Comments from Chris Lowe, IP Registration Number: 20014275 on:

TR020002-003694-Revised Noise Mitigation Plan (tracked version).

NOTE: Page numbers refer to the Page number shown on each page.

Page 2

The header for the Table says: "The effect levels for aircraft noise adopted for Manston airport are based on the most recent evidence and best practice and are set out below,:", and below the table the Footnotes say: "Effect levels derived from the following information sources (for more details refer to Chapter 12 of the ES):

- 1 WHO (1999) Guidelines for Community Noise
- 2 WHO (2009) Night Noise Guidelines for Europe
- 3 A precautionary UAEL set in line with Aviation Policy Framework requirement (Para 3.36) "to offer households exposed to levels of noise of 69 dB LAeq, 16h or more, assistance with the costs of moving"
- 4 Based on the findings of Basner et. al. (2006) Aircraft noise effects on sleep: Application of the results of a large polysomnographic field study."

RSP has ignored evidence already submitted, by myself and others, showing that the latest WHO Guidance of 2018, has lower recommended levels, and that even this WHO guidance does not include research results published since 2015, which would support the use of even lower levels. So this Table needs to be corrected accordingly.

Likewise the Table refers to LSMax which is the Slow measurement – the LFMax, the Fast measurement is the more appropriate measurement and would make a significant difference to the noise impacts.

According to Footnote 4, above, the SOAEL figure of 80 dB LSMax is derived from a study published in 2006, so is 13 years old, and much too high.

Similarly 18 nightly events suggests that although QC 4 aircraft are to be permitted, most night flights would all be QC 4

Footnote 5, refers to: "5 Osprey Consulting Services - Review of Potential Aircraft Noise Abatement Operational Procedures. Report 70992-011 Version 2.1 for RiverOak Strategic Partners 18 December 2017."

This report found that "based purely on meteorological factors, a preferential runway strategy would have a significant noise reduction effect and was feasible for the majority of the time (67.8%). The biggest limiting factor to preferential runway operations will be the movement rate that Manston Airport would like to be able to achieve. Above a movement rate of 5 freighter / airliner movements per hour, Manston Airport would no longer be able to support opposite runway direction operations. (Exec Summary)" So 26468 ATMs a year (paragraph 1.9) equates to 509 per week, 72 per day, or 4.5 per hour, for the 16 hour day.

In these circumstances it is likely that the 5 ATMs/hour restriction would apply most of the time, not the "majority of the time (67.8%)" quoted above.

Hence the noise reductions would be lost, especially as weather, such as rain etc., could further restrict the ability to operate the less intrusive route..

Pleasingly, the Table refers to Night as 2300 – 0700, so this is the "Night Period".

Page 3

Footnote: "6 The night time period quota figure has been arrived at based on a typical mix of aircraft operating within the noise levels that have been assessed in the environmental statement, rather than taking the noisiest possible aircraft."

However it is not known what the "typical mix of aircraft operating within the noise levels" might be. For 'worst case' the assessment should use the noisiest possible aircraft to ensure that people are not affected by worse noise than was modelled due to the greater use of the noisier aircraft at night.

Page 4

The last paragraph says; "It is difficult to directly mitigate the effects of noise on external amenity areas resulting from the re- opening of the airport."

This is precisely the reason why this proposal is unacceptable because amenity areas are essential to the health and well being of the population, and merely providing a "Community Fund' does not and cannot 'mitigate' this damage.

Page 5

Paragraph 1.2 says that Exempt aircraft includes aircraft below 84 EPN dB, but this range includes Quota Count 0.125 as used elsewhere in UK, and was previously commented on.

So this paragraph needs amending to exclude OC 0.125 aircraft.

It makes reference to paragraph 1.7, but that only gives annual noise quota, not an annual night movement limit. If there is to be a night quota limit, rather than a ban on all night flights (except emergencies) then there also needs to be an annual movement limit as well, to ensure that all movements are counted, including exempt aircraft.

Page 6

Paragraph 1.4 refers to 'at night between 2300 and 0600".

However, as noted above the Table on Page 2, specifies 'night' as being between 2300 to 0700.

8 hours sleep are essential for good health, so paragraph 1.4 must be amended to 2300 to **0700**.

Paragraph 1.6 refers to aircraft with QC of 8 or 16 being prohibited in the Night time.

However as previously noted, the new Heathrow regime will ban night flights, so Manston should be as good, if not better than that especially as it will never have runway congestion in the day time.

Paragraph 1.7 suggests an Annual Night Time QC of 3028, but it should be Zero.

If there is to be a Night Quota limit then 3028 is far too high. Even the previous proposal of 1593 in 2009, was found to be unacceptable then, and that was before so much was known about the adverse effects of night noise. That figure was also higher than at London Airports.

A Night Movement limit has not been proposed, but one is needed to ensure that all aircraft movements at night, including exempt aircraft, are caught. The current Night Flying Restrictions at the London Airports include all aircraft within their movement limits, so Manston should be at least as good as that.

The previous 2009 proposal had a 659 Movement limit which is just under two flights every night, so that is still too high, especially bearing in mind that there may be emergency flights as well.

It only takes one aircraft to wake someone up, hence the need for a strict regime.

Paragraph 1.8 refers to 'Emergency and Humanitarian' flights, but a clear definition of these is needed to avoid misuse.

Paragraph 1.9 and 1.10 refer to movement limits.

The Airport needs a movement limit for ALL daytime flights, and does not need separate categorisation for 'General Aviation' because they would be caught in the movement limit.

General Aviation can include some very noisy aircraft, including helicopters and business jets, so they must come within the Airport limits.

So the Maximum Movements would be 26,468, so that daytime movements would be this less any Night time movements.

In addition there should be a daytime Quota Count Limit of 50,000. So the average QC per movement would be just under 2, but would allow all aircraft to use the airport in the daytime.

Paragraphs 2.4.1 and 2.4.2 refer to Double Glazing. This is unacceptable, because triple glazing is not much

more expensive than double glazing but gives far better noise performance, as well as better thermal performance. As the Committee on Climate Change (CCC) have recently published their report on housing which recommends much higher standards for our buildings, it is a waste of money to install double glazing, and shows no willingness on the part of RSP to try and help those whose lives would be so badly affected.

In the light of that CCC report, there also needs to be a new paragraph:

2.4.6: "Wherever possible the noise reduction measures will be designed and installed to improve energy performance".

Page 7

Paragraph 2.6 and 2.7 do not say if the noise levels are inside or outside measurements and these noise levels need to be amended in accordance with recent WHO Guidelines.

Pages 9 and 10

Paragraph 7.1.1 requires a forthcoming year forecast of movements, which may be useful, but more importantly there needs to be a review of the past year, with the airport paying penalties for under-performance.

There also needs to be a gradually decreasing level in the relevant Quota Count numbers to comply with the government's requirement for noise to decrease over time.

So this Forecast also needs to have a formal reduction of the QC numbers for the coming year.

As well as the Reports suggested In Section 7, there need to be reports as recommended by the the CAA, in a presentation to the Airport Environment Federation which shows a table of such schemes, shown below.

This shows that by specifying limits for Noise Emissions by using Noise Quotas (both day and night), Noise exposure by using Noise Contour Areas and Shapes, and Population/dwellings exposed to noise, can provide an Absolute Limit for population impacted by the noise.

These data can also provide limits on the Noise Impact showing: Number of people annoyed (daytime) and Number of people sleep-disturbed.



Review of limit schemes

Type of restriction	Limit Scheme	Absolute Limit for population impacted	Relative Limit for population impacted	Absolute Limit for area impacted	RelativeLimit for area impacted
Noise emissions	Noise quota - day	✓	✓	✓	✓
	Noise quota - night	✓	✓	✓	1
Noise exposure	Noise contour area	1	1	1	✓
	Noise contour shape	1	X	✓	Х
	Noise level limit (to control shape of contour)				
	Population/dwellings exposed to noise	✓	✓	Х	Х
	Person-Events Index	Р	Р	Р	P
	Average Individual Exposure	P	Р	P	Р
Noise impact	Number of people annoyed (daytime)	4	√	х	Х
	Number of people sleep-disturbed	✓	✓	X	Х
	webTAG	✓	1	Х	Х

P - potentially

Hence these parameters must form the basis for report in the airport noise management plan.

It would also be useful to show the average noise per aircraft, as measured by the average noise Quota Count per aircraft movement over the course of a season, for both the Day and Night periods.

Paragraphs 7.1.2 and 7.1.3 refers to noise contours but they are not nearly detailed enough and need a wider range of noise levels, with the amended, WHO Guidance LOAEL to UAEL values.

There also need to the N above contours for LAFMax (NOT LASMax) from 50 to 90 dB.

Page 10

Paragraph 5.5.4 for 'community representatives' is too vague – there needs to be at least one environmental body representative covering noise, air pollution and climate change, one wildlife body covering all wildlife, one Ramsgate community body – possibly chosen by the various concerned groups at this Examination, one Rural representative for the villages such as Minster, St Nicholas at Wade etc., and one representative for Herne Bay & Whitstable people, such as No Night flights.

The honourable intentions of the Consultative Committee will be judged by the choice of the representative groups, as well as that of the independent Chair person, so it is important to choose truly representative bodies.

Page 11

Paragraph 10 refers to training Flights, but is vague about General Aviation training. These can be noisy and disturbing, so a maximum number of training flights needs specifying, and these will also be part of the total Movements limit, as well only operating between 0900 and 1700.

Page 12

Paragraph 12.2.1 needs something stronger than 'requested'. Change wording to: "pilots must avoid use ..."

because end of sentence allows use where it is essential.

Page 13

Paragraph 13.2.1 (g) is not clear because the part of the sentence for Runway 28, says: '..for runway 28 shall intercept the glide path prior to the coast <u>nor</u> thereafter fly below the glidepath."

Better wording would be: "..for runway 28 shall intercept the glide path prior to the coast <u>and</u> thereafter fly on or above the glidepath."

Paragraph 16 on monitoring needs more than just two monitors 6.5 km from start of roll, there need to be monitors each side of flight paths, as well.

The specification also needs to ensure that they are not located in high ambient noise levels – see CPRE Kent Report already submitted on this issue.

The Penalties should be for lower noise levels and much higher values.

To provide incentives the noisiest level should have the highest penalty of £2,000, increasing by £750 for each dB. These penalties need to reviewed and increased every year in line with inflation.

Paragraph 16.3 is not needed because 0600 to 0700 is part of the Night time regime- see above.