



**London South Bank**  
University

## London Battersea Heliport Noise Subjective Survey

FINAL REPORT Wandsworth Council  
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Prepared for the Secretary of the Heliport Consultative Group

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The work was undertaken as a collaborative partnership between LSBU Enterprises, Wandsworth Council, Hammersmith & Fulham Council and Kensington & Chelsea Council.

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# Heliport Noise Subjective Survey Report

## Executive Summary

A subjective survey in the form of an online survey questionnaire was designed and implemented in 2017 to collect information on the perceptions and attitudes of local residents to noise emissions from the London heliport operation.

The subjective study was intended to complement the objective study (reported in a separate document) and to allow a comparison of findings between the two. The questionnaire opened on 11th July 2017 and closed on 30<sup>th</sup> Sept 2017 and collected responses to closed ended questions from the boroughs of Wandsworth, Hammersmith and Fulham (H&F) and Kensington and Chelsea (K&C). A total of 1570 valid online questionnaires were received and processed.

The level of annoyance caused by helicopter noise reported by respondents appears to be higher than the level of annoyance attributed to noise measurements at monitoring sites (see noise monitoring survey report). However it is important to note that many non-acoustical factors (such as location, time of the day, socio economic factors) may influence responses when expressing attitudes and perception (annoyance) to noise.

The proportion of respondents highly annoyed (%) by helicopter noise in this study was much higher than the proportion of highly annoyed to aircraft noise reported in a similar survey responded to in 2014 by residents living around English airports.

The current complaint handling and recording system that is managed by the heliport appears to be ineffective and therefore under-represents the true scale of the impact on affected residents of the noise emissions from the heliport operation. There was some evidence to suggest that residents were confused as to which agency (and how) to direct complaints about helicopters. Currently as well as the heliport itself, local authorities and the CAA have a role in helicopter complaint monitoring and handling.

## 1. Introduction

A subjective survey in the form of an online survey questionnaire was designed and implemented in 2017 to collect information on the perceptions and attitudes of local residents to noise emissions from the London heliport operation.

The subjective study was intended to complement the objective study (noise monitoring measurements) and to allow a comparison of findings between the two.

The results of the subjective study were compared to the significance impacts computed from the objective noise data collected from residents' homes at the long term monitoring stations.

This report presents the results from the subjective survey and provides some analytical discussion, recommendations and conclusions.

## 2. Survey design

The online survey questionnaire was designed to obtain demographic and comprehensive perceptual and attitudinal data from residents from the boroughs of Wandsworth, Hammersmith and Fulham (H&F) and Kensington and Chelsea (K&C).

The questionnaire participation was anonymous and designed to obtain a high participation and completion rate from all the relevant boroughs.

The questionnaire was reviewed and approved by representatives of the three boroughs in July 2017. It was publicised through the boroughs' online communication channels between July and September 2017.

Eligible respondents were defined as any person above the age of 18 resident in any of the three boroughs of interest.

The questionnaire consisted of 33 closed ended multiple choice type of questions. The last question allowed the respondent to add comments in a free text box.

The questionnaire opened on 11<sup>th</sup> July 2017 and closed on 30<sup>th</sup> Sept 2017. This consultation period was arranged to approximately coincide with the objective study period. Summer months were defined in the questions as the period between *2nd May and 2nd September*.

Questions were grouped in three sections relative to the type of data intended to gather. These sections were called: *1- About your home 2- About the noises you hear and related issues 3- Some information about you.*

### 3. Results

This section provides statistical results from the questionnaire and generic analytical discussion grouped in different subsections to improve readability.

#### 3.1 Participation

A total of 1570 valid online questionnaires were received and processed.

61.2% of the respondents declared that they had lived in their property for between 5 and 10 years or more; 21.2% between 2 and 5 years. Only 7.6% declared to have lived in their property one year or less. This shows that a large proportion of the respondents (sample) have lived long enough in their property to have experienced the impact of noise emissions from the heliport.

Almost half of the responses were received from Wandsworth residents (49.4%), while almost the other half came from H&F (48.6%). The response rate from K&C was extremely low (2%). This is likely to be attributed to a weak or non-existent promotion of the survey in that borough in the wake of the Grenfell Tower Fire (14 June 2017).

The proportion of male respondents was 50.5% while females was 44.5%.

The vast majority of respondents (89%) were aged between 25 and 75 years old.

#### 3.2 About the participants' home

More than three quarters of the sample (78.3%) own their home, while 19.9% declared that they rent their home.

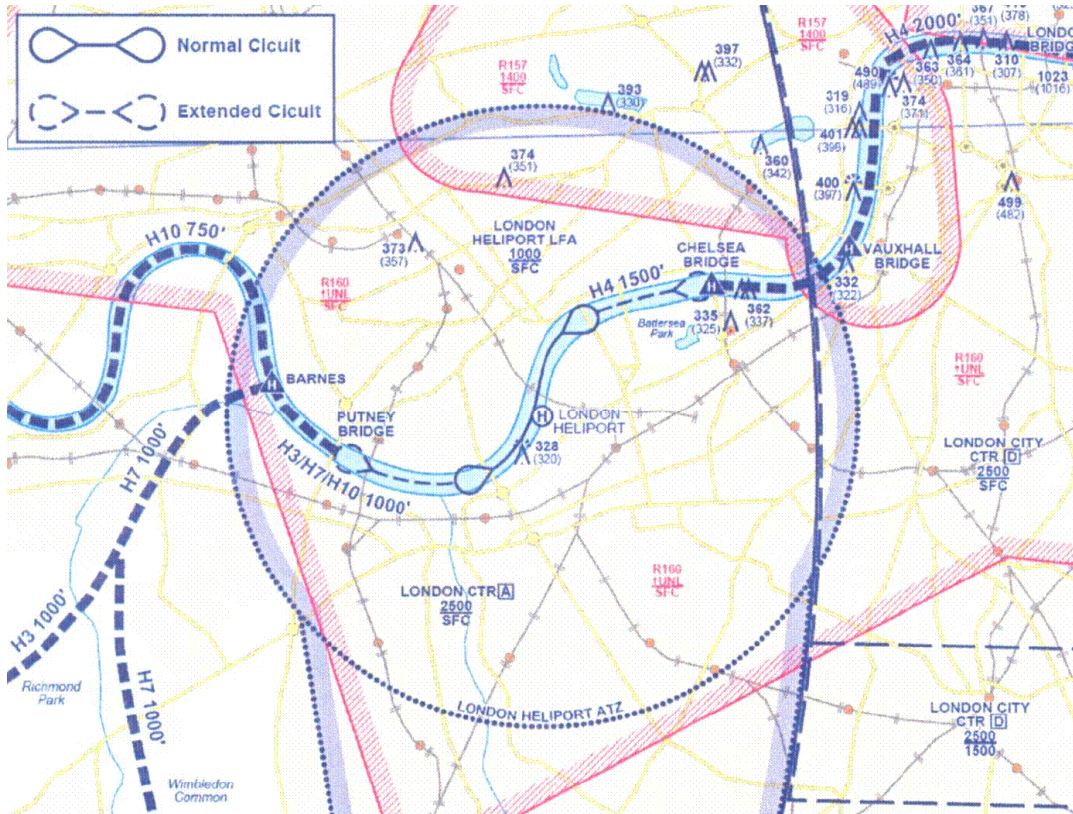
42.7 % of the respondents stated that their home has direct line of sight or slightly off line of sight of the heliport. 31.8% said that their home was not facing the river shore or in a street set back.

The heliport Air Traffic Zone (ATZ) is defined by an area of 1800m radius from the heliport (see map 1)

The proportion of respondents who identified their home as being within 1800m from the heliport was 61.7%. It is worth noting that 17.2% of respondents located their home as being more than 1800m from the heliport and 21.2% responded that they did not know the approximate distance of their home from the heliport.

These data suggest that a substantial proportion of the respondents live within an area affected by the heliport approach and take off flight paths.

Almost three quarters of the respondents (73.4%) reported having openable double glazed or better windows where they spend most of their time at home, while one quarter (25.1%) reported having single glazed windows.



Map 1 London Battersea heliport Air Traffic Zone (ATZ)

### 3.2 About the noise heard and related issues

Detailed results from the two main attitudinal questions are provided in figures 1 and 2 below

*“Thinking about the summer months (2nd May – 2nd Sept), when you are at home with windows open, how much if at all, does helicopter noise disturb or annoy you? Please rate between 1= (Not at all) to 5= (Extremely) “*

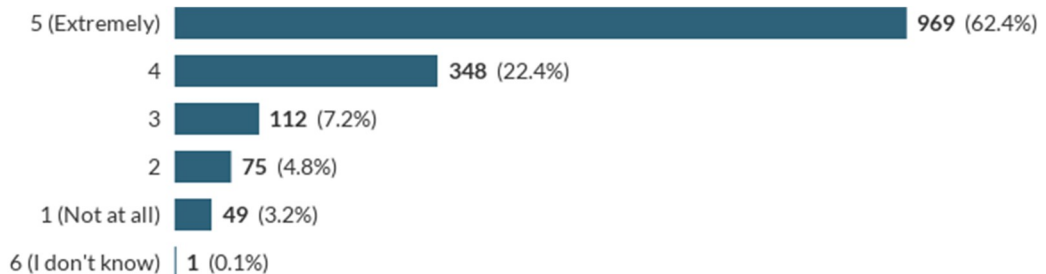


Figure 1 Responses on annoyance from helicopter noise with windows open during summer months

Figure 1 shows that 84.8% of respondents felt highly annoyed<sup>1</sup> by helicopter noise during summer months with windows open.

“Thinking about the summer months (2nd May – 2nd Sept), when you are at home with windows closed, how much if at all, does helicopter noise disturb or annoy you? Please rate between 1= (Not at all) to 5= (Extremely)”

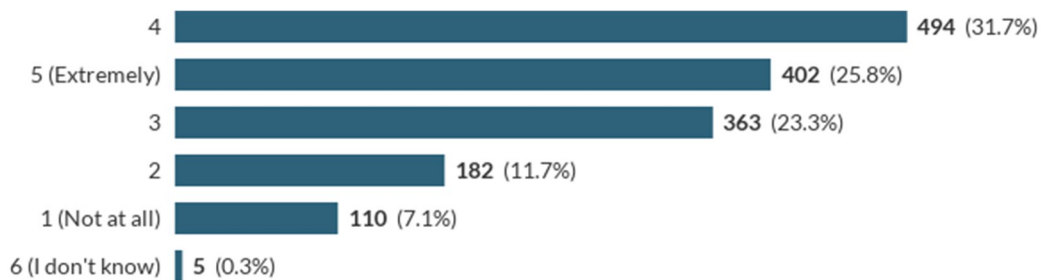


Figure 2 Responses on annoyance from helicopter noise with windows closed during summer months.

Figure 2 shows that 57.5% of respondents felt highly annoyed by helicopter noise during summer months with windows closed.

The results shown figures 1 and 2 are much higher than the overall annoyance to aircraft noise reported in a similar survey responded to by residents living around English airports<sup>2</sup>.

The majority of respondents (57 %) feel able to differentiate clearly between helicopters flying overhead without interacting with the heliport and helicopters approaching to land or leaving the heliport.

The vast majority of respondents (80.6%) expressed that on average they heard very frequently or frequently helicopter noise during an average summer day

Between 72% and 82% of respondents declared that helicopter noise in the summer time interfered with the following activities: having a conversation, quiet leisure activities, listening to the radio, spending time in the accessible outdoor area of the home, or having the windows open.

The majority of respondents (52.4%) felt that helicopter noise in the summer time (2nd May – 2nd Sept) interfered with sleeping patterns, “e.g. the time you go to bed or get up, or are kept awake”.

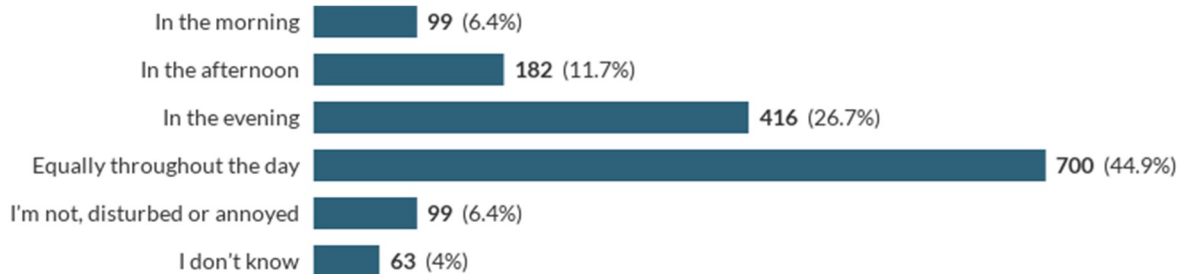
The vast majority of respondents (95.8%) believed that helicopter noise sounded much louder than the background noise in their home at the time of a fly past.

<sup>1</sup> Highly annoyed is the sum of categories 4 and 5

<sup>2</sup> Survey of noise attitudes 2014: Aircraft. Civil Aviation Authority.



Figure 3 shows the response distribution to the question on what part of a typical weekday in summer residents feel most disturbed or annoyed by helicopter noise.



*Figure 3 Responses on part of a typical weekday in summer when annoyance from helicopter noise is most felt*

The two most selected factors that residents found disturbing about the heliport operation were: loudness of helicopter noise (30.6%) and frequency content of helicopter noise (14.2%).

### 3.3 Other relevant attitudinal information

46.1 % of respondents have considered “sometimes” “often” or “very often” moving out of their home because of helicopter noise.

*Figure 4 shows the Response distribution to the question “Are you aware of any of the following ? (Please select the ones that apply)”*

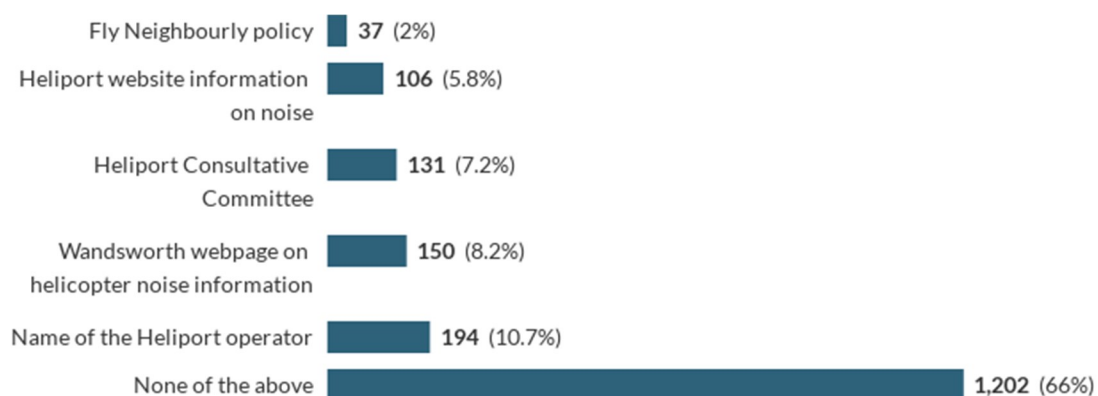


Figure 4 level of awareness by the respondents of sources of information on helicopter noise related issues

Only 11.1% of the respondents declared they have made a formal complaint about helicopter noise.

More than a quarter of the respondents (27.4%) expressed that they would be happy to participate in semi-structured interviews and more than a third (33.9%) would be happy to volunteer to allow helicopter noise measurements to be taken at their home.

Almost half of the respondents (49%) provided extra comments in the last free text box question. The vast majority of these comments expressed dissatisfaction, frustration and/or distress as a result of the heliport's operation. A very small proportion of comments indicated overall satisfaction or no disturbance caused by the heliport. These comments would reflect the percentage of residents not annoyed or bothered by helicopter noise as shown in Figures 1, 2 and 3.

Below there is a collection of some examples of comments (verbatim) provided in the free text box.

*"The noise can be deafening. You have to stop whatever you're doing until the helicopter passes especially when they fly too low, which is very often. I end up never using my balcony as a result"*

*"The very large black helicopter is now becoming a regular occurrence, this makes the entire flat vibrate when it is active on the helipad and when flying past"*

*"have never complained as I assume like the Heathrow complaints procedure it is a waste of time as nothing changes"*

*"..and we have to actually stop telephone conversations when the helicopters take off and land"*

*"I have noticed an increase in noise pollution from helicopters over the past year. It affects me and my husband every day and we find the noise stressful, as well as interfering with our daily activities (talking on the phone/working from home/watching TV etc). We are considering selling our flat and moving areas SOLELY due to the noise pollution of this area"*

*"The frequency of helicopters flying past our house (particularly between Friday and Sunday) has got worse over the last 12 months. The noise is so loud that it cuts above conversations, TV, or any other noise. We have had to close our doors during the hot summer months on occasions in order to be in our home. Please help us!!"*

*"I live in Prices Court. Noise has got far worse since the new tower block has been built by the railway bridge. Now almost every single helicopter approaches Prices Court before turning to approach the heliport. The approach and take off paths have changed since the new building due to its height. I cant now have the windows or doors open (which has been a nightmare with the recent hot weather) because of the noise making it impossible to hear the television or anything else"*

*"I've noticed more activity over the years and neighbours asked me to complete this survey. I'm not that close to the heliport that I'm bothered by it every day and frankly have become desensitized to the sound, but visitors and overnight guests notice the noise."*

*"When out and about in the neighbourhood, especially by the river, the frequency is more noticeable and I imagine for people in the flats on the river, it must be unbearable".*

*“I am irritated by pilots keeping the engines running on the ground. The noise bounces off the flats opposite. Some pilots pass opposite my third floor flat. Others higher up. Some take off or land more vertically than others. More use the west side than the east.”*

*“Noise and volume of traffic is out of control, the peaceful river residential area i brought into, is now a noisy polluted stressful location. .. more and more helicopters, more noise.. more pollution.. its absurd the vast amount of time and money spent on monitoring the helicopters, wasted complaints.. is no one listening.. sit by the river opposite the heliport try and have a conversation, its impossible, try and work from home impossible.. try and live peacefully impossible”.*

*“It's been there longer than I have (I've been there 17 years) and so not sure why anyone would complain. Perhaps before people move in they should be told about it if they're very sensitive but as far as I'm concerned it's great!”*

*“The Battersea heliport is part of the community and I have no wish to stop the operation. We should however insist on quieter aircraft”*

Residents of the three boroughs were not offered the possibility to direct complaints to the researchers of the surveys. However numerous formal complaints and reports were received by the researchers via email complaining about noise from heliport and the adverse effect this has on their living conditions.

From the information collected and reported above, it appears that affected residents are not clear about where or how best to direct their formal complaints.

## **4. Discussion**

Some factors limited a desired higher participation rate. These included that the survey opened for a short time, the limited publicity provided by relevant boroughs, the survey being run during the summer holiday season and the virtual absence of K&C respondents.

Despite the above factors, the participation obtained can be regarded as very high if only Wandsworth and H&F boroughs are considered.

The demographic data of the sample provided evidence of the required diversity, relevance and validity of respondents.

The large majority of responses reporting extreme annoyance or annoyance came from within the ATZ area.

The proportion of residents adversely affected by noise from the heliport's operation in Wandsworth and Hammersmith & Fulham is very high.

The majority of respondents (52.6%) who identified their home location as being within 1800m of the heliport or on / close to the heliport flight path felt highly annoyed by helicopter noise with

windows open, while 4.4% of respondents stated that they were either “not annoyed at all” or “very little annoyed”.

The level of annoyance caused by helicopter noise reported by respondents appears higher than the level of annoyance attributed to noise measurement at monitoring sites (see noise monitoring survey report). However it is important to note that many non-acoustical factors (such as location, time of the day, socio economic factors) may influence respondents when expressing attitudes and perception (annoyance) to noise.

The main limitation of the study was the fact that responses were received only from residents who were aware of the online survey and who “opted in” to participate.

Affected residents seemed to not be aware of the complaint submission systems available. It is perceived that a more representative number of official complaints would be received if an effective and coordinated complaint handling system were in place.

The survey results suggest that despite implementing the specific recommendation of the 2006 GLA Study (London in a Spin) to establish a formal complaint recording and monitoring scheme for the heliport, a very significant number of complaints about helicopter noise are not currently not being recorded.

In the authors’ opinion the reason for this is that the current complaint handling and recording system is not effective, the survey responses show a low level of awareness of its existence. We therefore recommend that the first action that should be taken forward is to undertake a full root and branch review of the current system and make recommendations for updating and upgrading it - to include options for bringing forward new web based applications.

## 5. Conclusions

The survey questionnaire obtained a high participation rate.

The majority of respondents feel extremely annoyed / disturbed by helicopter noise with windows open or closed.

Noise emissions from the heliport operation cause adverse impact on quality of life and wellbeing for a large majority of respondents.

Most responses received came from distances within the heliport ATZ.

The level of annoyance caused by helicopter noise reported by respondents appears higher than the level of annoyance attributed to noise measurements at monitoring sites (see noise monitoring survey report).

## **6. Recommendations**

The design and implementation of semi structured interviews can be an additional and valuable tool to complement the information obtained from online survey questionnaires.

An effective complaint handling and monitoring system is recommended to be implemented as a more representative and reliable source of information on the noise impacts of the heliport's operations.

## **7. Future Work**

An extended and more comprehensive subjective survey is proposed to cover uniformly the three boroughs and to achieve higher and more diverse participation. This extended subjective survey could complement a corresponding expanded objective survey aiming to cover the same areas in the same level of depth.