK AD 2.21(3(3)) Subject to sub-paragraphs (5) and (6) below, any aircraft shall, after takeoff, be operated in such a way that it will not cause more than 94 dBA Lmax by day 0700 to 2300 hours local time) as measured at any noise monitoring terminal at any of the sites referred to in sub-paragraph (2). This is to ensure that departing aircraft do not exceed the stated level during the day.

Comment:

There were no infringements of the noise limits during the day time period during the quarter.

Year	Number of Day Infringements	Year	Number of Day Infringements	Year	Number of Day Infringements
2006	9	2009	0	2012	0
2007	13	2010	0	2013	0
2008	2	2011	0	2014	0

DEPARTURE NOISE LIMITS (CORE NIGHT & SHOULDERS)

EGKK AD 2.21 (3(4)) Subject to sub-paragraphs (5) and (6) below, any aircraft shall, after takeoff, be operated in such a way that it will not cause more than 89 dBA Lmax by night (2300 to 0700 hours local time) and that it will not cause more than 87 dBA Lmax during the night quota period from 2330 to 0600 hours local time) as measured at any noise monitoring terminal at any of the sites referred to in sub-paragraph (2). This is to ensure that departing aircraft do not exceed the stated levels during the night and shoulder periods.

Comment:

There have been no night time noise infringements during this quarter.

Year	Number of Night & Shoulder Infringements	Year	Number of Night & Shoulder Infringements	Year	Number of Night & Shoulder Infringements
2006	2	2009	1	2012	0
2007	2	2010	0	2013	0
2008	2	2011	4	2014	0

DEPARTURES - TRACK KEEPING

All jet aircraft leaving Gatwick Airport should follow flight paths known as Noise Preferential Routes (NPRs) up to a height of 3,000ft or 4,000ft depending on the route.

In 2012 Gatwick Airport publicly consulted on the implementation of a more modern form of aircraft navigation called P-RNAV (Precision Route Navigation). After having assessed all consultation feedback, the Civil Aviation Authority (CAA) granted the airport permission to implement P-RNAV on all of our departure routes.

Implementing P-RNAV on the published departure routes has resulted in the tracks of departing aircraft being more concentrated within the boundaries of the current NPRs, with one exception.

This is the NPR designed 26LAM that heads west then turns back on itself and passes to the north of the airfield. This route has always presented a challenge for modern jets as it was designed to accommodate propeller driven aircraft and early jets that were around in the late 1960s. Implementing P-RNAV on this route now requires aircraft to fly outside of the current NPR and therefore aircraft on a P-RNAV departure on this route are not classified as off track as they are following the published route.

Air Traffic Control (ATC) are responsible for the routing of aircraft once airborne and when 3,000 or 4,000ft has been reached they may give a flight a more direct heading (known as vectoring) off the route. This is subject to certain factors including weather conditions or other traffic in the vicinity.

An NPR is a corridor 3 kilometres wide and aircraft are not obliged to follow any particular track within it. As long as aircraft remain within the corridor boundaries they are deemed to be on track. A map illustrating the Noise Preferential Routes at Gatwick is available on our website.

www.gatwickairport.com/noise

Flights leaving the route below the required height are automatically tagged and details sent to the airline for investigation. Our Flight Operations Performance & Safety Committee regularly review track keeping performance.

TABLE ILLUSTRATING TRACK KEEPING PERFORMANCE OVER 15 MONTHS

		Total			Westerly			Easterly	
Month	Deviations	Departures	% Deviations	Deviations	Departures	% Deviations	Deviations	Departures	% Deviations
Oct-13	228	11276	2.02%	211	8457	2.49%	17	2817	0.60%
Nov-13	126	8633	1.46%	113	5916	1.91%	13	2738	0.47%
Dec-13	163	8996	1.81%	156	8202	1.90%	7	794	0.88%
Jan-14	159	8762	1.81%	151	7428	2.03%	8	1333	0.60%
Feb-14	151	8516	1.77%	141	7511	1.88%	10	996	1.00%
Mar-14	106	9444	1.12%	92	5855	1.57%	14	3589	0.39%
Apr-14	78	9774	0.80%	57	5229	1.09%	21	4545	0.46%
May-14	37	11654	0.32%	26	7067	0.37%	11	4587	0.24%
Jun-14	41	11659	0.35%	25	6079	0.41%	16	5580	0.29%
Jul-14	56	12642	0.44%	30	8769	0.34%	26	3873	0.67%
Aug-14	102	13182	0.77%	83	11816	0.70%	19	1366	1.39%
Sep-14	40	11993	0.33%	22	4069	0.54%	18	7924	0.23%
Oct-14	82	11265	0.73%	77	9436	0.82%	5	1829	0.27%
Nov-14	61	8478	0.72%	43	4593	0.94%	18	3885	0.46%
Dec-14	2	9048	0.02%	1	7645	0.01%	1	1403	0.07%

Comment:

The table above shows track keeping performance over the previous 15 month period. The on track performance for the quarter was 99.49% compared to 99.55% measured in the 3rd quarter. The rolling 12 month year on year period on track performance stands at 99.29% as opposed to 98.04% for the 12 months ended December 2013. (These figures do not include PRNAV Departures on the 26LAM wrap around route)

DEPARTURES - OVER CONGESTED AREAS

The WIZAD Noise Preferential Route

EGKK AD 2.21 (8) (c) The ATC clearance via Mayfield specified in the second column of the table will not be available between 2300 hours and 0700 hours local time. Aircraft following the Noise Preferential Routing which relates to that clearance shall not fly over Crawley, Crawley Down or East Grinstead. This is to avoid aircraft noise from departing aircraft over areas of high population at night on the 26WIZAD NPR.

Comment:

This quarter there have been no departures during the restricted period, on the '26 WIZAD' Noise Preferential Route.

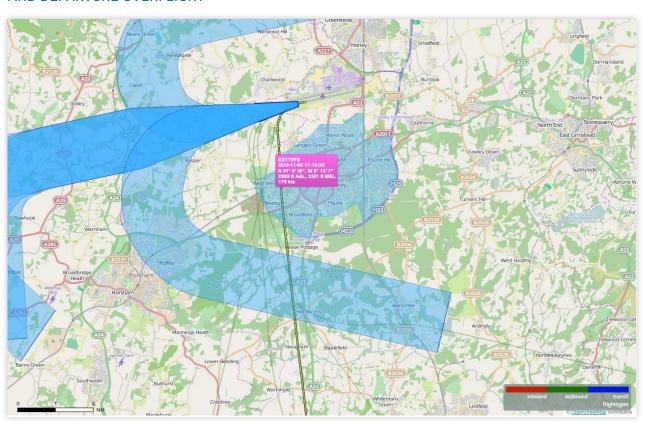
Overflight of Crawley and Horley

EGKK AD 2.21 (9) After take-off the aircraft shall avoid flying over the congested areas of Horley and Crawley. This is to avoid aircraft noise from departing aircraft over areas of high population.

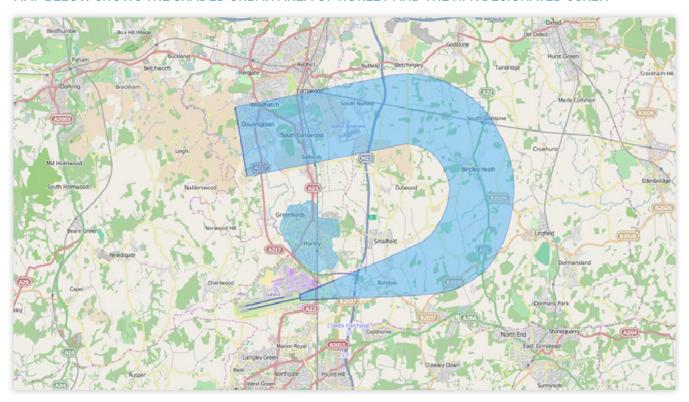
Comment:

During this period there were 5 departing flights that passed over Crawley all of which were confirmed weather deviations that were directed off the planned route by Air Traffic Control.

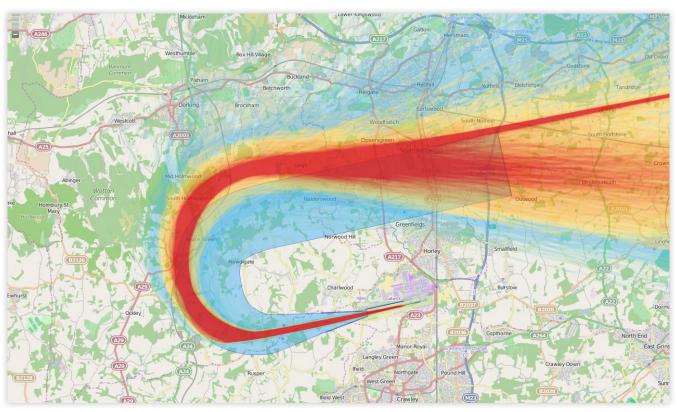
MAP ILLUSTRATING CRAWLEY TOWN BOUNDARY WITH NOISE PREFERENTIAL ROUTE 26 WIZAD AND DEPARTURE OVERFLIGHT



MAP BELOW SHOWS THE SHADED URBAN AREA OF HORLEY AND THE NPR DESIGNATED 08KEN



MAP BELOW ILLUSTRATES THE TRACK DENSITY OF AIRCRAFT OVERFLYING HORLEY DURING THE THREE MONTH PERIOD



BREAKDOWN SHOWING THE ANALYSIS OF HORLEY OVERFLIGHT

Month	Departures on 26LAM	Horley gate	% through Horley gate	Month	Departures on 26LAM	Horley gate	% through Horley gate	Month	Departures on 26LAM	Horley gate	% through Horley gate
Jan-12	2835	109	3.84%	Jan-13	2196	67	3.05%	Jan-14	3048	50	1.64%
Feb-12	2326	99	4.26%	Feb-13	1447	101	6.98%	Feb-14	3089	60	1.94%
Mar-12	2176	84	3.86%	Mar-13	1427	70	4.91%	Mar-14	2447	60	2.45%
Apr-12	457	14	3.06%	Apr-13	2499	78	3.00%	Apr-14	2043	40	1.96%
May-12	2634	140	5.32%	May-13	3545	186	5.25%	May-14	2805	46	1.64%
Jun-12	3407	76	2.23%	Jun-13	3114	153	4.91%	Jun-14	2606	38	1.46%
Jul-12	4579	151	3.30%	Jul-13	2777	78	2.81%	Jul-14	3466	52	1.50%
Aug-12	4493	109	2.43%	Aug-13	4157	152	3.66%	Aug-14	4512	35	0.78%
Sep-12	4374	147	3.36%	Sep-13	3590	185	5.15%	Sep-14	1686	24	1.42%
Oct-12	2673	55	2.06%	Oct-13	3614	139	3.85%	Oct-14	3826	31	0.81%
Nov-12	2966	131	4.42%	Nov-13	2659	128	4.81%	Nov-14	1881	19	1.01%
Dec-12	2989	142	4.75%	Dec-13	3438	60	1.75%	Dec-14	3079	79	2.57%

Full implementation of PRNAV from 1 May 2014

Comment:

The FPT monitors all departing aircraft that overfly the town of Horley with details also being passed to Air Traffic Control so that they can continue to review how they direct traffic over the area.

CONTINUOUS DESCENT APPROACH

EGKK AD 2.21 (10) Where the aircraft is approaching the aerodrome to land it shall commensurate with it ATC clearance minimise noise disturbance by the use of continuous decent and low power, low drag, operating procedures (referred to in Detailed Procedures for descent clearance in AD (2-EGKK-1-17). Where the use of these procedures is not practicable, the aircraft shall maintain as high an altitude as possible. In addition, when descending on initial approach including in the closing heading, and on intermediate and final approach, thrust reductions should be achieved where possible by maintaining a 'clean' aircraft configuration and by landing with reduce flaps, provided that in all the circumstances of the flight this is consistent with safe operation of the aircraft. This is to avoid prolonged periods of level flight and keep aircraft as high as possible for as long as possible.

CDA data is measured over three time periods, the core night period (2330-0600), the day and shoulder periods (0600 - 2330) and the 24hour period.

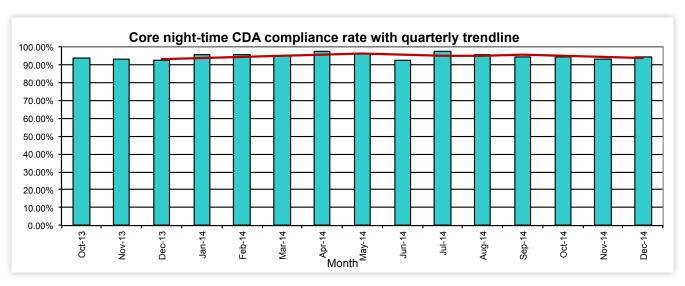
CORE NIGHT PERIOD

During the 2nd quarter, the core night-time CDA achievement rate was 94.31%, compared to 95.86% recorded in the previous quarter. The underlying performance rate remains positive with an achievement rate of 95.24% recorded for the year up to the end of December 2014, compared to 94.03% for the year ending December 2013.

BREAKDOWN OF THE CORE NIGHT TIME PERIOD

	All Arrivals				08 Easterly Arriva	ls	2	6 Westerly Arriva	ls
Month	Total	Non CDA	%CDA	Total	Non CDA	%CDA	Total	Non CDA	CDA
Oct-13	991	52	94.75%	268	17	93.66%	723	35	95.16%
Nov-13	274	12	95.62%	78	1	98.72%	196	11	94.39%
Dec-13	274	18	93.43%	13	3	76.92%	261	15	94.25%
Jan-14	241	11	95.44%	48	3	93.75%	193	8	95.85%
Feb-14	235	11	95.32%	33	1	96.97%	202	10	95.05%
Mar-14	283	14	95.05%	110	4	96.36%	173	10	94.22%
Apr-14	725	19	97.38%	383	9	97.65%	342	10	97.08%
May-14	1227	49	96.01%	536	27	94.96%	691	22	96.82%
Jun-14	1496	112	92.51%	863	81	90.61%	633	31	95.10%
Jul-14	1713	48	97.20%	546	28	94.87%	1167	20	98.29%
Aug-14	1866	80	95.71%	275	15	94.55%	1591	65	95.91%
Sep-14	1574	85	94.60%	1009	76	92.47%	465	9	98.06%
Oct-14	1046	56	94.65%	118	10	91.53%	984	46	95.33%
Nov-14	294	20	93.20%	104	3	97.12%	190	17	91.05%
Dec-14	366	21	94.26%	50	5	90.00%	316	16	94.94%

CORE NIGHT-TIME COMPLIANCE GRAPH



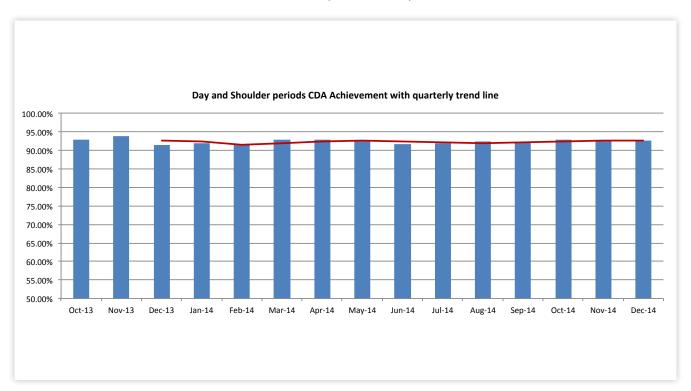
DAYTIME AND SHOULDER PERIOD

The average daytime and shoulder period achievement rate for this 3 month period is 92.76% compared to 92.17% for the previous quarter. The twelve month period to the end of December 2014 shows an achievement rate of 92.73% compared to 91.37% for the same period ending December 2013.

BREAKDOWN OF THE DAYTIME AND SHOULDER TIME PERIOD WITH GRAPH

		All Arrivals		0	8R Easterly Arriva	ale	2	6L Westerly Arriv	ale
Month	Total	Non CDA	%CDA	Total	Non CDA	%CDA	Total	Non CDA	CDA
Oct-13	9883	695	92.97%	2348	207	91.18%	7535	488	93.52%
Nov-13	8328	518	93.78%	2783	190	93.17%	5545	328	94.08%
Dec-13	8681	749	91.37%	824	79	90.41%	7857	670	91.47%
Jan-14	8410	684	91.87%	1246	143	88.52%	7164	541	92.45%
Feb-14	8174	705	91.38%	916	103	88.76%	7258	602	91.71%
Mar-14	9316	668	92.83%	3707	312	91.58%	5609	356	93.65%
Apr-14	9326	655	92.98%	4402	345	92.16%	4924	310	93.70%
May-14	10618	796	92.50%	4230	345	91.84%	6388	451	92.94%
Jun-14	10455	861	91.76%	5000	479	90.42%	5455	382	93.00%
Jul-14	11144	895	91.97%	3413	355	89.60%	7731	540	93.02%
Aug-14	11404	870	92.37%	1099	107	90.26%	10305	9542	7.40%
Sep-14	10853	848	92.19%	7149	590	91.75%	3704	258	93.03%
Oct-14	10344	726	92.98%	1691	160	90.54%	8653	566	93.46%
Nov-14	8413	627	92.55%	4229	344	91.87%	4184	283	93.24%
Dec-14	8841	643	92.73%	1429	122	91.46%	7412	521	92.97%

GATWICK DAY & SHOULDER CDA ACHIEVEMENT (0600 - 2330) WITH QUARTERLY TREND LINE



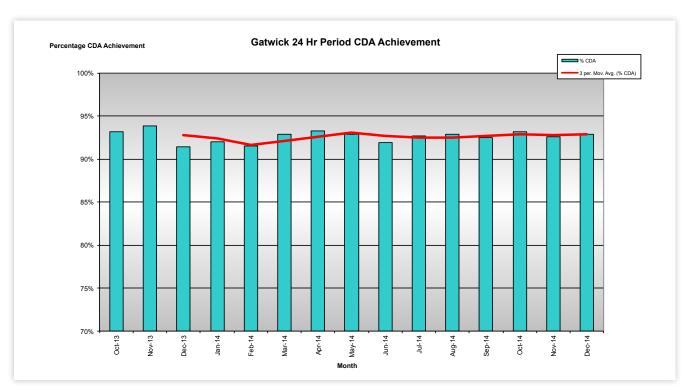
24 HOUR PERIOD

The 24 hour CDA achievement rate for the year ended December 2014 was 92.06%, compared to 91.37% for the corresponding period to December 2013. This quarter's performance level was 92.89%, whilst the performance for the previous quarter was 92.67%.

BREAKDOWN OF 24 HOUR TIME PERIOD WITH GRAPH

	All Arrivals			(08 Easterly Arrivals			.6 Westerly Arriva	26 Westerly Arrivals		
Month	Total	Non CDA	% CDA	Total	Non CDA	% CDA	Total	Non CDA	% CDA		
Oct-13	10874	747	93.13%	1308	224	82.87%	8258	523	93.67%		
Nov-13	8602	530	93.84%	2861	191	93.32%	5741	339	94.10%		
Dec-13	8955	767	91.43%	837	82	90.20%	8118	685	91.56%		
Jan-14	8651	695	91.97%	1148	146	87.28%	6808	549	91.94%		
Feb-14	8409	716	91.49%	949	104	89.04%	7455	612	91.79%		
Mar-14	9599	682	92.90%	3817	316	91.72%	5782	366	93.67%		
Apr-14	10051	674	93.29%	4200	334	92.05%	4664	294	93.70%		
May-14	11845	845	92.87%	4766	372	92.19%	7079	473	93.32%		
Jun-14	11951	973	91.86%	5863	560	90.45%	5675	413	92.72%		
Jul-14	12857	943	92.67%	3959	383	90.33%	8898	560	93.71%		
Aug-14	13270	950	92.84%	1374	122	91.12%	11896	728	93.88%		
Sep-14	12427	933	92.49%	8258	666	91.94%	4169	267	93.60%		
Oct-14	11446	782	93.17%	1809	170	90.60%	9637	612	93.65%		
Nov-14	8707	647	92.57%	4333	347	91.99%	4374	300	93.14%		
Dec-14	9207	656	92.87%	1479	124	91.62%	7728	532	93.12%		

GATWICK 24 HOUR PERIOD CDA ACHIEVEMENT



ARRIVALS - OVER CONGESTED AREAS

AD 2-EGKK1-12 (11) Before landing at the aerodrome the aircraft shall maintain as high an altitude as practical and shall not fly over the congested areas of Crawley, East Grinstead, Horley and Horsham at an altitude of less than 3000ft (Gatwick QNH) nor over the congested area of Lingfield at an altitude of less than 2000ft (Gatwick QNH). NB. 2000 ft - (202ft (airfield elevation) + 100ft (radar/ILS tolerance)) = 1698ft on ANOMS.

Comment:

Aircraft tracks were analysed for October, November and December 2014 and with the exception of a small number of go-arounds there were no arriving flights that passed over the towns of Crawley, East Grinstead, Horley and Horsham below the required altitude. The map below illustrates the outline of these urban conurbations.

A polygon located over the urban area at about 7 nautical miles (nm) from touchdown is normally used to analyse tracks over the Lingfield area. During the analysis period there were a total of 29318 arrivals that passed through this area. There were no arriving aircraft that passed over the town below a height of less than 1698 feet.

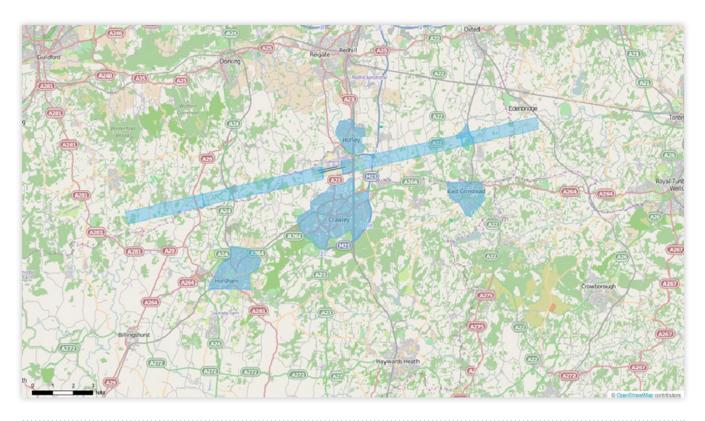
EGKK AD 2.21 (13 (a)) Where the aircraft is using the ILS in IMC or VMC it shall not descend below 2000 ft (Gatwick QNH) before intercepting the glide path, nor thereafter fly below the glide path. This is aimed at keeping aircraft as high as possible for as long as possible.

A) Day time joining height (0600 - 2330)

Comment:

The map below shows the congested urban areas, a series of gates running parallel to the extended runway centreline for around 6nm east and west of the airport, , used to monitor low arrivals, joining the ILS below 2000ft. There were 29,363 arrivals

THE FOLLOWING MAP ILLUSTRATES THE ANALYSIS ZONES USED FOR LATE AND LOW ARRIVALS FOR BOTH ENDS OF THE AIRFIELD AND THE CONGESTED URBAN AREAS



recorded by the Casper NTK system this quarter, 84 (0.28%) of which were operating below an altitude of 2000ft (equivalent to a height in the NTK system of 1798ft) through one or more of the analysis gates. In addition there were 15'go-arounds' that were not included in this figure.

EGKK AD 2.21 (14) Aircraft which land at Gatwick Airport - London between the hours of 2330 (local) and 0600 (local), whether or not making use of the ILS localizer and irrespective of weight or type of approach, shall not join the centre line:

- a) below 3000; ft or
- b) closer than 10 nm from touchdown.

This aims to keep aircraft higher for longer and avoid overflying areas en route to the ILS below 3000ft.

B) Night joining height & distance

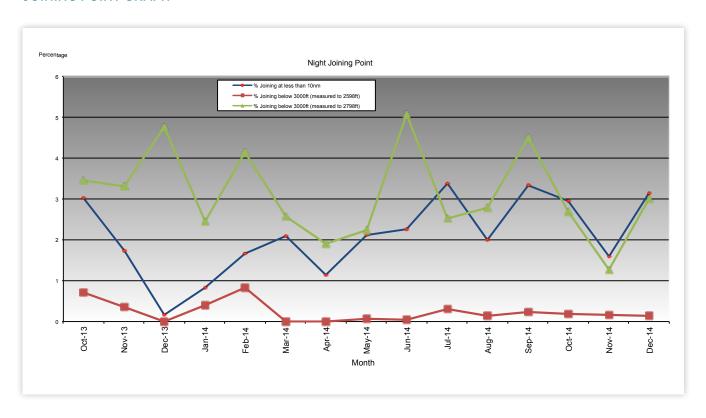
A change in the NTK system introduced in June 2007 caused a corresponding rise in aircraft joining below

3000ft, The reason was that previously only aircraft below 2598ft at 10nm would have been recorded which takes account of the 202ft elevation of Gatwick and the 200ft tolerance of the radar equipment. This metric is primarily used by NATS to ensure compliance and in allowing for these tolerances it is reasonable for a controller to assume that if an aircraft displays an altitude of 2800ft on their system it is compliant with the 3000ft requirements. The same aircraft would be at 2598ft above the airfield as displayed on the Casper NTK system (or any NTK) system. Since June 2007 statistics have only taken account of the airfield elevation and consequently any aircraft below 2798ft at 10nm has been flagged.

Comment:

The high number of arrivals of joining below 3000 feet (recorded to 2798 feet) was due to the use of the northern runway, during the latter part of June, due to the closure of the main runway for maintenance. The northern runway has no ILS system and this has a negative impact on 3000 feet performance.

JOINING POINT GRAPH



GO - AROUNDS

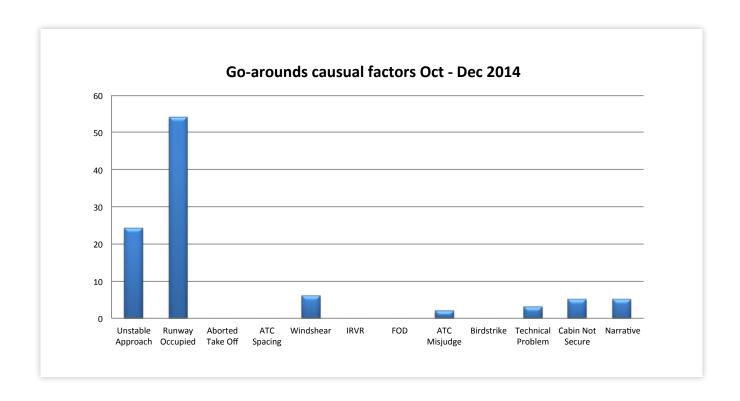
A go-around is a procedure adopted when an arriving aircraft on final approach aborts landing by applying take off power and climbing away from the airport. It is a set procedure to be followed by the flight crew in the event of an aircraft being unable to land. The procedure is published so that Air Traffic Control (ATC) and the pilots can anticipate where the aircraft will go following the decision to go-around.

The number and reasons for go-arounds are routinely discussed at FLOPSC meetings and Pilot Forums. All parties are focussed on minimising the number of occasions when a go around is required but expect some to occur given the fact that Gatwick

is a busy single runway airport. It should be stated that there are well established standard procedures which both pilots and controllers are trained in and are familiar with. Gatwick Airport Ltd as the airport operator actively encourages airlines operating at the airport to fly to the best possible environmental standards. However safety must and always will be the number one priority.

The main causes of go arounds this quarter were 'runway occupied' and 'unstable approaches'.

NATS CURRENTLY RECORD GO-AROUNDS UNDER ONE OF THE FOLLOWING CAUSAL FACTORS



GO AROUND STATISTICS 2003 - 2014

Year	Total	Total Arrivals	% of Arrivals
2004	344	124665	0.28
2005	450	129509	0.35
2006	405	130954	0.31
2007	434	133271	0.33
2008	359	131858	0.35
2009	455	125861	0.36
2010	364	120263	0.3
2011	386	125541	0.31
2012	520	123408	0.42
2013	473	125290	0.38
2014	512	129966	0.34

Comment:

The high number of wind shear events due to winter storms is the main reason for the higher than average number of recorded events for the year to date. The percentage of go arounds this quarter is back to the normal levels experienced in previous years, 0.34%.

NIGHT FLIGHTS

Introduction

The Secretary of State in exercise of his powers under Section 78 of the Civil Aviation Act 1982 has imposed restrictions at Gatwick Airport on aircraft operating at night. These restrictions are in place to limit and mitigate noise disturbance from aircraft operating at night and to prohibit aircraft of specified descriptions from operating, also to limit the number of occasions on which other aircraft may take off or land.

The night flying restrictions are divided into summer and winter seasons which coincide with the start and end of British Summer Time. They consist of a movement limit and a quota count system. The quota count (QC) means that points are allocated to different aircraft types according to how noisy they are. The noisier the aircraft type, the higher the points allocated. This provides an incentive for airlines to use quieter aircraft types. Aircraft are certified by the International Civil Aviation Organisation according to the noise they produce and are classified separately for both take-off and landing.

For the purposes of night flying operations, the night quota period is defined as the period between 23:30 -06:00 (Local time). In addition there are two further shoulder periods of 23:00 - 23:30 and 06:00 - 07:00 (Local time), where other restrictions apply to the scheduling and operation of aircraft of specified descriptions.

The Department for Transport has confirmed that the current night flight restriction will remain in force until October 2017.

Comment:

Overleaf is a an mid-season report for winter 2014 which started on 27th October 2014. There has been a total of 36% of the movement quota utilised to date. The total number of movements available this winter is 3250.

Dispensations - There have been a total of 77 dispensations applied this season. 22 were as a result of the disruption caused by an ATC software fault in December and another 55 dispensations, resulting from the Virgin incident also in December. This resulted in the runway being closed for 3 hours. (causing disruption and passenger hardship).

QC4, QC8 and QC16 movements - There have been no QC8 or QC16 movements during either the 'night quota' or 'shoulder periods', and no QC4 movements during the 'night quota period'.

RESTRICTIONS

Winter	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17
Movements Limits	3250	3250	3250	3250	3250	3250	3250
Quota Points	2060	2000	2000	2000	2000	2000	2000

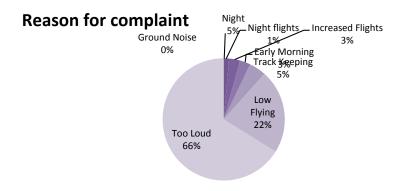
Summer	2010	2011	2012	2013	2014	2015	2016
Movements Limits	11200	11200	11200	11200	11200	11200	11200
Quota Points	6400	6300	6200	6200	6200	6200	6200

AIRPORT MOVEMENTS and QUOTA SUMMARY To Week 12 (26 October 2014 to 17 January 2015 inc) London Gatwick

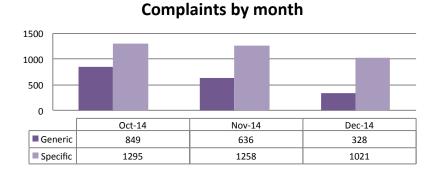
Sea	Season Quota Points Limit	Points	_imit		2	2000		Seas	Season Movement Limit	ement L	imit-		33	3250					
Tota	Total Quota Points Allowed	oints All	owed		7	2000		Total	Total Movements Allowed	ents Al	lowed		χ	3250					
No S	Week Ending Date	QC0.25 No.	QC0.5 No.	QC1 No.	QC2 No.	QC4 No.	QC8 No.	QC16 No.	Total Quota Value	Mvmts Against Limit	Exmpt Types	Not Cnt'd Delays	Not Cnt'd Govt	Not Cnt'd Emgcy	Total Arvis No.	Total Arvis %	Total Deps No.	Total Deps %	Total Rnwy Mvmts
-	01/11/2014	06	06	24	0	0	0	0	91.5	204	4	0	0	0	182	87.5	26	12.5	208
2	08/11/2014	51	57	13	2	0	0	0	58.25	123	2	0	0	0	112	88.9	4	11.1	126
3	15/11/2014	15	29	2	-	0	0	0	25.25	50	2	0	0	0	54	98.2	-	1.8	55
4	22/11/2014	01	32	7	-	0	0	0	27.5	20	2	0	0	0	48	92.3	4	7.7	52
2	29/11/2014	6	29	7	-	0	0	0	25.75	46	4	0	0	0	47	94.0	2	6.0	50
9	06/12/2014	∞	28	9	0	0	0	0	22	42	0	0	0	0	40	95.2	2	8.4	42
7	13/12/2014	19	39	6	0	0	0	0	33.25	29	2	22	0	0	82	90.1	6	6.6	91
∞	20/12/2014	25	35	œ	0	0	0	0	31.75	89	2	0	0	0	29	95.7	2	4.3	70
6	27/12/2014	23	49	2	0	0	0	0	35.25	77	3	0	0	0	75	93.8	2	6.2	80
10	03/01/2015	57	47	œ	0	0	0	0	45.75	112	-	55	0	0	139	82.7	29	17.3	168
Ξ	10/01/2015	62	53	16	-	0	0	0	09	132	2	0	0	0	120	9.68	4	10.4	134
12	17/01/2015	17	43	0	-	0	0	0	37.75	71	-	0	0	0	29	93.1	2	6.9	72
	TOTALS	386	531	118	7	0	0	0	494	1042	29	77	0	0	1033	0.06	115	10.0	1148
Quo	Quota Points Available	Availabl	a)		7	1506.00	0	Моче	Movements Available	Availab	<u> </u>		2	2208					
Quc	Quota Points % Used	% Used			Ö	24.7		Моче	Movements % Used	% Used			ίχ	32.1					
Not	Note 1 Not Cnt'd Delays:	t'd Dela	/s:		Δ	Delays I	ikely to) lead t	o serio	ns cong	estion	and del	ays resi	ulting fr	om wid	espread	l disrup	tion of A	likely to lead to serious congestion and delays resulting from widespread disruption of Air Traffic.
Not	Note 2 Not Cnt'd Govt:	t'd Gov	ij		Ш	xempt	ions gı	anted	by Gov	t (VIP	Jasseng	gers, En	nergend	Exemptions granted by Gov't (VIP Passengers, Emergency Relief).	Ę)				
Not	Note 3 Not Cnt'd Emgcy:	ıt'd Emg	cy:		Ш	merge	ncy Ta	ke-offs	Emergency Take-offs and Landings	andings									

NOISE COMPLAINTS

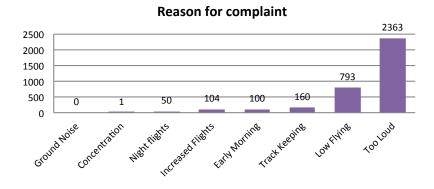
Knowing people's concerns about the airport is important to us. By studying the complaints we receive, and gathering information from the surrounding towns and villages, we believe that we have a good understanding of the noise issues that affect our communities.



The main reason for the complaints we receive are shown as a % in the graph to the left.



The graph to the left illustrates the number of complaints by month, divided between those complaining about a specific flight and those about general issues.



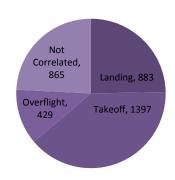
This graph shows the reason for complaint by actual the numbers received.

NOISE COMPLAINTS

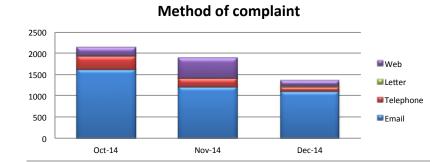
Noise is very subjective and peoples' attitude to various forms of noise can vary widely. What one person may consider acceptable may disturb another. These charts provide further analysis of where our complainants live and whether they have been disturbed by arriving or departing flights, or by noise from within the airport boundary.

The right hand diagram indicates the mode of operation for specific complaints matched to flights. When the Noise and Track system cannot match any aircraft operation with a reported time this is recorded as being a 'non correlated' event.

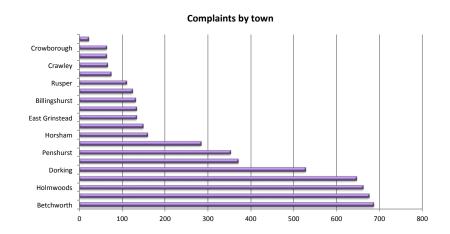
Category of aircraft operation



Gatwick airport provides a number of different methods for people to contact the airport about aircraft disturbance. As well as a low cost telephone line, individuals can email write, or contact us via our website' This graph illustrates how people have contacted the airport about noise.

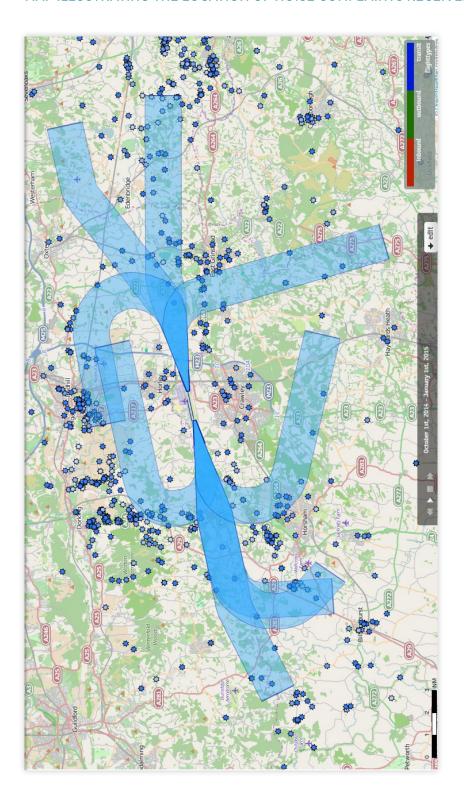


Although the areas closest to the airport generate the majority of complaints individuals from areas further from the airfield can also be disturbed by aircraft operations. This graph show the locations that generated the most complaints. (Some individals make numerous complaints so the areas where they live will be over represented.



4[™] QUARTER 2014

MAP ILLUSTRATING THE LOCATION OF NOISE COMPLAINTS RECEIVED THIS QUARTER



GROUND NOISE COMPLAINTS

We occasionally receive complaints about disturbance from noise from within the boundary of the airfield. These can be caused by the normal operation of aircraft moving about the airfield, taking off and landing. Additional sources of noise disturbance can be the use of Auxiliary Power Units by aircraft on stand or the testing of engines following maintenance or repair (engines runs). Strict regulations exist to minimise this disturbance, which includes a ban on engine running during the night. Details of any ground noise complaints are outlined below.

There were no complaints quoting 'ground noise' as the source of the disturbance this quarter.



Contact us: noise.line@gatwickairport.com
For more information visit us at www.gatwickairport.com/noise

