From: [redacted]
To: Manston Airport
Subject: Manston case team
Date: 08 July 2021 23:11:05
Attachments: NNF26 - ES inadequacy.docx
NNF27 - CAA stuff - without appendices.docx
NNF28 reputational risk.docx
NNF29 schools.docx
NNF27 - CAA stuff - without appendices.docx
RTC Report by Peter Forbes Manston.pdf

Ref TR020002

Interested Party ref 20014211

Dear Sirs

I am writing in response of the request for information by the Secretary of State with regards to the ongoing investigation into the viability of Manston Airport as a cargo hub. I write as a resident of Ramsgate, in a personal capacity however, I am also a Councillor and the Chair of Ramsgate Town Council.

I am a little surprised at this request, considering that the Planning Inspectorate did a thorough investigation into the feasibility of the project and found it wanting, the Secretary of State himself conceded the Judicial review, brought against him by Jenny Dawes, on need no less! And yet still we are invited to submit information to, yet again see if we can find an excuse to open the airport.

I sat through every hearing, spoke to many of my constituents and wrote in with real life experiences of what Manston was like even with just a few planes a week. Attached I have included the group No Night Flights data on noise and various other articles they submitted, because I can only assume that they were never read the first time by Andrew Stephenson, a gentleman that does not live in Ramsgate and ignored overwhelming evidence by the Planning Inspectorate.

So, you ask for new information.

I suggest there isn't any. As Chair of Ramsgate Town Council, we commissioned an independent report from the aviation expert Peter Forbes, from Alan Stratford and Associates. (Also attached) HIs view as an expert is that there is little , if no change to suggest Manston is either needed, or viable with the suggested business plan. Indeed, he concurs with the Planning Inspectorate that this DCO should not be given. As a lay person you may ignore my comments as to why I think the project is not viable, although as a resident and Councillor you should very much take into consideration my real-life experiences and those of my constituents. Yet to ignore your own Planning Inspectors as well as aviation experts? I can only comment to do so would be foolhardy.

It is my understanding that the DCO was challenged on three fronts, Need, Procedure and

Net Carbon. I am sure these will still be challenged through the courts if the decision is to continue to grant the DCO despite expert advice from PINS. There is an overwhelming desire amongst residents in Ramsgate to fight this proposed blight for the benefit of the area. Too many voices suggest jobs with little evidence and at the cost of the burgeoning tourist industry we have in this historic seaside town, which, whilst we are looking for new data has received Historical Action Zone status, been granted £2.6m for improvements to the Harbour and seafront area, and is currently in a bid for Levelling up money to help improve our Maritime status and tourism.

Thanet District Council themselves have declared a climate emergency on the 11th July 2019 and I have it from Kent County Council that they will not be hitting their targets for reducing carbon this year either. How is this reconciled with starting a new airport after more than 7 years being closed? What evidence is there to show that the opening of the airport will not jeopardise these local targets?

I conclude reiterating all that I have said before. It is not up to us to prove why the airport is not viable, it is for RSP to show a credible business plan, that shows profit, secured, not just 'interested' carriers, a clear remit regarding hitting government carbon targets and the plan to decrease those, as well as where the money is coming from. They as yet have not and cannot. We, residents like myself, in contrast have given clear data on why the business plan does not work, what the project looks in real time, with evidence of the detrimental effect is will have, and the devastation it will cause both our town and residents. And this has been done in our own time, with our own money and resources. We are not about to give up fighting this flawed decision either, our town depends on it.

Cllr Anne-Marie Nixey

Application by RiverOak Strategic Partners Limited for an Order granting Development Consent for the reopening and development of Manston Airport in Kent

REQUEST FOR COMMENTS AND FURTHER INFORMATION

Response by No Night Flights to the Department for Transport letter dated 17th January 2020 – NNF26

"23. The Secretary of State invites the Applicant and other Interested Parties to submit any comments they have on two late representations from Five10Twelve Limited dated 17 October 2019 and 27 October 2019, which it states are an evidenced Rebuttal to the Applicant's Overall Need Case [REP11-013]."

Comments on Five10 Twelve's representation dated 27th October 2019

1. Five10Twelve is correct to say at paragraphs 1.1 – 1.2 that RSP's Environmental Statement (ES) did not assess the likely significant effect of its proposals. Moreover, RSP did not base its DCO application on a credible "worst case" scenario . Instead the Applicant presented an Environmental Statement that substantially fails to describe and assess the likely "worst case" scenario. This means that the RSP ES has not put forward adequate mitigation measures. It also means that the environmental disbenefits associated with this DCO application have been substantially underestimated by RSP, making it impossible for the Secretary of State (SoS) accurately to weigh the environmental disbenefits against any possible benefit that might be delivered.

2. The so-called "Rochdale envelope" judgment calls for:

3. > *"sufficient information to enable 'the main,' or the 'likely significant' effects on the environment to be assessed [...] and the mitigation measures to be described" [...] such an approach will then feed through into the mitigation measures envisaged [...] It is important that* ***these should be adequate to deal with the worst case****, in order to optimise the effects of the development on the environment".*[1] [Our emphasis]

4. In our submission to the Examination NNF01[2] we pointed out that, in the first case, RSP had limited its assessment of likely environmental impacts by tying them to its predictions about likely commercial demand. In addition, RSP did not assess impacts according to the physical capacity of its proposed development, which RSP stated is merely "*theoretical*".[3] Whilst RSP may be correct in supposing it improbable that the freight market could ever demand the full physical capacity of RSP's proposals for the old airfield, it is also implausible that the "worst case" will never be more than RSP's business prediction for year 20 in 2039.

5. More importantly, in its ES RSP consistently underestimated the likely environmental impact of its proposals:

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1 Quoted in PINS Advice Note No 9 'Using the Rochdale Envelope' July 2018, Version 3)
2 NNF01 is TR020002-003492-NNF
3 APP-080, para 1.35

- By basing its environmental calculations on a fleet mix which it then confirmed to the Examination Authority (ExA) did not represent its actual proposal. In the Issue Specific Hearing on 21st March 2019, Dr Dixon, RSP's aviation consultant, said that the "indicative" airlines that were used to assess likely environmental impact in the ES were there simply to provide a "reasonable assumption". RSP then confirmed to the ExA that its latest thinking on its business plan meant that the smaller, less noisy, turbo prop planes that were in the "indicative fleet" that it used for its ES calculation, would be replaced by much larger and noisier aircraft. RSP confirmed that the smaller turbo prop planes accounted for 25% of the fleet on which it had based its environmental calculations. RSP did not update its environmental calculations to take account of the significant change in the noise environment that would be created as a result of this substantial exchange of less noisy planes for nosier ones
- RSP increased the number of general aviation ATMs to 38,000 p.a. from the 5,840 ATMs p.a. included in its ES. RSP did not update its environmental calculations to take account of this
- RSP has now admitted that there will be periods of the day when there will be "bunching" of ATMs. In its most recent Noise Mitigation Plan (dated 9th July 2019) RSP said that there will be no passenger flight departures between 0900 and 1130. RSP has not reduced the total number of passenger ATMs that it plans to operate. Inevitably, its passenger ATMs will be therefore concentrated into fewer hours, with all that that means in terms of the concentration of noise nuisance. Indeed, the likelihood is that some of these passenger ATMs are now planned to take place at night – between 0600 and 0700. RSP did not update its environmental calculations to take account of this change in the timings of passenger ATMs
- In the letter of 17th January 2020, the SoS seeks comments on a new proposed requirement that there will be just one passenger ATM arrival between 1600 and 1700; only two passenger ATM departures between 1800 and 1900; only one passenger ATM departure between 1900 and 2000; and no passenger ATM departures between 2000-2100. This, we assume, is in addition to the restriction written into the most recent NMP that there will be no passenger ATM departures between 0900 and 1130. On average RSP is planning for up to 26 passenger ATMs per 24 hour period. The restrictions above mean that that it is inevitable that there will be greater "bunching" of passenger ATMs into the unconstrained hours. On the balance of probabilities, more of these ATMs will be pushed into the night period. RSP has taken no account of "bunching" in its calculation of noise in its ES, nor has it considered the possibility that there will be a greater number of passenger night flights
- In its ES RSP modelled a handful of ATMs in its night contours, without ever clarifying exactly what was included in that calculation. Since the ES was produced, RSP has proposed a steadily worsening night flight regime, with fewer constraints and controls on the number of night flights and consequently fewer constraints and controls on the noise impact that its proposals would generate. RSP did not update its environmental calculations to take account of this significant worsening of its night flight proposals
- RSP did not include in its ES any need for Public Safety Zones (PSZ) to be established and so failed to calculate the impact of PSZs on the surrounding area. At the Issue Specific Hearing on 21st March 2019 it was made clear that RSP had ignored the relevant

guidelines set by the DfT as to the trigger point at which PSZs would need to be established. RSP continued to resist calls for it to update its environmental calculations to take account of this. RSP then produced some example PSZs from other airports and concluded that, were they to be overlaid on and around Manston, there would be no discernible impact. At no time has RSP calculated what the actual PSZs would be for the proposals that it is putting forward to the SoS as part of this DCO application. As we said in our submission NNF17:

"RSP now seeks to tell the ExA that, apart from an unknown effect on Manston Green, the implementation of the required PSZs will have little or no effect. It is hard to see how RSP arrives at such a conclusion as it has not calculated what the Manston PSZs would look like. It simply overlays other airport PSZs on a map of the area. Of the example PSZs provided, the two most potentially relevant ones are those for EMA and Stansted as these airports are probably the closest airports in terms of operating model to the airport that RSP says it wishes to develop. Even using RSP's rather home-drawn picture here of other airports' PSZs, it can be seen that the PSZs for EMA and Stansted both extend over a considerable amount of Ramsgate."[4]

- RSP built into its calculations an assumption that cargo aircraft will become much quieter in the future, saying: "*The reduction from Year 2 is due to the forecast phase out of the Boeing 767-300 and Boeing 767-400 aircraft in the fleet.*"[5] This is clearly an optimistic environmental impact assessment rather than one that captures the likely worst case

- RSP failed to produce an assessment of the cumulative noise produced by its proposals. The expert report produced by Ricardo for Thanet District Council in response to Deadline 6 of the Examination says:

  "The IEMA Guidelines for Environmental Noise Impact Assessment recommend that the change in noise levels as well as the absolute noise levels are considered. At present the noise assessments do not consider the total noise level or the total change in noise levels and so the 'with development' and the 'without development' scenarios are difficult to fully consider. It is noted that without the consideration of the cumulative sources noise of air noise, ground noise, traffic noise and plant noise ***the predicted significance of the effect may be understated****. It is understood the noise assessments of the for the Heathrow expansion DCO are using combined noise impact contours."* [Our emphasis]

- RSP produced noise contours that are not fit for purpose. Five10Twelve at paragraphs 1.3 – 1.8 of its 27th October 2019 representation deals with some of the key issues with RSP's noise contours. Like Five10Twelve, NNF could see that RSP's noise contours were so adrift of the likely reality (we have, after all, experienced a previous, smaller, airport on this site and have recorded measurements of the noise levels actually created by that operation) that we felt that the ExA should have access to accurate noise contours produced by an experienced professional. We commissioned the Civil Aviation Authority to produce noise contours that reflected what RSP is now saying is the likely fleet mix for its proposals. Those independently and professionally produced noise contours show that **RSP's noise contours in its ES significantly and consistently understate the likely**

4 NNF17 is TR020002-004116-NNF
5 (see ES 12.7.55)

noise nuisance that will be created by RSP's proposals. We attach our report NNF18 for convenience.[6]

- RSP's noise contours do not reflect likely operational reality, neither do they represent current thinking about the reality of noise nuisance. RSP's contours reflect:
    - Annual ATMs averaged almost evenly over 365 days
    - ATMs averaged evenly throughout a 16 hour or 8 hour period, for day or night, despite the fact that there will be "bunching" at some periods and despite RSP asking for unlimited night flights (we say more about this later)
    - That average is then split with 70% of the ATMs operating to the West of the runway and 30% to the East, and then 30% East and 70% West, as if for every day and every night there is an operational modal split of ATMs between the east and west of the airport. In reality, as years of past records show, the prevailing wind means that this is not the case. The wind will blow in one direction for days at a time
    - Lastly, RSP then adds the 70:30 hypothetical to the 30:70 hypothetical, divides by two, and says that this reflects the noise nuisance created on an average winter's day. It does not – this is an entirely artificial construct of RSP's devising
    - By contrast, Heathrow's operator is consulting as part of its DCO application on the basis of noise insulation grants being required for residential properties within the **full single mode easterly or westerly** 57dB LAeq 16hr contours or the 55dBLden noise contours, whichever is the bigger. The noise contours produced for NNF by the CAA demonstrate that **4,200 households (9,100 people)** would be within the westerly 57dB LAeq 16hr contours, and **8,300 households (17,700 people)** would be within the easterly 57dB LAeq 16hr contours. These numbers far exceed anything suggested by RSP's inexpert calculation of noise contours. In answer to ExA 4WQ Ns 4.7 RSP admitted that there was no assessment of single runway mode operation in its ES. We know from past experience that single runway mode operation persists for days at a time. RSP's ES therefore clearly does not assess the likely significant effects of its proposals.

6. RSP's proposals for night flights were opaque and inconsistent during the statutory consultation period and became more and more potentially damaging for local residents, our health, our economy and the local environment as different iterations were presented during the course of the Examination period. RSP said that it assessed "*up to 8*" night flights in its summer 2018 ES. The proposal on the table currently would allow for many more night flights than eight per night. The night flight proposals now captured in the most recent Noise Mitigation Plan (NMP) were not assessed in RSP's ES. **There has been no assessment whatsoever of the likely environmental impact of the latest night flight proposal.**

7. In February 2019, NNF submitted to the ExA its representation NNF09,[7] which covered representations from us on noise, night flights and the impact of both. Following that, RSP issued a new Noise Mitigation Plan.

6 NNF18 is TR020002-004224-AS-NNF
7 NNF09 is TR020002-003500-NNF

8. In May 2019, NNF submitted to the ExA its representation NNF15,[8] which commented on this new NMP. The NMP asked for a Quota Count of 3,028 to apply between 2300 and 0700. We noted RSP's comment that:

9. *"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".*

10. As we have said above, that *"typical mix of aircraft"* that was assessed in the ES has changed significantly since the environmental assessment was completed. RSP did not update its environmental calculations to take account of this.

11. The quota count requested in RSP's May 2019 NMP was to be used for unscheduled landings between 2300 and 0600, and take-offs, scheduled landings and unscheduled landings between 0600 and 0700. RSP resisted calls for it to clarify how many ATMs it was now proposing during the night period. As we pointed out in NNF16,[9] in our answer to the ExA's 2WQ for Deadline 6, the Quota Count requested far exceeded one already rejected by Thanet District Council in 2012 as being too damaging to the local environment and to local residents. We then pointed out in NNF17,[10] in our answer to the ExA's 3WQ, that:

12. *"There is no confidence that the Applicant's night noise contours accurately reflect the current operational "plan" for the reopened airport. That plan has changed a number of times over the last few months in response to challenges from other parties. We request the ExA to instruct the Applicant to produce new noise contours that reflect the new fleet mix and the clustering of flights in the evening and night period."*

13. However, RSP did not update its environmental calculations to take account of the substantial changes it had made to its operational plan.

14. In late June, at the very end of the Examination period, RSP then made further changes to its proposed night flight regime and to its NMP. It suggested that it would reduce the annual Quota Count budget to 2,000 QC points, but that any "late arriving" ATMs would then be excluded from counting towards this limit. As we pointed out in NNF19,[11] in our answer to the ExA's 4WQ, just a few days before the end of the Examination period:

15. *"This proposal would allow RSP to operate an unlimited number of "late" arriving night flights. Within that, it would also allow RSP to operate an* ***unlimited number*** *of planes as noisy as QC4 all arriving "late" at night."*

16. Nothing even close to this has been modelled in RSP's ES, neither did anything like this proposal appear as part of the statutory consultation. RSP has moved from "up to 8" flights a night in its ES to the latest proposals of unlimited night time arrivals with no environmental controls at all between 2300 and 0600 and then an intense period of arrivals and departures between 0600 and 0700. There is a huge difference between these two propositions and RSP has produced no environmental assessment to tell the SoS what the current proposal would

8 NNF15 is TR020002-003989-NNF
9 NNF16 is TR020002-004001-NNF
10 NNF17 is TR020002-004116-NNF
11 NNF19 is TR020002-004532-NNF

mean for human health, quality of life, the local tourist economy, local sensitive sites, and the wider local environment.

17. In our submission NNF19[12] we set out evidence drawn from past operations that showed that 22.5% of Manston's cargo ATMs in the three years 2008-2010 inclusive arrived "late", during the night time period. We pointed out that, using the numbers gleaned from Heathrow, Luton and Gatwick of between 1.04 and 2.8 ATMs for every QC point, RSP's new regime would allow it to operate between **5.7 and 15.3 ATMs between 0600 and 0700 every night, as well as to have an unlimited number of "late" arrivals between 2300 and 0600 of any QC level it liked.**

18. **Absolutely nothing** on this scale of night noise and disturbance has ever been assessed by RSP as part of its ES. Nothing like this has ever been put to local residents as part of RSP's statutory consultation. RSP's ES falls very, very short of capturing the likely worst case in terms of the noise disturbance that its proposal will create. Indeed, at the upper end of over 15 ATMs per night between 0600 and 0700 alone, RSP could operate over half of its proposed passenger ATMs in this one hour of the night. This is clearly absurd.

19. In May 2019 RSP introduced a "noise contour area cap" to its NMP without any attendant explanation. Needless to say, this cap was not included in RSP's ES, which was completed in 2018. Shortly before the Examination period ended, in response to questions from the ExA, RSP offered an explanation as to what this "cap" would mean. On 6th July 2019, a couple of days before the end of the Examination period, NNF submitted NNF23[13] in response to RSP's latest iteration of its NMP. We commented that RSP's new "noise area contour map" complied with neither the spirit nor the letter of the CAA's CAP 1129 guidance note on such caps. We then set out what the latest version of RSP's NMP – still a moving target and bearing no resemblance to what was in RSP's ES – would allow in terms of night flights:

- Unlimited "late arrival" ATMs rated up to and including QC16 allowed between 2300 and 0600. Nightly ATM limit constrained only by the overall annual ATM limit for the entire airport. No cost to the QC budget for any of these night flights and their unlimited amount of noise created
- An unlimited number of ATMs, departures and arrivals, between 0600 and 0700, subject only to a QC budget of 2000 QC points for that single hour. ATMs rated up to and including QC2 permitted. For illustration, a 747-400 is rated QC2 on arrival. As many ATMs rated QC0 and QC0.125 as RSP could handle as they would not be subject to any ATM cap nor included in the QC budget

20. Absolutely nothing on this scale of noise nuisance has ever been assessed by RSP as part of its ES.

21. At paragraph 57 of RSP's 5th July 2019 Overall Summary of Case, RSP says:

22. *"The Applicant recognises that the project has engendered passionate responses from local people, both for and against the project, with substantial levels of representations and other submissions from all points of view. A number of the local people making representations both for and against have participated throughout the examination and*

12 TR020002-004532-NNF
13 NNF23 is TR020002-004697-NNF

have dedicated considerable time and effort in making their submissions. The Applicant thanks its supporters for their dedication and notes that ***those objecting to the project have caused significant concessions to be made to address their concerns. One group is called No Night Flights – there are now (nearly) going to be no night flights following the examination****."* [Our emphasis]

23. **This is a breathtakingly inaccurate description of where we actually are.** As the summary above sets out, RSP has moved from "up to 8" flights a night on average in its ES to the current proposal – never assessed for its environmental impact – of:

- unlimited "late" arrivals between 2300-0600 including the very noisiest aircraft in operation
- unlimited arrivals and departures between 0600-0700 of up to QC2, constrained only by an extraordinarily generous annual QC budget of 2000 QC points.

24. For RSP to present this to the ExA and to the SoS as *"(nearly) going to be no night flights*" and as having addressed our concerns is extraordinary. RSP completely ignores the very detailed written objections that we have made to the various iterations of RSP's night flight regime, up to and including the most recent iteration. It ignores our detailed setting out of residents' concerns about the steady worsening of the night flight regime requested by RSP. This assertion by RSP that there will be nearly no night flights and that it has made significant concessions to address the concerns of local people is so far from the truth that we can only describe it as **dishonest**.

Application by RiverOak Strategic Partners Limited for an Order granting Development Consent for the reopening and development of Manston Airport in Kent

REQUEST FOR COMMENTS AND FURTHER INFORMATION

Response by No Night Flights to the Department for Transport letter dated 17th January 2020 – NNF27

"25. The Secretary of State invites the Applicant, York Aviation and the Civil Aviation Authority ("CAA") to submit any comments they have on the late representation from Five10Twelve Limited dated 19 December 2019 relating to correspondence it has received from the CAA. The Secretary of State also invites their comments on the late representation from Five10Twelve Limited dated 20 December 2019 relating to inconsistencies in the application, The representations are published alongside this letter."

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1. The Secretary of State (SoS) has not invited Interested Parties to comment on these representations. This is surprising given the notionally open and transparent nature of the DCO process and given the fact that these two representations have been accepted after the deadline of 9th July as relevant to the application.

2. It is also surprising given that the 20th December 2019 representation from Five10Twelve sets out the fact that, given the obvious inadequacies in the noise contours produced by the Applicant as part of its Environmental Statement and Impact Assessment, Five10Twelve commissioned the CAA to produce noise contours that more accurately reflected the likely noise impact of RSP's aviation operations proposals (so far as these proposals had been articulated). Like Five10Twelve, NNF also commissioned noise contours from the CAA. We say more about this below.

3. NNF strongly supports the 20th December 2019 submission by Five10Twelve. In particular, we would like to draw the SoS's attention to the facts that:

- Despite having launched in early 2014 a plan to acquire the failing airport, the principals associated with this DCO application have consistently failed to identify any airline operator that has credible plans to move its operations to a new cargo airport at Manston should the application be approved. The appearance of Magma Aviation at a recent RSP focus group is the first hint that any potential air freight customer exists. We note Five10Twelve's evidence that Magma has just two cargo planes that could use a reopened Manston. We also note that Magma's fleet is on average 25.8 years old and that its craft would therefore be classed as the older, noisier planes that RSP undertook in its DCO application to ban. A reliance on older, noisier planes was not built into the assumptions that shaped the Applicant's calculation of the environmental noise and air pollution that would be created should this airport application be successful. Therefore, **the SoS cannot rely** on RSP's environmental impact assessment as an accurate assessment of the likely worst case

- We note, too, Five10Twelve's **significant** discovery that RSP is now saying that there will be up to 8 planes an hour and that there will be "bunching" of ATMs at some times of the

day. This "bunching" was not built into the assumptions that shaped the Applicant's calculation of the environmental noise and air pollution that would be created should this airport application be successful. Again, **the SoS cannot rely** on RSP's environmental impact assessment as an accurate assessment of the likely worst case

- We strongly endorse Five10Twelve's submission at paragraph 42 that the noise contours presented by RSP as part of the environmental impact assessment associated with this DCO application are inaccurate and that they do not represent the likely noise outcome, and certainly not the worst case. RSP's noise contours are fundamentally flawed because:

    - The consultant who produced the contours for RSP, Oliver Bewes, is a specialist in railway noise. He admitted to the Inspectors in the DCO hearing that he had never calculated aviation noise before. He used an outdated (2005) version of modelling software despite this having been updated in 2016. He also used modelling software that the CAA does not use for this purpose. The CAA's model uses actual radar data and noise recordings from UK airports and is to be preferred when predicting the noise that aviation operations at a UK airport will make

    - RSP is planning for a much busier airport than it has ever been – a cargo operation 29 times the size of the previous one (17,100 *vs* 587 ATMs, on average p.a.) and a passenger operation 16 times size of the previous one (9,298 *vs* 656 ATMs, on average p.a.). Despite this, and defying all logic, RSP's noise contours suggest a smaller noise footprint for this much, much bigger and busier airport than the noise levels that were actually experienced previously

    - RSP's noise contours are based on assumptions about types of aircraft and numbers made by Dr Dixon who admitted to the Inspectors in open forum that she had no experience of forecasting air freight. Her assumptions were then changed by RSP during the Inquiry. 25% of the quieter craft that she had predicted would use the airport were removed and replaced with noisier aircraft. Inexplicably, RSP did not update its noise contour maps as a result

    - RSP did not include enough General Aviation ATMs in its calculation of the future noise impact

    - RSP only provided noise contours showing average[1] noise – this takes the number of flights in a period and averages the noise out over 16 or 8 hours. RSP then averaged the noise out between the two modes of operation (east and west), although this is an event that never happens in reality. Operations are never simultaneously east and west for a sixteen hour period as RSP's contours suggest. RSP did not produce contours showing the actual noise of, say, one 747-400 cargo plane operating with an easterly wind and also with a westerly wind

1 RSP calculated its annual ATMs and spread them evenly across 365 days. It then spread a day's flights across a 16 hour day although RSP now says that there will be bunching of ATMs at certain times of day. RSP then averaged that average day's flights as if, for every 16 hour period, 30% of ATMs were in one direction and 70% the other. This never happens in a day – a clean 30/70 split either end of the runway. RSP then added together a 70:30 west/east split and a 30:70 west/east split and divided the total by 2. RSP's contours are a long way from reflecting likely operational reality in which the wind is in one direction for days at a time.

- RSP's contours ignored the fact that there are many years of noise monitor readings of actual aviation noise available for Manston. RSP's "predicted" noise levels did not reflect the past experience of local people (captured in our complaints to the previous airport operator about noise) and actual noise monitor readings.

4. Like Five10Twelve, NNF commissioned the Civil Aviation Authority to produce noise contours. Like Five10Twelve's contours, the contours produced for NNF by the CAA[2] demonstrate the extent to which the Applicant's own noise contours vastly understate the likely noise pollution that will be generated as a result of its aviation proposals. We comment on this in more detail below. In brief, however, the SoS should be aware that no reliance can be placed on RSP's noise contours as being an accurate assessment of the "worst case" noise nuisance that will result from RSP's proposals.

5. As part of our suite of submissions to the DCO Examination process, NNF set out in NNF16,[3] in answer to the Examining Authority's (ExA's) second set of written questions, the fact that the UK Government recognises that the onset of significant community annoyance now begins at 54 dB LAeq, 16hr. The CAA noise contours produced for NNF calculated that this would mean that a population of 29,100 would be exposed to this level of noise and above when aircraft operations are to the east. **This is significantly in excess of the number shown by RSP**. 14,700 people will suffer noise levels at or above the level of significant community annoyance when operations are towards the west. Again, we cannot find this clearly set out anywhere in RSP's documentation.

6. The population that will be affected is also a population that would be *newly* subjected to aviation noise – the old airport closed nearly six years ago, and we are, conservatively, three years away from a new airport opening on that site, complete with a licence from the CAA. This means that this population will be more likely to experience this change in its ambient noise environment as a significant negative change in the quality of life. It is uncontroversial that the onset of significant community annoyance for this population will therefore begin at a level below 54 dB LAeq, 16hr. RSP has not taken this into account in its assessment of the noise impact of its proposals. We also attach our rebuttal of RSP's comments on the CAA's noise contours – NNF22.[4]

7. We attach the noise contours produced by the CAA for NNF, together with our commentary. One thing that is immediately clear when looking at the difference between RSP's contours and the CAA's contours is the stark difference that a marginal tweak to the fleet mix produces. The NNF fleet mix used by the CAA is a closer representation of the fleet mix that RSP now says will be using at its proposed airport. However, if another 10% or 20% of the aircraft in the mix were replaced with noisier aircraft, the average noise contours would expand. We make no claim that the fleet mix that NNF gave to the CAA represents the likely worst case. The lack of detail from RSP, the lack of credible forecasting, the rejigging of forecasts, and the lack of an operational plan from the Applicant mean that NNF, other residents and the ExA were prevented from analysing the likely worst case scenario with regard to noise. This means that there is no calculation of what the worst case noise outcome might be before either the ExA of the SoS.

2 NNF18 is TR020002-004224-AS-NNF
3 NNF16 is TR020002-004001-NNF
4 NNF22 is TR020002-004696-NNF

8. RSP has not set out the *"likely significant effects"* of its proposal in terms of aviation noise. RSP's proposed Noise Mitigation Plan is nowhere near *"adequate to deal with the worst case"*. The CAA contours produced for NNF reveal a worse case than the one that RSP is suggesting. Moreover, given the limitations in the NNF brief to the CAA (we set these out in detail in the attached document), the CAA contours do not show the likely worst case. The worst case is unknown, so – by definition – there is also no adequate mitigation plan that attempts to deal with the likely worst case.

Noise contours commissioned from the Civil Aviation Authority by No Night Flights

14th June 2019

NNF18

9. The PINS advice note[5] on using the "Rochdale envelope" says that the Applicant is required to provide *"sufficient information to enable 'the main,' or the 'likely significant' effects on the environment to be assessed"*.

10. The note says that: *"In assessing the likely effects, it is entirely consistent with the objectives of the Directive to adopt a cautious 'worst case' approach."*

11. The note says that: *"such an approach will then feed through into the mitigation measures envisaged ... It is important that these should be adequate to deal with the worst case, in order to optimise the effects of the development on the environment"*.

12. The Applicant has failed to do this. The contours we commissioned from the CAA demonstrate that tens of thousands of people will suffer a level of aircraft noise that is above the levels set out in the World Health Organisation's guidance, and that is above the level at which the UK Government accepts that *"significant community annoyance"* begins. The Applicant has not provided the information to enable the ExA to examine the likely significant effects of its proposal on the environment. Moreover, the Applicant is suggesting mitigation measures for just a few hundred people.

13. It is for the ExA to decide whether it is satisfied, given the nature of the project in question, that it has *"full knowledge"* of the project's likely significant effects on the environment. We say that the Applicant has failed to produce this. Moreover, now that No Night Flights has provided this information, it is clear that the likely significant negative effects of this proposal will far outweigh the small advantages that the Applicant suggests it will deliver.

NO NIGHT FLIGHTS

5 PINS Advice Note No 9 'Using the Rochdale Envelope' July 2018, Version 3

Why No Night Flights commissioned this work

14. No Night Flights (NNF) was established in 2009 as a response to the problem of aircraft noise from aviation operations at Manston. NNF replaced the Manston Airport Group (MAG). MAG had been in existence since 1999.

15. Most of NNF's members live under the flight path. They include residents from the western edge of Herne Bay in Hampton, to the eastern edge of Ramsgate near the harbour. We also represent residents from the villages under and near the flight paths.

16. NNF came into existence purely because of the noise nuisance created by airport operations at Manston. We know how much noise can be generated by aviation operations on the Manston site. Very early on in the DCO consultation process, it became clear to us that RSP was not presenting the public with an accurate picture of the future noise impact that we would suffer as a result of its planned operation.

17. We have set out in all our consultation submissions, as well as in numerous submissions to the DCO process, the fact that RSP's noise predictions fall far short of our experience of the actual levels of noise produced when the airport was operational. We have submitted evidence about the levels of noise captured by the noise monitors that were in place during that period. We have submitted our "noise nuisance map", that clearly shows the home location of residents who complained about noise levels when the airport was operational. However, the DCO process is designed in such a way that the Applicant can simply ignore our evidence and our challenges. This is what RSP has done.

18. We have also made the point that RSP intends to operate far more ATMs than any of the previous airport operators have handled, and that, logically, it is likely that the noise nuisance generated by RSP's plans would be far greater than the previous noise level that we experienced. To put this into context, we produce below a brief summary of the passenger and cargo Air Transport Movements (ATMs) at Manston during its life as a commercial airport. We have excluded 2014 as the airport was not open for a complete year. We have also excluded General Aviation (GA) ATMs.

Manston/Kent International Airport 1999-2013 **ATMs**

	Lowest annual total	**Highest** annual total	**Average** annual total
Cargo ATMs	**322** in 2006	**1,081** in 2003	**587**
Passenger ATMs	**5** in 2002	**4,454** in 2005	**656**

19. RSP says that it will cap the total number of ATMs for its proposal at 26,468 excluding GA ATMs. RSP's Environmental Statement (ES) suggests a Year 20 total of 17,170 cargo ATMs and 9,298 passenger ATMs. Looking at the table above, it is immediately clear that RSP's operation would be many, many times bigger than that of any previous airport operator on that site. RSP's cargo operation would be more than 29 times the size of the average annual cargo operation previously at Manston, and almost 16 times the size of Manston's best year ever (2003) for cargo ATMs. RSP's passenger operation would be more than 14 times the size of the average annual passenger operation previously at Manston, and more than twice the size of Manston's best year (2005) ever for passenger ATMs. In both cases, the "best year ever"

for the total number of ATMs was many years ago. The table below shows just how much bigger RSP's aviation operation would be than any previous commercial aviation operation that local people have experienced on that site. The full table showing commercial ATMs at Manston from 1999 to 2014 is on page 34.

	ATMs	Multiple of previous operators' **average** year	Multiple of previous operators' **best** year
RSP's suggested **cargo** ATM cap	**17,170**	**29.3**	**15.9**
RSP's suggested **passenger** ATM cap	**9,298**	**14.2**	**2.1**

20. It is not just the comparison with Year 20 that should be noted. RSP "forecasts" a steep growth in ATMs right from the day that its new airport would open. This means that a population that would not have experienced aviation noise at all for about a decade[6] will be exposed to levels of noise outstripping those of previous operations on the site very early on in RSP's growth plans.

21. It is clear that RSP plans an operation that would be many multiples of the size of the previous operations on that site. Despite this, RSP's ES suggests that the noise impact of its operations would be far less than the noise impact we previously experienced. **This has no credibility**.

22. RSP has ignored all our submissions about recorded reality and has refused to deal with the evidence we have produced about past noise impact.

23. The ExA has been entirely reliant on RSP's modelling of noise contours. Those contours were produced by someone with no previous experience of doing this. The ExA said in January that it did not intend to commission independent expert evidence about noise.

24. ICCAN made it clear that it is too young an organisation to bring any expertise to the table to assist the ExA.

25. Given the distinct gap between our actual experience of the noise created by airport operations and RSP's predictions about the future noise impact that it says its much, much bigger airport operation would generate, we felt we had no option but to commission independent expert input ourselves.

26. We commissioned the Environmental Research and Consultancy Department (ERCD) of the Civil Aviation Authority to do this work. The ERCD's role is to provide technical advice to the Department for Transport (DfT) and other Government departments. The ERCD also provides technical advice, including the provision of noise exposure contours, to airport operators, local authorities and others on a commercial basis. We chose the CAA because:

- It is independent.
- It is a recognised centre of excellence in this field
- It is using the latest version of the ANCON noise model, v.2.4

6 Assuming that a DCO is awarded and that RSP takes possession at the earliest in 2021-2022, and then taking into account time required for redevelopment and the CAA licence and airspace change process

- It could do the work by using the same methodology and the same technology that it will use to assess any airspace change proposal that RSP might later submit should a DCO be awarded

27. As part of the Stansted Airport planning application UTT/18/0460/FUL, which Uttlesford District Council resolved to grant in November 2018, noise contours were commissioned. The Uttlesford DC planning committee report dated 30 November 2018 notes in paragraph 9.175 that the ERCD was asked to do this work:

28. *"For the purposes of the ES aircraft noise modelling has been produced by the CAA's Environmental Research and Consultancy Department (ERCD), using their Aircraft Noise Contour (ANCON) model (current version 2.3). The ERCD is a specialist body within the CAA with national and international expertise on the assessment of aircraft noise. They produce noise contours for the designated London airports, and they generated the noise contours used by the Airports Commission.* ***Their work is robust, authoritative and also impartial****."* [our emphasis]

29. We set out below what we asked the CAA to produce; why we asked the CAA to produce it; and what the results of the CAA's work demonstrate. These are the noise contours that RSP should have produced for the public as part of the consultation process and then updated for the ExA.

The Brief we gave the CAA

Contours

30. Firstly, we asked the CAA to produce Lmax footprints for the Boeing 747-400.[7] The 747-400 is the workhorse of the global freighter fleet. We asked the CAA to produce its footprint for each arrival and departure route.

31. Secondly, we asked the CAA to model contours for:

- Day LAeq,16hr (0700-2300 local time), plotted from 51 to 72 dB(A) in 3 dB steps; and
- Night LAeq,8hr (2300-0700 local time), plotted from 45 to 72 dB(A) in 3 dB steps.

32. We also asked for four runway modal splits:

- 100% west
- 100% east
- 70% west/30% east
- 30% west/70% east.

Fleet mix

33. We gave the CAA a fleet mix to use. That fleet mix is set out in the CAA's report (Appendix Two, pages **Error! Bookmark not defined.-Error! Bookmark not defined.**). It draws to a very significant extent on the fleet mix set out by RSP in its ES last year. However, despite identifying a number of changes to the fleet mix and to operations since producing the ES last year, RSP has not updated its original fleet mix. This is unacceptable.

34. In the ISHs in March and in June, Nick Hilton of Wood repeatedly asserted that RSP's fleet mix is not a 100% prophecy and that it is not a guarantee. He repeatedly said that it was, however, a robust enough estimate of future operations to absorb any variation of parameters in the future. These two assertions are contradictory. The ExA cannot assess the likely significant impact of operations if the fleet mix that underpins these operations is not updated in line with changes in the Applicant's "forecasts".

35. In the ISHs in March, RSP said that its plan now includes "new" integrators. RSP said that the implication of this for the fleet mix in the ES is that the ATR-72 craft should be deleted. RSP said that these craft would be replaced by B737s and B767s. We asked the CAA to make this adjustment. We chose the B737-800 and the B767-300 to replace the ATR-72s having looked at the fleet mix of Amazon and Alibaba. Had RSP updated its fleet mix we would have been able to use that.

36. We asked the CAA to include in the fleet mix the 38,000 General Aviation ATMs for which RSP has asked permission. Again, there is little information available as to what craft would be flown. RSP has mentioned "two kinds of Piper" but has said no more. We knew that TG Aviation (the training school that was based at Manston when the airport was operational) uses C152 and Piper Warriors. We also knew that, in the past, Manston had welcomed executive jets to the airport. We asked the CAA to divide the 38,000 ATMs evenly across the four categories set out by the CAA:

7 Boeing 747-400, GE CF6 engines (ANCON type B744G)

- SP = single propeller e.g. C152
- STP = small twin-piston e.g. C310
- STT = small twin-turboprop e.g. F406
- EXE3 = executive jet (Chapter 3) e.g. C510.

An "average" day

37. Beyond the statement that RSP has modelled an average winter's day rather than an average summer's day, RSP has not set out clearly how its ATMs might be allocated across a year or across a day. As we had no further information to go on, we asked the CAA simply to take the RSP fleet mix, substitute the ATR-72s as explained above, and then divide the annual ATM total by 365. This means that our contours do not capture the worst case, as we were not able to model what the worst day might look like.

38. RSP has never produced an outline timetable for its operations, so we were unable to produce any noise contours using Lden. (Lden is the average sound level over a 24 hour period, with a penalty of 5 dB added for the evening hours of 19:00 to 22:00, and a penalty of 10 dB added for the night time hours of 22:00 to 07:00.) RSP accepts that there will be a clustering of ATMs in the evening. Our contours do not capture the recognised increased annoyance caused by aircraft noise in the evening and so, again, do not represent the likely worst case.

Night operations

39. We asked the CAA to produce night noise contours. RSP has never produced a fleet mix for its night flight operations, whether during the consultations or during the examination itself. All RSP has said is that it envisages around seven or eight night time flights on average a night, and that it wishes to allow dedicated cargo planes that had been scheduled for the day period to arrive late, during the night period. RSP also wants the freedom to allow passenger planes to depart from 0600.

40. RSP has asked for a Quota Count budget for the hours 2300 to 0700 of 3,028 QC points. It was perfectly clear in the ISH on Environmental Issues on 5th June 2019 that RSP had no idea what its 3,028 QC points would translate into in terms of a number of ATMs and the type of aircraft. Indeed, RSP seemed doubtful under questioning as to whether it would be possible to "retrofit" ATMs to its QC budget. We find this astonishing.

41. As an aside, if RSP does not know what its night operations would look like, it is evident that RSP cannot make a business case to support the need for those night flights.

42. Given this limited information, we developed an average night fleet mix that would use a budget of less than 8.3 QC points per night (3,028 ÷ 365); that would number fewer than seven or eight ATMs per night; and that would include dedicated cargo planes arriving and passenger planes departing. We used aircraft already in RSP's fleet mix for these ATMs. Our night fleet mix is set out in the CAA's report on page **Error! Bookmark not defined.**.

Flight paths

43. RSP has produced indicative flight paths only. We therefore asked the CAA to use the flight paths that it had approved when the airport first became a commercial airport – the "Wiggins routes", see pages **Error! Bookmark not defined.-Error! Bookmark not defined.**. These routes capture the operator's various methods of minimising overflying of centres of

population. The routes were crystallised with the CAA's approval in the airport's AIP in September 2007 and updated in 2010. The AIPs reflect the Wiggins routes.

44. In 2009 NNF had a number of conversations with the CAA about the approved routes as, at that time, we were experiencing some off-route flying. The CAA confirmed that the routes that we had from the Wiggins days and the AIP routes were the approved routes. Pilots coming in to land, particularly in a fully laden 747-400, want to establish themselves on the centreline about 10 miles away from the airport. There is limited room for manoeuvre in a fully loaded 747 on a 3 degree Continuous Descent Approach. This means that the arrivals path is over Herne Bay and Ramsgate for the bigger, noisier planes. The departure routes were created to minimise the overflying of Herne Bay and Ramsgate.

45. We asked the CAA to use the routes that it had previously approved and that we knew had previously been flown. In practical terms, whatever routes the CAA finally approves, should the DCO be awarded, will be driven by safety and by avoiding population centres where possible. Given the geography, the flightpaths will always be pretty much the same as they were in the past.

The Rationale for our Brief to the CAA

Lmax footprints for the Boeing 747-400

46. We asked the CAA to model these footprints because they are the best reflection of the noise that we actually hear. The contour maps on pages **Error! Bookmark not defined.-Error! Bookmark not defined.** are maps of the noise harm that will be caused by a single 747-400G as it follows each of the flight paths.

47. People do not hear the average of a series of separate noise events. Noise harm is experienced "in the moment" for the period that it takes a plane to fly over a location. If 100 aircraft, each creating noise levels of 90dB Lmax, fly over someone's house during a day, that person will hear 100 individual 90dB noise events. He/she will not hear an average of those 100 flights spread evenly over a sixteen hour period. LAeq is *least misleading* when used for airports where the noise is almost constant because planes are flying overhead all the time. This is not the case at Manston where RSP says that it will cap cargo and passenger ATMs at 26,468 per annum, which is around 72 to 73 ATMs per twenty four hour period.[8]

48. As far as we can make out from RSP, a maximum of seven of eight of those 72 to 73 ATMs would operate during the night period (RSP steadfastly avoids having an ATM cap for its night period, so, in reality, none of us knows how many night ATMs there will be). That leaves around 65 cargo and passenger ATMs on average per sixteen hour period – an average of four ATMs an hour. If the noise of 65 90dB flights is averaged out, **the resulting noise footprint will be artificially small**. It will suggest that the noise created is almost imperceptible above the existing ambient noise level. However, the noise of four 90dB aircraft an hour going overhead all day, every day, can be very intrusive. A 90dB overflight, we know from experience, is enough to prevent conversation and mask the sound from a television. At night it will wake people.

49. The suggested cargo and passenger ATM cap for RSP's new airport is a few percent of the total ATMs for an airport like Heathrow. For an operation like the one RSP plans for Manston, with an average of four ATMs an hour, an average measure of noise across a sixteen hour period will do a superb job of masking the true noise impact, and must be rejected. The single noise footprints for an aircraft are the closest-to-experience representations of the noise impact that we can currently produce. They are to be preferred.

Day and Night LAeq in 3dB steps

50. We asked the CAA to model these contours because LAeq is the most widely-used metric when airports are monitoring the noise created by current operations or when they are seeking permission to expand, and also because RSP has chosen to focus on these contours. As we explain above, we know that **they are not an accurate reflection of the noise nuisance that individuals under the flight path or near the airport will suffer**. Additionally, in our assessment, the LAeq contours are unhelpful as a metric to use to inform local residents as to the level of noise that they might experience when a new airport is opened. However, we wanted to be able to compare the LAeq contours produced by RSP using its original fleet mix in the ES with LAeq contours generated by the CAA using a fleet mix that is a better match for the mix that RSP now says is most likely to be using the airport.

8 We are ignoring the additional 38,000 General Aviation ATMs for these purposes

51. We asked the CAA to show the contours in increments of 3dB. It is beyond us why RSP has chosen not to show this level of detail in its ES.

52. In recognition of the WHO's guidance that people should not be subjected to aircraft noise above 45dB Lden, we wanted to ask the CAA to produce contours for Lden. RSP has said in the ISHs in March that there will be busy periods in an average day and that there will probably be a clustering of ATMs in the evening. RSP also said in answer to ExA 2WQ Ns 2.16: *"… as night ATMs will not be permitted, this will cause a higher than average demand during the hours immediately after opening in the morning and again in the hours approaching closure in the evening."* This would have a marked effect on the Lden contours. However, RSP has provided no useful information as to how ATMs might be spread across the day and evening so we were unable to model contours using this slightly more nuanced metric. Again, this means that our contours do not model the likely worst case.

The runway modal splits

53. What RSP has set before the ExA is a suite of noise contours, the vast majority of which show the noise generated by its annual ATMs, spread out almost entirely evenly across the year, then spread out evenly over an average day, and then averaged out between easterly and westerly operations. This is a long way from being a fair representation of reality.

54. To a great extent, it is the wind that determines whether operations are easterly or westerly, with the airport operator articulating a preference for westerly operations as and when it is safe to do so. In reality, on an average day, the wind does not blow 70% of the time in one direction and 30% in the other. Operations are never simultaneously east and west for an eight or sixteen hour period as RSP's contours suggest. The 70/30 split is only apparent as a rough average when viewed across an entire year, but local people do not experience 365 days a year with the wind being 70% from the east and 30% from the west every day.

55. In reality, the wind tends to blow in a certain direction for days at a time. In reality, therefore, residents will most often experience a full day's operations being 100% to the west or 100% to the east, rather than being split neatly 70/30 for each of the 365 days of the year. TDC's consultants, Ricardo, identified this flaw in RSP's modelling in Ricardo's submission to D6.

56. Given our past experience of entire days' operations being to the west or the east, we thought it imperative that we capture the noise impact of 100% westerly and 100% easterly operations.

The Results

Lmax footprints for the Boeing 747-400

MAP 1 – FULL IMAGE ON PERROR! BOOKMARK NOT DEFINED.

One B747-400G arriving from the West.

80dB: 750 people live inside this contour

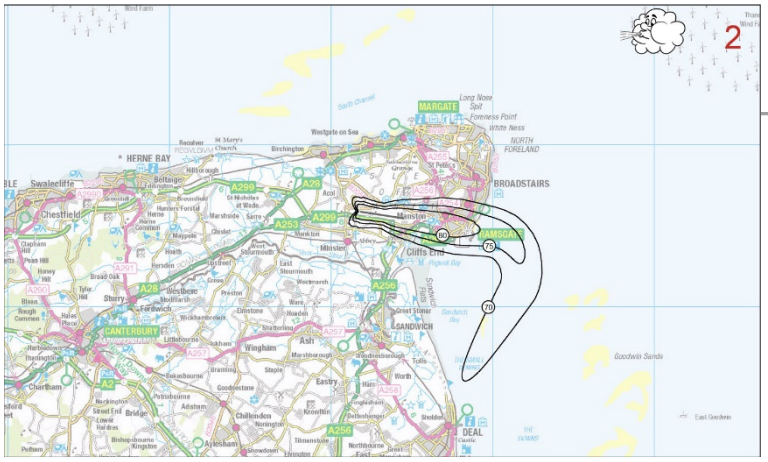
75dB: 5,400 people live inside this contour

70dB: 26,950 people live inside this contour [9]

57. The 70dB contour extends right over the town of Herne Bay, and over Hampton and Studd Hill in the west. The 80dB contour extends into St Nicholas at Wade. 80dB is typically described as a noise equivalent to an alarm clock going off close to a sleeping person.

58. If this DCO is awarded, the numbers of people who will experience the noise levels shown in Map 1 will increase substantially. The Canterbury Local Plan provides for over 4,000 new homes in Herne Bay. Four new housing estates, totalling towards 3,000 homes, will be at the eastern end of town, the part of the town most affected by aviation noise from Manston. Some of those estates are already at the planning permission stage. At a conservative estimate, an additional 6,000 to 9,000 people will be in the 75dB contour when these new homes are built.

MAP 2 – FULL IMAGE ON PERROR! BOOKMARK NOT DEFINED.



One B747-400G departing to the East.

80dB: 22,050 people live inside this contour

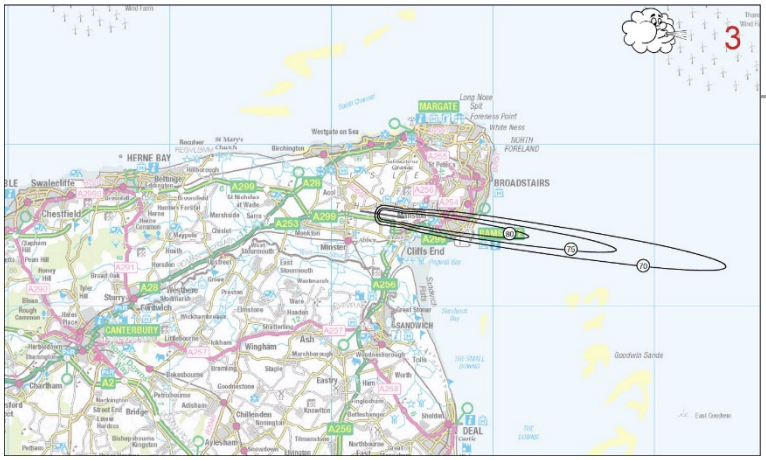
75dB: 33,100 people live inside this contour

70dB: 42,600 people live inside this contour [10]

59. The 80dB contour extends right over Ramsgate and beyond the harbour arm.

9 CAA table 18, see page 40
10 CAA table 16, see page 39

MAP 3 – FULL IMAGE ON PERROR! BOOKMARK NOT DEFINED.



One B747-400 arriving from the East.

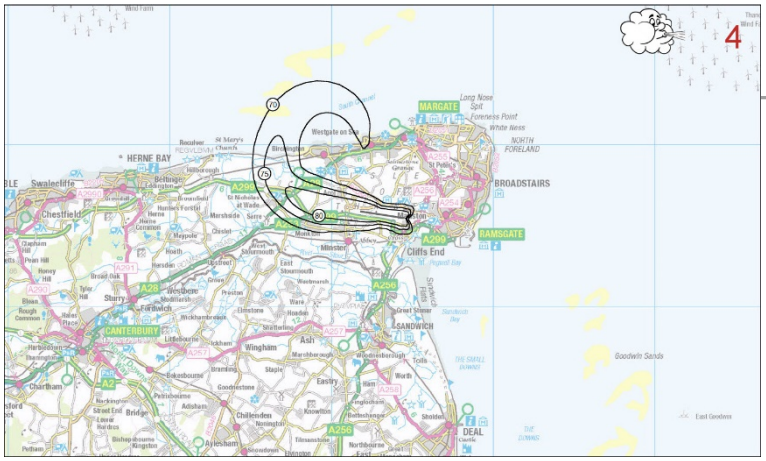
80dB: 15,100 people live inside this contour

75dB: 20,550 people live inside this contour

70dB: 26,800 people live inside this contour [11]

60. The 80dB contour extends from the runway, right over the town and over the harbour. The 70dB contour covers almost the entire town.

MAP 4 – FULL IMAGE ON PERROR! BOOKMARK NOT DEFINED.



One B747-400 departing East then turning North.

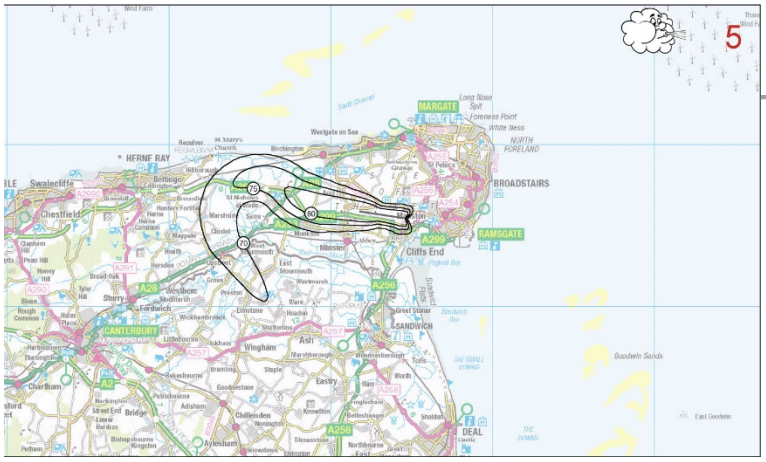
80dB: 650 people live inside this contour

75dB: 2,100 people live inside this contour

70dB: 6,100 people live inside this contour [12]

61. There are two departure paths available when a plane departs to the west over Herne Bay. Route 1 means a turn to the north over the Wantsum Channel.

MAP 5 – FULL IMAGE ON PERROR! BOOKMARK NOT DEFINED.



One B747-400 departing East then turning South.

80dB: 650 people live inside this contour

75dB: 2,250 people live inside this contour

70dB: 5,650 people live inside this contour [13]

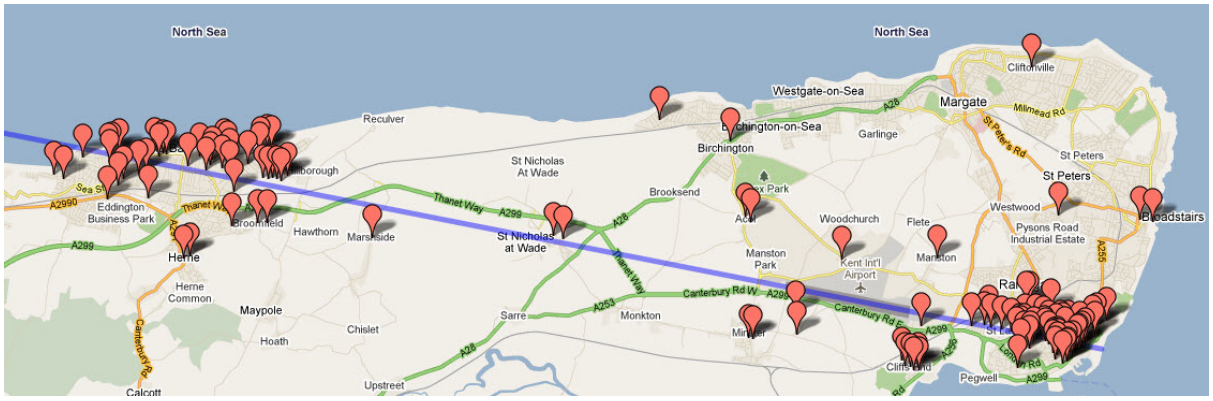
11 CAA table 17, see page 40
12 CAA table 14, see page 39
13 CAA table 15, see page 39

62. The second departure path for a plane departing to the west over Herne Bay is Route 2. This means a turn to the south over St Nicholas at Wade.

Comparisons

63. It is hard to compare the CAA's noise contours with those provided by RSP. As far as we can tell (it is needlessly difficult to navigate RSP's thousands of pages of unhelpfully referenced submissions, so we may have missed something), RSP has failed to model the noise impact generated by a single 747-400 flight on each of the five available routes. The nearest comparators that we can find are RSP's LASmax night contours for Year 20.[14]

64. A comparison of RSP's Figure 12.9 (page **Error! Bookmark not defined.**) with NNF's Maps 1 and 2 reveals a significant noise impact that RSP has simply not shown. The 70dB contours extend over the entire town of Herne Bay in the NNF contours. RSP has only modelled 80dB LASmax and so Herne Bay does not even appear on its maps. This suggests that Herne Bay will be entirely unaffected by aircraft noise – an assertion often made by the RSP team at various consultation events. However, Herne Bay residents know from experience that a single 747-400 creates a significant noise footprint. A 747-400 overflying Herne Bay in the daytime is loud enough to make people look up as it goes over. At night, the impact is greater. The real impact on Herne Bay residents is entirely missing from RSP's assessment of noise impact.



65. We have submitted many times before NNF's map of noise complaints to illustrate the homes of people who felt so strongly about the aircraft noise generated by Manston that they complained. We submitted it in our response to the July 2017 and the February 2018 statutory consultations. We submitted it in our critiques of Dr Dixon's "Azimuth – volume I" report in February 2018, December 2018 and February 2019. We submitted it in NNF06 and NNF09 in February 2019 in response to D3. It has been ignored by RSP on every occasion. We submit it again above. It can immediately be seen how our noise map, identifying real people who made actual complaints about real aircraft noise, matches the CAA noise contours for a 747-400.

66. Clearly, footprints like the ones we've shown are the best representation of the actual noise (and therefore the actual harm) experienced by the people who live, work and study within earshot of the flight paths.

67. Averaging the noise contours gives the appearance of averaging the harm, and the technique that RSP is using to present the effect of its proposals downplays the actual harm to the extent

14 ES Figure 12.9

that it appears not to exist. **Averaging noise destroys evidence of harm, and must not be relied on by the ExA when assessing the potential harmful effects of the proposal**.

Contours for operations 100% to the east or west – a real "average" day

MAP 6 – FULL IMAGE ON PERROR! BOOKMARK NOT DEFINED.

Runway operations during **Easterlies**

63dB: 700 people live inside this contour

54dB: 29,100 people live inside this contour

51dB: 37,950 people live inside this contour [15]

68. These contours are average contours, and a number of things are immediately apparent. There is **no 75dB or 80dB contour** – the averaging of all the noise events means that they simply cease to exist. Those **actual** noise events of 75dB, 80dB and over (and 100dB was frequently recorded by the noise monitor at Clarendon School) have been "averaged" out of existence. The average contours are clearly much smaller. None of them extend into Herne Bay, although we know that **every** 747-400 arrival over Herne Bay is heard the length of the town, as are smaller passenger planes like the Fokker 70 and Fokker 100 previously flown by KLM and EUJet.

69. We set out in NNF16, in answer to ExA 2WQ Ns 2.13, the fact that the Government recognises that the onset of significant community annoyance now begins at 54 dB LAeq, 16hr. That's 29,100 people when operations are to the east. This population is one that would be newly subjected to aviation noise. This means that this population will be more likely to experience this change in its ambient noise environment as a significant negative change in the quality of life. It is uncontroversial that the onset of significant community annoyance for this population will therefore begin at a level below 54 dB LAeq, 16hr.

70. As we set out in NNF09, the socio-economic facts are that Thanet has a population that is likely to be **more** vulnerable to the damaging effects of aviation noise than the average population as a result of the local age and health profile.

71. In NNF14 at paras 11-13, NNF quoted from the WHO's 2018 report:

72. *"For average noise exposure, the GDG [Guideline Development Group] strongly recommends reducing noise levels produced by aircraft below 45 dB Lden, as aircraft noise above this level is associated with adverse health effects."* [16]

73. The best comparator that we can find for our Map 6 is RSP's Figure 12.6 (see page **Error! Bookmark not defined.**) – daytime LAeq 16 hour, Year 20. Of course, RSP has averaged operations to the east with operations to the west. This means that the noise impact is

15 CAA table 7, see page 35
16 "Environmental Noise Guidelines for the European Region" - previously submitted by NNF for D3

considerably understated in RSP's contours. RSP's 50dB contour over Ramsgate falls slightly outside the CAA's 57dB LAeq contour and between that contour and the CAA's 54dB LAeq contour. The CAA's contour map shows that between 29,100 and 37,950 people[17] will experience average noise levels over 54 dB LAeq. That is the level of the onset of significant community annoyance. RSP is seeking to downplay this. RSP is not proposing to offer any mitigation.

74. In TR020002-004180, the ExA's list of Action Points arising from the June hearings, the ExA asks at point 7 about the proximity of the 57dB contour to Albion Place Gardens.

75. The additional KML files that the CAA provided allow us more flexibility in viewing the contours, for example being able to "zoom in". Below is the CAA Map 6, viewed through Google Earth. The 57dB LAeq contour is highlighted in pink for clarity. Below that, at paragraph 69, is a closer look at the eastern end of the 57dB contour.

76. 

17 CAA table 7, see page 35

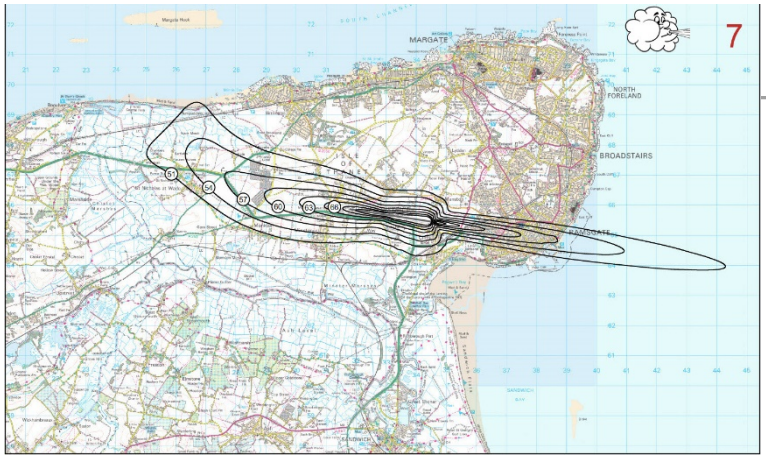
77. 

78. The Google Earth images overlaid with the CAA contours show that Albion Place Gardens are entirely within the 57dB Leq contour for 100% operations to the East, as is much of central Ramsgate's harbour frontage, from the Old Sailors' Church by Nelson Crescent to the Bandstand at Wellington Crescent.

79. The other thing that is immediately clear when looking at the difference between RSP's contours and the CAA's contours is the stark difference that a marginal tweak to the fleet mix produces. The NNF fleet mix used by the CAA is a closer representation of the fleet mix that RSP now says will be using its proposed airport. However, if another 10% or 20% of the aircraft in the mix were replaced with noisier aircraft, the average noise contours would expand. There is no confidence that the fleet mix that NNF gave to the CAA represents the likely worst case. The lack of detail from RSP, the lack of credible forecasting, the rejigging of forecasts, and the lack of an operational plan from the Applicant mean that residents and the ExA are prevented from analysing the likely worst case scenario with regard to noise.

80. RSP also produced a 50dB LAeq contour at p383 of the appendices to its response to the ExA's 3WQ – see page **Error! Bookmark not defined.**. That 50dB LAeq contour is similar to the CAA 51dB LAeq contour to the west and markedly understates the noise impact to the east. What it fails to set out is the fact that some of the schools that RSP has marked in Ramsgate are within the 57dB LAeq contour.

MAP 7 – FULL IMAGE ON PERROR! BOOKMARK NOT DEFINED.



Runway operations during **Westerlies**

63dB: 300 people live inside this contour

54dB: 14,700 people live inside this contour

51dB: 21,800 people live inside this contour [18]

81. 14,700 people will suffer noise levels at or above the level of significant community annoyance when operations are towards the west. Again, we cannot find this clearly set out anywhere in RSP's documentation.

82. RSP produced a 50dB LAeq 100% west contour at page 382 of the appendices to its response to the ExA's 3WQ. It shows the primary school at St Nicholas at Wade as being outside the 50dB LAeq contour. The CAA shows this school as being between the 51dB LAeq and the 54dB LAeq contours.

Contours for operations 70% west and 30% east

MAP 8 – FULL IMAGE ON PERROR! BOOKMARK NOT DEFINED.

Runway operations during **70W:30E**

54dB: 19,400 people live inside this contour [19]

83. We also asked the CAA to produce contours for runway operations averaged out so that 70% are west and 30% are east.

84. Again, even with the caveat that these contours are artificial, and that this *average of an average* understates the impact, the noise impact is still significant. 19,400 people will suffer a noise level of 54dB LAeq and above. That's 19,400 people who, even on RSP's average of an average, will suffer significant community annoyance.

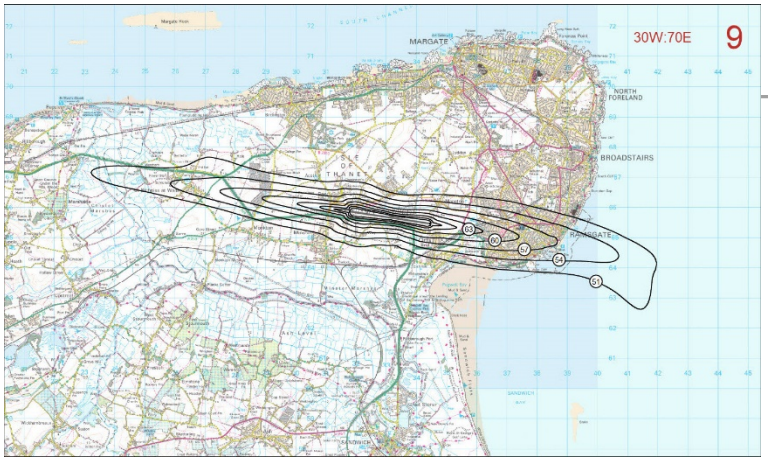
85. Again, the contours in Map 8 are larger than the contours in RSP's Figure 12.6 from its ES (see page **Error! Bookmark not defined.**). In Ramsgate, RSP's 50dB LAeq contour falls

18 CAA table 6, see page 35
19 CAA table 8, see page 35

partly inside the CAA's 51dB LAeq contour and then runs with the CAA's 54dB LAeq contour to the north.

Contours for operations 30% west and 70% east

MAP 9 – FULL IMAGE ON PERROR! BOOKMARK NOT DEFINED.



Runway operations during **30W:70E**

54dB: 25,250 people live inside this contour [20]

86. We asked the CAA to produce contours for runway operations averaged out so that 30% are west and 70% are east. As we say above, we produced these contours simply so that we would have a comparator for the contours produced by RSP. It must be remembered that **these contours do <u>not</u> in any way reflect the reality of operations**. Operations are never simultaneously east and west for a sixteen hour period as RSP's contours suggest. The contours are generated by taking the "forecast" fleet mix and ATM total for Year 20, then dividing those ATMs by 365 to arrive at an "average" ATM total for one day. That day's average ATMs is then split between easterly and westerly operations 30/70 or 70/30 on the assumption that traffic might be split in this way over the course of a full year. This 30/70 split does not happen in practice. The wind does not blow neatly 30% in one direction then 70% in another to allow this split for every 16 hour period. This 30/70 split does not show an "average" day.

87. Even with the caveat that these contours are artificial, and that this average of an average understates the impact of the aircraft noise, the noise impact is still significant. 25,250 people[21] will suffer a noise level of 54dB LAeq and above. That's 25,250 people who, even using RSP's approach of taking an average of an average, will suffer significant community annoyance.

88. It is instructive to look at the noise footprints produced by the CAA for a single 747-400 (Maps 1 to 5) and then compare those footprints with the CAA's average contours for operations 100% to the east or west (Maps 6 and 7). The contours shrink as quieter aircraft are added into the calculation and the noise impact of four aircraft an hour is averaged out over a full 16 hour period. If we then compare the 100% east or west contours with the 70/30 splits, we see that the contours shrink again. Finally, if we look at RSP's LAeq contours (on pages **Error! Bookmark not defined.-Error! Bookmark not defined.**), we can see the diminishing effect of taking a 70/30 modal split and averaging it with a 30/70 modal split. The full extent of the noise harm presented by every 747-400 appears to have vanished. Even the extent of the noise harm caused by a 100% east or west operation has shrunk significantly. We conclude that this is why RSP chooses to present so few contours and to present contours that represent average noise that is then averaged again.

20 CAA table 9, see page 36
21 CAA table 9, see page 36

89. RSP's Noise Mitigation costs will be driven by the number of people who fall within whichever noise contour that the ExA decides is appropriate. As an example to illustrate what this could mean, we note that the planning approval given to Stansted by Uttlesford DC includes a requirement to extend the sound insulation grant scheme to include households in the 57 dB LAeq,16h noise contour. This is set out in the relevant draft s106 agreement (see schedule 3: Part 1).[22] The CAA contours for RSP's proposals for operations 100% to the east show that 8,300 households fall within the 57 dB Leq contour and would be entitled to a sound insulation grant under the Stansted scheme. That's £41.5m to add to the insulation scheme costs for homes within the higher contours of 60dB LAeq and 63dB LAeq. The smaller the relevant contour, the smaller RSP knows its noise mitigation bill will be.

Night contours

90. We asked the CAA to produce four sets of night contours:

- 100% to the east
- 100% to the west
- 30% to the west and 70% to the east
- 70% to the west and 30% to the east.

91. NNF set out in detail the WHO's 2018 guidance on aviation noise in NNF09. In its 2018 report,[23] the WHO said that:

92. *"11% of participants were highly sleep-disturbed at a noise level of 40 dB Lnight."*

93. At 55dB Lnight, that figure rose to 25.5%.[24] The WHO went on:

94. *"There is additional uncertainty when characterizing exposure using the acoustical description of aircraft noise by means of Lden or Lnight.* ***Use of these average noise indicators may limit the ability to observe associations between exposure to aircraft noise and some health outcomes (such as awakening reactions); as such, noise indicators based on the number of events (such as the frequency distribution of LAmax) may be better suited.*** *However, such indicators are not widely used.* ***The GDG acknowledged that the guideline recommendation for Lnight may not be fully protective of health****, as it implies that around 11% (95% CI: 4.72–17.81) of the population may be characterized as highly sleep-disturbed at the recommended Lnight level. This is higher than the 3% absolute risk considered for setting the guideline level."* [25] *[our emphasis]*

95. RSP has chosen to ignore the latest WHO guidance. The ExA should not.

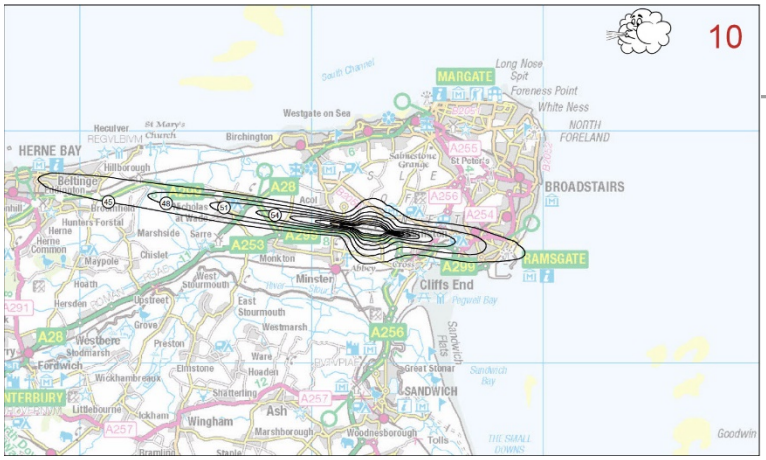
96. As we have said above, we were unable to provide the CAA with the data that it would need to calculate Lden as RSP has not produced any information about the likely timing of flights. In our assessment, given the relatively small number of night ATMs that would be spread across an average night, the LAmax contours would be the most accurate reflection of the

22 Document submitted separately with this submission.
23 World Health Organisation - Environmental Noise Guidelines for the European Region 2018
24 ibid – table 32
25 ibid – section 3.3.2.3

level of noise that each night ATM will cause. Averaging the noise generated by seven or eight flights across an eight hour period is meaningless.[26]

97. Nevertheless, in order to be able to compare the CAA's work with RSP's, we asked the CAA to provide night contours based on LAeq 8 hr.

MAP 10 – FULL IMAGE ON PERROR! BOOKMARK NOT DEFINED.



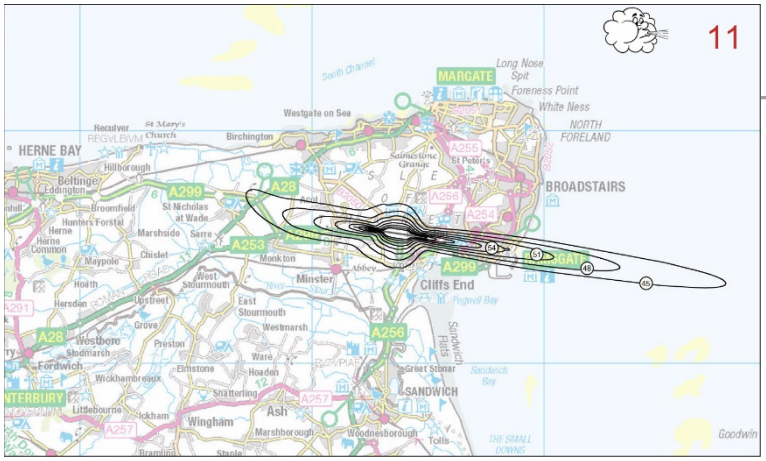
Runway operations during **Easterlies** at night

45dB: 28,750 people live inside this contour [27]

3,163 people highly sleep-disturbed

98. Map 10 shows the average noise nuisance created by six night ATMs averaged across an eight hour period when operations are to the east. 28,750 people currently live within the 45dB LAeq contour, so that's 28,750 people who would experience a level of aircraft noise at night at least 5dB above the level recommended by the WHO. More than 11% of these people are predicted to be highly sleep-disturbed. That's at least 3,163 people. This will have negative implications for their health. As we have explained above, the likely number of people adversely affected will soon be much higher given the plan for four new housing estates in eastern Herne Bay. A conservative estimate of an additional 6,000 to 9,000 people will be in the 45dB contour.

MAP 11 – FULL IMAGE ON PERROR! BOOKMARK NOT DEFINED.



Runway operations during **Westerlies** at night

45dB: 22,450 people live inside this contour [28]

2,470 people highly sleep-disturbed

99. Map 11 shows the average noise nuisance created by six night ATMs averaged across an eight hour period when operations are to the west. 22,450 people live within the 45dB LAeq contour, so that's 22,450 people who would experience a level of aircraft noise at night at least

26 We are ignoring here the freedom that RSP seeks to carve out via its Noise Mitigation Plan to have a countless number of night flights using aircraft rated QC0.125 and QC0. The Government recognises that these aircraft create enough noise to cause disturbance to people. RSP has ignored this

27 CAA table 11, see page 37

28 CAA table 10, see page 37

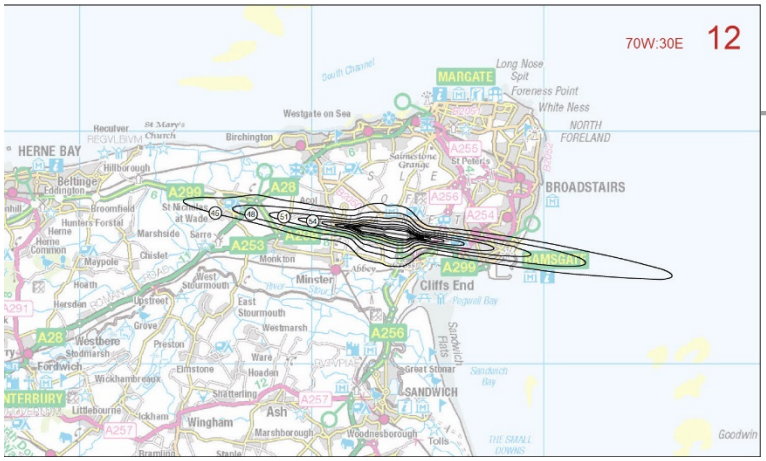
5dB above the level recommended by the WHO. More than 11% of these people will be highly sleep-disturbed. That's at least 2,470 people.

100. RSP's night LAeq contours are in the ES at Figure 12.7 (see page **Error! Bookmark not defined.**). It is hard to know how RSP calculated these contours given the confusion amongst the RSP team when asked at the ISH on Environmental Issues in June what underpinned its night operation assumptions and what fleet mix and number of ATMs led to RSP's desire for a 3,028 annual QC budget. It can be seen from RSP's Figure 12.7 that RSP has significantly understated the potential noise impact of the night flights that it could operate whilst staying within its desired QC budget and whilst following its statements about welcoming late arriving cargo planes at night and allowing passenger planes to take off from 0600.

101. RSP has shown only the 40dB and the 55dB night contours. Looking at Map 10 above, RSP's 40dB contour is smaller than the CAA's 45dB contour in the west and is closer to the CAA's 48dB contour. Looking at Map 11 above, RSP's 40dB contour is similar to the CAA's 45dB contour in the east. RSP's Figure 12.7 disguises the fact that the 57dB Lnight contour stretches well into Ramsgate and that much of the town would experience average night noise of 51dB.

102. As we have said above, we are modelling average noise here. That's the average noise of six flights, each taking, say, a minute in terms of the sound that any one person hears. Those six minutes of sound are then averaged over an eight hour period, suggesting that the actual noise experienced is at a very low level. This is highly misleading. A better indicator of the noise suffered when there are relatively few ATMs in a period is LAmax – the actual sound generated by each overflight. Our Maps 1 to 5 are the most useful when considering the impact of night noise on the local population created by one kind of aircraft.

MAP 12 – FULL IMAGE ON PERROR! BOOKMARK NOT DEFINED.

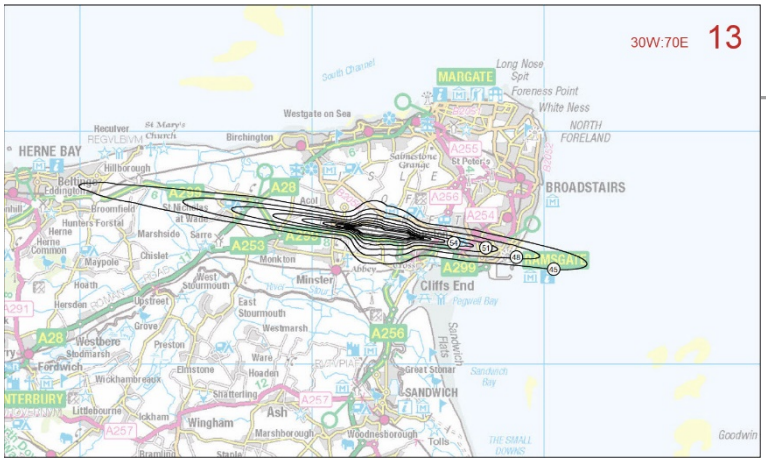


Runway operations during **70E:30W** at night

45dB Lnight: 23,300 people live inside this contour [29]

29 CAA table 12, see page 38

MAP 13 – FULL IMAGE ON PERROR! BOOKMARK NOT DEFINED.



Runway operations during **30W:70E** at night

45dB Lnight: 23,600 people live inside this contour [30]

103. For completeness, we have included LAeq contours for night noise for the "average of an average" calculation of 30% west and 70% east (Map 13), and vice versa (Map 12). The same caveats apply to these as we set out above. Even with this repeated coarsening of the data by averaging, it can be seen that the CAA's contours here stretch further than the contours shown in RSP's Figure 12.7 (see page **Error! Bookmark not defined.**). 23,600 people[31] will experience noise levels of 45dB Lnight and above for the imaginary 30% west and 70% east runway split, and 23,300 people[32] will experience noise levels of 45dB Lnight and above for the imaginary 70% west and 30% east runway split. This means that tens of thousands of people will suffer aircraft noise at night well above the maximum level recommended by the WHO.

30 CAA table 13, see page 38
31 CAA table 13, see page 38
32 CAA table 12, see page 38

Additional Comments

The impact of changes to the fleet mix – RSP is not showing the likely worst case

104. The CAA's work depends entirely on the brief that NNF gave the CAA. NNF's brief depends on the fleet mix that RSP published in its ES and on the oral updates to that fleet mix given by Mr Cain and his RSP colleagues at the ISHs in March and June. The fleet mix in RSP's ES depends on the "forecasts" produced by Dr Dixon. Dr Dixon admitted in March that she has no experience of forecasting air freight in the south east of the UK. It is hard to understand why Mr Freudmann introduced Dr Dixon to his RSP colleagues as the consultant to undertake this work given her lack of experience.

105. NNF recognises that the fleet mix produced by RSP is of questionable quality in terms of its predictive power. However, it is the only fleet mix that RSP has produced and so we felt that we were obliged to use it. Our removal of the ATR-72 craft reflects RSP's many statements that this is a sensible thing to do, in recognition of the fact that RSP has changed its expected fleet mix since publishing its ES.

106. RSP compounded the unreliability of the "forecasts" that generated its fleet mix by then asking a consultant who had not previously used the relevant software to take that fleet mix and model the noise contours that it would generate. This is another odd decision. It is also surprising that RSP chose not to use the software used by the CAA, or indeed, the CAA itself.

107. The difference between the CAA 70/30 contours and the RSP 70/30 contours demonstrates the impact on the noise environment that occurs when relatively small changes are made to the fleet mix. The fact that this difference is visible for an annual ATM average that has then been split 70/30 and 30/70, and then averaged across those two modal splits, shows what impact a small change in the fleet mix can make even when the data is degraded through several iterations of averaging. It is all the more important then, that the ExA should have available to it a fleet mix that truly represents the likely worst case. The fleet mix in RSP's ES is clearly not that fleet mix.

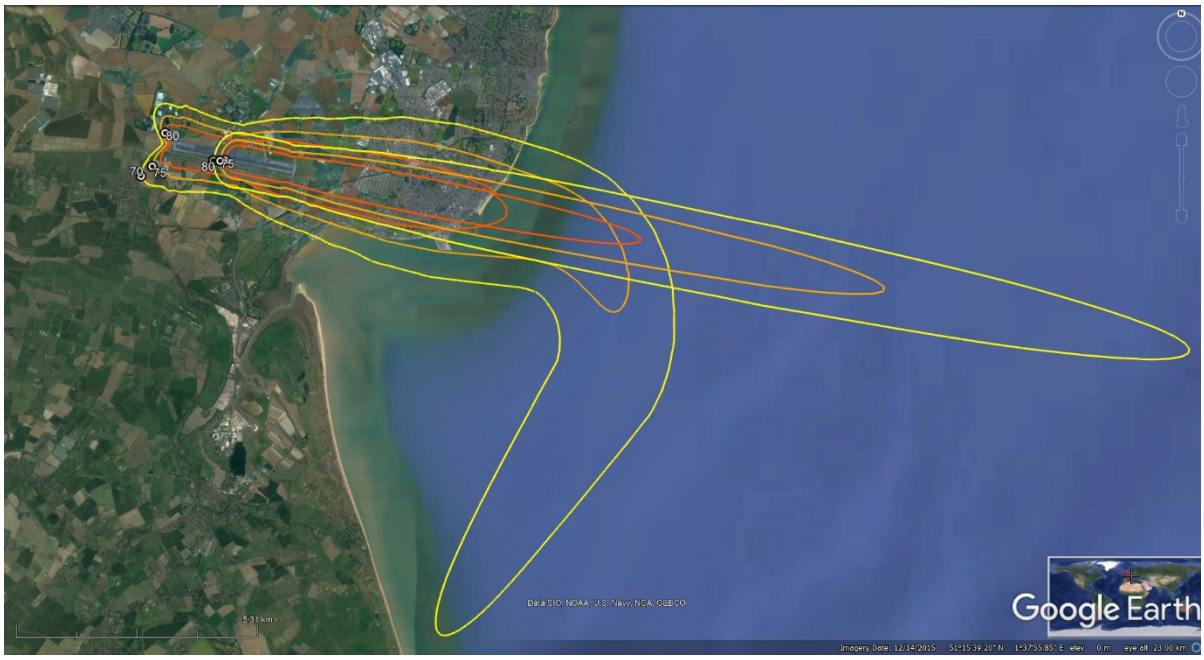
RSP does not show the likely worst case impact on Ramsgate

108. The town of Ramsgate will be particularly disadvantaged by RSP's proposal. The prevailing winds mean that around 70% of arrivals will come in over Ramsgate. Around 30% of departures will also be over Ramsgate. Most of Ramsgate lies within the 80dB LAmax footprint for the 747-400 arrival and for its departure. RSP's contours mask this. NNF and a number of individual residents have been trying to get across to RSP for years the fact that most people in Ramsgate will experience 80dB LAmax for every 747-400 arrival and every 747-400 departure to the East, whether day or night.

109. This can be clearly shown using the KML files from the CAA, as in the images below. For clarity, the 70dB, 75dB, and 80dB contours have been coloured yellow, orange and red respectively. The arrival and departure flight paths (CAA Maps 3 & 2) are shown separately and together, and the fourth image is a close-up of the area of Ramsgate enclosed by the two 80dB contours (which are shown in splendid isolation).

Departure to the East

Arrival from the East



The two footprints overlaid

Zoomed on central Ramsgate, showing only the 80dB contour

Night flights

110. RSP has yet to set out the forecast fleet mix and ATM numbers for its proposed night operations. Despite this, RSP has asked for a QC budget of 3,028. NNF set out in NNF09[33] for D3 the fact that a lower QC budget (1,995 QC points) was determined in 2012 to represent more harm than good to the community. We also highlighted in our response to ExA 2WQ Ns. 2.4 the fact that RSP is seeking a disproportionately higher QC budget than Heathrow, if the Quota Count for each airport is compared to its annual ATM cap. RSP has not set out what, if any, benefit might accrue to the community as a result of night operations and this oversized QC budget. Given this, there is nothing to set against the obvious downsides of night operations as set out by NNF and as shown clearly in the CAA contours. There should therefore be a complete ban on night operations, scheduled, timetabled, late, unplanned or otherwise.

111. NNF set out in NNF17 in our answer to ExA 3WQ Ns 3.1 the fact in 2011 24.8% to 50% of Manston's annual 1,472 ATMs that year were "late" arrivals. The ExA has asked whether the QC budget should apply only to the hour from 0600 to 0700. The answer is an emphatic "**no**". A QC budget is for the entire night period. If RSP is to be allowed to operate night flights (and we can see nothing that approaches a case that, on balance, says that it is in the public interest for RSP to be allowed to do so) then every night ATM must be accounted for within whatever QC budget is allowed. To do otherwise will give RSP the freedom to land a sizable percentage of its ATMs at night, unscheduled, with no penalty and no limit. As cargo ATMs are typically not scheduled flights anyway, past experience says that this would have alarmingly negative noise impacts for tens of thousands of people.

112. RSP has set no ATM limit for its night operations. RSP also intends not to count aircraft rated QC0 and QC0.125 in its QC budget for night movements. The Government recognises that aircraft rated QC0 and QC 0.125 expose communities to noise levels that the WHO identifies as being capable of creating sleep disturbance. If the QC budget and Noise Mitigation Plan as currently proposed are approved, RSP will have free rein to have as many night flights rated QC0 and QC 0.125 as it can attract. **This is clearly not acceptable, and is not in line with the Government's expressed position**.

113. RSP persists in asking to operate flights rated QC4 at night. It has produced no case for doing so. A B747-400 is rated QC4 on departure. The impact on the local population of allowing this can be seen in our Maps 2, 4 and 5.

33 Paragraphs 144-149

Summary

- RSP's proposal is for an airport many times the size of the commercial airport that used to be on the Manston site
- RSP's proposed **cargo** operation would be more than 29 times the size of the average annual cargo operation previously at Manston, and almost 16 times the size of Manston's best year ever (2003) for cargo ATMs
- RSP's proposed **passenger** operation would be more than 14 times the size of the average annual passenger operation previously at Manston, and more than twice the size of Manston's best year ever (2005) for passenger ATMs
- It is clear that RSP's proposal will generate a far greater level of aircraft noise than has been generated by any other commercial aviation operation on that site
- Residents who lived through the airport's previous commercial operations complained about the noise impact on them and on their life of both day and night operations
- When a 747-400 – the workhorse of the air cargo world – arrives from the west, 26,950 people are in the 70dB contour[34], 5,400 people are within the 75dB contour and 750 in the 80dB contour. The 80dB contour extends into St Nicholas at Wade
- When a 747-400 arrives over Ramsgate from the east, 15,100 people are in the 80dB contour[35], 20,550 people are within the 75dB contour and 26,800 in the 70dB contour. The 70dB contour covers almost the entire town
- When a 747-400 departs to the east over Ramsgate, 42,600 people are in the 70dB contour[36], 33,100 people are within the 75dB contour and 22,050 in the 80dB contour. The 80dB contour extends right over Ramsgate and beyond the harbour arm. We have previously submitted noise monitor records of noise levels of 90dB and over 100dB LAmax over Ramsgate
- When a 747-400 departs to the west, turning North, 6,100 people are in the 70dB contour[37], 2,100 people are within the 75dB contour and 650 in the 80dB contour
- When a 747-400 departs to the west, turning South, 5,650 people are in the 70dB contour[38]. 2,250 people are within the 75dB contour and 650 in the 80dB contour
- A comparison of RSP's Figure 12.9 with NNF's Maps 1 and 2 reveals a significant noise impact that RSP has simply not shown
- For operations 100% to the east, the 63dB contour includes 700 people[39]. The 51dB contour includes 37,950 people and the 54dB contour includes 29,100 people
- For operations 100% to the west, the 63dB contour includes 300 people[40]. The 51dB contour includes 21,800 people and the 54dB contour includes 14,700 people

34 CAA table 18, see page 40
35 CAA table 17, see page 40
36 CAA table 16, see page 39
37 CAA table 14, see page 39
38 CAA table 15, see page 39
39 CAA table 7, see page 35
40 CAA table 6, see page 35

- The Government recognises that the onset of significant community annoyance begins at 54 dB LAeq, 16hr. The WHO says that aircraft noise levels above 45dB Lden are "*associated with adverse health effects".*
- For the hypothetical operations 30% to the west and 70% to the east, even with the shrinking of the contours generated by showing an average of an average, the noise impact is still significant. 25,250 people[41] will suffer a noise level of 54dB LAeq and above. That's 25,250 people who, even on RSP's average of an average, will suffer significant community annoyance
- For the hypothetical operations 70% to the west and 30% to the east, even with the shrinking of the contours generated by showing an average of an average, the noise impact is still significant. 19,400 people[42] will suffer a noise level of 54dB LAeq and above. That's 19,400 people who, even on RSP's average of an average, will suffer significant community annoyance
- RSP's 30/70 and 70/30 contours are smaller than the CAA's
- When night operations are to the east, 28,750[43] people are within the 45dB LAeq contour. They will experience a level of aircraft noise at night at least 5dB above the level recommended by the WHO. More than 11% of these people will be highly sleep-disturbed – 3,163 people
- When night operations are to the west, 22,450[44] people are within the 45dB LAeq contour. They will experience a level of aircraft noise at night at least 5dB above the level recommended by the WHO. More than 11% of these people will be highly sleep-disturbed – 2,470 people
- For the more realistic operations 100% to the East 29,100 people will suffer noise levels that generate significant community annoyance
- For the more realistic operations 100% to the West 14,700 people will suffer noise levels that generate significant community annoyance
- RSP has significantly understated the potential noise impact of night operations. RSP's 40dB LAeq contour to the west is smaller than the CAA's 45dB LAeq contour and is closer to the CAA's 48dB LAeq contour. RSP's 40dB LAeq contour to the east is similar to the CAA's 45dB LAeq contour. RSP's Figure 12.7 disguises the fact that the 57dB Lnight contour stretches well into Ramsgate and that much of the town would experience average night noise of 51dB Lnight – well above the WHO guidance level.

41 CAA table 9, see page 36
42 CAA table 8, see page 35
43 CAA table 11, see page 37
44 CAA table 10, see page 37

Conclusions

114. RSP's contours mask the reality that its proposals for a new airport at Manston represent material harm for tens of thousands of people. RSP significantly underestimates the population numbers affected and ignores the fact that this is a vulnerable population in UK health terms, and one that is not currently exposed to noise from aviation operations.

115. RSP's measurements of the current ambient noise levels are suspect. RSP placed noise monitors in the gardens of airport supporters and chose locations for other measurements that are not representative of the ambient noise in that location. This means that the proposed change in the level of noise that people will experience as a result of RSP's proposal has been understated at both ends – RSP's measurements of the current noise level are tainted by uncertainty and its measurements of the possible future noise level and the number of people affected is demonstrably understated.

116. The inconvenient truths of past noise levels recorded by official noise monitors; of past planning decisions taken about aviation noise; and of past complaints from residents have all been steadfastly ignored by RSP.

117. The move from actual noise footprints for one type of aircraft (our Maps 1 to 5) to our two 100% LAeq contour maps show how the actual noise level heard is immediately diminished by averaging out individual noise events over time. Even so, our Maps 6 and 7 are a more accurate reflection of the noise environment under an easterly or westerly wind. This is the actual "lived experience".

118. When our two 100% maps are adulterated to make the 70/30 LAeq contour maps, the noise contours shrink again. This is RSP's preferred reporting format. As Ricardo observed in its response to D6:

119. *"It is further noted that the eligibility [for noise insulation compensation] shown is for contours averaged for both easterly and westerly operations, rather than an actual day of westerly or easterly operation. Using the average mode has the effect of reducing the contours as the noise is spread across the routes in a way that would not necessarily happen in a day of operation at the airport. The eligibility contours should be provided separately for both easterly and westerly operations to derive noise insulation eligibility."*

120. We know that the noise maps we have provided do not show the likely worst case. It is clear that RSP's fleet mix is based on guesses and that the fleet mix has already worsened (in noise terms) since it was created last year. We have no idea what further changes might occur which could easily produce a worse noise environment. Our night noise contours do not include any QC0 and QC0.125 ATMs, yet RSP could operate as many as it pleases under the terms of its Noise Mitigation Plan. We do not have the information that we need to be able to calculate Lden. And, of course, our noise contours do not include noise from other sources of airport noise such as road noise.

121. RSP has not set out the *"likely significant effects"* of its proposal in terms of aviation noise.

122. RSP's proposed Noise Mitigation Plan is nowhere near *"adequate to deal with the worst case"*. The CAA contours reveal a worse case than the one that RSP is suggesting. Moreover, given the limitations in the NNF brief to the CAA, the CAA contours are not the likely worst case, and the mitigation plan does not even deal with this.

123. The CAA contours reveal the number of people who will experience a serious degradation in their quality of life as a result of RSP's proposed operation. These people will also be at risk of adverse impacts on their health.

124. RSP has yet to identify a level of benefits that its proposal will deliver such that the serious and permanent harm to local people would be outweighed by these benefits. Given this, there is no compelling case in the public interest to allow a compulsory purchase by RSP of SHP's land.

Appendix 1: Commercial operations at Manston, annual ATMs

Year	Total Passenger ATMs (peak)	Total Cargo ATMs (peak)	Total ATMs
1999	46	700	746
2000	20	915	935
2001	26	911	937
2002	5	800	805
2003	25	1,081	1,108
2004	2,603	730	3,333
2005	4,454	177	4,631
2006	139	322	461
2007	164	444	608
2008	128	412	540
2009	98	485	583
2010	660	491	1,151
2011	1,083	389	1,472
2012	255	432	687
2013	1,129	511	1,640
2014 (part year)	392	229	621
Averages (excl. 2014)	**656**	**587**	**1,309**
RSP Year 20 (for comparison)	**9,298**	**17,170**	**26,468**

Appendix 2: CAA Report

NNF22

Response to RSP's response to ExA4WQ Ns.4.3

Noise contours produced by the Civil Aviation Authority for

No Night Flights

5th July 2019

Introduction

1. We write in extreme haste. RSP's Technical Note which comments on the noise contours submitted by No Night Flights was published by PINS on its website at close of business on Wednesday 3rd July 2019. The deadline for responding to RSP's document is midnight on 5th July 2019. We write without having had the opportunity to seek follow up validation directly from the CAA of the approach that it took to the production of noise contours for NNF.

2. We wish to place on record the quite extraordinary disadvantage which this inflicts on ordinary residents. None of us is employed to comment on this application. We are not in a position to use working days to do this. Two working days clearly gives inadequate time to comment on RSP's latest responses. This means that the voice of those whose life will be severely impacted should this DCO be awarded is going unheard. It also means that we have inadequate time in which to champion the objective and expert input of the CAA to this DCO process.

3. We have been told time and again by PINS, by the Applicant, and by the Applicant's cheerleader, Sir Roger Gale, that this DCO application process is front-loaded, meaning that the vast bulk of the work should have been completed before the application was submitted. RSP has manifestly failed to do this and was allowed by PINS to submit its application and begin the examination process despite the fact that there were substantial gaps in the evidence that it should have produced.

4. During the process itself, RSP has also manifestly failed to produce the information that the ExA and the public need to be able properly to understand the potential impact of RSP's proposals. As a result of the poor quality of RSP's application and its disorganised, partial and inadequate responses through the examination period, local residents are left hard up against the end of the examination period, still without a full set of professionally-produced noise contours from the Applicant. This is completely unacceptable.

5. It is NNF's position that, given the poor quality work carried out by the Applicant to identify to the noise impact from aviation operations associated with its proposal, the ExA should give weight to the independent, expert evidence produced by the CAA for NNF. It is the CAA who will assess the potential noise impact of RSP's proposals as part of RSP's future application for an Airspace Change. The CAA will use ANCON to do this – the modelling system that it used for our work. The CAA will use its in-house experienced noise modellers to do this – as it did when it produced the NNF contours.

6. The ExA has a simple pragmatic choice to make when it compares RSP's noise contours with NNF's. Does it prefer the work of the developer, carried out by someone who has never done this before, using a system that is not used in the UK by the CAA? Oliver Bewes, the acoustics consultant responsible for producing RSP's noise contours, is a specialist in railway noise. There is no trace in his CV of any experience in aviation noise. Similarly, does the ExA prefer RSP's noise contours, carried out for the specific purpose of demonstrating to the ExA that there is little noise nuisance associated with its proposal and little or no need for the developer to pay for expensive noise mitigation measures? It is telling that RSP has not produced input files that are properly time and date stamped for the ExA following the ExA's request for it to do so. The ExA can therefore have no confidence that the few noise contours that the Application has produced reflect the fleet mix described in the Applicant's ES.

7. Alternatively, does the ExA prefer the work of the CAA who has used its professional expertise to provide an objective set of noise contours based on inputs produced by NNF that have been clearly and transparently set out in the CAA's document? What weight is the ExA going to give to the substantial amount of evidence from local residents from the coastline in Ramsgate to the coastline west of Herne Bay that they experienced significant noise nuisance from the airport when it was operational (a much smaller airport than RSP wants) and that this had a significant and detrimental effect on their daily life? How will the ExA assess this evidence against the noise contours produced by RSP that suggest that many of these people could not possibly have heard any aircraft noise because the noise contours do not even reach them? Is the experience of these people to be dismissed as fantasy? What weight will the ExA give to the evidence submitted about previous noise monitor readings that demonstrate that noise levels far in excess of those suggested by RSP were experienced as a matter of course in central Ramsgate?

8. It is NNF's submission that the RSP aviation noise contours are insufficiently expert to be given weight in the determination of this DCO application. They are also incomplete. We genuinely cannot understand why RSP did not provide in its application a full set of noise contours, in 3dB steps, for single aircraft footprints, for Lden and for LAeq for day and night, for operations 100% to the east and 100% to the west (which is the day-to-day reality) as well as for its most optimistic annual average of 70:30. Its consistent failure to do this throughout the examination period tells us that RSP did not want this information to be available to the ExA.

9. In short, we submit that the CAA contours produced for NNF (and, for that matter, for Five10Twelve) are more expert and are objective assessments of the likely noise impact that would be produced by RSP's proposals. We submit that they are to be preferred and we urge the ExA to give them significant weight in its deliberations.

NNF's comments on the RSP Technical Note

10. RSP's Table 1 compares the assessments by RSP, Five10Twelve and NNF. For ease, in our response below we follow the order of RSP's document.

Prediction Model

11. RSP says that the difference in the model used is unlikely to result in a difference in results.

12. In the CAA's ECAC Doc.29, 4th Edition, December 2016,[45] the CAA says:

13. > *"Although many acoustical consultants have the understanding of aircraft noise characteristics and propagation that is necessary to use a noise contour model and interpret the results,* ***the noise modelling practitioner usually needs to have, or have access to, knowledge and expertise in airport and aircraft operations to achieve reliable results****. This is because aircraft noise levels heard on the ground depend on the flight path of the aircraft (position vs. time) as well as its flight configuration - its weight, engine and flap settings, speed and rate of climb or descent.*

[45] Already submitted by Five10Twelve for D9

These in turn are determined not only by individual airline operating procedures but also by air traffic control requirements." [our emphasis]

14. It is clear from the evidence that he gave to the ExA at the ISH in March that Oliver Bewes, RSP's consultant who was responsible for doing the noise modelling for the developer, did not have previous experience in using the modelling tool that RSP is relying on, nor does he appear to have had the required *"knowledge and expertise in airport and aircraft operations to achieve reliable results."* This gives the ExA considerable reason to doubt the accuracy of the RSP noise contours.

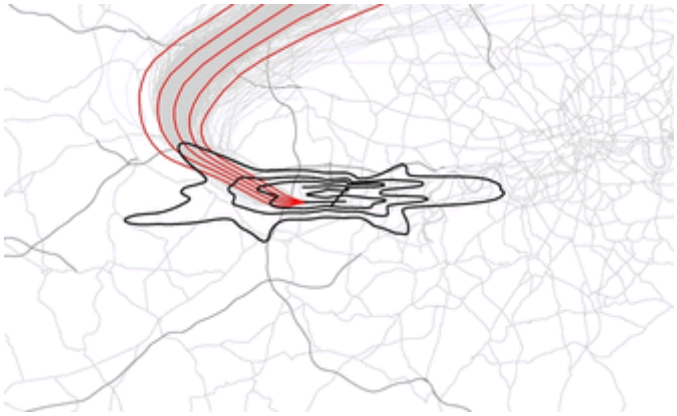
15. Like Five10Twelve (in its submission to D9) NNF does not understand why the Applicant used the third edition of the ECAC Doc.29 instead of the fourth edition. The third edition was published in 2005, and the fourth in 2016. This is a "signature" failure by the Applicant – as it has done with the WHO reports, the Applicant once again prefers to use out of date guidance. We respectfully refer the ExA to the submissions made by Five10Twelve on this issue in section 3 of its submission to D9 in response to RSP's comments on the Five10Twelve contours.

16. When the CAA comes to consider RSP's airspace change application, the CAA will be using ANCON to assess the noise impacts of that application, and to determine flight paths. ANCON is the default tool for the CAA – the relevant statutory body and UK subject experts. It is clear from this that ANCON is a more relevant model to use than the INM model used by RSP.

Aircraft Noise Data

17. On its website,[46] the CAA explains its aircraft noise profile data. The CAA says:

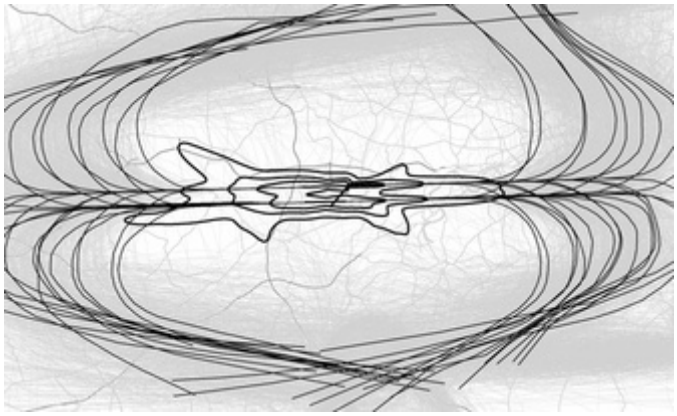
> *Analysis of flight tracks and profiles from radar data*
>
> *Where feasible, we analyse local airport radar data to ensure the highest degree of modelling accuracy. Extensive in-house radar analysis tools are used to generate mean flight tracks and the associated lateral dispersions for each route, and average flight profiles of height, speed and thrust for different aircraft types.*
>
> *The diagram below shows a typical representation of a departure route at Heathrow using mean and dispersed tracks, together with the underlying radar data.*



Typical departure mean tracks © Crown copyright

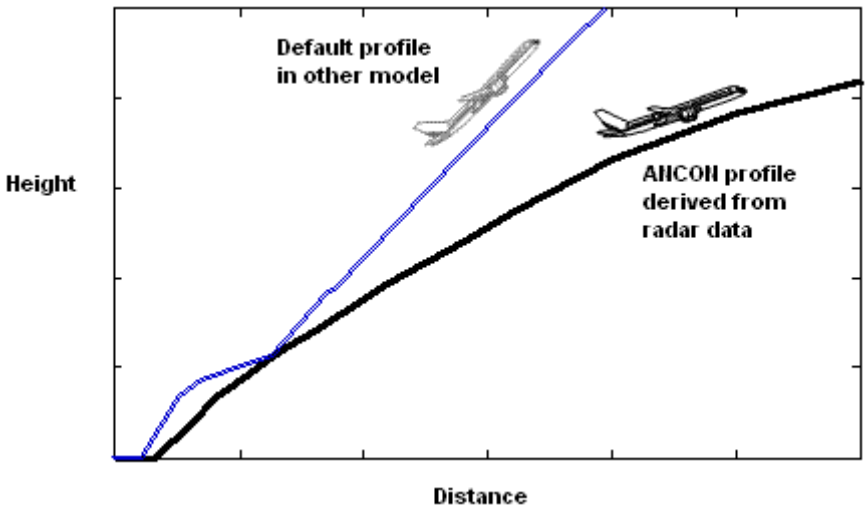
[46] https://www.caa.co.uk/Consumers/Environment/Noise/Features-of-the-ANCON-noise-modelling-process/.

A typical representation of arrivals at Heathrow using multiple 'spur' tracks is shown below:



Typical arrival mean tracks © Crown copyright

It is important to determine flight profiles for the noise dominant types at an airport using local radar data, since they may differ significantly from the 'default' profiles supplied in some noise models. For example, the following diagram shows the difference between the average departure height profile for the Boeing 767 as measured at the London airports, and a 'default' profile contained within another noise model.



Comparison between ANCON and another noise model's default profile for Boeing 767

Noise database verification

ANCON's noise database is checked and updated on an annual basis by taking several hundreds of thousands of noise measurements around Heathrow, Gatwick and Stansted airports each year. The noise database contains data for specific airframe/engine combinations in the form of 'noise-power-distance' (NPD) curves, thus ***it is applicable to any airport.*** *In particular,* ***the database contains extensive noise information for the majority of aircraft types that operate from UK airports, unlike other noise models****.* [our emphasis]

18. Key points to take from this explanation by the CAA is that the ANCON flight profiles may differ significantly from the default profiles in some noise models. The diagram above which compares the ANCON-derived profile for a B767 to another noise model's default profile for the same aircraft, would have a significant impact on the assessment of the actual noise nuisance that would be experienced on the ground. The default profile shows the departing plane reaching a greater height much sooner than the profile generated by the CAA. The CAA's profile captures the reality of a longer, lower, and therefore noisier, take off. It is the CAA's model that will be used to determine eventual flight paths should this DCO be awarded. The CAA's model is therefore to be preferred.

19. The second key point to take from the explanation on the CAA's website is that its system is updated annually using **actual** noise measurements. It is our understanding that the INM system is no longer being supported and updated. As RSP says in its ES [APP-057], section 12.3 Aircraft Noise Modelling:

20. > *"However, in 2015 INM was replaced by AEDT, also produced by FAA. Both AEDT and INM are produced by FAA, however due to the release of AEDT the FAA stopped supporting INM and therefore will not update the model or its associated database with new aircraft technology."*

21. The CAA specifically says that the ANCON model is **applicable to any airport**. This contradicts the Applicant's assertion in Table 1 that ANCON data is relevant only to extant airports.

22. The third key point is that *"In particular, **the database contains extensive noise information for the majority of aircraft types that operate from UK airports, unlike other noise models.**"* [our emphasis] Again, this suggests that the CAA's outputs using ANCON are more robust and are to be preferred.

Takeoff and Approach Flight Profiles

23. The Applicant says that there may be a difference between its profiles and NNF's because the ANCON database assumes average weights. In Appendix 12.3 to the Applicant's ES [APP-057], the Applicant says that the INM system that it used does not have a setting for aircraft weight. It relies instead on assumptions about the length of the stage that the aircraft has flown. It says that that stage length is only applicable to departing aircraft. For example, if an aircraft is going to the US, it will be heavier than if it were going to Norway (all other variables being equal) because it will be carrying more fuel. This suggests that in the Applicant's model no account is taken of the fact that the Applicant's own operating assumption is that a disproportionate amount of cargo that would be handled by its proposed airport would be imported, therefore would be relevant to arrivals. Our contention is therefore that RSP's contours underestimate the weight of arriving freight aircraft.

24. By contrast, the CAA contours specifically deal with *"the expected high proportions of freight traffic"*. The CAA has taken **real** noise data of freight arrivals and departures at Stansted using average weights. Where real data for a specific freighter was not available in the Stansted database the CAA used real data for those freighters from Heathrow, or Gatwick. This is set out in NNF18 [submitted 14 June 2019] on p30. The CAA contours are therefore a more accurate reflection of reality.

Flight Path

25. The Applicant asserts that it is highly unlikely that the CAA would adopt the same flight path as was previously used by the airport. The Applicant offers no evidence to support this view. The Applicant then says that the previous flight paths would not be supported *"because of the likely worsening of the noise impacts."* This *"likely worsening"* is exactly what NNF is trying to get across in its own submissions.

26. It is a fact that the CAA approved the previous flight paths as being the best balance between safety – the over-riding factor – and the noise impact.

27. It is a fact that the CAA re-approved the previous flight paths in every subsequent update of the airport's AIP.

28. It is more likely than not that the CAA would approve the previous flight paths for use again, should the DCO be awarded. Given that the CAA is still guided by the same considerations of safety and noise impact, any deviation from the previous flight paths can only be small. There simply is not that much that leeway, given the geography.

29. It is extremely difficult to identify from the indicative flight paths provided by the Applicant in what way it thinks its flight paths are fundamentally different to the previous flight paths as submitted by NNF. Both RSP and NNF have provided arrival flight paths that follow a straight-line approach from either the east or the west. Both RSP and NNF have provided departure flight paths to the west that turn either north or south to avoid overflying Herne Bay. Both RSP and NNF have provided a departure flight path to the east that turns south. RSP has added an additional departure flight path to the east that then turns north. That flight path does not turn north over the sea until the whole of Ramsgate has been overflown and so the noise that it would generate over Ramsgate is catered for in the NNF path that departs east and then turns south, after clearing Ramsgate.

30. In its ES, RSP says under the title Track Proportion:

31. > *"Typically, aircraft arrive and depart into wind and therefore to determine the future runway direction historical weather data was assessed. The historical weather data suggests that for an average year approximately 70% of arriving aircraft will arrive over Ramsgate and 30% will arrive over Herne Bay. For departing aircraft approximately 70% will depart to Herne Bay and 30% towards Ramsgate. For aircraft departing to the west there are two likely flight paths, one turning north and one turning south and it is assumed that there will be a 50/50 traffic distribution. Table A12.3.41 presents the traffic distribution along each flight path as a percentage of the total aircraft movements."*

32. The possible 70W:30E split that RSP describes in its ES is modelled in the NNF contours, as is a possible 50:50 split between north turn and south turn for those departures to the west. Again, it is difficult to see how NNF's use of previous operational flight paths differs from the indicative flight paths used by RSP in this regard. Yet RSP says in its response to the contours produced by the CAA for NNF that the difference in flight paths *"is considered to be the most likely cause of difference between outcomes."*

33. We note in RSP's Figure 4 of its comments on the CAA contours that the centre line for the more southerly of the two departure paths to the east assumes that the turn to the south begins almost as soon as the aircraft clears the runway. The path then overflies Cliffsend and Pegwell Bay. This is wholly inconsistent with what the Applicant says about this flight path in its ES [APP-057]. On p13 of the Aircraft Noise Modelling section the Applicant says that *"that early turn before Ramsgate was discounted after it became apparent the route was not operationally feasible given the location of the Pegwell Bay RAMSAR."* Given this, the logical conclusion is that RSP should not have modelled the noise impact of a flight path that it will not use and that it had already rejected. RSP's other departure path to the east would therefore match the departure path that was used previously, and therefore would match the departure path that NNF gave to the CAA.

34. Given this inconsistency between the statement in RSP's ES, and the visual representation of its indicative flight paths in its Figure 4 in its recent response to our contours, the ExA can have no confidence in the noise contours produced by RSP. If that flight path was rejected, why is it still shown? Was this flight path modelled in the noise contours or not? If it was, then the noise generated over Ramsgate has been underestimated by RSP as it is relying in its calculations on an (unusable) departure path over Ramsgate that tracks south east from the runway rather than overflying Ramsgate.

35. It is also hard to ascertain what weight RSP is putting on its sixth flight path – the departure path to the east that then turns north. It is hard to see in what way that flight path would diminish the noise impact of departures on Ramsgate. It is hard for NNF to make any further comment on this purely indicative flight path as we can find no record that it was used operationally previously.

36. In its ES, in the Aircraft Noise Modelling section, RSP says:

37. *"The aircraft flight paths define the ground tracks taken by aircraft in the INM model and hence locations of noise emissions from aircraft in flight. The exact airspace options and aircraft flight paths will be formalised through an Airspace Change Proposal (ACP), which is a separate consenting regime. The ACP will be submitted through the CAA's airspace change process and the potential noise effects will be assessed following the CAA guidance within the Civil Aviation Publications (CAP). The ACP will therefore provide opportunities for communities to engage on future flight paths through an extensive consultation process.* ***The assessment of aircraft air noise for ES has therefore considered six indicative airspace route options within a design swathe*** *as provided by the airspace consultant Osprey Consulting Services Limited. The design swathe has taken into account the 'knowns' of the local airspace, including airways and navigational aids. The route swathe and indicative flight paths are presented in Figure A12.3.1 and show the different routes within the design swathe for future departure and approach routes and Table A12.3.39 presents the six design principles considered."*

38. *"As described above, the route options will not be finalised until an ACP is completed. This will not occur until after the powers to build and operate the airport are obtained under the DCO process. The assessment of the noise impact of the airport in the ES is based on an indicative route.* ***The noise impact of the Airport may be different to that presented in the ES following the finalisation of the ACP****. The purpose of the*

options appraisal presented here is to provide an indication of the potential variability in the noise impact which remains until the routes are finalised in the ACP." [our emphasis]

39. This makes it clear that the *"indicative"* flight paths modelled by RSP in its noise contours are just that. In contrast, the NNF flight paths reflect 15 years of operational reality, as well as reflecting flight paths previously approved by the CAA. **The NNF flight paths are clearly to be preferred**.

Modal Splits

40. RSP says in Table 1 *"When comparing like with like, this should influence the difference."* We have no idea what this means.

41. As RSP has noted, the CAA produced noise contours for NNF for operations 100% east and 100% west, and 70W:30E and 30W:70E. What RSP did was to produce an average contour which assumes a 70W:30E split for each of the 365 days of the year. As we say in NNF18 [submitted on 14 June and accepted as an additional submission by the ExA], TDC's noise consultants, Ricardo, identified this average of an average as a flaw in RSP's modelling in their submission to D6.

42. NNF's noise conoutrs are to be preferred because they show the noise impact that is created for days at a time when operations are in one direction or the other. RSP's contours do not reflect operational reality. RSP's contours reflect:

- Annual ATMs averaged almost evenly over 365 days
- ATMs averaged evenly throughout a 16 or 8 hour period, for day or night
- That average is then split 70:30 and 30:70 as if every day and every night has this operational modal split
- Lastly, RSP then adds the 70:30 hypothetical to the 30:70 hypothetical, divides by two, and says that this reflects the noise nuisance created on an average winter's day. It does not.

Fleet Mix

43. RSP says that *"NNF used an alternative commercial fleet mix"*. This is true. The RSP fleet mix, as is well recorded, has not been updated since the ES was submitted in the summer of 2018. In Table 2 of RSP's response to NNF's contours, RSP shows that that fleet mix includes 4,310 ATR-72 ATMs. RSP has accepted, in evidence, that its current "plan" relies on "new" integrators, and that these airport customers would **not** be using ATR-72 aircraft. Despite this, RSP continues to assert that its ES is robust and that it will reflect a likely worst case scenario. This is not supportable. The NNF contours reflect the evidence that RSP gave to the ExA in the March and June ISHs. The NNF contours are to be preferred.

44. The fleet mix in RSP's ES is at the heart of its assessment of the noise, the pollution, and the traffic impacts of its aviation operations. This fleet mix is out of date and is not in line with RSP's latest operational "forecast".

45. We note with increasing disbelief and horror that far from introducing a ban on night flights, RSP is seeking an even greater level of flexibility for night flights in the latest iteration of its Noise Mitigation Plan. **The night noise contours produced for NNF by the CAA do not in any way begin to capture the night noise impact that would be generated by the operational freedom that RSP is now seeking to apply its suggested annual quota count to just one hour of an 8 hour night.** We will say more about this in our response to the latest Noise Mitigation Plan.

46. The NNF contours include 38,000 GA ATMs. RSP appears to have included 35,040 GA ATMs.[47] In the Aircraft Noise Modelling section of its ES in Appendix 12.3 at xxxiv, RSP says:

47. *"General Aviation (GA) traffic was added, comprising of a worst-case daily scenario of 40 arrivals and departures, eight circuits flight comprising six circuits per flight and eight touch and go operations. General Aviation flights will only occur during the daytime and therefore there is no change in-terms of night-time contours."*

48. In its ES, RSP says:

49. *"The modelling shows that when General Aviation flights are considered there is a negligible change in the LOAEL contour however because the circuits routes overfly new areas there is a noticeable change in the SOAEL contours."*

50. RSP has not set out the aircraft assumptions that underpin its modelling of GA ATMs in the ES. NNF produced a fleet mix that included some of the types of GA aircraft that were previously in use at the airport and that RSP has said it would like to attract to a new airport, including executive jets. RSP's comment about the potential impact of such flights on the SOAEL suggests that the RSP noise contours do not reflect the likely worst case noise impacts.

RSP's Commentary for Ns.4.3 NNF

51. RSP says at 3.2.3 that NNF has:

52. *"… presented contours which they state will more closely relate to the nuisance they believe will result from the airport, which the Applicant does not believe are required to enable consideration of the application with respect to policy."*

53. This is the most extraordinary statement. It appears that the Applicant has not grasped the need to assess the likely noise nuisance that would be generated as a result of its proposal so that the ExA can determine whether or not the claimed benefits of the application are outweighed by the likely dis-benefits. This balancing act will still need to be carried out despite the fact that there is now no need for a CPO of the land that was owned by Stone Hill Park (although other parts of the proposed site owned by others will still require a CPO if RSP is to carry out its plans). The ExA is obliged to consider as part of its determination the likely negative impact of RSP's proposals on the human rights of local residents. The ExA will also need to take a view as to what level of noise mitigation would be appropriate if the ExA decided to award a DCO to RSP. Of course the ExA will need to consider relevant policy. It is also the

[47] (8 circuits flights x 6 circuits each) + 40 + 8 multiplied by 365 days p.a.

duty of the ExA to consider relevant evidence put in front of it about the likely negative impacts of the proposal.

54. At 3.2.4 RSP says that its following five paragraphs address why it has used 16 hour and 8 hour contours, average day, and modal splits "*rather than taking NNF's approach.*" We are puzzled by this. We too have used 16 hour and 8 hour contours, average day and modal splits.

55. At 3.2.5 RSP says that "*the noise information that should be presented for a new airport is not mandated in England*." It says it has provided information about the areas and populations exposed to the LOAEL, the SOAEL, and also to LAmax. Of course, RSP's use of LAmax for an assessment of night awakenings is adulterated by its idiosyncratic use of the work of Dr Basner to suggest that there will be no additional awakenings as a result of 18 80dB noise events every night. NNF has commented exhaustively on the evidence from previous operations at the airport, as well as from up-to-date guidance from the WHO that demonstrates that RSP's approach is, at the politest, an outlier. The WHO talks about individual noise events causing harm at 45dB LAmax whereas RSP suggests that 18 individual noise events of 80dB will cause no harm and generate no awakenings. RSP has also produced a paucity of evidence about the substantial harm to health that can be caused by night noise without necessarily producing an awakening.

56. On its website, the CAA says:

57. > *"Occasional loud noise is measured in the UK by Sound Exposure Level (SEL).* ***Studies have found that SEL above 90dBA generally leads to sleep disturbance. SEL footprints can be used to work out the areas where take-off creates an SEL over 90dBA to inform decisions about whether or not a particular type of aircraft should be permitted to operate at night, or to influence airport construction or extension in populated areas.*** *An SEL footprint shows the geographical area in which a particular SEL is reached from a single noise incident (e.g. a plane taking off).* [our emphasis]

58. NNF has submitted evidence previously from the noise monitors in use while the airport was operational demonstrating that SEL above 90dBA was regularly captured by the noise monitor at the Clarendon School in Ramsgate.

59. Also in 3.2.5 RSP says that it is not relying on a "Rochdale envelope approach" for its application. This is a new development. It is hard to see how RSP can claim that it has accurately assessed the likely worst case if RSP has chosen to put itself beyond the reach of the "Rochdale envelope approach".

60. In answer to a query last year from NNF to PINS about the inadequacy of RSP's consultation, PINS replied:

61. > *"Applicants can assess the likely significant impacts of a proposed development using the 'Rochdale Envelope' (RE) approach; this is used to assess a likely or reasonable 'worst case scenario'. This approach is consistent with the objective of the EIA Directive, and the Planning Inspectorate acknowledges the Rochdale approach is a way of dealing with an application comprising EIA development where details of a project have not been resolved at the time when an application is submitted."*

62. PINS then referred to Advice Note 9 which says:

63. *"…Taken with those defined parameters of the project, the level of detail of the proposals must be such as to enable a proper assessment of the likely environmental effects, and necessary mitigation – if necessary considering a range of possibilities:*

64. *…The level of information required is: "sufficient information to enable 'the main', or the 'likely significant' effects on the environment to be assessed… and the mitigation measures to be described…" (Para.104 of the Judgement)*

65. *…The 'flexibility' referred to is not to be abused: "This does not give developers an excuse to provide inadequate descriptions of their projects."*

66. *Care will be needed by the developer to ensure that the project description is clear so that the developer can demonstrate that the statutory requirements regarding consultation have been met."*

67. We take RSP's comment here as tacit recognition that it has failed to meet the standards expected of it with regard to the Rochdale envelope. We are astonished by the assertion that the Rochdale envelope has no relevance to the assessment of the likely significant impacts of this application.

68. In 3.2.9 RSP says that its anticipated modal split is the norm for presentation of aviation noise contours. It cites noise contours produced for Heathrow in 2015. RSP appears not to have caught up with what the operator at Heathrow airport is now suggesting is relevant and appropriate in its current noise consultation. At 5.245 of the Airports NPS, there is the following commitment:

69. *"In addition to statutory requirements, Heathrow Airport has publicly committed to a community compensation package comprising a number of more generous offers:*

70. *• […]*

71. *• Following a third-party assessment, to provide full acoustic insulation for residential property within the* ***full single mode easterly and westerly 60dB LAeq,16hr noise contour*** *of an expanded airport;*

72. *• Following a third-party assessment, to provide a contribution of up to £3,000 for acoustic insulation for residential properties within* ***the full single mode easterly and westerly 57dB LAeq,****16hr* ***or the full 55dB Lden noise contours of an expanded airport, whichever is the bigger****; and*

73. *• To deliver a programme of noise insulation and ventilation for schools and community buildings within the 60dB LAeq,16hr contour."* [our emphasis]

74. In addition, the Aviation 2050 consultation published in December 2018 proposes the following noise insulation measure:

75. *"for airspace changes which lead to* ***significantly increased overflight****, to set a new minimum threshold of an increase of LAeqT 3dB, which leaves a* ***household in the LAeq,16hr 54dB contour or above as a new eligibility criterion*** *for assistance with noise insulation."* [our emphasis]

76. The implication of this is clear for RSP's proposal. The Government is suggesting that, for communities which would experience significant overflight – and this clearly includes everyone who lives under the flight paths for a new airport at Manston – the threshold for noise insulation grants should be 54dB LAeq where the increase over the previous noise environment is LAeqT 3dB. We urge the ExA to adopt this measure for the RSP proposal. It is entirely in line with current Government acceptance that the onset of significant community annoyance is now 54dB LAeq.

77. The Draft UK Airspace policy published by the Department for Transport (DfT) in February 2017 and the consultation response that the DfT published in October 2017 says:

78. *"Consistent with the Noise Policy Statement for England, our objectives in implementing this policy are to: … limit and, where possible, reduce the number of people in the UK significantly affected by the adverse impacts from aircraft noise." (Para 2.69 Oct 2017)*

79. *"The government acknowledges the evidence from recent research which shows that sensitivity to aircraft noise has increased, with the* ***same percentage of people reporting to be highly annoyed at a level of 54dB LAeq,16hr as occurred at 57dB LAeq,16hr in the past****." (Para 2.72 Oct 2017)* [our emphasis]

80. The Heathrow consultation document says at 2.9.5

81. *"We have also* ***made a commitment to use a combined contour based on both full, single mode contours, namely the easterly and westerly mode contours****. This will produce a noise contour area larger than the area for the actual averaged east-west operations and effectively will treat areas impacted by one mode as if it occurred for the entire year."*

82. This means that all properties within the single mode easterly and westerly 60dB LAeq, 16 hour noise contour will have the full cost of all noise insulation and ventilation costs covered by the airport operator. In addition, all properties within the single mode easterly and westerly 57dB LAeq, 16 hour noise contour will receive a grant of £3,000 towards noise insulation costs, as will all properties within the 55Lden contour. We have made submissions before on the approach to noise insulation being taken by the planning authority at Stansted. Uttlesford DC has set as a planning condition the requirement to extend a sound insulation grant scheme of £5,000 to households in the 57 dB LAeq,16h noise contour and to those in the 90dB SEL footprint for night noise.

83. We see no reason why Thanet and Canterbury residents should be treated less well than London residents in this regard. Indeed, we should be offered better noise mitigation given that we are a population that has not been habituated to aviation noise.

Conclusion

84. At 4.1.1 RSP says that noise from airport operations will be limited by the noise contour cap and *"as such, the adverse effects of the proposed development are limited to those reported in the ES"*. Firstly, of course, the ExA would need to accept that RSP's noise contour cap is a sensible and appropriate way of managing the noise nuisance that would be generated by airport operations.

85. Secondly, RSP is confusingly conflating two separate ideas here. The noise contour cap was invented by RSP in May 2019 [REP-021] post-dating the publication of the ES by almost a year. In addition, a noise contour cap of 50dB will not prevent a 747-400 from being heard the length of Ramsgate and into Herne Bay. It will do nothing to avoid or mitigate the noise impact of aviation operations.

86. Furthermore, it is clear that the adverse effects of the proposed development will not be limited to those in the ES. The ES does not reflect the likely fleet mix that will be in operation. The ES does not model the Applicant's latest request for QC4 aircraft to be operated 23 hours a day. The ES does not model the likely noise impact from unlimited other "late" arrivals between 2300 and 0600. The ES has not included the full number of GA ATMs. The ES offers an average of an average of an average in its noise contours. In short, the ES comes nowhere near reporting the potential adverse effects of the development when it comes to aviation noise.

87. The Airports NPS says at 5.68:

88. *"Development consent **should not be granted** unless the Secretary of State is satisfied that the proposals will meet the following aims for the effective management and control of noise, within the context of Government policy on sustainable development:*

89. *- Avoid significant adverse impacts on health and quality of life from noise;*

90. *- Mitigate and minimise adverse impacts on health and quality of life from noise; and*

91. *- Where possible, contribute to improvements to health and quality of life."* [our emphasis]

92. RSP's proposal does not do this. The NNF noise contours, together with other evidence submitted by us during the course of this examination, demonstrate conclusively that there will be significant adverse impacts on health and quality of life from the noise that would be generated by RSP's new airport. There will also be adverse impacts on health and quality of life that RSP's NMP does not even begin to mitigate. We strongly urge the ExA to reject RSP's application for a DCO for this proposal as it neither avoids significant adverse effects, nor mitigates and minimises adverse impacts, and certainly does not contribute to any improvement in health and/or quality of life.

93. We will deal with the Noise Contour Cap in our comments on the latest Noise Mitigation Plan.

Application by RiverOak Strategic Partners Limited for an Order granting Development Consent for the reopening and development of Manston Airport in Kent

REQUEST FOR COMMENTS AND FURTHER INFORMATION

Response by No Night Flights to the Department for Transport letter dated 17th January 2020 – NNF28

"26. The Secretary of State also invites comments from the Applicant and other Interested Parties on the late representation from Five10Twelve Limited dated 23 December 2019 relating to public cost and reputational risk, which is published alongside this letter."

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1. The Five10Twelve letter dated 23rd December 2019 makes a number of sound points.

2. RSP is a start-up company. No Night Flights adds that it is a recent start-up with no track record. The company has no track record in raising this level of finance; nor does it have a track record in major construction and redevelopment projects; nor does it have a track record as an airport operator. It cannot have been the intention of the Planning Act 2008 that a start-up company with no experience in the field, and no proof of funds, can use the DCO process to compulsory purchase the land of others for a Nationally Significant Infrastructure Project. It must be remembered that RSP's principals initially set out to buy the airfield from the previous operator to run it as an airport operating no more than a couple of dozen cargo flights a week.

3. Five10Twelve is correct to say that the only principal associated with RSP who has operational airport experience is Mr Freudmann. It is, of course, Mr Freudmann who was MD at Manston when the airport first became a commercial airport and who presided over the airport's complete failure as a commercial venture between 1999 and 2005. NNF has presented a substantial amount of evidence[1] about this to the DCO examination, including evidence that Mr Freudmann was MD at the time and that, under his guidance, the airport did not break even financially in any one year of operation. NNF has presented evidence that the airport failed because the operator was unable to attract enough business to it. Despite what Mr Freudmann asserts, the evidence shows that the airport did not fail because of the liquidation of the airline EUJet – the airport was already in the red many years before that liquidation occurred.

4. Five10Twelve is correct to say that the beneficial owners of RSP are hidden from public view in an offshore company and that RSP has not provided the evidence that it either has the money or that it can raise the money to fund its proposed development – a development that RSP estimated in its one page spreadsheet that it submitted to the Examination would cost more than £300m.

5. Five10Twelve is correct to say that RSP gave evidence to the DCO Examination process that its aviation consultant, Dr Sally Dixon, an independent consultant operating as Azimuth, made no assessment of viability in the forecasts that she produced for her client. None of RSP's principals provided any assessment of viability. In fact, no assessment as to whether RSP's proposal is financially viable was ever put before the Inspectors, and the ExA itself considered the question of viability to be beyond its remit, so the issue has **never** been

1 Primarily TR020002-003493-NNF, and TR020002-003494-NNF, TR020002-003495-NNF, TR020002-003496-NNF, TR020002-003497-NNF.

examined or tested. The Secretary of State therefore cannot rely on the fact that RSP could develop a financially sustainable airport at Manston. NNF has previously submitted past Airport Consultative Committee minutes and other written evidence that demonstrate that an airport on that site, using the same business plan as the one that is before the SoS now, has failed three times on that site. RSP has provided no evidence that a fourth attempt to develop a profitable airport on that site can succeed. Given that, there is a significant risk if this DCO is awarded that land will be CPOd, MoD assets moved, and housing shunted onto green field sites that could otherwise have been placed on the brownfield land at Manston… and that the airport will then fail for a fourth time, rendering these costs wasted.

6. Five10Twelve is correct to raise concerns about RSP's flat refusal to accept that Public Safety Zones (PSZ) will need to be established for Manston should the DCO be awarded. RSP has made no assessment of this impact of this necessity on its plans and on its costs. Similarly, the cost to the local area of restricting development in line with the Public Safety Zone guidelines has not been calculated. There is reputational risk here for a SoS who approves a DCO **without** having been given full information about the impact of that proposal and **without** knowing that the developer understands the risks and costs inherent in the developer's own proposal. As importantly as the development blight that PSZs will cast over part of Ramsgate, the establishment of PSZs will have a negative impact on Thanet District Council's ability to meet its Objectively Assessed housing provision in the relevant Local Plan period

7. Our research, already provided to the Examination process, supports that of Five10Twelve as regards the recent upsurge in inward investment to Ramsgate and the wider area, and the increase in individuals and businesses relocating to and investing in the area since the former airport was closed in 2014. It is uncontroversial that this is highly likely to be reversed in the event that the airport is re-opened, re-instituting flight paths directly over Ramsgate at a maximum height of 800 feet at the coast and descending from that point over the town to land at the airport. The recent beneficial increase in local creative industries and in local tourism will be reversed. This is a cost to the area and to the people who live here. Five10Twelve is right to say that TDC's Local Plan relies upon an increase in tourism and in the creative industries locally to fuel future economic development. Both these will be harmed for those areas under the flight path by the considerable noise nuisance created by a new cargo airport at the edge of Ramsgate

8. We wholeheartedly agree with Five10Twelve's conclusions that: *"there is in fact a very significant cost - both reputationally and financially - that may result from granting the DCO, irrespective of whether or not the development is delivered as planned or proves to be unviable, as expected."* NNF is on record as having set out at multiple stages during the Examination process the flaws in the statutory consultation by RSP; the gaps in its Environmental Statement and its Environmental Impact Assessment; the fact that RSP has not shared with the ExA and with the SoS **any** information about commercial viability; the fact that RSP's aviation consultant admitted that she has no experience of forecasting air cargo traffic in South-East England; and the fact that experienced and well-regarded aviation experts like York Aviation and Altitude Aviation brought forward evidence that undermined, again and again, the assertions made by the developer about the UK air cargo market and the role that a reopened Manston Airport could play in that market.

9. We have also set out the DfT's own assessment of the likely development of the UK air cargo market and have drawn to the ExA's attention the fact that the Department does not think that that market is growing. It is our considered view that the substantial amount of evidence that we and others have submitted shows that RSP's proposals will never deliver the additional 10,000 cargo ATMs p.a. required by the legislation, leaving the Department in a position where, if this DCO is awarded, the Department will have supported a CPO of land and a significant environmental and economic blight over a wide area only to see the airport fail, entirely predictably, for a fourth time.

January 2020

Application by RiverOak Strategic Partners Limited for an Order granting Development Consent for the reopening and development of Manston Airport in Kent

REQUEST FOR COMMENTS AND FURTHER INFORMATION

Response by No Night Flights to the Department for Transport letter dated 17th January 2020 – NNF29

"3. The Secretary of State invites views from Kent County Council on the acceptability and adequacy of the Applicant's contribution of £139,000 per year for affected schools for 20 years to mitigate and minimise the noise effects on schools."

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1. We appreciate that the Secretary of State (SoS) has directed this question purely at Kent County Council (KCC). However, as a campaign group representing local residents, some of whom have, or will have, children in the affected schools, this is a matter of significant importance to us and to the local residents who we represent.

2. NNF has submitted evidence previously from the noise monitors that were in use while the airport was operational that demonstrates that SEL noise levels above 90dBA were regularly captured by the noise monitor at Clarendon School in Ramsgate when a plane flew over the school. The noise contours that the Civil Aviation Authority (CAA) produced for NNF[1] demonstrate that some of the schools that RSP has identified in Ramsgate will also be within the 57dB LAeq contour. It is not just Ramsgate schools that will be negatively affected. The primary school at St Nicholas at Wade is shown by the CAA to sit between the forecast 51dB LAeq and 54dB LAeq contours. A number of interested parties have submitted clear, factual evidence to the Examination as to the number of schools that will suffer unacceptable levels of aviation noise as a result of this proposal. Indeed, a number of children and teachers attested to their own negative experience of the noise nuisance created by the previous, much smaller, airport operation at Manston.

3. None of this is controversial. Nor is it controversial that aviation noise has a damaging effect on the educational achievement of children. We, and others, have submitted scientific evidence to the Examination on this. Despite this, RSP seeks to spread across twenty years its obligation as the noise polluter to pay for adequate noise mitigation measures for schools. This is unacceptable as well as unworkable.

4. There is no evidence that the noise mitigation work required can be easily sliced into units of £139,000 per year. There is no mechanism offered for adjudicating between the mitigation needs of X school and Y school when the sum of money applied for in any one year by a number of schools is greater than the sum provided for in that particular year. There is no evidence that suggests that £139,000 p.a. will adequately mitigate for a number of schools the noise nuisance created by the airport on a straight line basis, with the nuisance increasing 1/20 every year and with the work that needs to be done totalling no more than £139,000 in any one year across all the schools that need that work.

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1 NNF18 is TR020002-004224-AS-NNF

5. RSP has lost sight of reality here. Lessons will be interrupted the first time that a cargo 747-400 overflies schools, creating for some of the schools below the flight path a noise event of 90-100dB for that flight. This level of noise is a recorded fact of past airport operations, and therefore a predictable outcome of RSP's proposals. The responsibility to fund mitigation for the harm caused by its business plan is entirely RSP's. The correct way to do this is for schools to be able to apply to RSP for whatever it may cost to implement appropriate noise mitigation measures before lessons are interrupted and before children start to suffer from a poorer education. This means that the entire fund must be in place before the airport is open and it must be available to all schools that need noise mitigation work to be carried out. After all, there is a wealth of documentary evidence as to the noise levels that some schools will experience as a result of aviation operations at a reopened Manston, because there is a wealth of documentary evidence available about the noise levels that some schools actually experienced as a result of *previous* aviation operations at reopened Manston.

6. RSP must not be allowed to shirk its responsibilities in this way and be allowed to leave some schools with inadequate noise mitigation for a period of up to twenty years.

7. As to the quantum of noise mitigation money suggested, we can make no comment on that as we do not have the expertise. We rely on KCC to comment as to whether the sum suggested will be adequate to fund the work that needs doing to protect our children and their education from the noise pollution that will be created by RSP's commercial aspirations.

30 January 2020

Consultancy advice in relation to the redetermination of the Application for a DCO for the reopening and development of Manston Airport

Report

July 2021

Contents

1. Introduction

1.1 Background to the assignment

On 15 February 2021, the High Court quashed the decision by the Secretary of State for Transport regarding the application for a Development Consent Order (DCO) for the establishment of a cargo hub at the disused Manston Airport in Kent. The Department for Transport is now required to reassess its decision and has written to Interested Parties requesting further representations on certain issues for the purposes of redetermining this decision (see Appendix A).

This report is prepared by the independent aviation consultants, Alan Stratford and Associates Limited (ASA) on behalf of Ramsgate Town Council who, as an Interested Party, are planning to respond to this request. The report provides an analysis of the implications of changes to national aviation policy since 9 July 2020 and the factors that impact on the quantitative need for the proposed development that have arisen since 9 July 2019. As such, the impact of these changes will not have been considered in the evidence provided to the Planning Inspectorate's (PINS) Inquiry which recommended that the DCO should not be approved nor will they have been taken into account in the Secretary of State's decision which overturned the Planning Inspectorate's recommendation.

Wherever possible, we have endeavoured to make an independent evidence-led approach to this assessment. Any views expressed are our own and not those of Ramsgate Town Council or any other party.

1.2 Alan Stratford and Associates Ltd

Alan Stratford and Associates (ASA) is one of the leading and oldest established aviation consultancy practices in the UK. It was established in 1968 to provide a wide range of specialist independent air transport consultancy services, including air traffic forecasting, economic appraisal and operational studies across the airport and airline sectors.

The firm has extensive project experience at both at UK hub and regional airports, including Manston. Previous assignments carried out include advice to Thanet District Council on a Section 106 Agreement at Manston Airport and assistance to Kent County Council in respect of their response to the Airport Commission's consultation on airport capacity in London and the south east. ASA has also worked for the UK Civil Aviation Authority on regulatory studies at London Heathrow Airport and for the Irish Commission for Aviation Regulation on projects at Dublin Airport. The firm is currently working for Sheffield City Region (a partnership of local councils in south Yorkshire) regarding the future of Doncaster Sheffield Airport and on other projects relating to other airports and airfields across the UK .

2. Impact of changes to national and local policies since 9 July 2020

2.1 Airports National Policy Statement (ANPS)

The Airports National Policy Statement (ANPS) provides the policy framework for new runway capacity and infrastructure at airports in the SE of England. After a rigorous assessment by the Airports Commission, a new northwest runway at London Heathrow airport was adopted as the government's preferred option. The ANPS was given parliamentary approval in June 2018 but as at 9 June 2020, was ruled as illegal following a judgement by the Court of Appeal. This ruling was overturned by the Supreme Court in December 2020.

The third runway at Heathrow still requires approval at the Development Consent stage, although given the status of the ANPS, there is no reason to suppose that this should not be granted.

The new runway would provide a significant increase in the availability of slots for both bellyhold cargo on passenger aircraft and for dedicated freighters. Heathrow already accounts for some 62.6% of the UK's air cargo traffic by tonnage handled and 81.1% of that handled by the London area airports[1]. The new Heathrow runway would enable it to handle an increased proportion of future longer-term air cargo demand for SE England and the UK as a whole – particularly due to the price differential of passenger bellyhold cargo, which accounts for nearly 70% of all UK air freight.

The increase in ATM capacity at Heathrow would clearly reduce any potential long term demand for a new cargo hub at Manston. It should however be noted that recovery from the impacts of Covid-19 and Brexit is likely to be slow and that growth in UK air traffic is likely be constrained by climate change targets. It is possible therefore that the new runway will be delayed or not built at all. At present, Heathrow Airport Limited (HAL) are targeting that this would open in 2030. In any event, should the third Heathrow runway not be required, this would only arise as a result of lower growth in UK air passenger and cargo traffic than originally forecasted. In these circumstances, we believe that the demand for a new cargo hub at Manston would also be substantially reduced and it would no longer be justified.

3. Impact of changes to the quantitative need for the development since 9 July 2019

3.1 Global and national demand for air freight

The need for a new cargo hub at Manston is dependent on the long-term demand for UK air freight, the availability of air traffic movement (ATM) and cargo handling capacity at other UK airports and the locational advantages/disadvantages of

[1] Based on pre-Covid-19 (2019) figures.

Manston in comparison to these other airports for onward consignment distribution.

There have been significant changes in the nature of the global and UK air freight market since the start of the Covid-19 pandemic which started since the date of completion of the PINS Inquiry (9 July 2019). As indicated in Table 3.1, the overall UK air cargo market in 2020 declined by some 21.0 % on a total tonnage basis which, in turn, represented a decline of some 4.2% over 2018.

Table 3.1 UK Air Cargo Market – 2018-2020

	Total tonnes handled	% change
2018	2,645,710	0.9%
2019	2,535,422	-4.2%
2020	2,002,187	-21.0%

Source: CAA Airport Statistics

The lack of passenger flights and consequently cargo bellyhold capacity during the pandemic has, however, resulted in significant growth in dedicated freighter traffic, although as indicated in Tables 3.2 and 3.3 both the volume of cargo handled by dedicated freighters and the number of dedicated freighter ATMs have begun to decline as passenger flights have started to be reintroduced.

Table 3.2 UK Air Cargo Market by Type – May 2019 – May 2021

Tonnes Handled	May-19	May-20	May-21
Passenger Bellyhold	146,491	17,322	49,231
Dedicated Freighter	65,507	123,090	115,199
Total	211,999	140,412	164,430

Source: CAA Airport Statistics

Table 3.3 UK ATMs by Type – May 2019 – May 2021

Total ATMs	May-19	May-20	May-21
Passenger Aircraft	202,572	10,283	17,000
Dedicated Freighter	4,888	8,263	6,899
Total	207,460	18,546	23,899

Source: CAA Airport Statistics

The figures for dedicated freighters for May 2020 and 2021 include a number of 'pfreighters' (passenger aircraft with the main deck temporarily converted for freight) which are being operated on some routes although some airlines have now started to reconvert these back for predominately passenger use. Other passenger to freight aircraft reconfigurations have (or are) being made on a permanent basis. We do not however believe that this is a reflection of any long-term increase in the growth of global air cargo demand but rather that this is primarily an opportunity for airlines to retire old passenger aircraft types to replace even older, fuel and carbon emission inefficient freighter aircraft.

In terms of longer-term demand, Boeing's latest 20-year air cargo forecast[2] published since July 9 2019 (October 2020) shows a reduction in the rate of growth of global air freight to 4.0% pa in comparison with their 2018 forecast of 4.2% pa. European

[2] https://www.boeing.com/commercial/market/cargo-forecast/

markets are expected to have a lower rate of growth. This would imply that the Azimuth and Northpoint forecasts for Manston presented at the PINS Inquiry would need to be reduced accordingly. In any event, PINS took the view that.. *'the levels of freight that the Proposed Development could expect to handle are modest and could be catered for at existing airports (Heathrow, Stansted, EMA, and others if the demand existed)'.* We would concur with this view.

The Department for Transport (DfT) has not updated its air cargo forecasts since 9 July 2019. The fundamental driver of air cargo demand in the DfT's forecasting model is UK Gross Domestic Product (GDP), which in turn impacts on the level of imports and exports. As a result of Covid-19, Brexit and other economic factors, government forecasts of UK GDP growth have been significantly reduced since 9 July 2019. The latest forecasts prepared by the Office for Budget Responsibility (OBR)[3] predict that UK GDP will return to pre-Covid-19 levels by the second quarter of 2022 although the future level of growth thereafter was highly uncertain. A number of recent studies however, confirm earlier forecasts that the effect of Brexit will reduce the level of UK GDP by about 4% compared with remaining inside the EU[4]. It should be noted that the Azimuth and Northpoint forecasts for air cargo demand at Manston have not taken account of GDP decline due to Covid-19 and it is also unclear as to how or whether the full effect of Brexit has also been incorporated in their forecasts.

3.3 Cargo ATM and handling capacity at other UK airports

We do not believe that the level of air cargo (or passenger) demand at Manston would be sufficient to make it commercially or financially viable and we agree with the PINS Inspector that '*..general air freight would continue to be well served in the UK with spare capacity at Stansted in the short term (to 2030) and the proposed Northwest Runway at Heathrow in the longer term'.*

We should however, point out that, as a result of the Public Inquiry for the expansion of Stansted Airport to up to 43m passengers pa, the maximum number of permitted CATMs (Cargo Air Transport Movements) has been reduced from 20,500 CATMs to 16,000 CATMs to enable an increased number of PATMs (Passenger Air Transport Movements). However, in 2019, Stansted handled only a total of 10,627 CATMs, indicating that there is still considerable excess capacity. Forecasts produced by Stansted Airport Limited (STAL) at the Public Inquiry suggested that air cargo handled at the airport would grow from 209,000 tonnes in 2016 to 376,000 tonnes by 2020. The majority of this, however, would be passenger bellyhold cargo which was expected to grow from 6,000 tonnes in 2016 to 366,000 tonnes in 2028 because of carrier diversification (ie more full-service airlines) and increased long-haul operations. Dedicated CATMs were forecast to grow to just over 16,000 by 2028.

[3] https://obr.uk/overview-of-the-march-2021-economic-and-fiscal-outlook/
[4] https://www.ft.com/content/fbb70741-34cc-4f54-a66b-a2e4b9445f5b

There is substantial available capacity at East Midlands Airport, which is the UK's second largest cargo airport, handling some 13.2% of total UK air freight in tonnage terms in 2019. There is also considerable scope for other UK airports to handle increased volumes of air cargo both as passenger bellyhold and dedicated freighter traffic. Manchester, Birmingham and Doncaster Sheffield airports, which all have some available night-time capacity, have all placed increased marketing emphasis on attracting air freight since 9 July 2019. In the longer-term, we believe that the price differential between passenger bellyhold and dedicated freighter cargo will widen in the future, particularly in the UK where Heathrow is dominant. Passenger bellyhold cargo is generally carried on more fuel efficient aircraft with fewer carbon emissions on a 'per tonne carried' basis. Given the likely price constraints required to meet the UK's carbon emissions targets and the need to maximise their overall revenues, it is likely that many shippers will favour passenger bellyhold over dedicated freighter cargo in the future.

3.4 Locational factors

Whilst Manston's location (and that of other UK airports) has obviously not changed since 9 July 2019, there are a number of other geospatial factors that have emerged since this date. It is important to stress that other UK airports are better located than Manston for the distribution of air cargo or e-commerce items throughout the UK often via a 'fulfillment centre'. A key location for UK retail and other logistics warehousing is in the 'Golden Triangle', an area that extends between Northampton, Birmingham and Leicester. It includes the prime logistics parks dotted along the M1 from J15 up to J24 and along the M6 in Birmingham. The Golden Triangle are is most easily accessed via East Midlands Airport, although other airports such as Birmingham and Doncaster Sheffield are in relatively easy reach[5]. The importance of this region in terms for logistics warehousing and 'fulfilment' centres to due to its central location. Approximately 85% of the UK's population (or retail stores) can be reached within four and a half hour's drive time by an HGV. This is critical as it is the limit HGV drivers can drive before having to take a break (they are allowed a maximum of nine hours' driving per day). Similar logistics parks are also starting to emerge along the M40 and M6 corridors.

A number of new warehouse logistics parks to support e-commence, such as the Prologis' Dirft facility on the M1 near Northampton[6] and GLP's 1.0 million sq ft of speculative warehousing in the East Midlands (the largest programme in the UK)[7], have been announced since 9 July 2019 - although, with the exception of Amazon's proposed new logistics park near Dartford, none of these are close to Manston Airport. Furthermore, in the March 2021 budget. the government announced eight new freeport sites across the UK, including the East Midlands (which incorporates East Midlands

[5] https://www.shdlogistics.com/news/cbre-demystifies-golden-triangle-debate
[6] https://www.bbc.co.uk/news/business-57547389
[7] https://www.shdlogistics.com/property/e-commerce-fuels-speculative-warehousing-golden-triangle

Airport). All of these freeport locations are, however, more easily accessed via other UK airports rather than via Manston.

As indicated in the PINS report, the express freight integrators and e-commerce suppliers prefer to be based at a centrally-located cargo hub such as East Midlands or Stansted. Amazon Air has an established base at East Midlands Airport but has, since 9 July 2019, introduced night flights via Southend Airport. We see no possible future opportunities for Amazon Air or any other e-commerce or express freight operators to be based at Manston, particularly in view of the Applicant's commitment not to operate any night flights.

The importance of an airport's location is fundamental for both passenger and freight traffic. In the case of freight, single consignments, say fresh fruit from Africa, will need to be distributed to retail stores across the UK as quickly as possible. Similarly e-commerce delivery times are becoming increasingly shorter. Manston's remote location puts it at a considerable disadvantage over other UK airports. We believe that there is (or will be) sufficient capacity at Heathrow, Stansted and East Midlands Airports to handle UK air cargo growth for at least the next 20 years, but even if this proved not to be the case, other UK airports would be more suitable for this. We agree therefore with PINS' view that…*'If demand were present, then facilities could be constructed at other airports where speed and handling efficient could be largely matched to the Applicant's plan and the ExA (Examining Authority) is not convinced that the location of the Proposed Development is entirely favourable'.*

3.5 Summary

The PINS Inspector's report concluded that.. *'the levels of freight that the Proposed Development could expect to handle are modest and could be catered for at existing airports (Heathrow, Stansted, EMA, and others if the demand existed)'.* In view of this, it considered that ..*'Manston appears to offer no obvious advantages to outweigh the strong competition that such airports offer'*.

The changes to the UK air freight market and its likely development over the next 20 years as discussed above reinforces PINS' overall conclusions.

4. Impact of changes relating to carbon emissions from UK aviation

4.1 Impact of development on UK national carbon emissions targets

The PINS Inquiry reviewed the likely impact of the Manston development on climate changes in view of the relevant national and local policies at the time. These included the Airports National Policy Statement (ANPS), the National Planning Policy Framework (NPPF) and Planning Policy Guidance (PPG), the Infrastructure Planning (EIA) Regulation 2017, the Climate Change Act 2008 and the Emerging Draft Thanet

Local Plan to 2031 policies.

The PINS Inspector's report concluded that *'…climate change issues have been adequately assessed, and that the requirements of the ANPS, NPPF and 2017 EIA Regulations are met'*. However, it also noted that.. '*given the direction of emerging policy that the Proposed Development's contribution of 730.1 KtCO2 per annum ie 1.9% of the total UK aviation carbon target of 37.5 Mt CO2 for 2050, from aviation emissions will have a material impact on the ability of Government to meet its carbon reduction targets, including carbon budgets.* As a result, the report '*..concludes that this weighs against the granting of development consent'.*

The Climate Change Act 2008 did not require international aviation (which would form the vast majority of Manston's flights) to be included in the UK government's targets for Net Zero emissions. However, the Sixth Carbon Budget, which was published on 9 December 2020, set a new goal to reduce carbon emissions by 78% by 2035 in comparison to 1990 levels and it incorporates the UK's share of emissions from international aviation as from 2033.

The Sixth Carbon Budget was enshrined in UK legislation on 22 June 2021 and will present substantial challenges for its aviation sector, with some estimates suggesting that a traffic increase of only 25% between 2018 and 2050 would be possible in order to meet the 'Net Zero' target[8]. Further targets may be required to kerb the climate change effects of non-CO_2 emissions from aviation in the future.

There is no doubt that in order to meet the Net Zero requirements, the growth of both UK air passenger and cargo traffic will need to be substantially curtailed in the future, probably largely through price increases. This will significantly reduce the level of possible future air cargo (and passenger) demand at Manston. Furthermore, it should be noted that Manston's potential 1.9% share of the UK's aviation carbon target by 2050 is implicitly already allocated to other airports, many of which have existing planning consent for such growth. In these circumstances, DCO consent for the new Manston development must be regarded as unjustified.

5. Other matters arising since 9 July 2019

5.1 Impacts related to forecasted employment

The PINS report concluded the level of new employment from the new Manston development forecasted by the Applicant was flawed, with an incorrect use of employment multipliers and no adjustment for displacement effects. The report indicated that the jobs generated as forecasted by the Applicant were more likely to be at the national level rather than benefit those living in Thanet or East Kent.

[8] https://www.theccc.org.uk/wp-content/uploads/2020/12/Sector-summary-Aviation.pdf

We agree with the PINS Inspector's view. In particular we note that the jobs generated would only arise if the forecasted level of cargo (and passenger) demand is achieved and that historically direct employment at Manston has never exceeded more than 200 jobs.

It should also be pointed out that since 9 July 2019, the Applicant has reportedly indicated that the level of jobs generated by the development is likely to be lower than expected due to automation although it is not clear as to the possible scale of this reduction.

5.2 Airspace Change Proposal

As part of its plans for the site, in 2019 the Applicant began the process to secure approval from the Civil Aviation Authority (CAA) for its use of airspace and procedures for safe and efficient operations to and from the airport, if Manston opens again. There are seven stages and 14 steps that need to be completed for the airspace change to be approved by the CAA. As well as this, there are four 'gateways' which must be approved.

We understand that, at 9 July 2021, the Applicant had not yet met the necessary requirements for approval of the 'Develop and Assess Gateway', (part of Stage 2) due to 'errors and inconsistencies'. Whilst this does not preclude the eventual resolution of these requirements should DCO consent be granted, a full public consultation will be required, which presents a question mark over the feasibility of the necessary airspace changes.

5.3 Lack of support from the air freight and logistics sector

We note that there has been a conspicuous lack of publicised support for the proposed development from cargo (or passenger) airlines, air freight integrators and other logistics specialists since 9 July 2019 (including the period from 15 February 2021 when it was announced that DfT's decision was to be re-assessed). It is possible that private submissions will be made to DfT, although we would contend that if such support existed, this would probably already have been publicised by the Applicant himself. It should be noted that the traffic forecasts prepared by Azimuth Associates on behalf of the Applicant and presented at the Public Inquiry were based on interviews with airlines and logistics specialists, although the identity of the interviewees and the outcome of the interviews were not disclosed.

5.4 Impact on aircraft noise

The extent of aircraft noise generated by the development and its construction was the subject of considerable debate during the PINS Inquiry. The Inspector's report indicated that the mitigation package (R9b) proposed by the Applicant would, in his

view, address the noise impacts adequately. Nevertheless this does not alter the fact that a considerable number of people, particularly those living in Ramsgate, would be affected by the adverse effects of aircraft noise if DCO consent were granted and the forecasted traffic levels achieved. In practice, we believe that the changes to the expected traffic demand at Manston as outlined above would reduce these noise impacts although they would nevertheless be significant and properties would continue to be blighted.

5.5 Impact on local tourism

During the PINS Inquiry, the impact of the proposed development on the local tourism industry was discussed. In his report, the PINS Inspector indicated that he was '*persuaded by the view of TDC that while the Proposed Development may bring further tourists to the wider area, the amenity impacts from the construction and operation of the Proposed Development would adversely affect the tourism industry in Ramsgate'.*

Whilst we agree with the Inspector's position on this, we believe that neither the cargo or passenger traffic levels forecasted by the Applicant are likely to be achieved, particularly in view of the recent changes to the key drivers of traffic demand as described above. Despite this, we still maintain that aircraft noise levels would still sufficient to have a serious detrimental impact on local tourism, particularly in Ramsgate where visitors to the town centre, beaches and other local attractors would be under the direct flight path of a cargo airport.

6. Conclusions

To summarise our conclusions:

(i) Heathrow is likely to continue to be the UK's main gateway for air cargo, along with Stansted and East Midlands Airports.

(ii) The Airports National Policy Statement (ANPS), in which a new north-west runway at Heathrow is adopted as the preferred option for additional runway capacity in the south east now has full legal status following an over-ruling by the Supreme Court. This would provide substantial additional passenger bellyhold and dedicated freighter capacity and would significantly reduce the need for a new facility at Manston. Whilst it is possible that the third Heathrow runway is no longer required due to lower levels of future air traffic growth, this would also apply to Manston.

(iii) The impacts of Covid-19 have increased the number of dedicated freighter ATMs across the UK. These impacts are expected to be temporary until bellyhold capacity becomes available following the resumption of passenger flights. In the longer-term, the price differential of bellyhold

capacity over dedicated freighters is likely to widen as freighter aircraft are likely to have cost penalties due to their higher fuel and carbon emissions.

(iv) Following a Public Inquiry for the expansion of Stansted held earlier this year, the airport agreed to reduce its number of permitted Cargo Air Transport Movements (CATMs) to 16,000 pa. This, however, is considerably in excess of its pre-Covid level of 10,627 in 2019. As such, there is considerable scope for expansion, if required, thereby reducing the need for a new facility at Manston. There is also substantial spare cargo capacity, including for night-time operations, at East Midlands, Birmingham, Manchester and Doncaster Sheffield Airports.

(v) In the medium to long term, the impacts of Covid-19 and Brexit are likely to have a significant impact on UK GDP growth and its consequent effect on air freight (and passenger) demand. This will, in itself, reduce the quantitative need for the proposed development at Manston.

(vi) A number of new logistics parks and fulfillment centres for e-commerce have been announced since 9 July 2019, most of which are in the 'Golden Triangle' in the East Midlands or in the M40 or M6 corridors, which are centrally located for onward distribution across the UK. Other airports, including East Midlands, Stansted, Birmingham and Doncaster Sheffield, are better placed than Manston to serve these logistics parks and fulfillment centres.

(vii) The Sixth Carbon Budget, which required UK international aviation to be included in its Net Zero targets from 2033 onwards, was enshrined in UK legislation on 22 June 2021. As a result. UK air passenger and cargo traffic will need to be substantially curtailed in the future, probably largely through price increases. This will significantly reduce the level of possible future air cargo (and passenger) demand at Manston. Furthermore, it should be noted that Manston's potential 1.9% share of the UK's aviation carbon target by 2050 is implicitly already allocated to other airports, many of which have existing planning consent for such growth. In these circumstances, DCO consent for the new Manston development, must be regarded as unjustified.

(viii) The lack of any publicised support from cargo (or passenger) airlines, air freight integrators or the logistics industry, even after 15 February 2021 when it was announced that DfT's decision was to be re-assessed, suggests that there is little appetite for the proposed development.

(ix) Whilst the impact of any lower traffic demand at Manston as a result of these changes would reduce the impact of aircraft noise for the local

community, there would still be significant adverse noise effects particularly for those living in Ramsgate.

(x) The expected reduced level of traffic demand will impact on the forecasted extent of employment created by the development if consent for the DCO were to be granted. The number of local tourists would similarly be expected to reduce, although the construction and operation of the new facility would still have an adverse impact on the local tourism industry, particularly in Ramsgate.

(xi) In summary, the changes since 9 July 2021 significantly reduce the quantitative need for the proposed development, whilst substantial adverse impacts, such as its effect on climate change, aircraft noise and the local tourism industry still remain. The PINS Inspector recommended that consent for the DCO should not be granted. We would concur with this view.

Appendix A

Department for Transport letter to Interested Parties
(11 June 2021)

Department for Transport

Great Minster House
33 Horseferry Road
London, SW1P 4DR

Telephone:
e-mail: transportinfrastructure@dft.gov.uk
Web: www.gov.uk/dft

To:

All Interested Parties

11 June 2021

cc:

Dear Sir/Madam

Planning Act 2008 and the Infrastructure Planning (Examination Procedure) Rules 2010

Re-determination of the Application by RiverOak Strategic Partners Limited ("the Applicant") for an Order granting Development Consent for the reopening and development of Manston Airport in Kent.

STATEMENT OF MATTERS

1. The High Court's order dated 15 February 2021 quashed the decision of the Secretary of State for Transport dated 9 July 2020 to grant the application by RiverOak Strategic Partners Limited ("the Applicant") for development consent for the proposed development and reopening of Manston Airport in Thanet, Kent ("the Development"). Following that order, the Secretary of State must now re-determine that application.

2. I am therefore writing in accordance with rule 20(2) of the Infrastructure Planning (Examination Procedure) Rules 2010 to set out to you, as an Interested Party to the above application, the following matters which the Secretary of State invites further representations for the purposes of his re-determination of the application. These matters are:

   - the extent to which current national or local policies (including any changes since 9 July 2020 such as, but not limited to, the re-instatement of the ANPS) inform the level of need for the services that the Development would provide and the benefits that would be achieved from the Development;
   - whether the quantitative need for the Development has been affected by any changes since 9 July 2019, and if so, a description of any such changes and the impacts on the level of need from those changes (such as, but not limited to, changes in demand for air freight, changes of capacity at other airports, locational requirements for air freight and the effects of Brexit and/or Covid);

- the extent to which the Secretary of State should, in his re-determination of the application, have regard to the sixth carbon budget (covering the years between 2033 – 2037) which will include emissions from international aviation; and
- any other matters arising since 9 July 2019 which Interested Parties consider are material for the Secretary of State to take into account in his re-determination of the application.

3. In addition to the above matters set out in paragraph 2, the Secretary of State requests information from the Interested Parties specified below.

4. In light of the passage of time since close of the examination, the Secretary of State requests the **Applicant** to consider the currency of the environmental information produced for the application (including information submitted to inform the Habitats Regulation Assessment) and either confirm the continued currency of that information, or where necessary, to submit updated information.

5. The Secretary of State seeks confirmation or otherwise from **the Government Legal Department** of consent to the compulsory acquisition under section 135 of the Planning Act 2008 in relation to plots 019c and 05b held as Queen's Nominee in respect of bona vacantia land.

6. The Secretary of State seeks confirmation or otherwise from both **the Met Office** and **the Secretary of State for Housing, Communities and Local Government** of consent to the compulsory acquisition under section 135 of the Planning Act 2008 in relation to plot 27.

7. **The deadline for any response is 9 July 2021.**

8. Responses to the matters outlined in this statement of matters should where possible be provided by email to manstonairport@planninginspectorate.gov.uk, marked "For the attention of the Manston Airport Case Team". As a result of ongoing Government guidance relating to the coronavirus (COVID-19) emergency, the Planning Inspectorate based at Temple Quay House is unable to receive postal submissions in a reliable way. Postal submissions made to the Secretary of State for Transport, Manston Airport Case Team, c/o Planning Inspectorate, National Infrastructure Planning, Temple Quay House, 2 The Square, Temple Quay, Bristol BS1 6PN will therefore be subject to delay and we cannot guarantee that they will be received in time to be considered. If you have difficulty in submitting a response by the consultation deadline, or difficulty in submitting a response by email, please inform the Manston Airport Case Team.

9. The Secretary of State has appointed an independent aviation assessor to advise him on matters relating to the need for the Development and to produce a report summarising those findings. The assessor's report, along with all representations received and any supporting information, will be made available on the Planning Inspectorate's National Infrastructure Planning website as soon as possible after the 9 July 2021 deadline for responses at:

   https://infrastructure.planninginspectorate.gov.uk/projects/south-east/manston-airport/

10. An opportunity to comment on the independent aviation assessor's report, the representations received and any supporting information will be given to Interested Parties. The Secretary of State will then consider the responses and information received in redetermining the application.

11. All previous representations and information relating to the application received before 9 July 2020 has been published on the National Infrastructure Planning website. To assist the Secretary of State, any reliance on information containing in previous representations made either during or since the examination should also include the relevant document reference number(s) and preferably also include hyperlinks to where the documents can be viewed on the National Infrastructure Planning website.

12. Any correspondence received between 9 July 2020 and the date of this statement of matters has not been published on the National Infrastructure Planning website and as such will not be taken into account as part of the re-determination process. Where Interested Parties have submitted comments on the application between 9 July 2020 and the date of this statement of matters, and where they wish to have those comments treated as a formal representation in the re-determination process, the Secretary of State requests that Interested Parties resubmit their correspondence. The Secretary of State will then treat such resubmitted correspondence as a formal representation submitted to him in response to his statement of matters.

13. This letter is without prejudice to the Secretary of State's re-determination of the application for the Manston Airport application and his decision whether or not to grant development consent for the reopening and development of Manston Airport, and nothing in this letter is to be taken to imply what that decision might be.

Yours faithfully

Natasha Kopala
Head of Transport Infrastructure Planning Unit

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