

File With \_\_\_\_\_

## SECTION 131 FORM

Appeal NO: ABP 314485-22Defer Re O/H ☐Having considered the contents of the submission dated/ received 31/03/2024  
fromBart and Bernie Glover I recommend that section 131 of the Planning and Development Act, 2000  
be not be invoked at this stage for the following reason(s): no new material issuesE.O.: Pat BDate: 08/04/2024

For further consideration by SEO/SAO

Section 131 not to be invoked at this stage. ☐Section 131 to be invoked – allow 2/4 weeks for reply. ☐

S.E.O.: \_\_\_\_\_

Date: \_\_\_\_\_

S.A.O.: \_\_\_\_\_

Date: \_\_\_\_\_

M \_\_\_\_\_

Please prepare BP \_\_\_\_\_ - Section 131 notice enclosing a copy of the attached  
submission

to: \_\_\_\_\_ Task No: \_\_\_\_\_

Allow 2/3/4 weeks – BP \_\_\_\_\_

EO: \_\_\_\_\_

Date: \_\_\_\_\_

AA: \_\_\_\_\_

Date: \_\_\_\_\_

File With \_\_\_\_\_

## CORRESPONDENCE FORM

Appeal No: ABP 51448-22

M \_\_\_\_\_

Please treat correspondence received on 31/03/2024 as follows:

- |  |  |
|--|--|
| 1. Update database with new agent for Applicant/Appellant _____<br>2. Acknowledge with BP <u>23</u><br>3. Keep copy of Board's Letter <input type="checkbox"/> | 1. RETURN TO SENDER with BP _____<br>2. Keep Envelope: <input type="checkbox"/><br>3. Keep Copy of Board's letter <input type="checkbox"/> |
|--|--|

Amendments/Comments Barb and Bernie Glover response to S.13112/03/24: 02/04/24 ✓

## 4. Attach to file

- |   |   |
|---|---|
| (a) R/S <input type="checkbox"/>            | (d) Screening <input type="checkbox"/>    |
| (b) GIS Processing <input type="checkbox"/> | (e) Inspectorate <input type="checkbox"/> |
| (c) Processing <input type="checkbox"/>     |   |

RETURN TO EO ☐

	Plans Date Stamped <input type="checkbox"/>
	Date Stamped Filled in <input type="checkbox"/>
EO: <u>Pat B</u>	AA: <u>Anthony McNally</u>
Date: <u>08/04/2024</u>	Date: <u>25/04/2024</u>

## Alfie Staunton

---

**From:** Bord  
**Sent:** Tuesday 2 April 2024 09:53  
**To:** Patrick Buckley  
**Cc:** Appeals2  
**Subject:** FW: Requested Submission Case No ABP-314482-22 Ref., 20A/0668  
**Attachments:** 240329 Bart Glover Response Submission .pdf

---

**From:** Bart Glover <bart@kayskitchen.ie>  
**Sent:** Sunday, March 31, 2024 11:36 AM  
**To:** Bord <bord@pleanala.ie>  
**Subject:** Requested Submission Case No ABP-314482-22 Ref., 20A/0668

**Caution:** This is an **External Email** and may have malicious content. Please take care when clicking links or opening attachments. When in doubt, contact the ICT Helpdesk.

Good Morning,  
For The Attention of Mr. Patrick Buckley, Executive Officer.

Please find attached my requested submission regarding the above case,

Kind Regards,  
Bart Glover  
087 251 7615



Bart & Bernie Glover, Millennium, Blackwoods, Blackwood Lane, Malahide,  
Co. Dublin K36 HP30, Ireland

Mr. Patrick Buckley,  
Executive Officer,  
An Bord Pleanala,  
64 Marlborough Street,  
Dublin 1. D01 V902  
29<sup>th</sup> March 2023

**Re. Case ABP-314485-22 Planning Reference No. F20A/0668**

Dear Sir,

I refer to the response from Tom Philips and Associates dated 14<sup>th</sup> September 2023 on behalf of DAA plc., their covering letter including the relevant documents and maps concerning aircraft activity related to Dublin Airport's runway operations. Below is my submission as requested.

My foremost concern regards excessive noise emanating from aircraft landing in a westerly direction on the new northern runway 28R/10L, primarily at night but not exclusively. The above-mentioned response is yet another incarnation of conflicting evidence, it pertains to be a factual representation of the noise levels, that we in the locality of Portmarnock and Blackwoods Malahide, experience; it is nothing of the sort. Indeed, the contour lines of the northern runway would suggest we experience almost silence from its operation. Both the maps and narrative would give the impression that air liners whose median weight would be in excess of 96 tons under powered flight, passed our way at all.

**My submission is to request An Bord Pleanala, (in the interests of attaining valid, honest and accurate information), to instigate an independent professional acoustic survey, accurately reflecting the living reality of those communities neighbouring the northern runway flight paths.**

The following is a quote from Mr. Karl Searson, Acoustic Engineer, who carried out an acoustic survey (attached) at Blackwoods, Malahide, on the day July 11<sup>th</sup> and the night 12<sup>th</sup> July 2023.

*"Even were the tests to have been conducted for potential "emergency" or "one-off operational conditions", the data, now to hand, means that unless and until significant upgrades/modifications to your home (and that of your immediate neighbours) are completed (thereafter being suitably commissioned, confirmed and maintained) these flight paths must not be availed of." Karl Searson.*

My evidence for this request is set out under the following headings,

1. Fingal Development Plan 2023-2029 Dublin Airport, Aircraft Noise Zones. Attachments 1,2 and 3.
2. Aircraft Noise Competent Authority (ANCA) Aircraft Noise Zones, Dublin Airport. *World Health Organization (WHO) and International Standards organisation (ISO 1996-1)* Attachments 4 & 5.
3. Karl Searson & Associates Acoustic Survey and Conclusions Dated 5<sup>th</sup> October 2023. Attachment 6.

**1. Fingal Development Plan 2023-2029 Dublin Airport Noise Zones.**

Maps 1 and 2 attached are taken from the Fingal County Development Plan 2023-2029 dated April'23 that resulted in document 3 attached, page 328, heading 8.1 Aircraft Noise Zones, citing a necessary acoustic survey and sound insulation requirement with conditions and recommendations. For the

sake of illustration, I have highlighted Blackwoods position within the zone areas and its proximity to the north runway westerly flight path.

You will note that Blackwoods, Malahide, is in **Zone B**. The methodology used by the planners of Fingal County Council in December 2019 is described as 'Single Mode' operations. It is notable that irrespective of the resultant decibel figures, (>54 & <63dB LAeq, 16hr & >55dB Lnight) the council concludes the noise levels to be of a magnitude requiring all new dwellings and public structures to perform an acoustic survey with appropriate sound insulation.

The absurdity of the situation is further illustrated in that should I decide to alter my garage to domestic usage, I would be subject to the planning requirements of aircraft noise mitigation. However, under ANCA's Noise Contour Zones and subsequently DAA's Noise Assistance Grant Scheme, I am neither Annoyed by Noise nor Sleep Disturbed, thus illegible for a single bedroom noise insulation grant. It is difficult to believe both these conflicting results emanated from the same building, namely Fingal County Council HQ. One would have thought there would be some correlation in their respective outcomes.

## **2. Aircraft Noise Competent Authority (ANCA) Aircraft Noise Zones, Dublin Airport.**

ANCA's remit is set out in the relevant legislation of which section 21. (1) states the following

The competent authority shall monitor—

(3) (a) The airport authority, or a person upon whom there is a noise impact from the airport, may, by notice in writing given to the competent authority, request the competent authority to review the effectiveness of the noise mitigation measures and operating restrictions (if any) on achieving the noise abatement objective.

(b) The competent authority shall, as soon as is practicable after it receives a request under *paragraph (a)*, respond in writing to the requester.

(c) The competent authority may, at its discretion, comply with a request under *paragraph (a)*.

It was under the highlighted section 3(c) above that ANCA refused to accept or review Mr. Searson's Acoustic Survey. To date neither myself nor any of my neighbours are aware of ANCA accepting any other source of information other than that provided by the Dublin Airport Authority.

An incidence of excessive noise is just as Mr. Searson's Report aptly describes, charting as it does its severity and intensity. The purpose of ANCA's contour maps is to dilute and smear-out over time the level and intensity of aircraft noise as it happens. It is a deliberate act aimed to conceal that which has blighted our lives as we live it, excessive noise as it peaks and decays in actuality. If one is disturbed from one's sleep by excessive noise, it happens in the moment, not over a period of weeks and months. It is incredulous, bearing in mind the findings in Mr. Searson's report that ANCA an unelected body, can produce contour maps so detached from reality that Blackwoods is within the 50-54 dB Daytime contour and at the 00-55dB Nighttime contour.

Acoustic Survey's producing contour maps requires mathematical modelling of the collected data. A myriad of decisions like acoustic monitoring placement, rounding up or down of the data, frequency, segmentation and weighting of data must be constantly made over long periods of time. It is incredulous that ANCA and the DAA choose to ignore both the **World Health Organisation and**

**International Standards organisation 1996-1** rules for Lden and Lnight with regard to areas of concentrated noise. ANCA and the DAA's use of Lden365 and Lnight365 to smear out and dilute high levels of recorded noise is reprehensible and quite peculiar to Ireland, by comparison to international practice. An example of which is London Heath Row's use of **Lden92** for the 3 summer months when use is made of a supplementary runway.

It is little wonder the communities neighbouring Dublin Airport view ANCA's contour maps with incredulity as they bear no relationship to their lived experience.

### **3. Karl Searson & Associates Acoustic Survey and Conclusions Dated 5<sup>th</sup> October 2023.**

Mr Searson's report is self-explanatory and corroborates what has been maintained by all the groups forming the neighbouring communities of Dublin Airport, that ANCA's contour maps bear no relationship to their living realities and in particular our small community in Blackwoods.

Mr. Searson's data was collected exclusively from nighttime flights and resulted in maximum readings of 90dBs outside and 67dBs inside our home. A further item of note is that 101 flights were recorded that night greatly in excess of the 65 flights granted in planning permission. My home is approximately 275 metres from the centre line of the northern runway flight path with aircraft flying on average, 395 metres overhead, this piece of Information gleaned from Flight Radar 24.

Mr. Kenny Jacobs, Chief Executive, of the DAA answer to Mr. Searson's report was to say the northern runway is only operational for westerly landings when the southern runway is closed for essential maintenance. We have no guides or time limits on such periods, nor do we know when this is liable to happen. Furthermore, concerning the future, neighbouring communities only have a single sentence statement that the south runway is the preferred runway for westerly landings. This is such a generalisation that it bears no comfort whatsoever for future operations with increased traffic.

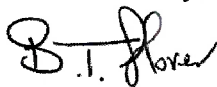
### **Conclusion**

In Mr. Jacobs reply to our enquiries and Mr. Searson's Report stated the following,

*"On a final point, the acoustic report (Section 1) refers to two design levels, namely "LAeqT... should not exceed 30dBA" and "LAS max should not exceed (about) 42 dBA". It is important to note that these are design criteria but are not legal requirements that the airport is required to meet."*

It is my contention that the DAA, will continue to blight our lives with excessive aircraft noise unless they are required to do so by the force of law. They have already ridden rough-shod over passenger numbers and night flight limits contrary to planning permission. An appropriate start would be to instigate an independent acoustic survey with a brief to future growth at Dublin Airport,

Yours Sincerely,



Bart Glover

087 251 7615







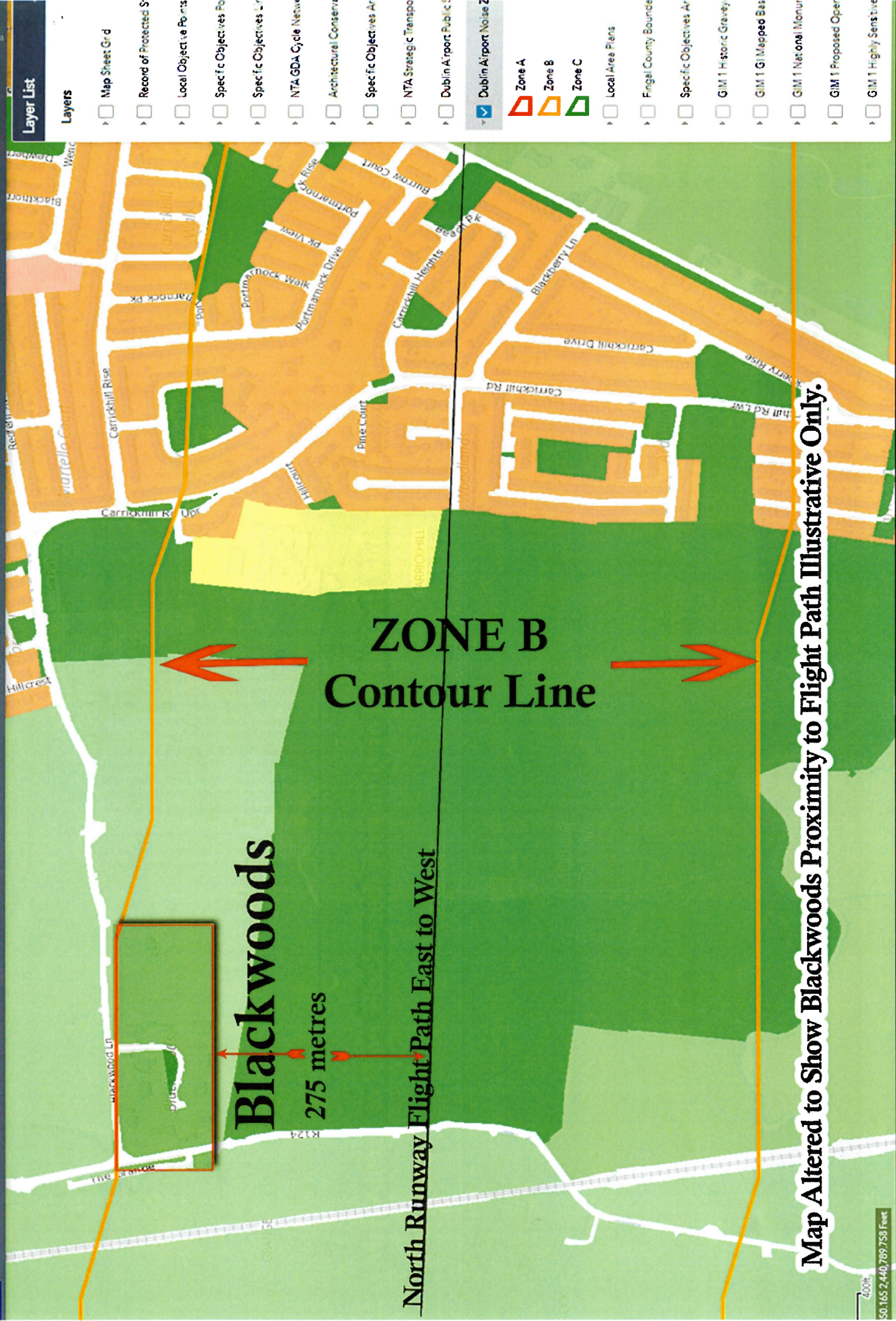




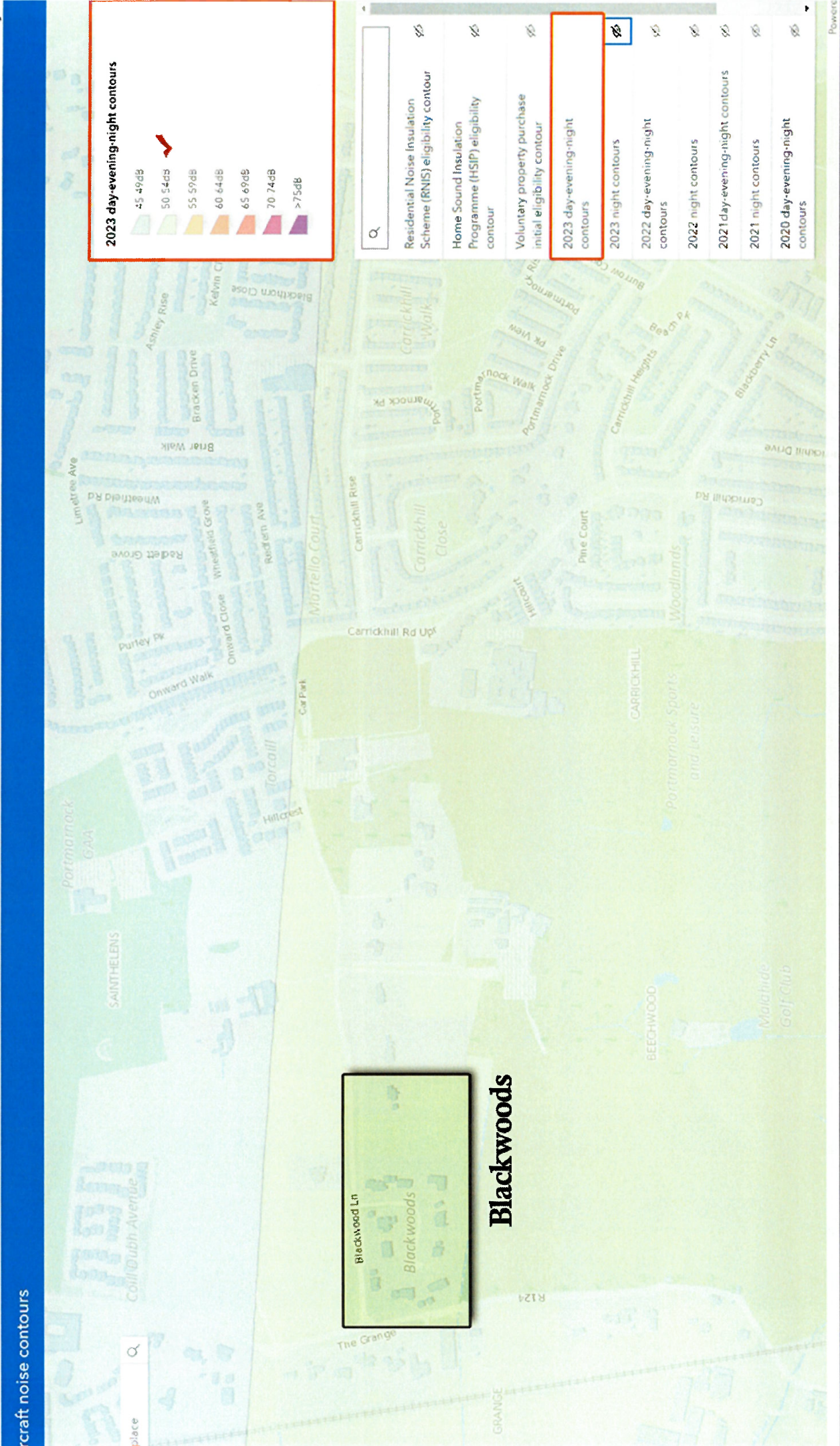
Table 8.1: Aircraft Noise Zones

Zone	Indication of Potential Noise Exposure during Airport Operations	Objective
D	≥ 50 and < 54 dB LAeq, 16hr and ≥ 40 and < 48 dB Lnight	To identify noise sensitive developments which could potentially be affected by aircraft noise and to identify any larger residential developments in the vicinity of the flight paths serving the Airport in order to promote appropriate land use and to identify encroachment. All noise sensitive development within this zone is likely to be acceptable from a noise perspective. An associated application would not normally be refused on noise grounds, however where the development is residential-led and comprises non-residential noise sensitive uses, or comprises 50 residential units or more, it may be necessary for the applicant to demonstrate that a good acoustic design has been followed. Applicants are advised to seek expert advice.
C	≥ 54 and < 63 dB LAeq, 16hr and ≥ 48 and < 55 dB Lnight	<p>To manage noise sensitive development in areas where aircraft noise may give rise to annoyance and sleep disturbance, and to ensure, where appropriate, noise insulation is incorporated within the development. Noise sensitive development in this zone is less suitable from a noise perspective than in Zone D. A noise assessment must be undertaken in order to demonstrate good acoustic design has been followed.</p> <p>The noise assessment must demonstrate that relevant internal noise guidelines will be met. This may require noise insulation measures. An external amenity area noise assessment must be undertaken where external amenity space is intrinsic to the development's design. This assessment should make specific consideration of the acoustic environment within those spaces as required so that they can be enjoyed as intended. Ideally, noise levels in external amenity spaces should be designed to achieve the lowest practicable noise levels. Applicants are strongly advised to seek expert advice.</p>
B	≥ 54 and < 63 dB LAeq, 16hr and ≥ 55 dB Lnight	To manage noise sensitive development in areas where aircraft noise may give rise to annoyance and sleep disturbance, and to ensure noise insulation is incorporated within the development. Noise sensitive development in this zone is less suitable from a noise perspective than in Zone C. A noise assessment must be undertaken in order to demonstrate good acoustic design has been followed. Appropriate well-designed noise insulation measures must be incorporated into the development in order to meet relevant internal noise guidelines. An external amenity area noise assessment must be undertaken where external amenity space is intrinsic to the development's design. This assessment should make specific consideration of the acoustic environment within those spaces as required so that they can be enjoyed as intended. Ideally, noise levels in external amenity spaces should be designed to achieve the lowest practicable noise levels. Applicants must seek expert advice.
A	≥ 63 dB LAeq, 16hr and/or ≥ 55 dB Lnight	To resist new provision for residential development and other noise sensitive uses. All noise sensitive developments within this zone may potentially be exposed to high levels of aircraft noise, which may be harmful to health or otherwise unacceptable. The provision of new noise sensitive developments will be resisted.
Notes:	<ul style="list-style-type: none"> <li>➤ 'Good Acoustic Design' means following the principles of assessment and design as described in ProPG: Planning &amp; Noise – New Residential Development, May 2017;</li> <li>➤ Internal and External Amenity and the design of noise insulation measures should follow the guidance provided in British Standard BS8233:2014 "Guidance on sound insulation and noise reduction for buildings"</li> </ul>	



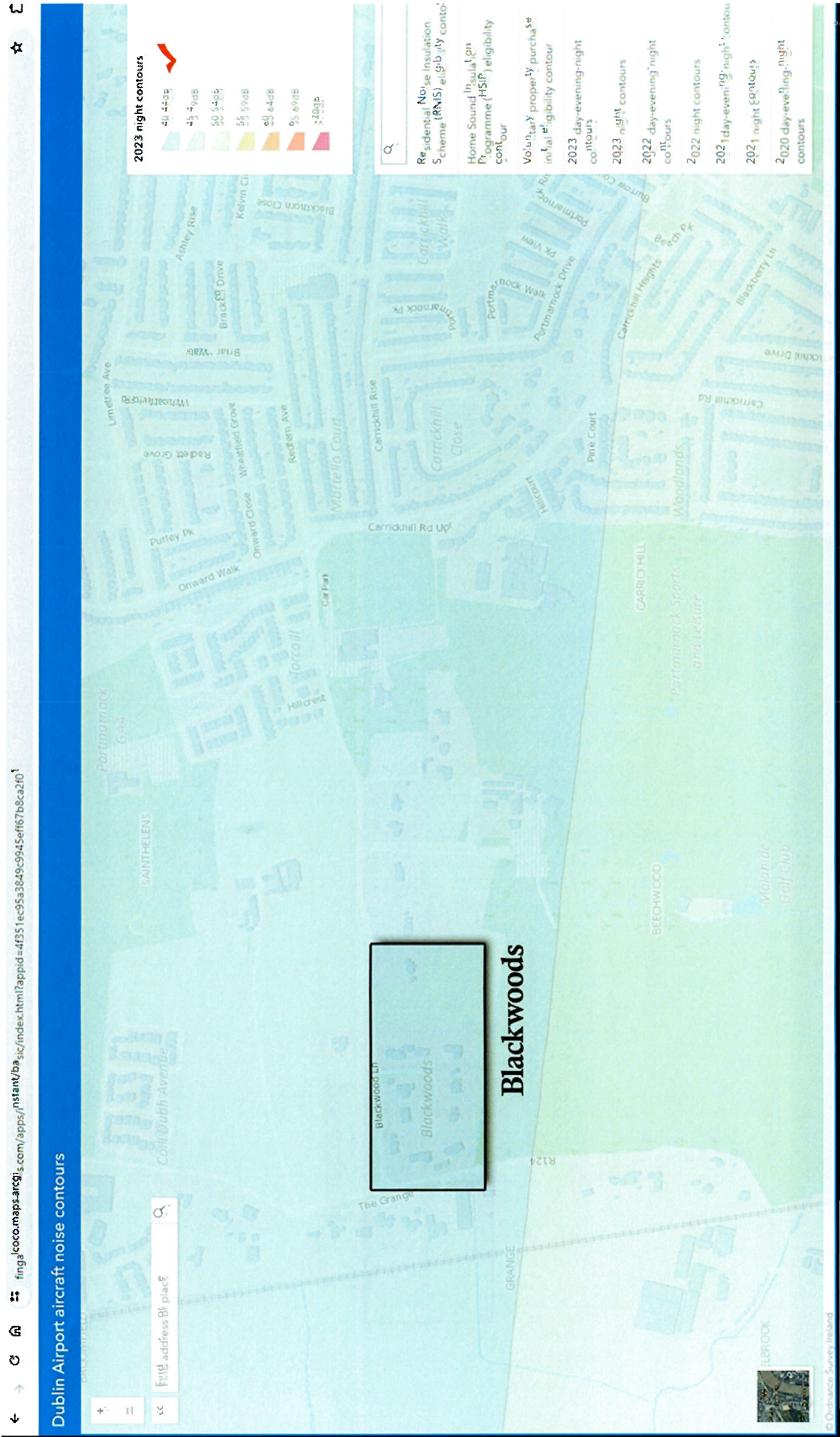
# Aircraft Noise Competent Authority 2023 Airport Noise Contours

fga2101





# Aircraft Noise Competent Authority 2023 Dublin Airport Noise Contours





# SEARSON ASSOCIATES

CONSULTING  
ENGINEERS

KARL V SEARSON

C Eng MIEI MIOSH MIOA ACI Arb

Phone (087) 2588061

(089) 2158958

Email [searsonassociates@gmail.com](mailto:searsonassociates@gmail.com)

OUR REF: 8569/23 rev 2.1

YOUR REF: BG

DATE: 5<sup>th</sup> October 2023.

Mr Bart Glover,  
4, Blackwoods,  
Blackwood Lane,  
Malahide.  
[Bart@kayskitchen.ie](mailto:Bart@kayskitchen.ie)

## **Re: No 4, Blackwoods: Aircraft Noise Assessment, index of noted events.**

Dear Mr. Glover,

I am setting out below details of the 101 *significant events* which were recorded at/in your home over the measurement period which commenced shortly after 15:00 hours on 11<sup>th</sup> July and terminated at 09:00 hours on 22<sup>nd</sup> July 2023. During this 127 hour-odd period specific attention was paid to night time events, night-time commencing at 23:00 hours and terminating at 07:00 hours the next morning. The specific events were proximate aircraft fly-by's which provoked excessive in-bedroom noise levels. You had been advised that certain "test periods" had been selected by DAA for new flight paths and the measurement sessions were intended to analyse the levels associated with these new night-time fly-by events.

An aircraft identification application - with acronym FR - was initially used to identify those in-bedroom noise signals which characterised "events", but that application left many events unidentified. A subsequent package, with acronym WT and available on the internet, was accessed. It proved useful in reviewing the flight passes with respect to Dublin Airport during the above-mentioned measurement period and traces of specific fly-paths were noted and compared to the gathered acoustical data. It proved possible to identify the flight identification number and aircraft type and time of passage (with respect to Blackwoods) and correlate such results with the time stamp of the fast-logged acoustical data. In this respect the primary time metric was that accompanying the highest in-bedroom fast level (defined below as  $L_{AFmax}$ ) and the corresponding flight, gauged from "inching" the incoming aircraft icon proximate to Blackwoods and noting the corresponding time, aircraft type and flight identification number. In all the 101 events noted, the maximum time difference between the fast logged (primary) acoustical data and the WT time display was 22 seconds. As the minimum interval between incoming flights was typically six times this interval, no significant error arises.

The acoustical data refers to both indoor and outdoor locations, the indoor location being in a bedroom with the window ajar for fresh air admission and the outdoor location being some 3,5m out from the façade of that bedroom, and at a height of 4m overground.

There are a number of acoustical metrics of interest, as follows:

- **$L_{AFmax}$** : This is the noisiest portion of an event, assessed with the fast time constant and expressed in A-Weighted decibels, dB(A).
- **$L_{ASmax}$** : This is the noisiest portion of an event, assessed with the slow time constant and expressed in A-Weighted decibels, dB(A).
- **SEL**: This is the total acoustical energy associated with a given event but normalised back to a 1-second time interval. It is expressed in A-Weighted decibels, dB(A). It is an acronym for "single event level" or, alternatively, "sound energy level".

Considerable data have been gathered and to present same in a coherent fashion I have prepared appendices showing the relevant data for each day and, additionally, tabulated the  $L_{AFmax}$  trace from outdoors and indoors directly under each other to enable the contours to be visualised. For each outdoor event provoking excessive in-bedroom levels, I have tabulated and included the above metrics. The primary time is the Brüel & Kjær time (B & K time).

I Report as follows:

1. The first series of data refers to the night-time profiles on 11<sup>th</sup> July 2023. There were six notable events, numbered accordingly, and I have tabulated the metrics, times and details in table 1A, below. I have also prepared and attached, as appendix 1, the Comparative fast trace, 23:29 – 00:00, 11<sup>th</sup> July 2023. This trace depicts the outdoor profile in the upper (1A) portion and, directly below, the corresponding provoked in-bedroom level (1B).

TABLE 1: 6 noted events of 11<sup>th</sup> July, # 1 - #7.

#	B & K time	WT Flight Id.	Type	OUTDOORS - A			INDOORS - B		
				SEL	$L_{AFmax}$	$L_{ASmax}$	SEL	$L_{AFmax}$	$L_{ASmax}$
1	23:31:27	RYR2PC	B738	85	76	73	65	56	55
2	23:33:38	EIN40W	A320	86	81	77	67	61	59
3	23:36:24	GEC 8582	A321	85	77	75	66	59	57
4	23:39:24	EIN611	A320	86	79	77	66	61	58
5	23:47:02	RYR9M	B738	85	79	76	65	60	58
6	23:50:43	EIN24K	A320	87	79	77	67	60	58
7	23:57:57	SWR878C	BCS3	83	73	71	62	54	53

The above table give a useful insight into the reduction in certain acoustic metrics going from outside to inside via a window ajar for ventilation (fresh air admission). While the SEL values have a significant effect on the 5-minute (or 15-minute)  $L_{Aeq}$  level obtained, the maximum values (fast or slow) are subject to a numerical ceiling. This ceiling applies during night-time, from 23:00 to 07:00 hours, and, in the case of the  $L_{AFmax}$ , the in-room level should not exceed 45 dB(A) and in the case of the  $L_{ASmax}$ , the level should not exceed (about) 42 dB(A).

Taking the two periods from the 23:00 hours until 23:30 (no significant events) and the following period from 23:30 until midnight (7 notable events as set out above), there are significant differences. Via the B&K Evaluator software the following results a have been established:

TABLE 2: 30-minute night-time comparisons, no events Vs 7 events

Time (T)	Events ?	OUTDOORS - A			INDOORS - B		
		$L_{AeqT}$	$L_{AFmax}$	$L_{ASmax}$	$L_{AeqT}$	$L_{AFmax}$	$L_{ASmax}$
23:00 – 23:30	No	47	63	60	27	42	39
23:30 – 00:00	Yes, 1 - 7	61	81	77	42	61	59

There are good and reliable criteria for a bedroom, at night, with fresh air admission. The  $L_{AeqT}$  (sometimes called the decibel average) should not exceed 30 dB(A), and this should be maintained for the duration of the night. The first 30-minute test (no events) has all three metrics comfortably within their guideline values. Once the "events" occur (itemised and recorded as 1 to 7) those levels are *grossly* exceeded.

2. The next day (in a 24-hour sense) was 12<sup>th</sup> July. 32 night-time events were noted, and their combined result are set out in table 2 below:

TABLE 2: parts 1 & 2, 32 noted events of 12<sup>th</sup> July, #8 - #40.

#	Time	WT Flight Id.	Type	OUTDOORS - A			INDOORS - B		
				SEL	$L_{AFmax}$	$L_{ASmax}$	SEL	$L_{AFmax}$	$L_{ASmax}$
8	00:00:23	RYR4YC	A320	83	75	73	66	61	58
9	00:03:05	RYR2WK 779	B38M	83	76	73	64	58	55

10	00:08:24	EIN70V	B752	92	86	82	70	62	59
11	00:11:27	RYR5YV	B738	87	80	78	67	61	58
12	00:14:56	RYR11YP	B738	85	76	74	66	59	57
13	00:18:01	EIN459	A320	86	76	74	66	61	59
14	00:26:38	RYR9QY	B738	86	79	76	66	58	57
15	00:29:21	RYR275Y	B38M	84	78	75	64	57	55
16	00:31:55	RYR56SP	B738	85	76	73	66	59	57
17	00:34:44	RYR38ZY	B738	85	78	75	65	60	57
18	00:38:00	RYR72GD	B738	86	78	76	66	59	58
19	00:40:26	RYR4JW	B38M	83	74	73	64	56	55
20	00:42:58	RYR212	7M8	85	77	74	65	58	56
21	00:45:49	EIN4RL	A320	86	80	77	67	60	58
22	00:48:13	RYR8Q2	B38M	83	80	77	65	56	54
23	00:51:14	RUK95CX	B738	85	76	74	65	58	56
24	00:57:24	EIN4GJ	A320	87	79	76	67	61	58
25	01:01:59	EIN43N	A320	89	79	76	67	62	58

TABLE 2: Continued.

#	Time	WT Flight Id.	Type	OUTDOORS - A			INDOORS - B		
				SEL	L <sub>AFmax</sub>	L <sub>ASmax</sub>	SEL	L <sub>AFmax</sub>	L <sub>ASmax</sub>
26	01:04:07	EIN7VT	A320	89	79	72	66	60	58
27	01:06:48	RYR927E	B38M	83	75	72	63	57	54
28	01:09:50	RYR8L	B738	84	79	76	64	60	57
29	01:13:42	RYR6VL	B738	84	76	74	65	59	57
30	01:21:39	TOM239	A320	85	79	76	66	61	58
31	01:25:10	EIN799	A320	86	78	76	66	60	58
32	01:27:37	AZD358	AT72	87	80	76	66	59	56
33	01:30:41	EIN499	A320	87	79	77	67	62	59
34	01:38:43	EIN38JC	A320	86	79	76	67	60	58
35	01:51:06	EIN5HL	A320	87	81	78	67	63	60
36	01:54:10	EIN44Y	A320	87	80	77	68	63	60
37	02:10:53	EIN584	A320	86	79	77	67	60	58
38	02:16:10	EIN56V	A320	87	81	78	67	62	59
39	02:20:57	EIN34V	A320	87	79	77	67	61	59
40	04:25:50	EIN104	A333	89	79	77	69	61	59

Appendices 2, parts 1 and 2, show the indoor and outdoor traces. Considerable air traffic movements ensued from just after midnight (event #8) until 02:22 (event #39). A single event (#40) occurred at 04:25 - 04:27 hours.

- The next few days – until the early hours of 18th July - passed without any **significant** night-time events occurring.
- A single event occurred in the early hours of 18<sup>th</sup> July. There were other signature passes both before and after the particular event, but the in-room level associated therewith were all below the threshold L<sub>AFmax</sub> level of 45 dB(A). Appendix 3 details the relevant combined trace, the results being set out in table 3 below

TABLE 3: Noted single event of 18<sup>th</sup> July.

#	Time	WT Flight Id.	Type	OUTDOORS - A			INDOORS - B		
				SEL	L <sub>AFmax</sub>	L <sub>ASmax</sub>	SEL	L <sub>AFmax</sub>	L <sub>ASmax</sub>
41	01:41:41	AZD358	AT72	77	70	66	58	55	51

- There were no notable event on 19<sup>th</sup> July.
- The 20<sup>th</sup> July proved to be particularly busy - from the point of view of notable events. A total of 30 events were recorded and analyzed. Appendix 4, the comparative L<sub>AFmax</sub> traces, is broken down into three parts, the tabular data being set out below in table 4:

TABLE 4: parts 1, 2 & 3, noted events of 20<sup>th</sup> July, #42 - #72.

#	Time	WY Flight Id.	Type	OUTDOORS - A			INDOORS - B		
				SEL	L <sub>AFmax</sub>	L <sub>ASmax</sub>	SEL	L <sub>AFmax</sub>	L <sub>ASmax</sub>
42	00:53:55	RYP275Y	B738	85	75	74	64	57	55
43	00:55:58	RYP7120	B38M	85	75	74	65	61	57
44	00:58:17	RYP77JN	B738	84	75	74	64	57	56
45	01:00:42	TOM7DX	A320	82	72	71	62	54	53
46	01:00:42	RYP1391	B738	84	74	74	65	57	56
47	01:04:54	EIN4RL	A320	84	75	74	65	57	56
48	01:09:04	RYP7FL	B738	85	75	74	65	58	57
49	01:11:34	RYP6E	B738	85	75	75	65	56	55
50	01:13:48	RYP30UE	B738	85	77	76	65	58	56
51	01:18:32	EIN499	A320	85	78	76	65	60	58
52	01:25:56	AZD 358	AT72	84	74	73	654	55	54
53	01:29:17	EIN58R	A320	84	75	74	665	57	56
54	01:40:23	RYP3TD	B38M	84	74	73	64	55	54

TABLE 4: continued.

#	Time	WT Flight Id.	Type	OUTDOORS - A			INDOORS - B		
				SEL	L <sub>AFmax</sub>	L <sub>ASmax</sub>	SEL	L <sub>AFmax</sub>	L <sub>ASmax</sub>
55	02:26:54	TOM3HD	A320	83	73	72	63	54	53
56	02:43:38	EIN5HL	A320	84	75	75	65	56	55
57	03:43:46	EIN104	A333	86	76	75	66	58	57
58	04:00:08	AAL724	B772	87	76	75	66	57	56
59	04:04:07	EIN1TC	A21N	83	73	72	63	54	53
60	04:13:28	EIN13K	A333	87	77	76	67	58	57
61	04:27:58	BCS2886	B734	87	78	78	67	60	59
62	04:37:25	FPO7SN	B738	86	81	79	66	62	60
63	04:39:45	UPS248	B763	86	76	75	66	57	56
64	04:42:51	BCS5QC	A321	85	77	76	66	58	57
65	23:36:18	RYP66PG	B738	83	72	71	63	54	53
66	23:38:30	5F711	A320	85	77	75	65	59	57
67	23:41:01	RYP45HY	B738	86	78	76	66	60	57
68	23:43:30	RYP3CH	B738	84	74	73	64	56	55
69	23:46:22	GEC8352	A321	84	75	74	64	56	55
70	23:50:42	RYP1SB	B38M	84	75	74	64	56	55
71	23:55:58	RYP86EY	B38M	84	75	74	64	56	55
72	23:58:25	RYP51JX	B38M	84	73	72	63	55	54

7. The pattern of notable events carried on into the early hours of 21<sup>st</sup> July. A further 28 events were noted and analyzed. Appendix 5, divided into two parts, sets out the comparative L<sub>AFmax</sub> traces with the individual results being tabulated in table 5 below.

TABLE 5, parts 1 & 2, 28 notable events of 21<sup>st</sup> July.

#	Time	WT Flight Id.	Type	OUTDOORS - A			INDOORS - B		
				SEL	L <sub>AFmax</sub>	L <sub>ASmax</sub>	SEL	L <sub>AFmax</sub>	L <sub>ASmax</sub>
73	00:00:49	EIN3AV	A320	85	78	76	66	59	57
74	00:03:44	RYP9QY	B738	85	76	75	65	57	56
75	00:06:13	RYP45TC	B38M	83	74	73	63	55	53
76	00:08:59	EIN70V	B752	89	82	79	69	62	59
77	00:11:42	EIN7VT	A320	84	77	75	65	57	55
78	00:13:50	RYP8CK	B738	85	75	74	65	57	56
79	00:16:05	RYP2BY	B38M	85	76	75	63	55	54
80	00:18:36	EIN76HJ	A320	84	75	74	65	57	56
81	00:21:23	RYP2WK	B738	85	76	75	64	56	55
82	00:23:34	EIN799	A320	85	76	75	65	58	57
83	00:26:44	EIN38JC	A320	85	76	75	65	57	56
84	00:29:29	RYP7BW	B738	85	76	75	65	59	57
85	00:32:19	TAP26T	E190	84	77	75	65	59	57



86	00:39:49	FIA711	A320	86	77	76	66	58	57
87	00:50:57	NYX300	SF34	80	70	69	59	50	49
88	00:53:55	RYR8TE	B738	85	75	74	65	56	55
89	00:56:22	RYR38ZG	B38M	84	73	72	64	56	54
90	00:59:07	EIN4GJ	A320	85	76	76	66	58	57
91	01:01:42	RYR87YJ	B738	85	75	74	65	57	56
92	01:11:13	RYR11YP	B738	85	76	74	65	58	56
93	01:15:18	EIN56V	A320	85	78	76	66	60	58
94	01:22:29	AZD358	AT72	84	76	74	63	54	52
95	01:42:49	EIN58R	A320	85	76	75	65	59	57
96	02:00:48	EIN499	A320	85	78	76	66	59	58
97	02:03:45	EIN5HL	A320	85	77	75	65	59	57
98	03:31:45	TOM59H	A320	83	73	72	63	55	54
99	03:57:35	EIN104	A333	88	79	77	68	60	59
100	04:09:32	AAL724	B772	87	77	75	67	58	57
101	04:13:52	EIN13K	A333	88	78	77	68	60	58

8. The above results – and appendices – indicate a clear and significant issue in respect of the given events. You have indicated that the DAA e-contacted you (and others) indicating that “tests” were being conducted.
9. From my interpretation of the WT trace, these events are all associated with incoming aircraft, at night, availing of the North Runway.
10. The crux of the night-time issues, in respect of the 101 events tabulated above, mean that each and every one of the above tests provoked in-bedroom noise levels well in excess of the published levels geared towards a good night’s sleep. Furthermore, on the occasions when these tests were **not being conducted** proper and suitable levels were measured, post 23:00 hours, in your bedroom, the window ajar for fresh air admission.
11. These findings are applicable to your immediate neighbours, assuming they rely on natural ventilation for fresh air admission.
12. Even were the tests to have been conducted for potential “emergency” or “one-off operational conditions”, the data, now to hand, means that **unless** and **until** significant upgrades/modifications to your home (and that of your immediate neighbours) are completed (thereafter being suitably commissioned, confirmed and maintained) these flight paths must not be availed of.

Yours sincerely,

Karl Searson

Chartered Engineer.

