LDG-068591-23

87 60 to 15 sue /13/12/23

S.37

File	With	-	_	

# **SECTION 131 FORM**

ABP— 3141	185-72	Defer Re O/H
Having considered the	ne contents of the submis	recommend that section 131 of the Planning ed at this stage for the following reason(s):
Section 131 not to be	invoked at this stage.	
Section 131 to be inv	oked — allow 2/4 weeks	s for reply.
Signed Pat B		Date 14/12/2023
Signed		Date
SEO/SAO		
M		
Please prepare BP	- Section 131 notice	enclosing a copy of the attached submission.
То	Task No	Allow 2/3/4 weeks
		BP
Signed		Date
EO		
Signed		Date



# Planning Appeal Online Observation

Online Reference NPA-OBS-002828

Online Observation Details	<b>;</b>		
Contact Name Adrian Kelly	<b>Lodgement Date</b> 06/12/2023 09:5	5:47	Case Number / Description 314485
Payment Details	, , , , , , , , , , , , , , , , , , , ,		
Payment Method Online Payment	Cardholder Name Adrian Kelly		Payment Amount €50.00
Processing Section			
S.131 Consideration Required  Yes — See attached  Signed  EO	131 Form	N/A — II	nvalid
Fee Refund Requisition			
Please Arrange a Refund of Fee of		Lod gement No	
€		LDG—O	58.591-23
Reason for Refund			
Documents Returned to Observer Yes	No	Yes	to Senior Executive Officer for Approval
Signed		Date	
EO			
Finance Section  Payment Reference		Checked Against	Fee Income Online
ch_3OKHpXB1CW0EN5FC03	ObX7mG		
A		EO/AA (Accounts S	Section)
Amount		Refund Date	
Authorised By (1)		Authorised By (2)	
SEO (Finance)		Chief Officer/Direct	or of Corporate Affairs/SAO/Board
Date		Date	

Adrian and Barbara Kelly, 3 Blackwood Lodge, Blackwoods, Blackwood Lane, Malahide, Co Dublin K36 PC04

The Secretary,
An Bord Pleanala,
64 Marlborough Street,
Dublin 1, D01 V902
OBSERVATION. Case. Number PLO6F. 314485. ADRIAN KELLY.
An Bord Pleanala Case No. PL06F 314485
Planning Authority Case Reference. F20A/0668

Location of Planned Development. Dublin Airport. An Objection.

Dear Sir/Madam, The purpose of this submission is to object to the above for the reasons as set out below.

# **Excessive Noise**

# Acoustic Report Reflecting Reality.

Excessive noise especially at night is the principal reason for our objection. It would be detrimental to our health, disastrous for the quiet enjoyment of our property, (a right enshrined in law) and calamitous for our property values to allow unfettered flight operations at Dublin Airport. Please refer to the Attached Acoustic Survey Report produced by Mr. Karl Searson, CEng., MIEI., MIOSH., MIOA., ACIArb., conducted on the night of 11th and 12th July 2023 at my neighbour's home, corresponding to the above address. Blackwoods is an estate of eleven dwelling houses inclusive of a neighbouring home on an adjacent site, all located at the intersection of the R124 and Blackwood Lane, Malahide. It lies a mere **270 meters** from the centre line of the flightpath for runway 28R (the northern runway) and used by landing aircraft in a westerly direction. Please refer to attached illustrative graphic No 1. External readings of up to 92 decibels SEL and internal readings of up to 70 decibels SEL were recorded in the bedroom of the home. A good median to take is External 86 decibels and internal 66 decibels. Readings that are excessive by any standards. This has been our plight since the opening of the new northern runway albeit intermittently, a fate which can only worsen over time. Meteorological conditions in Ireland dictate that due to prevailing winds. this could well be our experience 70% of the year **dependent on operational** decisions at Dublin Airport the control of which is purely in the hands of commercial interests.

I draw your attention to item 12 of Mr. Searson's report in which he concludes as follows,

"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."

#### **Aircraft Noise Competent Authority (ANCA)**

The remit of ANCA was taken from Fingal County Councils Web Site.

In 2022, ANCA defined a Noise Abatement Objective (NAO) for Dublin Airport. An NAO is a policy for managing the effects of aircraft no is emissions on the surrounding communities and environment at an airport. It is a plan to ensure that any growth at the airport occurs in the most sustainable manner possible. The NAO for Dublin Airport was defined by ANCA to ensure that aircraft noise is considered as part of the sustainable development of the airport. It has a clear policy objective set against measurable criteria and outcomes.

The Legislative Backing for the above.

21. (1) The competent authority shall monitor—

- (a) compliance with noise mitigation measures and operating restrictions, and
- (b) the introduction of operating restrictions.
- (2) Subject to *subsections* (3) and (4), the competent authority shall, on or before each anniversary of the date of commencement of this section, review the effectiveness of the noise mitigation measures and operating restrictions (if any) on achieving the noise abatement objective.
- (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).
- (4) Where the competent authority is of the opin on,

following a review referred to in *subsection* (2) or (3), that the noise abatement objective is not being achieved, it shall take such action, whether under the Aircraft Noise Regulation or this Act, or both, as it is of the opinion will be effective towards achieving that objective.

#### **Distortion of Reality**

Operationally ANCA, stick very closely to their remit. They take no account of health, the environment or disturbance but rather take the position noise is an inevitable outcome in supporting the growth and expansion of Dublin Airport; they treat sustainability as a matter of conjecture. The only data reviewed by ANCA is that provided solely by the DAA and have rejected Mr. Searson's professional acoustic report provided here. This is all the more galling as they are still awaiting the DAA to provide figures for 2022. The legislative framework under which ANCA operate, (highlighted passage C above) provides them with complete discretion as to whether or not they will accept or study such material; to date they never have. Indeed, their only relevance to the neighbouring communities are the noise contour maps (Document 2 and 3 included with this submission) These contour maps are at variance with the reality of life as we experience it.

An incidence of excessive noise is just as the appendices to Mr. Searson's Report aptly describe, charting the severity and intensity of such noise. The purpose of the contour maps is to dilute and smear-out over time the level and intensity of 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 40-44 Daytime contour and outside any contour on the Nighttime map. Our data has been collected exclusively from nighttime flights.

In the matter of ANCA's approach to its discretionary powers there is a point of law to be considered here. Yes, ANCA have legislation on their side affording them enormous leeway in what to accept and reject; it is solely at their discretion. However, the Doctrine of Reasonableness and Proportionality applies here as demonstrated in Meadows vs Minister for Justice, Equality & Law Reform, and the O'Keefe Principle. Succinctly, the decision maker must not flagrantly reject or disregard fundamental reason or common sense in reaching a decision.

They have done just that in rejecting Mr. Searson's report. Anca is part of the executive function of Fingal County Council (FCC) and whilst the ELECTED membership of FCC supports our view, the executive and ANCA do not; it is patently undemocratic. Is it because over €33,000,000 is collected annually in commercial rates from Dublin Airport?

ANCA's contour maps are not associated with any operational limits either in noise level or aircraft volumes, a practise not seen in any other western societies. ANCA do not

operate in a Reasonable or Proportionate Manner therefore the data they produce is biased. They are independent of the county council members and unelected.

#### Submission

For the reasons Stated Above

- Night Flights Between the Hours of 11pm and & 7am Should Be Prohibited.
- Adopt The World Health Organization Recommendation of 45 Decibels for All Flights.
- In the interests of allowing neighbouring communities gain an undisturbed night's sleep the 6am to 12pm operating extension should not be granted.

# The Dublin Airport Authority (DAA), Trust & Conditionality

# Passenger Cap of Thirty-Two Million

The Irish nation and more directly those communities that neighbour Dublin Airport must await the result of a legal dual between Fingal County Council and the DAA over the interpretation of a planning permission granted by An Bord Pleanala (ABP) regarding passenger capping. It is a monstrous absurdity that state entities will spend hundreds of thousands of Euros in legal fees to determine what should be obvious to any reasonable human being. I am confident ABP knew exactly what they meant when they granted Planning Permission to the DAA

## Breaking the 65 Night Flight Limit.

Numerous instances have been reported to the DAA by neighbouring communities, TD's. and County Councillors about the breaching of the sixty-five aircraft movements per night rule. As for myself, I can testify that in or around the period of the attached acoustic survey I and our neighbours counted over one hundred aircraft passing overhead.

# Take-Off Flight Paths, Standard Instrument Departures (SID's)

ABP granted Planning Permission in 2007 to the DAA, for straight ahead (westerly) departures by aircraft taking off from the new north runway (28R/10L). However, these were not implemented but instead the DAA instigated SIDs directing aircraft to turn sharply right and depart to the north, circle east and leave the mainland close to Rush. Residents having brought this to the attention of the DAA were informed these were the licenced departures granted by the Irish Aviation Authority (IAA). Furthermore, the DAA claim these headings were always meant to be the correct SID's for this runway, despite the contrary ABP planning permission.

Confusion now reigns supreme, in that nobody in the north county knew of this change in operational procedures and any houses that the DAA provided with sound insulation or directly purchased as sound insulation proved to be an insufficient remedy, were all

in a westerly direction. The DAA are being less than candid. It is quite apparent the DAA are operating in an underhand and less than transparent manner, playing off a grant of planning permission from ABP to a grant of license from the IAA.

Just because one has a driver's license and a Ferrari it does not entitle one to drive it at 150 KPH on Irish roads.

#### **Submission**

For the reasons Stated Above,
Night Flights Should Not Be Permitted
Planning Permission should be refused.
Self-Regulation is No Regulation.
If Planning Permission is granted in part or in whole, it should only be done so under extremely strict conditions, accompanied by punitive penalties on default.

# EPA, Fairness, Expert Opinion and Request for an Oral Hearing.

# The Environmental Protection Agency (EPA)

The above body when contacted have refused to act in the matter of fuel emissions or excessive noise citing, they have no remit in aviation fuel partlets, it is a matter for the DAA. Regarding noise they suggest contacting ANCA, whist that body deny any environmental involvement stating their remit is purely Aircraft Operations.

#### Fairness.

The various communities neighbouring Dublin Airport are a disparate group and affected in diverse ways to a greater or lesser degree depending on location and distance from the airport. Some are affected by aircraft taking off and others landing aircraft, as is our case. Our requirements for information and consultation whilst having some commonalities differ in detail.

# **DAA's Application for Planning Permission**

The application submitted by the DAA for Planning Permission was in excess of 550 pages of information, impossible for small communities like ours to absorb in the allotted five weeks and an impossibility to brief and appoint expert opinion.

#### Submission

For the reasons and information contained in all three parts of this document we request the Bord review its decision to not grant an Oral Hearing.

Due to the lack of candour from the DAA as demonstrated in the foregoing document and the obvious bias in ANCA's deliberations we request that should independent

expert opinion be required in this assessment of Planning Permission ABP appoint its own.

An oral hearing is absolutely necessary given the gravity of the situation.

Signed: Adrian Kelly

Date. 5th December 2023.

Copy of report we commissioned by Karl Searson Associates attached.

# SEARSON ASSOCIATES

CONSULTING ENGINEERS

KARL V SEARSON

C Eng MIEI MIOSH MIOA ACIArb

Phone (087) 2588061 (089) 2158958

Email 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

#### 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 these 127 hour-odd periods 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<sub>AFmax</sub>) 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<sub>AFmax</sub>: This is the noisiest portion of an event, assessed with the fast time constant and expressed in A-Weighted decibels, dB(A).
- L<sub>ASmax</sub>: 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<sub>AFmax</sub> 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 11th July, # 1 - #7.

				OL	JTDOORS	5 - A	IN	IDOORS -	В
#	B & K time	WT Flight Id.	Туре	SEL	L <sub>AFmax</sub>	L <sub>ASmax</sub>	SEL	L <sub>AFmax</sub>	L <sub>ASmax</sub>
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

			OUTDOORS	S - A		INDOORS - B			
Time (T)	Events?	L <sub>AeqT</sub>	L <sub>AFmax</sub>	L <sub>ASmax</sub>	L <sub>AeqT</sub>	L <sub>AFmax</sub>	L <sub>ASmax</sub>		
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.

				OL	ITDOORS	- A	11	IDOORS -	В
#	Time	WT Flight ld.	Туре	SEL	L <sub>AFmax</sub>	L <sub>ASmax</sub>	SEL	L <sub>AFmax</sub>	L <sub>ASmax</sub>
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.

				0	UTDOORS	6 - A		NDOORS	- B
#	Time	WT Flight Id.	Туре	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.

- 3. The next few days until the early hours of 18th July passed without any **significant** night-time events occurring.
- 4. 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 18th July.

				OUTDOORS - A INDOORS				IDOORS -	В
#	Time	WT Flight Id.	Туре	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

- 5. There were no notable event on 19th July.
- 6. 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 analysed. 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  $20^{th}$  July, #42 - #72.

				0	UTDOORS	6 - A		NDOORS	- B
#	Time	WY Flight Id.	Туре	SEL	L <sub>AFmax</sub>	L <sub>ASmax</sub>	SEL	L <sub>AFmax</sub>	L <sub>ASmax</sub>
42	00:53:55	RYR275Y	B738	85	75	74	64	57	55
43	00:55:58	RYR7120	B38M	85	75	74	65	61	57
44	00:58:17	RYR77JN	B738	84	75	74	64	57	56
45	01:00:42	TOM7DX	A320	82	72	71	62	54	53
46	01:00:42	RYR1391	B738	84	74	74	65	57	56
47	01:04:54	EIN4RL	A320	84	75	74	65	57	56
48	01:09:04	RYR7FL	B738	85	75	74	65	58	57
49	01:11:34	RYR6E	B738	85	75	75	65	56	55
50	01:13:48	RYR30UE	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	RYR3TD	B38M	84	74	73	64	55	54

TABLE 4: continued.

				OL	JTDOORS	- A	IN	DOORS -	В
#	Time	WT Flight Id.	Туре	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	RYR66PG	B738	83	72	71	63	54	53
66	23:38:30	5F711	A320	85	77	75	65	59	57
67	23:41:01	RYR45HY	B738	86	78	76	66	60	57
68	23:43:30	RYR3CH	B738	84	74	73	64	56	55
69	23:46:22	GEC8352	A321	84	75	74	64	56	55
70	23:50:42	RYR1SB	B38M	84	75	74	64	56	55
71	23:55:58	RYR86EY	B38M	84	75	74	64	56	55
72	23:58:25	RYR51JX	B38M	84	73	72	63	55	54

7. The pattern of notable events carried on into the early hours of 21st July. A further 28 events were noted and analysed. 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 21st July.

				OU	TDOORS	- A	IN	DOORS -	В
#	Time	WT Flight Id.	Туре	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	RYR9QY	B738	85	76	75	65	57	56
75	00:06:13	RYR45TC	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	RYR8CK	B738	85	75	74	65	57	56
79	00:16:05	RYR2BY	B38M	85	76	75	63	55	54
80	00:18:36	EIN76HJ	A320	84	75	74	65	57	56
81	00:21:23	RYR2WK	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	RYR7BW	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	ТОМ59Н	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

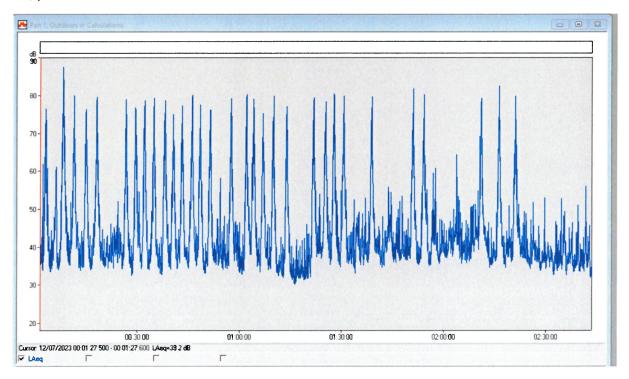
- 8. The above results and appendices indicate a clear and significant issue in respect of the given events. You have indicated that the DAA e-contacted you (and others) indicating that "tests" were being conducted.
- 9. From my interpretation of the WT trace, these events are all associated with incoming 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,

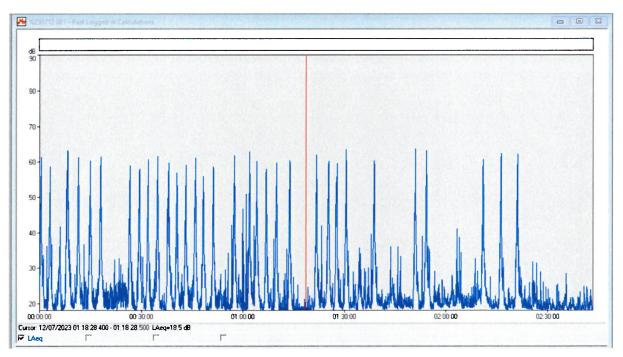
Karl Searson

Chartered Engineer.

2A, pt 1: OUTDOORS

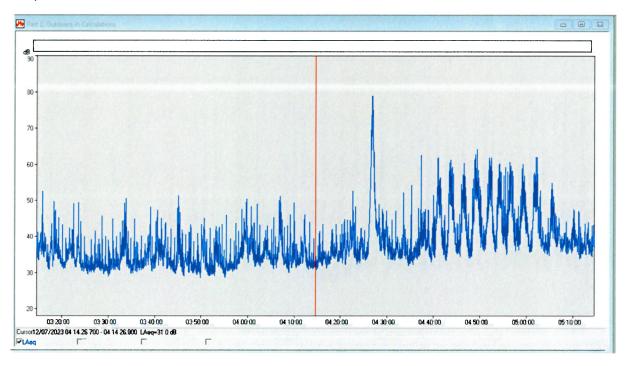


# 2B, pt 1: INDOORS

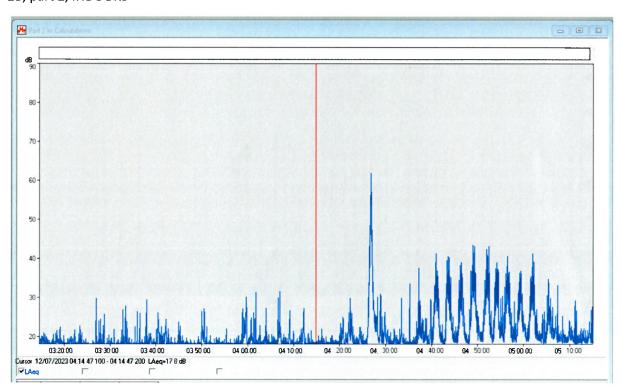


APPENDIX 2, Comparative fast trace, 12<sup>th</sup> July, part 2, 03:14 – 05:14

# 2A, part 2: OUTDOORS

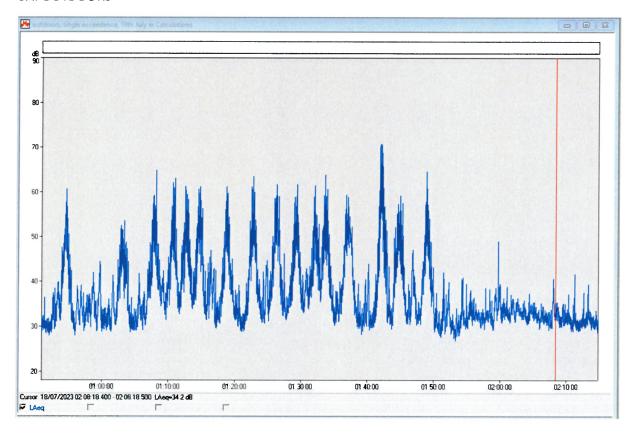


# 2B, part 2, INDOORS

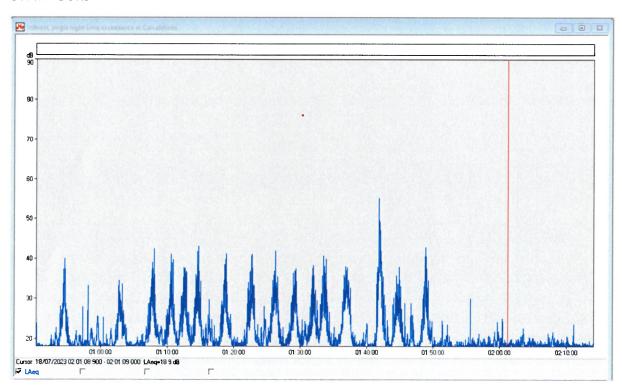


APPENDIX 3; Comparative fast trace, 18<sup>th</sup> July, 00:50 – 02:14

## 3A: OUTDOORS

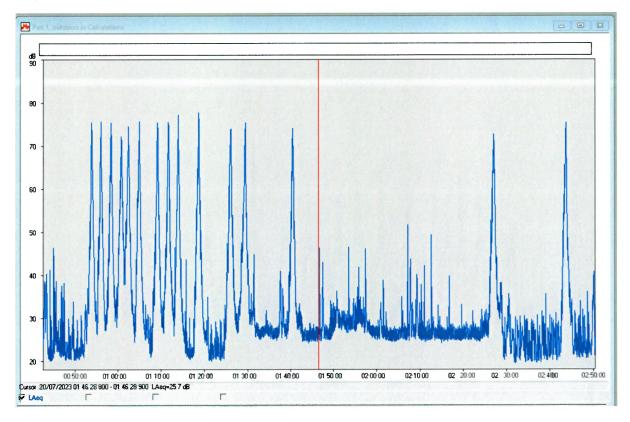


## **3B: INDOORS**

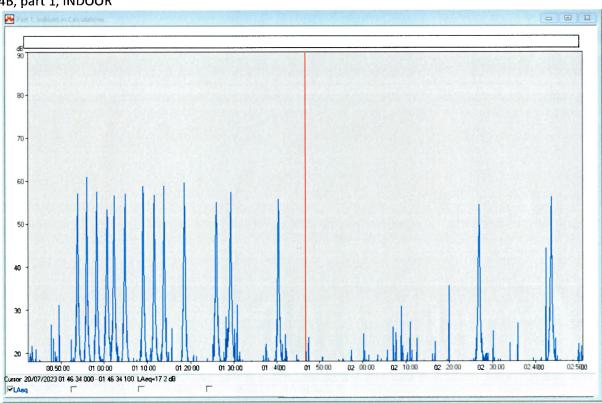


# APPENDIX 4, Comparative fast trace, $20^{th}$ July, part 1: 00:42-02:50

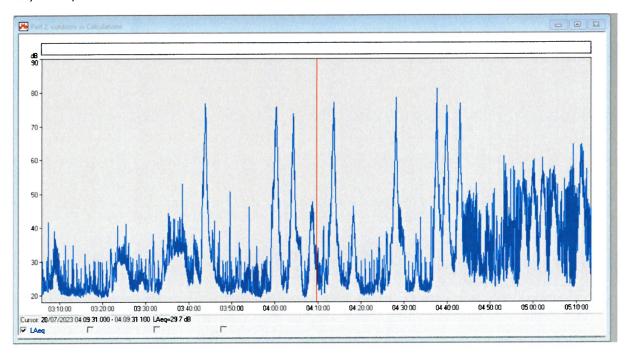
# 4A, part 1, OUTDOORS



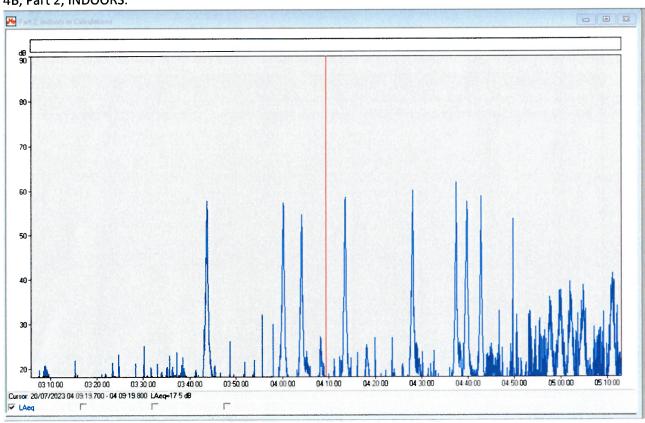
# 4B, part 1, INDOOR



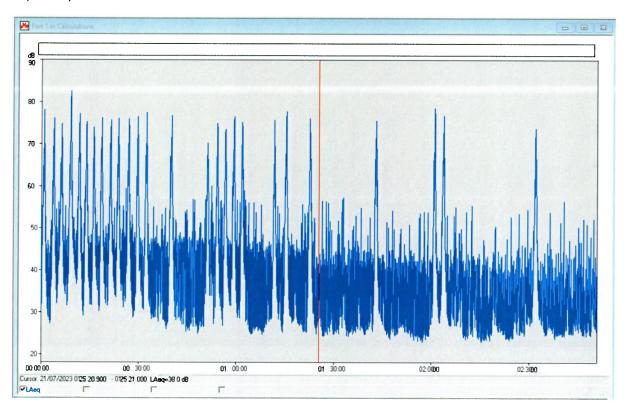
# 4A, Part 2, OUTDOORS



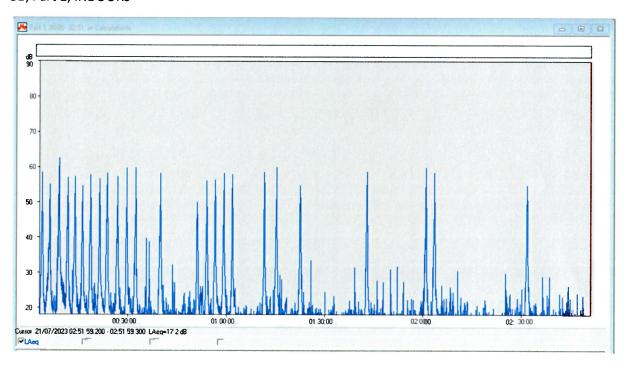
# 4B, Part 2, INDOORS.



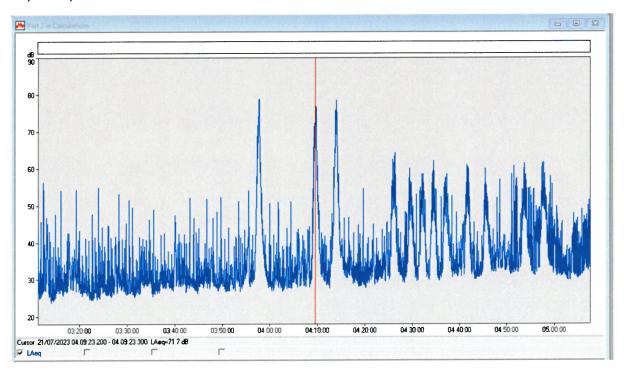
# 5A, Part 1, OUTDOORS



# 5B, Part 1, INDOORS



5A, Part 2, OUTDOORS



## 5B, Part 2, INDOORS

