

Dear PINS

Summary of Submission

I am a resident who is affected by current aviation activity at Gatwick and as such I believe my views should be assessed and considered carefully to provide PINS with a balance to listening to people in the DCO process who are supporting the scheme yet who do not live 24 hours a day under the planes that some are so enthusiastically promoting for purely their own benefit.

My full submission has only two main policy related themes to consider:-

- A. GAL has not provided for a transparent or fair understanding of the Northern Runway scheme. That is a flaw which is against GOV policy that requires such consultations be sufficiently clear to enable informed decisions on either economic matters nor noise impact matters.(ref available) Without clear detail PINS, the SoS and the public cannot reasonably make an informed decision. I raised the issue of the missing information during the 2021 public consultation, and I now see that 70% of my raised issues were not logged or responded to in the 2023/4 registered GAL documents. I therefore believe that GAL is choosing which questions to acknowledge and answer which all amounts to an unfair withholding of information which is likely to be to the benefit of GAL's case. This looks to be a deliberate action and I ask PINS to investigate and take account of this. My full evidence shows multiple cases of missing or wrong information. The subjects I raised in 2021 and which are raised again in my full submission cover the subjects of unassessed risks to demand forecast of Business and freight flights, low confidence of economic benefit forecast, sleep disturbance, failure to monetise harm of CO2, use of incorrect noise assumptions which leads to incorrect worst case noise harms, inability to assess noise impact due to obscuring presentation, prevalence of flooding risk highlighted in consultants report.
- B. GAL is describing the demolition, relocation and complete building of a brand new runway as" making best use of existing infrastructure". This is tantamount to telling us the value of 1 is zero, or black is really white. This is pure Doublespeak. The **intent** of GOV policy was not to add departure or arrival capacity via newly constructed runways. If the runway were to be called existing then it would not take four to five years to construct, nor would it involve around 500,000 cubic metres of groundworks to construct it. Any reasonable man or woman (or judge) can plainly understand that constructing new tarmac and concrete runway is not making use of existing infrastructure. My full evidence expands on this point of policy transgression.

Full PINS Submission

Theme A: missing/manipulated/wrong information to better portray the scheme. All in conflict with GOV policy to provide clear and transparent consultation.

Gatwick northern runway if approved, would allow the airport to grow from 46 million passengers in 2019 to 80 million passengers per year (= over 70% growth) and from 281,000 aircraft movements in 2019 to 386,000 aircraft movements per annum (=over 35% growth). The application documents state that peak flows are capped (at capacity limit) - so most of the growth will be outside of peak hours. So why is GAL stating to the public that there will be a 20% increase in flights, when there is overall a 35% increase in aircraft movements. The increase will primarily be outside of peak hours, so the increase there will be far more. This amounts to a deliberate manipulation of headlines to pacify the public into accepting that expansion will 'only' involve a 20% increase in disturbing planes. This is just one of many actions by Gatwick which I believe amount to a deliberate withholding of information which thereby deceives planners and the public as the planning system is used to suit the aims of the airport (increased profit) whilst paying lip service to community and national concerns.

Another example of withholding information is GAL's proposals for Jet zero. These are purely unsubstantiated marketing puffery carefully crafted by GAL to persuade us that sustainable fuels and carbon efficient airplanes will be used enough to flatten emissions by 2030. However what is not told is that there is no rigour nor evidence to back this storytelling. Therefore I propose to the SoS, that the scheme cannot be built, and Gatwick needs to reapply for such an increase in flight numbers, only after the carbon neutrality of future increases has been proven and can be contained within the current carbon emissions AND that the noise burden is not increased. PINS has to recognise there is no rigour and therefore can have no confidence in the GAL storytelling.

If Gatwick is allowed to go ahead what will be the implications for growth at any of the other regional airports around the country. This consequential issue is not discussed at all by GAL. It logically will mean a ban on all other airport growth (until jet zero is attained/ proven). This continued growth of the South East (south of London) at the expense of

all other parts of the country, is 100% contrary to 'levelling up' policy of the UK Government.

It is fact that many of the scheme attributes to do with economic forecasting and noise harms have been dribbled out by GAL, so as not to provide the public with a transparent case early enough for the public to make an informed response. Instead information-in-part was provided in 2021 leaving it only until now during the examination stage for GAL to be submit last minute 'clarifying' information that should have been given months ago. This means the wider public in the 2021 public consultation did not have the full facts and were unable to form a balanced informed view. This supports the argument that the 2021 consultation was deficient and should be voided.

In good faith, I constructively contributed to the 2021 consultation by submitting 12 points of concern. I have now made a review to see how many of the points I raised in my original submission have been responded to. Out of the 12 original points only 3.5 have been acknowledged/responded to. 70% of the points have not been addressed or tracked at all. This % is unacceptable when PINS previously required all submitted responses to be taken into account and not just the points that GAL wishes to respond to. How many other people's "tricky to answer" responses have not been addressed? The following analysis shows the fate of each point originally raised. As personally advised by PINS, I have subsequently written to GAL about some of the ignored points, and my attempts to engage have been unanswered and ignored.

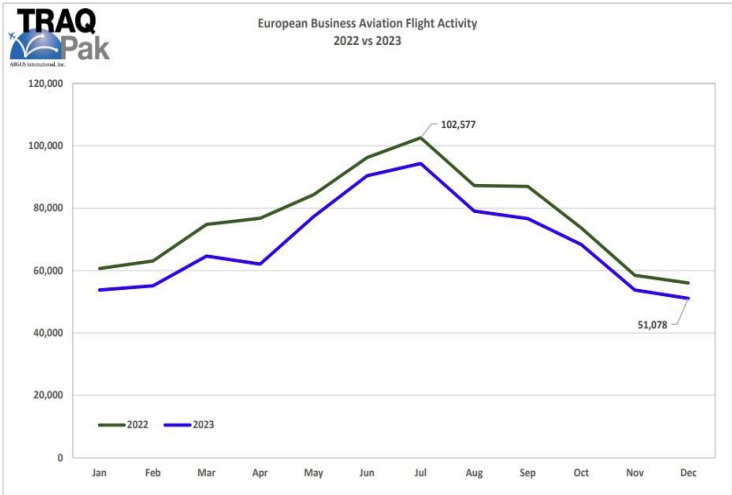
Fate of Economic issues previously raised during the 2021 consultation

1. 2021 issue: Climate change gives a risk of reducing air travel demand and economic benefit. Has there been any sensitivity analysis performed? 2023 Response - page 30..."The Forecast Data Book provides further information supporting the recovery profile from COVID. The assumed speed of recovery is comparable to other industry forecasts for example IATA, ACI and Eurocontrol."

This 2023 response does not answer the originally posed question of what would a 1% decline in passenger numbers do to the claimed ££ economic benefits. In fact the CAA says demand forecasting error (in normal times) is typically around 5% - so what is the economic benefit reduction if passenger demand is 5% less than forecast? And as the world is in a climate emergency, what would the consequences of a 10% demand reduction be? This is an omission of information which prevents anyone from judging the merits and robustness of the scheme's economic justifications. I also propose that this omission of information is deliberate

so as to remove any thought of 'doubt' in the headline economic benefits promoted by GAL. PINS need to ask for sensitivity testing on economic benefits due to depressed demand so as to critique the robustness of the economic claims. This point is particularly important as much of the ££ benefits of the scheme are predicated on sustained business travel. PINS should be aware of the most recent (Dec 2023) report into business travel from Argus tracker which says "European Business travel declined 10.2% compared to 2022."

European flight activity declined 10.2% in 2023, when compared to 2022. The busiest month over the last two years was July 2022 and the lowest month was December 2023, signaling a return to the pre-Covid activity patterns across the continent.

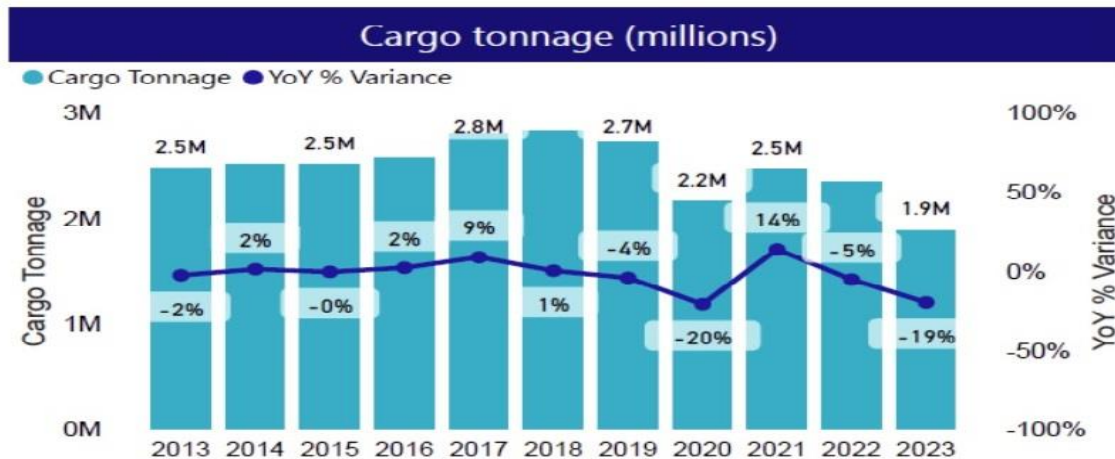


Ref available

How can anyone now believe GAL's £££ forecasting which seem to ignore the dynamic shift in the business market towards online meetings. Added to this is the apprx 5% increase in air passenger tax that was announced in the Spring Budget 2024. This WILL reduce demand and further undermine the made-up business benefits that GAL proclaim.

GAL will point to their own marketing storytelling again to say that "Cargo volumes to more than double if Gatwick's Northern Runway is brought into routine use – supporting local businesses and jobs" This is pure unsubstantiated fiction based on overly optimistic forecasting is designed to influence public and SoS. Please see the below UK air cargo trend from the CAA that shows the trend of UK air freight over the last 10 years. In ten years air freight cargo has in fact declined overall by 24% and from 2022 to 2023 the annual year on year performance shows a 19% decline. So how can the GAL marketing machine predict 'a doubling' if they had the Northern Runway? It is pure made-up fiction and I have zero confidence in their assertions.

Ref available



In part, the explanation for the flat air freight growth is the growing recognition that air freight is the most polluting and planet damaging mode of transport ever devised. This shift in thinking is shown by Tesco's push for use of long distance trains from the Mediterranean countries for short life perishable goods. Tesco recently established five weekly train services from Spain to its Barking depot, carrying 35,000 loads of fresh produce like oranges and lemons, cucumbers, peppers and tomatoes all in temperature controlled containers. A further shift in thinking is shown by the Compass Food Group which the UK's largest food services company, which has **banned the use of air freight for fresh fruit** and veg as part of its plans to reach net-zero emissions by 2030.

Ref available

Worldwide, the picture for air freight demand is very uncertain with demand falling 5% in 2023 compared to 2022.

All this evidence points to the GAL 'doubling' forecast to be out of touch with reality and is unjustified

2. 2021 issue: For the stated £3.5m increase cost of sleep disturbance, what is the current baseline? Without this I (nor PINS nor SoS) cannot say if £3.5m is a 10% increase or a 110% increase?

GALs 2023 Response - This issue is not addressed in the tracking table at all..... the 2023 appendix docs shows overall noise cost £9m and for sleep disturbance a cost of £3.3m .. but there is no baseline figures to compare - so this point is 100% not addressed. Webtag outcomes are not even discussed at all in ES Chapter 18: Health and Wellbeing (Doc Ref. 5.1 [Environmental Statement Appendix 14.9.2: Air Noise Modelling \(planninginspectorate.gov.uk\)](https://www.planninginspectorate.gov.uk/environmental-statement-appendix-14.9.2-air-noise-modelling/))

3. 2021 issue: The overall net benefit of the scheme does not seem to account for the wider environmental impact cost. The extra co2 emissions will have a monetarised cost which is not shown at all. There is already an appeal court ruling for Heathrow where the co2 emissions of the 3rd runway were judged not to have been accounted for in line with the Paris climate agreement. This proves that this issue cannot be simply ignored by PINS.

GALs 2023 Response - This point is not discussed or addressed. The only information provided is assumed co2 emissions for departing aircraft as percentages of various carbon budgets. What is not provided is information of what degree of planetary warming will be caused by the extra 100,000 flights. Using CCC recommendations for this question, a calculation can be made that shows a 0.18 degree centigrade increase due to the scheme. This has not been even mentioned in passing in the current 2023 documents. It is therefore impossible for PINS or public to determine in absolute terms the planetary impact of the scheme using data provided by the applicant. Residents within West Sussex deserve to know the wider consequences of the scheme, but are not being given the information.

4 and 5. These points have been addressed in 2023 documents.

6. 2021 issue: Do your forecasts take a view on whether kerosene will be taxed in the UK and or EU? It is increasing likely that airplane fuel will be taxed to curb demand aimed at reducing the growth in emissions. An EU report suggests air fares will rise 10% (Jet fuel tax hopes lifted by leaked EU report – Euractiv)

GALs 2023 Response - This has still not been considered/mentioned as a risk in any of the 2023 documents. This risk to the passenger demand and the resultant economic benefits has again been ignored in the 2023 documents despite other interested parties besides myself pointing this out in 2021. The ignoring of such questions related to the economic forecast appears to be a tactic to defend the forecasting credibility, which is not how a transparent infrastructure inquiry should be conducted.

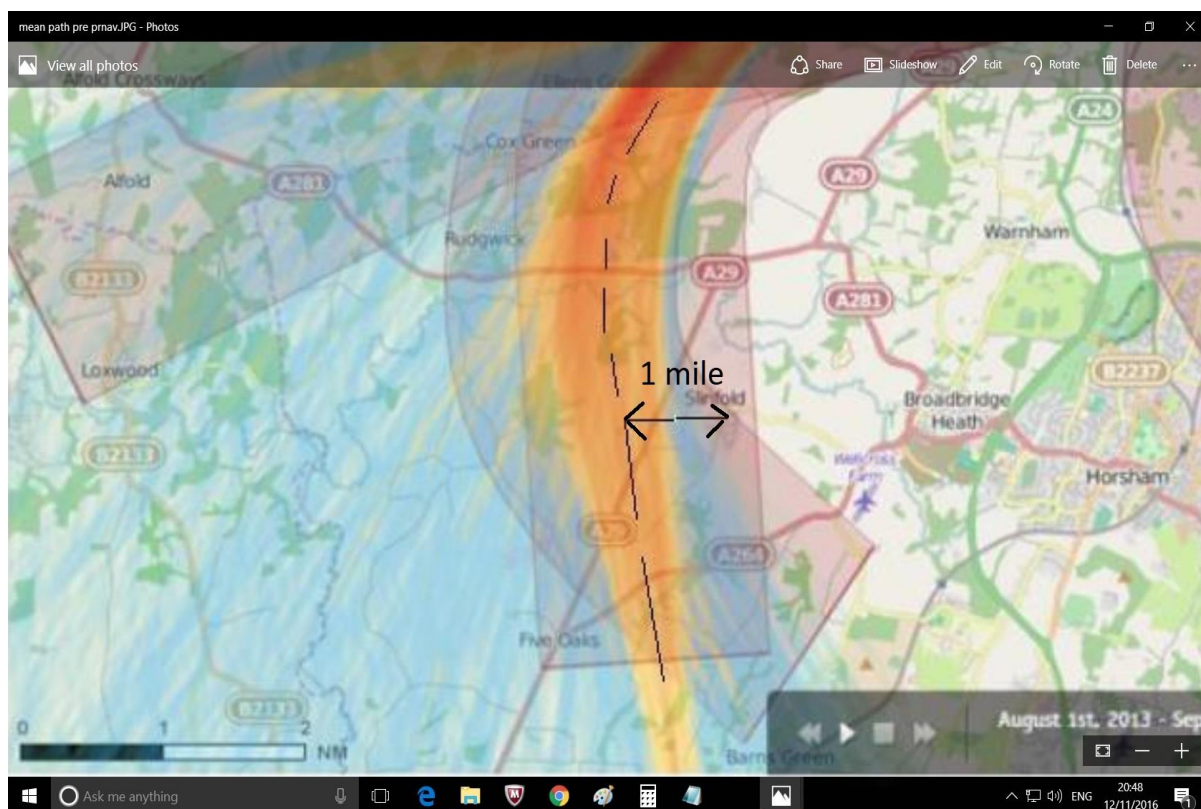
7. 2021 issue: The additional number of people affected by dementia due to the project has not been stated, only a monetary figure which is completely meaningless.

GALs 2023 Response - This issue has not been tracked/mentioned and appears still the case in the 2023 documents.

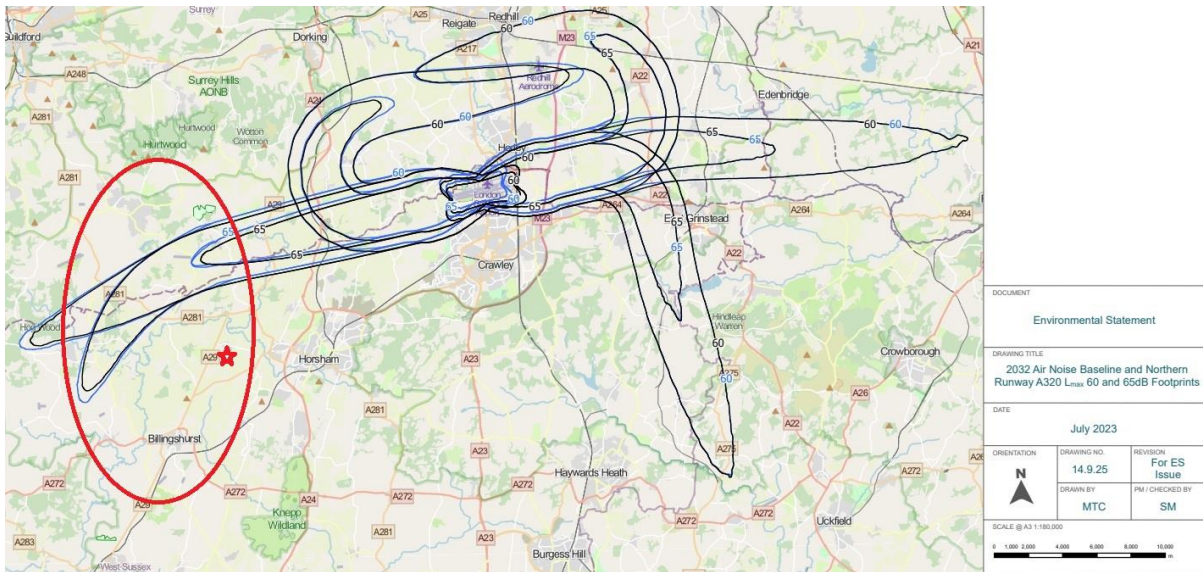
8. 2021 issue: This has been addressed in 2023 documents.

Fate of Noise Issues Previously Raised in 2021

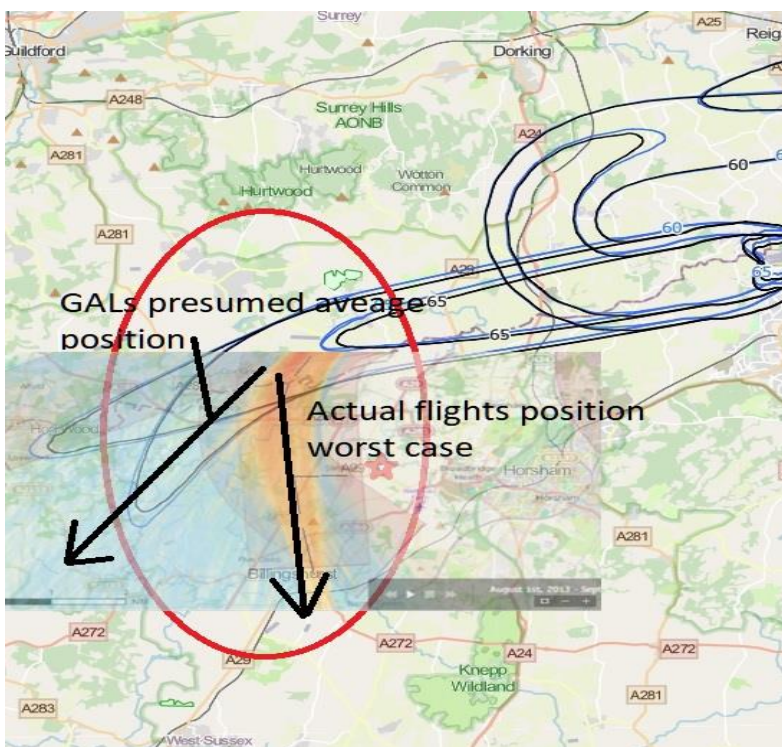
1. 2021 consultation issue: The BOGNA SID noise impact has been assessed by GAL using an average position of plane intensity (the method to reach this is unexplained) and not using either the published PRNAV line position nor the line that currently causes most disturbance. GALs approach will significantly and materially underestimate the worst case noise scenario. Below is the worst case position which shows the vast majority of planes flying over or within a 1 mile radius of Slinfold.



By contrast, below is the position that GAL is using for aircraft shown in the red oval which is several miles to the **west** of Slinfold shown with red star and crucially shows no overflight. GALs routing is totally unrepresentative of the default (un-vectored) route through the BOGNA swathe and will lead to a vastly reduced forecast level of disturbance to population centres due to noise from the proposed scheme.



To see the magnitude of the difference we can lay the two positions on top of each other as below.



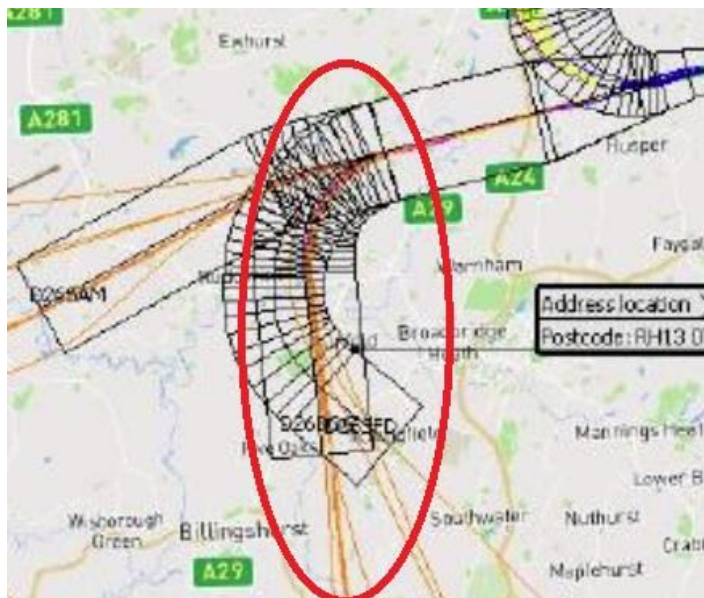
The two positions are very, very different. The orange heat distribution shows GAL'S average position is clearly unrepresentative of the worst case (and average) and the consequence is this will not portray either a realistic or worst case noise impact from the proposed development. GAL is therefore not complying with the PINS request to **show worst case impacts nor the correct position of the average intensity**. This needs to be reworked using the default PRNAV routing and showing the number of planes per hour. The question also arises, where else for other

departure/arrival swathes has GAL used this 'blended average' position for assessment of noise?

Further proof that the standard PRNAV NPR centreline is actually being followed and is the worst case of noise disturbance, is supplied below by Gatwick itself. Below is a response to a recent noise complaint in December 2023 where **75% of plane traffic is following the published centreline of the NPR.** (not GAL's blended average)

Quote from Gatwick is " ... **Whilst most aircraft utilising 26BOG/Route 7 during this time followed the centreline of the NPR,** some aircraft were vectored off of the route in a westerly direction."

Below is the Gatwick supplied confirmation of early morning routings Dec 8 2023 clearly showing the concentrated flights path which does not agree with the routing in the 2023 application documents.



So why is this routing not portrayed/ modelled in the noise assessments for the northern runway scheme? This precise question was asked in 2021.

GALs 2023 Documents Response - there is a partial response which says " Comments that the centre lines on the sound footprint are inaccurate, misrepresenting current and future locations of overflight and noise impacts. The Lmax footprints are illustrative for particular routes. The overflight assessment has been refined and updated for the ES." However, the 'average' vectored position of westerly departure routes is still shown incorrectly as an unsubstantiated average and used, so there is no proof of any corrections being made. Therefore the worst case noise impact is still not being shown by the 'average' as used by GAL. People

and inspectors will not be able to correctly assess impact of the increase in planes due to the scheme. For example, worst case n60 nighttime and daytime noise contours will be wrong due to this issue. In addition, there is no prediction of event frequency of aircraft occurrence for any location and an absence of operational diagrams of the most used routes in a SID. This is a hugely important omission as even GAL themselves recognizes in their very own and current, noise action plan report that, quote "..... figures would suggest that aircraft noise is not always the primary issue as it appears it is the **frequency of the aircraft that provokes more complaints.** ..." This being the case, why has GAL chosen not to portray such frequency information for the proposed scheme? It again points to a deliberate omission of information that would be damaging to the applicants case. Yet without the information no one can judge the real impact. Heathrow by comparison shows N60 details across 24hrs. Quote reference available from Gatwick Airport Ltd Environmental Noise Directive Noise Action Plan 2019 – 2024 Annex Document.

The UK Gov supports my argument that the **frequency of plane occurrence** (ie how many events per hour) should be presented. Below is a quote from the CAA's Air Navigation Guidance document which emphasizes the importance of providing exactly this information. This document deals with airspace modernisation, but the principle it discusses is blatantly still valid for an airport expansion of aircraft numbers.

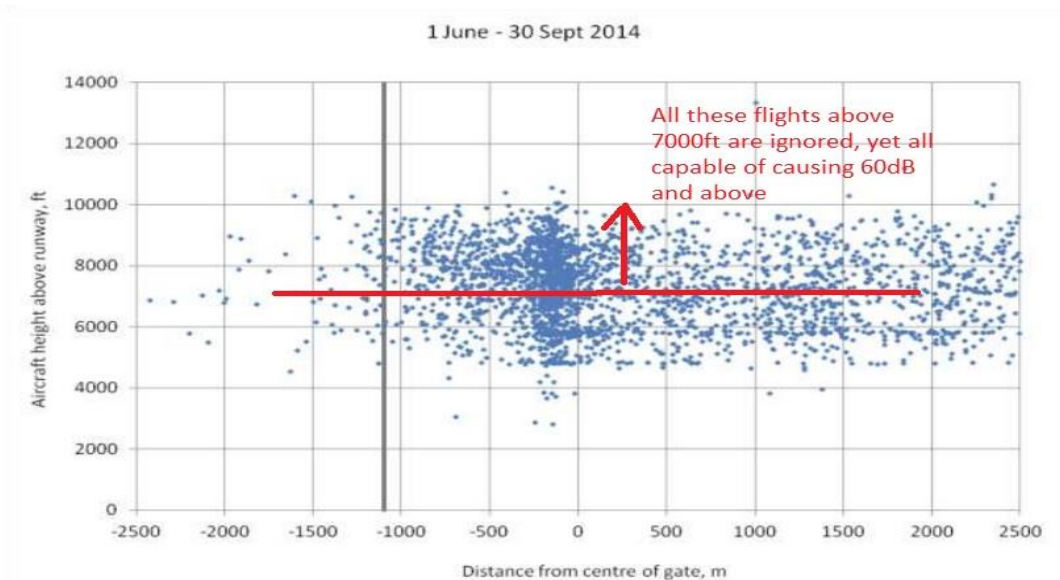
"3.15 The increased concentration from airspace modernisation can be more profound above 4,000 feet due to more accurate navigation and less need for vectoring which has typically begun at this height. **It is therefore important that the frequency of occurrence of aircraft is factored into decisions that affect airspace between 4,000- 7,000 feet.** The CAA should therefore verify that where it is practical to do so, and in balance with other factors, that sponsors have taken measures to limit the impact of increases in the number of aircraft experienced by communities..... This means there will be situations when multiple routes, that expose more people overall to noise but to a lesser extent, may be better from a noise perspective. Taking account of consultation, preferred options should normally be based on those which result in fewer people significantly affected as measured by the approach outlined above."

As already mentioned, GAL has refused to publish such numbers of aircraft passing per hour, and it is therefore, my opinion that GAL is deliberately not disclosing transparent noise and plane occurrence figures. This being the case, what other information detrimental to the case is being with-held?

1a. In the 2023 documents, GAL says "air noise – noise from aircraft in the air or departing or arriving (including reverse thrust) on a runway, is generally assessed to a height up to 7,000 feet above ground level;" This

misleading statement is used by GAL to **ignore** ALL impacts of ALL flights over 7,000 feet. Heathrow and other UK airports normally account for noise from aircraft flying at higher than 7000ft. At 7000ft the noise can be 60-63db max which is disturbing, and as GAL says itself above, it is also the passing frequency or interval between passing planes that cause a lot of disturbance and that can be between 7,000 and 10,000ft especially if it was happening every 100 seconds. If you remove this dose from flights between 7,000 and 10,000ft then the average noise dose envelopes (which GAL portrays) will be wrong and not the worst case scenarios. It will also prevent presentation of correct N60 instances as a good **proportion of aircraft will be missing** (evidenced below) – automatically removed from consideration as they are over 7,000 feet, yet they are there in the real world and creating significant and disturbing noise as accepted by GAL in other references.

To evidence this, below is an altitude analysis of planes at the village of Slinfold in 2014.(South West of Gatwick) **50% of planes are 7000ft and over, yet the typical loudness of planes between 7000ft and 9000ft is 60-62dBA** which is a very disturbing level especially every 100 secs. GAL has chosen to remove such flights from any of their noise analysis. This directly supports my argument that the 20% increase in flights that GAL headlines the public and inspectors with, is not a realistic figure as noise impacts from so many aircraft have been removed/ignored.



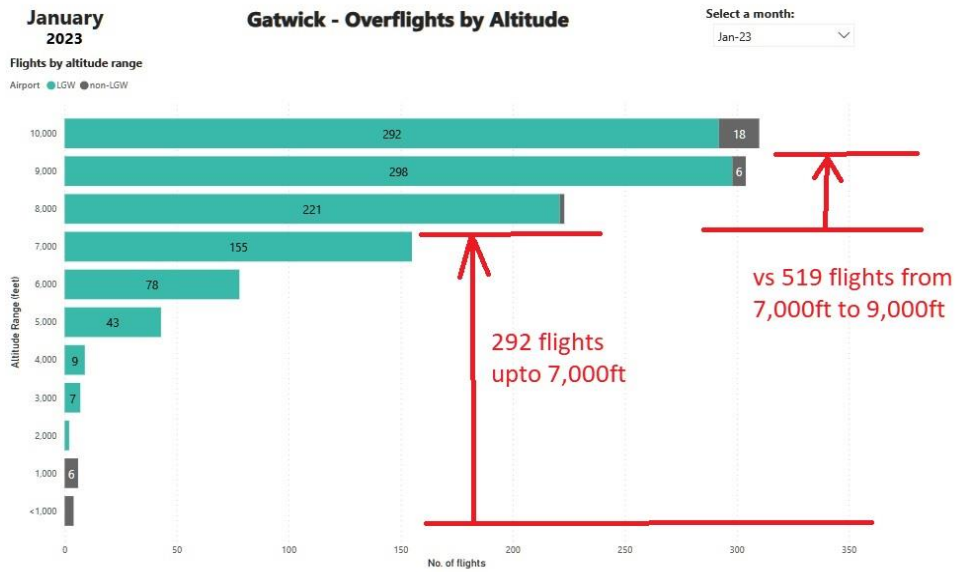
Here is further evidence that the forecast noise modelling will not portray such disturbing flights. The below is a capture of flights at Slinfold in 2015 in a sample day in August. (taken from GALs own noise monitor) Note the highlighted columns show altitude and noise – all above 7,000ft yet delivering over 60db in noise – commonly at intervals of 2 mins between fly overs. All such disturbance is magically removed from forecast noise as all these will be conveniently removed by GAL as they are over 7,000ft. This also explains why GALs blended average position of aircraft is so

different to reality as flights such as these, which are flying close to the population centre of Slinfold will not be accounted for in the position nor volume of forecast averages.

ne_date	ne_tin	durati	lamax	sel	ne	flight	alt	co
19/08/2015	07:23	42	60.5	74.2	3193373	4474989	7756	
19/08/2015	09:27	30	60.7	71.8	3193383	4475588	7833	
19/08/2015	10:01	27	60.3	71.9	3193385	4475783	7783	
19/08/2015	13:29	29	60.8	71.7	3193393	4477350	7733	
19/08/2015	13:31	17	60.1	68.9	3193394	4477363	7858	
19/08/2015	13:51	40	61.7	73.6	3193399	4477497	7383	
19/08/2015	14:41	34	63.3	73.7	3193405	4477856	7558	
19/08/2015	22:09	29	62.5	74.1	3193440	4480081	7760	
18/08/2015	06:00	40	62.2	75.1	3193216	4468813	7751	
18/08/2015	06:02	33	61.8	74.2	3193217	4468815	8101	
18/08/2015	06:10	29	60.9	72.9	3193219	4468831	7676	
18/08/2015	06:13	33	60.5	73.1	3193220	4468839	7776	
18/08/2015	06:15	37	60.6	73.9	3193221	4468843	7376	
18/08/2015	06:17	38	61.8	75	3193222	4468848	7301	
18/08/2015	06:18	31	60.7	73.4	3193223	4468853	8251	
18/08/2015	06:25	26	60.5	72.4	3193226	4468861	7526	
18/08/2015	06:33	40	62.1	74.4	3193229	4468881	7551	
18/08/2015	06:35	44	63.2	76.1	3193230	4468888	8051	
18/08/2015	06:44	33	61.2	73.5	3193234	4468915	7901	
18/08/2015	06:56	35	61.9	74.5	3193237	4468952	7253	
18/08/2015	07:09	41	61.2	73.5	3193241	4469015	8328	
18/08/2015	08:27	58	66.8	80	3193249	4469403	7253	
18/08/2015	11:52	26	60.1	71.5	3193272	4470654	7453	

The automatic removal of flights by GAL is not compliant with the request from PINS that noise assessment should be for a worst case scenario. How can the predicted noise contours be 'worst case' if they omit the noise from aircraft at 7,000ft - which at this altitude and to 9,000ft , can be over the waking threshold for noise.

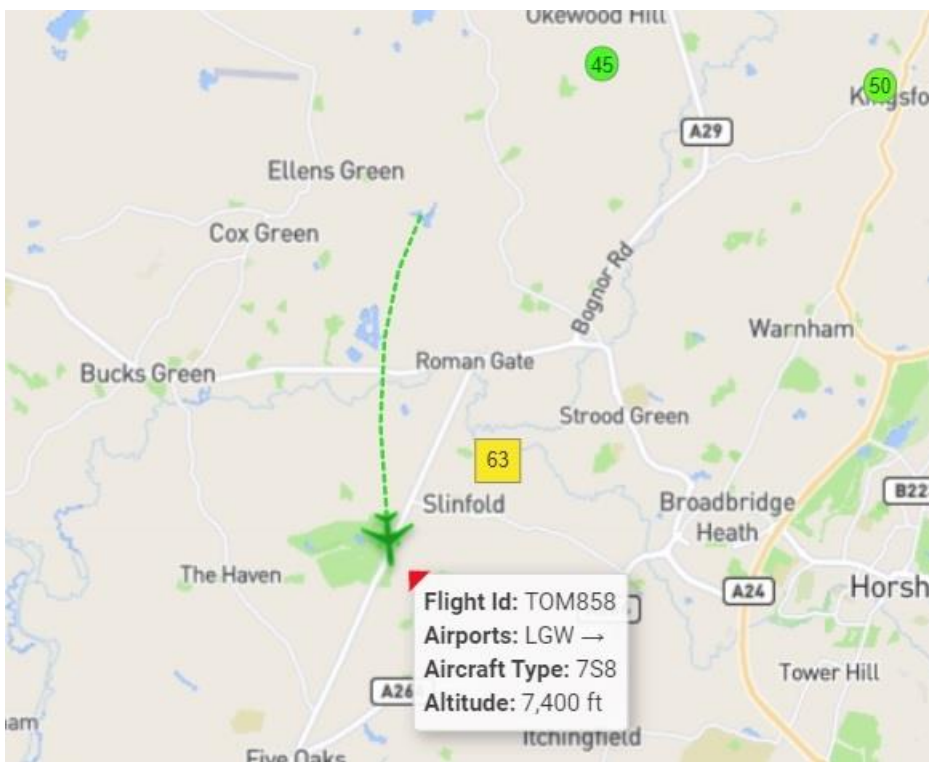
More recent evidence is to be found below from 2023 which is a graphic from GAL's own webtrak for Slinfold's noise monitor which shows the number of flights between 7000ft and 9,000ft are **more numerous** than those between 0 to 7000ft. (519 planes vs 292)



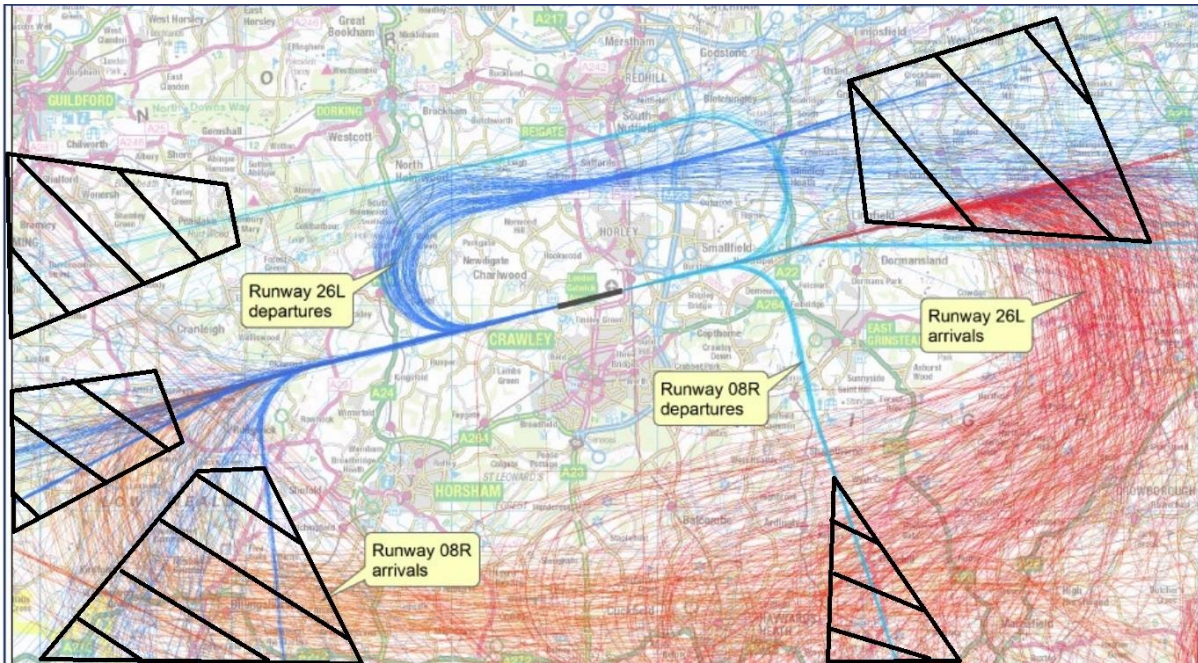
So it is fact that there are more flights at and above 7,000ft to 9,000ft than below 7,000ft , yet all flights over 7,000ft are being ignored, so how can the contours and N60 figures be either representative or worst case? And without these flights the predicted noise environment in future years will be wrong.

Here is indisputable evidence that flights at over 7,000ft at Slinfold create substantial noise is highlighted below using data from webtrak. Planes above 7,000ft are shown emitting very disturbing noise well over 60db.(sound level in decibels is shown in the yellow circle) Firstly at 9,100ft producing 61db, then 62db at 10,000ft and finally 63db at 7,400ft.

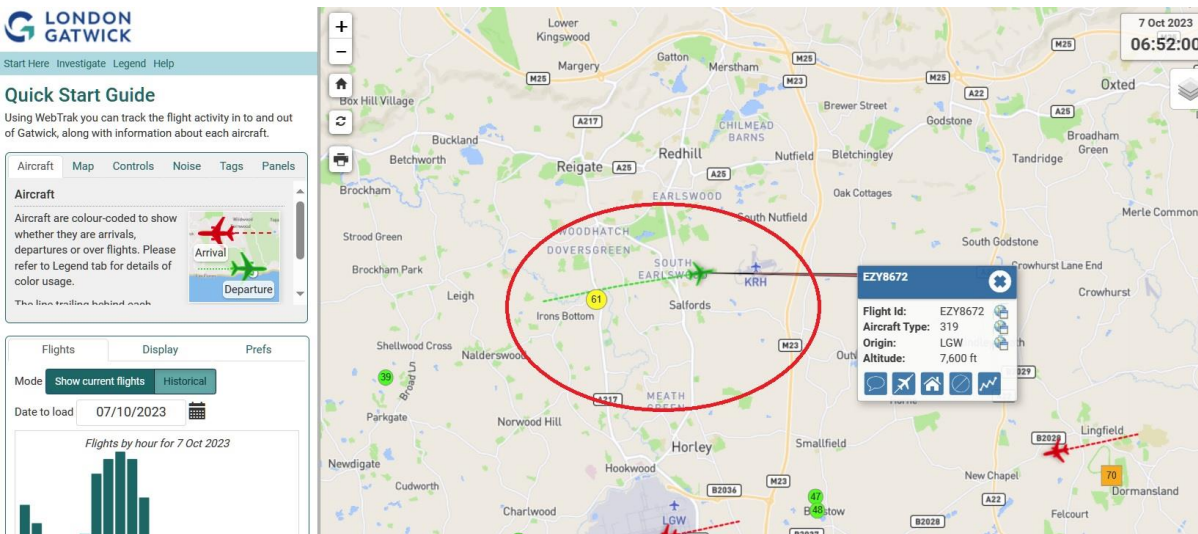


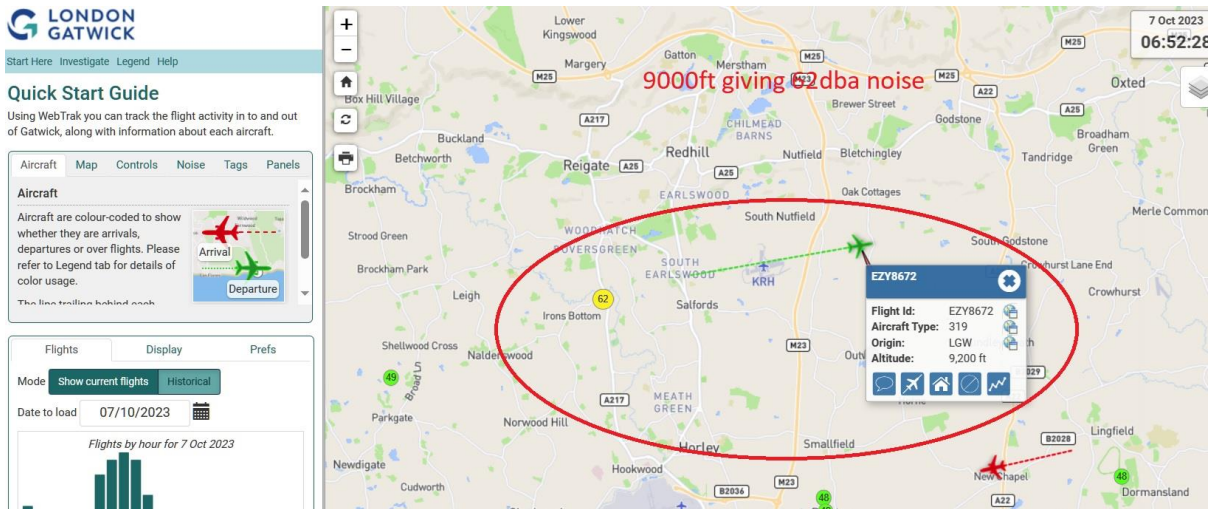


Importantly this evidence of missing noise dosage is not an issue just restricted to Slinfold, no, this will affect all communities that are situated at roughly 11-14 miles from Gatwick where departing aircraft reach between 7,000ft and 9,000ft. The below map shows those areas hatched in black.



Evidence that in these hatched areas flights over 7,000ft cause significant loudness is shown below for example flights at 7,600ft and 9,000ft. and 7,100 ft (yellow circle shows 61dBA and 62dBA and 64dBA for flights at 7,600ft , 9000ft and 7,100ft)





This conclusively proves that the GALS representation of the noise environment is flawed and needs to be reworked to include all flights to 10,000ft in order to comply with PINS request for worst case.

The CAA CAP 1616 document is for changes in airspace - and that does indeed **prioritise** assessment of flights below 7,000ft. (it does NOT say exclude) It **DOES NOT SAY** that you must NOT assess over 7,000ft, and in fact at para b.56 says this - "In most cases, we would expect no assessment or portrayal of noise from aircraft at or above 7,000 feet, in line with Government policy that the prioritised environmental impact at these altitudes is CO2 emissions. **HOWEVER**, aircraft can sometimes be audible when above 7,000 feet, even though the effects from noise at these altitudes are not defined as significant. **That is not to say that noise may not still be annoying for some people. Therefore in**

instances where design options are no different (or very closely matched) in terms of all other environmental impacts, then the overflight metric could be used as a means to determine if traffic patterns from aircraft above 7,000 feet could be used by a change sponsor as a differentiating impact."

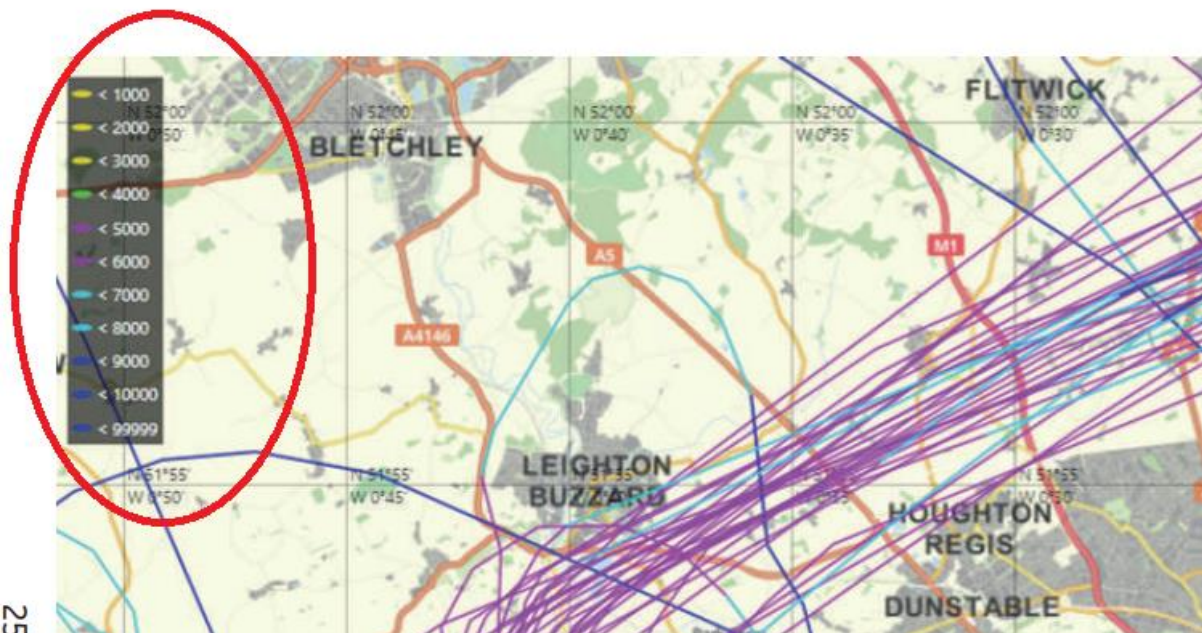
This means that where flights over 7,000 feet are a problem – then GAL should be considering this.

By contrast Heathrow regularly includes noise assessments for departing flights up to 10,000ft in analyses. The below is a quote taken from a calibration report of the noise modelling used at Heathrow being compared to actual noise measured at noise monitors, " it was decided to include East and West operations (where this distinction is relevant) and to verify flight data up to 10.000ft." Ref available.

The following Heathrow community analysis also uses flights over 7,000ft to characterise the noise environment. Ref available. Heathrow.com

Luton Airport also uses all flights up to 10,000ft, shown below in an altitude /route depiction of flights out of Luton Airport. This clearly shows flights above 7,000ft. This gives insight and clarity to any proposals - I ask PINS to ask GAL for altitudes over 7,000ft to be depicted and assessed. Ref available luton.com

Easterly (07) Flight Routes (24 hour period)



1b I believe that the noise modelling presented in 2023 (and 2021) which is being used by GAL to predict plane noise loudness and number of planes per hour in future years has not been calibrated/validated. It would seem obvious that you could use the results of the forecast noise model to predict current noise levels and compare the outputs specifically at the locations at some of the existing noise monitors that are sited around the airport (eg Lmax db instances/ N60/N65) Without such validation, it cannot be 'assumed' that any of the predictions in the GAL modelling of noise are correct. Heathrow by contrast has performed such validation for their noise modelling ref available [Heathrow.com](https://www.heathrow.com).

This point was raised by myself in the GAL 2021 consultation, but has been **completely ignored** as there is no reference to my original objection nor any mention of using any of the existing noise monitors for validation. Why is this? Without calibration none of the noise predictions can be trusted or used.

Instead I will present a comparison that immediately will alert PINS that something is wrong in the noise model. Take an example day in July 2015 (a year I have full data for). Firstly look at the area around Slinfold in the GAL 2019 baseline overflight map; it is coloured light green - indicating 11-50 overflights per day (drawing 14.6.7) This is entirely non representative as on 25.7.2015 according to the Slinfold noise monitor, there were 90 overflights in a period of 24hrs. So the inspectorate needs to ask about calibration and whether the overflight numbers in the scheme maps are yearly averaged? And if so, how do the public assess worst case summer months? From this case, it seems PINS need to multiply the presented overflight number by 80% which will convert the 50 overflights shown in the baseline map to 90. (Part of the reason of course is that Gatwick have removed all flights of altitude 7,001ft and above.

2. 2021 issue: The overflight diagram used at figure 8.6.5 in the 2021 documents, 'could' be good way for the public to see increases of overflight. But it is flawed because it uses a map key which **has a series of range thresholds** that are too large to be able to show the actual increase in overflight at most locations. This then completely defeats the purpose of the map, and worse it potentially hides from the public and PINS large increases that are just not seen.

2023 response/position. **Point partly/not addressed.** GAL said "The presentation of overflights in a 3.6x3.6km grid was not considered to be of sufficient resolution for analysis. The resolution of the overflight analysis has been reduced to 1km for the ES as explained in ES Appendix 14.9.2: Air Noise Modelling (Doc Ref. 5.3) and reflected in the various overflight maps provided for in ES Chapter 14: Noise and Vibration (Doc Ref. 5.1)".

That is not the point I'm making, but it is an improvement that the resolution of the maps is now better (1km) however the **numeric range** of the coloured divisions representing the number of overflights is still so large that it is again still impossible to assess change with and without the scheme. What is worse is there is no longer a provided 'magnitude of change' map (comparison) so I have to manually visually assess the map 2032 Baseline All Overflights,(app 063) with the map 2032 with scheme all overflights, which helpfully (not), is not in the same document but in app065. Take as an example Petworth House, in app 063 the colour there is a very light green (11-50 overflights) and in app 065 it is also in the same colour (11-50 overflights) **but the range of the division is a huge 39 flights**. So will the 'with scheme scenario' be 49 flights or 11? There is a massive difference possible - yet the colour will be exactly the same for either figure - so potentially masking a 350% increase of overflight in the same colour band. (Remember all flights over 7,000ft will have been removed exasperating the inaccuracy) If this was the case (ie 350% more) then **no one can see or appreciate that change**. The screening effect is made even worse as the next range up is 100 overflights a day wide, meaning an increase of 75 flights due to the scheme will not be visible to PINS. This 'hiding' of impact will occur all over the geographic area of the submitted overflight maps. Therefore these maps are seriously misleading at portraying change with and without the scheme. This is still the case in 2024 despite me explicitly pointing out the flaw out in 2021 saying that the range is too large. So my point has been ignored, and the maps are still useless for the public to judge the change/impact of the scheme. The question has now to be asked is this deliberate ignoring of feedback or incompetence? Note that the 'missing information' once again, is to the benefit of the applicant.

3. 2021 issue: There are no N60 daytime contours presented which removes the possibility of assessing the number of aircraft flying with this loudness at any location in the study area.

2023 response: **No response** and N65 contours are the only presented contours even for areas that will be newly over flown (eg North East Horsham). There are N60 night time contours - but as previously discussed even these will be wrong and underestimating worst case noise as all flights over 7,000ft are excluded by GAL.

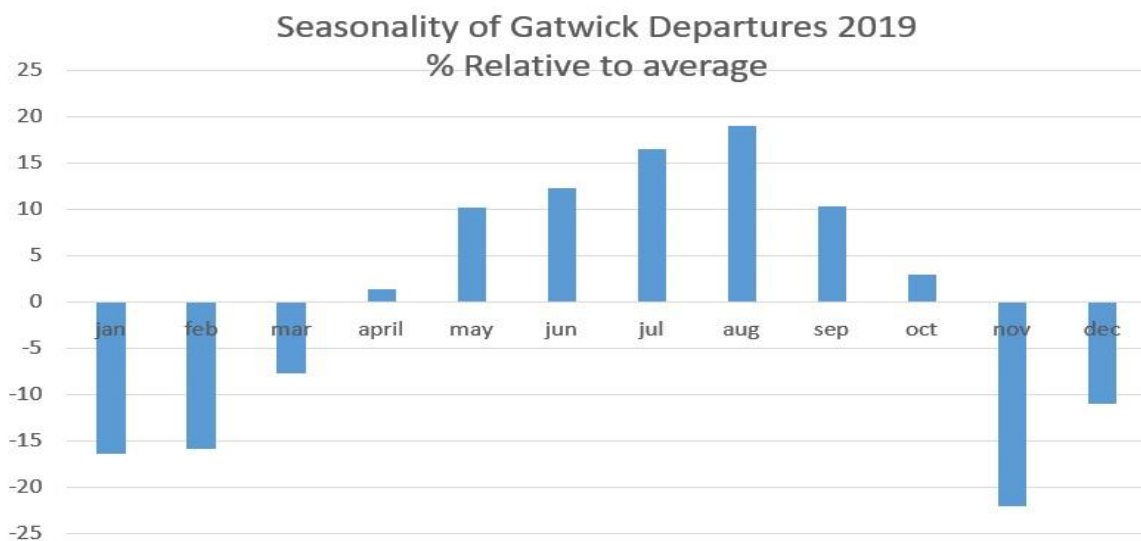
As aircraft are getting quieter, but overflying more frequently, the metrics of how to measure them obviously needs adjusting too. Without N60 daytime, you **cannot** gain any sense of how frequently in any one hour in any day your house will be overflown by aircraft making 60dbA of sound - so no one knows whether it is 20, 50 or 100 or 200 times a day. Remember GAL itself has previously correctly stated that it is not only the loudness of aircraft, it can also be the passing frequency of planes, (ie how many per hour), that will cause disturbance and yet GAL

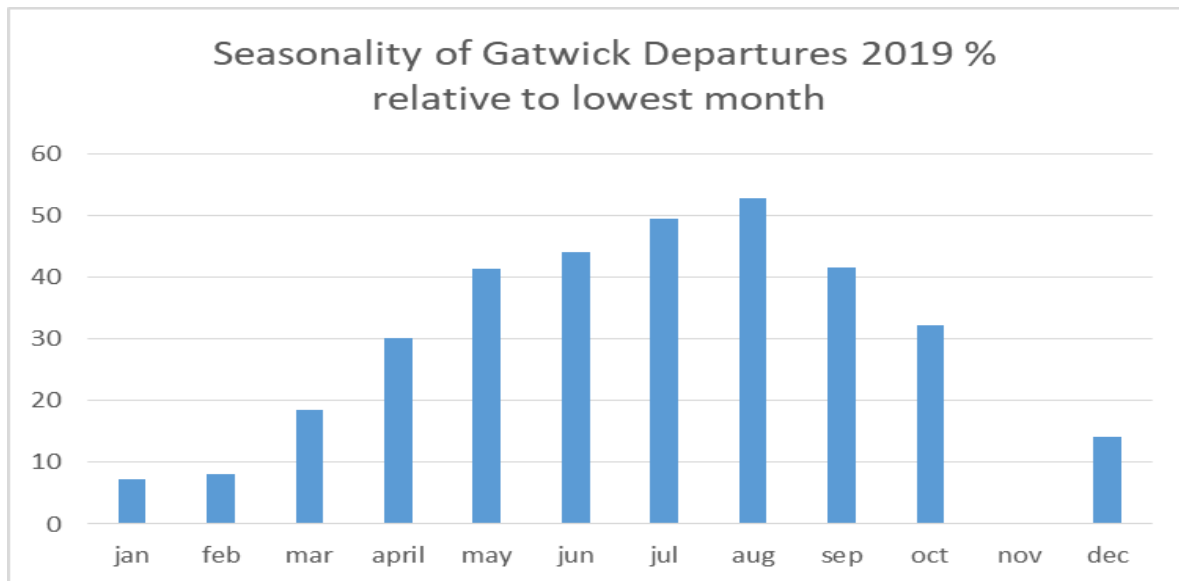
still provides no information on this. PINS must question why GAL do not want to provide such clarifying information.

New point 3a: GAL say that existing SIDS/NPRs and distributions will be used with the scheme - and in effect average positions of plane load have been used - especially for the BOGNA SID from runway 26. This portrayal of average load, **cannot show worst cases** - ie early mornings 6am - 9am in the summer months. Worst case for BOGNA is when planes are following the prescribed/published prnav routing every 2 minutes (not the blended vectored average routing) with a 90 degree south turn that passes Slinfold either overhead or within 1 mile. This happens peak mornings especially in the summer and is a worst case as it affects more residents than the average plane load positioned used in the noise model. This goes against what PINS asked for which is worst case scenarios.

GAL itself admits that only a blended mean position of tracks has been used as they state in Appendix 14.9.2: Air Noise Modelling "2.1.9 Mean departure and arrival flight tracks from the 2019 summer Leq contour analysis were used " As discussed, this will not depict worst case impacts.

New point 3b. PINS have asked for worst case noise impacts. However all of GALS noise modelling contours show averaged out air traffic movements over the year. ("eg 2032 Air Noise Baseline Lden Annual Average 24 Hour") Unfortunately this means the worst case impacts cannot be appreciated because unlike Heathrow, Gatwick traffic is very, very seasonal. This means the peaks in June, July and August which cause greatest noise impacts are not correctly portrayed and people will have no appreciation of the greater disturbance with the scheme. To illustrate this, the below graph shows the monthly variation of traffic compared to the year average. August traffic is 55% higher than the lowest month and at least **20% higher than the portrayed average.**





So the degree of worst case disturbance is not portrayed in the average yearly smoothed contours and event statistics, it is showing at least 20% less than it should and as flights over 7,000ft are being ignored the underestimation figure is between 20-30%. Therefore it is crystal clear that the public and inspectors are being given a large underestimation of real noise impacts which is not connected to reality. People do not hear noise averaged over a year, people are woken up on a daily basis from the months of May to September. People are disturbed and stressed by departing aircraft flying overhead at 60dBA and above every 2 mins in the summer months. None of this is being portrayed in GALs 2023 documents, and therefore inspectors and public alike do not have the information to make a fair assessment of impact.

Source: Gatwick annual report 2019

New point 4

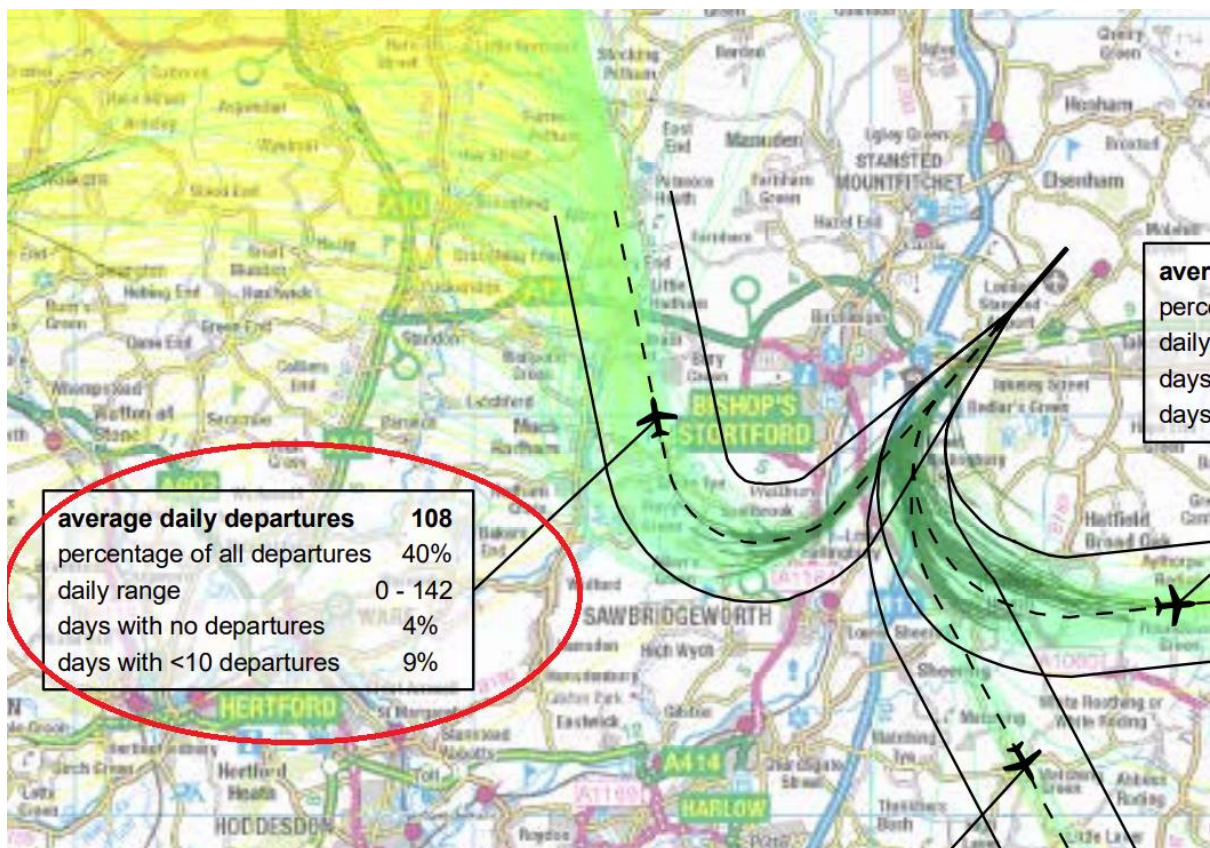
Horsham north east communities will have a substantially increased number of aircraft due to the scheme's increased use of route 9 WIZAD SID. Communities have no idea of the number per day of departing aircraft that will affect their lives, so how can they be expected to make an informed comment. How can PINS and SoS make a judgement?

All that residents have are 2 maps; first is current baseline situation showing 1 overflight per day rising to an average of 11-50 per day (we need to increase this figure by 20-30% to arrive at summer months worst case, ie 65 flights) So the total overflight volume will be at least a 1500 % increase for the apprx 20,000 people who live in the 63dBA max footprint. What is also unknown is how many overflights per hour within the hours of 6am and 9am. Will it be 5? 15 or 30? The public are completely unaware that such disturbing and life changing noise will be

heading their way. PINS at least now must make itself aware of what the consequences will be and judge accordingly.

PINS must not ignore the fact that noise levels will be really disturbing in North East Horsham as this will be effectively a newly overflown area. Flights starting at 6am with awakening loudness of 60 to 65dbA max. Has the population if NE Horsham been included in the early wakening health and cost assessments? The lack of information for this population is staggering. It is noted elsewhere by the CAA that residents who are newly exposed to noise at night - eg due to a new runway or routing will affect a greater percentage of the population than is otherwise the case. This seems logical and reasonable. Has GAL taken this into account when assessing the number of people in North Horsham who will be affected by flights on route 9?

By contrast to the lack of transparent information from Gatwick, here below is what Stanstead airport supply to clearly inform their local communities. This shows **the actual number of aircraft on each SID, and the range of overflights related to the average**. Ref Stanstead [Airport](#). Yet again this is an example of GAL not disclosing information that would damage their case.

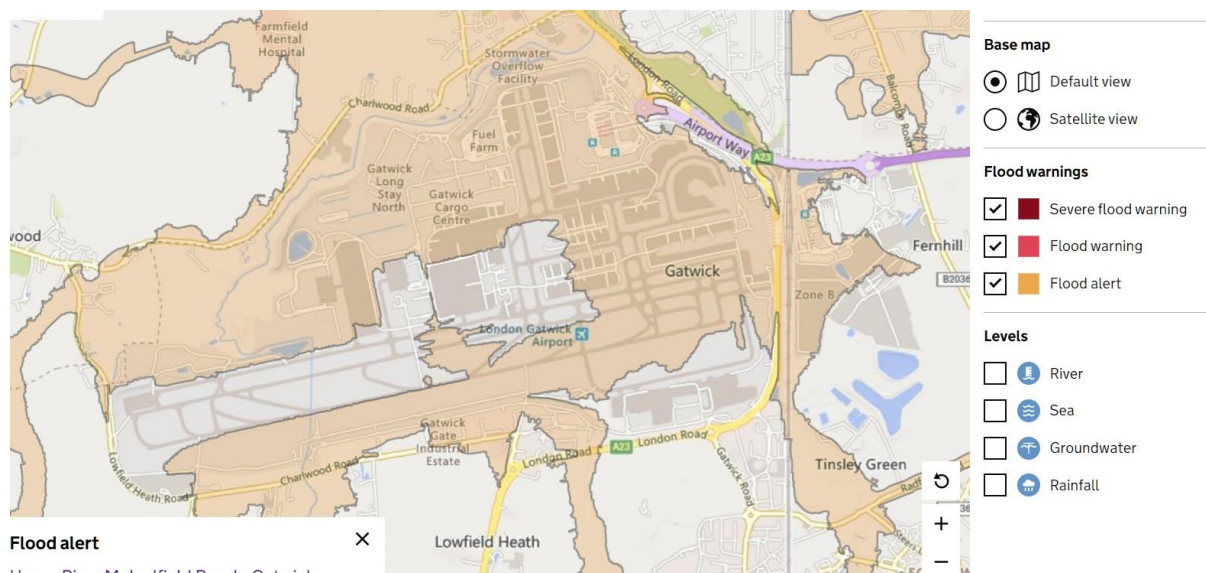


New Point 5

The FASIS change of London Airspace is progressing very quickly. Stage 3 consultation is the next stage predicted for late 2024 / early 2025. The new FASIS departure and arrival procedures for Gatwick could be approved in 2026. **This means the public /SoS will not have had chance to assess the noise environment of the new FASIS aircraft routings with the Northern Runway scheme.** The process timing is therefore flawed. The whole decision timeline for the Northern runway should be paused until FASIS changes are approved, then re submit environmental evidence based on the new departure and arrival procedures.

New point 6

Flooding. Today 22.2.24, the online gov.uk flood warning site issued a flood warning that shows large areas of Gatwick airport possibly being affected. (shown below) This is after a fairly modest 10mm rainfall falling during 24 hrs, but after a prolonged period of rainfall making land saturated. The map graphically shows that the airport is in the centre of a confluence of 3 water courses and that therefore there is a significant risk of flooding - especially with intensified rainfall that will come with climate change. (caused in part by aviation) One in 20 year rainfall events will become 1 in 10 and can only become more and more frequent.



Jacobs consultants in a recent 2021 report agrees with my assessment:-

"Based on hydraulic modelling, **Gatwick Airport is considered to be at risk of fluvial flooding on average between the 1 in 20 annual chance (5% AEP) and the 1 in 50 annual chance (2% AEP) events.** The airport is served by an extensive surface water drainage network which

would be overwhelmed by extreme rainfall events, which is predicted to flood on average for the 1 in 10 annual chance (10% AEP) event. The location at highest risk of surface water flooding is the North Terminal. Flood risk from both fluvial (river) and surface water sources is predicted to increase within the next ten years as a result of climate change if no mitigation measures are implemented."

Mitigations will help but it still leaves the whole of Gatwick vulnerable for decades to come as climate change effects inexorably and exponentially increase.

Therefore I ask PINS to consider whether it is justified to build a new runway in an area that has such a significant flood risk profile? Would there be advantages in siting this extra runway capacity in a different part of the country without such a risk and with the advantage of distributing UK runway capacity to an area outside of the South East of England.

Theme B: A new runway is a "new runway" and therefore its status is subject to the Airport Commission report.

The Northern Runway is a new runway. It will be constructed as a new runway, by firstly ripping up the existing emergency runway (about 350,000 cubic metres of tarmac and concrete) and building in its place a new runway in a new location, using 500,000 cubic metres of new concrete and tarmac. It will be operated as a new runway requiring new additional navigational infrastructure to operate it (ILS), it will have a noise envelope different to a single runway. It is not an existing runway, nor one that is being brought back into use. By building a new runway in a different location to the existing emergency runway, it provides new operational runway capacity which in any definition you like is therefore "new runway capacity".

The intent of the Gov policy to have no new runway capacity and instead to best use existing runways is clear. The intent certainly was not to rip up, relocate and enable a fully operational new runway. If PINS need, there are some precedents which consider the definition of 'new' – both by physical characteristics and operational definitions.

- **Significant extension or alteration of an existing runway:** Extending an existing runway by a substantial length, or other physical attribute often defined by regulations or based on operational needs, can be argued as "**new**" if it **significantly alters the runway's capabilities**
- **Increased capacity:** If the new runway significantly increases the airport's capacity to handle more flights or larger aircraft, it could be argued as functionally "new" even if physically built on existing infrastructure. This argument focuses on the distinct operational capabilities introduced by the new runway.

- **New flight routes:** If the new runway enables new flight routes that were previously not possible due to limitations of the existing runways, it could be considered "new" from an operational standpoint. This highlights the creation of new operational possibilities beyond just the physical presence of the runway.

So by several definitions, the northern runway is "a new runway". Firstly this conflicts Gov policy but secondly as "a new runway" the decision making process must (because it is highly relevant) make reference to the 2015 Airport Commission which ruled whether "a new runway capacity" at Gatwick was appropriate for the country.

As PINS and SoS well know, the airport commission looked at provision of 'new runway capacity' for the next 3 decades. The inquiry was thorough and extremely detailed. The decision was a new runway at Heathrow. Sir Howard Davies, Chairman of the Airports Commission succinctly summarised the conclusion in a 2015 quote "Gatwick does not need a 2nd runway; Heathrow is full, Gatwick is not. Heathrow needs a new runway". Nothing has substantially changed since then with passenger numbers at Heathrow back now at Pre-covid levels and the decision is at the very least relevant information for this DCO process. The below summaries the decision and the factors that were involved.

The 2015 recommendation for a third runway at Heathrow over a second runway at Gatwick was based on several key factors:

Economic benefits:

- **Passenger capacity:** Heathrow already handled significantly more passengers than Gatwick, and expanding it was seen as crucial for maintaining the UK's position as a global aviation hub.
- **Jobs and economic growth:** The expansion was projected to create more jobs and contribute more to the UK's GDP than the Gatwick option.
- **Connectivity:** Heathrow offered more direct connections to key international destinations, particularly in Asia, which was considered important for businesses.
- **Existing infrastructure:** Heathrow already had a significant amount of existing infrastructure in place, making expansion potentially easier and less disruptive