MANSTON AIRPORT DEVELOPMENT CONSENT ORDER EXAMINATION LATE SUBMISSION FOR DEADLINE 7a

COMMENTS ON APPLICANT'S NOISE CONTOURS, ENVIRONMENTAL STATEMENT AND NOISE MITIGATION PLAN

FROM LOCAL BUSINESS AND INTERESTED PARTY, FIVE10TWELVE LTD

- 1. In advance of the Issue Specific Hearings scheduled for the week commencing 3 June 2019, we would like to urgently draw the ExA's attention to a series of noise contour reports produced by the Environmental Research and Consultancy Department, ("ERCD") of the Civil Aviation Authority, ("CAA") which we expect to be provided by us immediately upon receipt from the CAA.
- 2. The CAA's ERCD reports are produced according to the ERCD Charter¹, which confirms that amongst the CAA ERCD's roles is "to provide technical advice to the Department for Transport (DfT) and other Government departments under the terms of annual letters of agreement".
- 3. The CAA's ERCD Charter further states that the ERCD is available "to provide technical advice, including the provision of noise exposure contours, to airport operators, local authorities and others on a commercial basis".
 - 3.1. Given the role that the CAA's ERCD will play in ultimately producing and determining the impact of noise exposure during the Applicant's proposed ACP and Aerodrome certification, it is unclear as to why the CAA's ERCD was not approached or preferred to produce the Applicant's own previously-submitted noise contours.
- 4. We believe the noise contours we have commissioned by the CAA's ERCD are of material significance to the hearings and to the issues at hand, specifically with regards to the Applicant's Environmental Statement, Environmental Impact Assessments and Noise Mitigation Plans and associated costings.

¹ Appendix 01: Charter for the Environmental Research and Consultancy Department (ERCD)

- 5. Further, we anticipate that the CAA's ERCD noise contour reports will call into question the issue as to whether the Applicant has in fact planned for a realistic 'worst case' scenario as it has previously maintained and is most surely required.
- 6. We further anticipate that the noise contour charts produced by the CAA's ERCD will also call into question the conclusions, submissions and Statements of Common Ground ("SOCG") of statutory bodies and Interested Parties that have been based on the assumption that the Applicant's previously submitted noise contours are indeed a realistic 'worst case'. This includes but is not limited to Thanet District Council, Canterbury City Council, Dover District Council, Kent County Council, Public Health England, Historic England and Natural England.

Background

- 7. In our submission to Deadline 5 of 27 March 2019, (REP5-121), we outlined a number of concerns, echoed by numerous other Interested Parties, statutory bodies and Local Authorities, with regards to the Applicant's noise methodology and production of noise contours which forms the basis of the Applicant's Environmental Statement, Environmental Impact Report, Noise Mitigation Plans and mitigation costings.
 - 7.1. These other parties include but are not limited to Historic England, (REP4-058), Thanet District Council LIR, (REP3-010), Canterbury City Council LIR, (REP3-246), Dover District Council (RR0490), and numerous public representations and submissions providing evidence of both historical noise monitoring data and testimony of lived experience during previous operations, (e.g. REP1-053, RR0537, RR2039, RR0530, RR1043, RR0009, RR1419, RR1994, RR1479, RR0631, RR0555 etc.).
- 8. These concerns and their impact were reiterated in our further submission to deadline 5, (REP5-074), specifically paragraphs 6 6.7, in which we requested at paragraph 6.5 that "there should be an independent review and re-issue of the noise contours" and at paragraph 6.5.3 that this should be conducted by the

Environmental Research and Consultancy Department, ("ERCD") of the Civil Aviation Authority, ("CAA").

- 9. In our submission of 27 March 2019 (REP5-121), we also stated our intention to engage a noise and vibration expert in order to conduct "a distinct piece of work on the Applicant's noise contours submitted" and sought permission from the ExA to submit a late submission to Deadline 5 with the results. We had hoped to be able to submit the results within this timeframe.
 - 9.1. In the event, the production of the noise contours was a longer process for the CAA's ERCD than previously anticipated. We will be submitting these charts at the earliest possible opportunity and within hours of receiving them from the CAA. We have been advised that this is likely to be by close of play on 31 May 2019.

10. Noise Contours

In order to show the impact and variance of different levels of noise events, the CAA's ERCD has produced noise contours plotted from 51 to 72 dB(A) in 3dB steps, which the CAA's ERCD informed us was their standard approach for noise contour production. It is unclear why such plotting was not also provided by the Applicant in its own noise contour reports produced by its own commissioned consultants.

10.1. The attached noise contour reports have been produced by the CAA's ERCD using CAA standard LAeq, 16hr modelling.

Data Sources and Methodology

11. Fleet Mix

We have previously echoed the ExA's concerns and those of York Aviation and others expressed during the previous round of Issue Specific Hearings, ("ISH"), in relation to the Applicant's Fleet Mix, as per paragraph 5.3.3 of our submission to DL5, (REP5-074).

- 11.1. In the interests of comparing 'apples with apples' and finding the best comparison with the Applicant's own noise contours, however, the CAA ERCD noise contours were commissioned based on exactly the same commercial Fleet Mix as that submitted by the Applicant in Appendix 3.3 of the Environmental Statement (APP-044).
- 11.2. Nick Hilton of Wood, on behalf of the Applicant, confirmed during the ISH of 2 May 2019 at approximately 14:00hrs that this Fleet Mix was and is "the basis of all forecasts used in the EIS", including the noise contours.
- 11.3. Whilst the commercial Fleet Mix used by the CAA's ERCD is as per the Applicant's own Fleet Mix at Appendix 3.3 of the Environmental Statement, (APP-044), the CAA's ERCD noise contour reports commissioned also include the 38,000 General Aviation ("GA") ATMs which the Applicant has confirmed will operate from the proposed airport, (REP7-002)².
- 11.4. Since it is our understanding that the Applicant did not include this number of GA ATMs or details of specific GA aircraft type for this number of ATMs in its own noise contours, the GA ATMs for the noise contour reports produced by the CAA's ERCD have been based on a realistic balance of 58% Single Propellor, (SP), 15% Small Twin Piston, (STP), 15% Small Twin Turboprops (STP) and 12% Executive Jets (EXE3).
 - 11.4.1. The percentage split of these different GA types has been taken from GA movements recorded at East Midlands Airport, which the Applicant has recognised as an appropriate comparison airport, during a single average day's movements recorded on 9 May 2019³.

12. **ATMs**

The CAA ERCD noise contour reports commissioned are based on the Year 20 ATMs confirmed and used by the Applicant of 26,468 commercial ATMs, (REP7-002)⁴, plus the above-mentioned 38,000 GA ATMs.

² REP7-002, page 9, "New R21", paragraph (ii)

³ Appendix 02: East Midlands Airport Flight Log, 9 May 2019

⁴ REP7-002, page 9, "New R21", paragraph (i)

13. Flight Paths

In accordance with concerns we and others have raised with regards to the Applicant's assumptions regarding Flight Paths and the ExA's Question Ns.2.19 in its Second Written Questions, we concur that "there can be no certainty that the proposed flightpaths which the (Applicant's) noise assessment is based on will be deliverable" and that "a worst case assessment would need to be based on flightpaths as previously operated when the airport was open".

- 13.1. The Applicant's own submitted Flight Paths and swathes are further unlikely since they appear to show all flights departing to the West with no indication of how or where such routes might change direction to the South or East or how much fuel would be burned before doing so for flights which may be routed to the African, European, East European, Middle East and Asian destinations listed by the Applicant as amongst its target markets.
- 13.2. We entirely reject the Applicant's Response to this question submitted at DL6 (REP6-012) in which the Applicant claims that "it is highly unlikely that the identical flight paths, vertical and lateral, that were used when the airport was previously open would be accepted by the CAA as they would not represent best practice (having been based on obsolescent equipment and procedures) in the context of the requirements of CAP1616 and of FASI-S"
- 13.3. It is our understanding that "worst case" must, by definition, include all levels of assumed likelihood and probability. As such, previously operated Flight Paths must also be included in any potential assumptions of worst case scenarios, however unlikely the Applicant may consider this in its own unsupported assertions.
- 13.4. As part of our brief to the CAA's ERCD department and before commencing the production of the noise contour reports, we confirmed in our brief to the CAA's ERCD in an email dated 13 May 2019 that:

"In the absence of any existing flight tracks since the airport is not currently operational, it is our understanding that historical flight tracks would be a credible option under CAP 1616 and FASI-S."⁵

13.5. Our brief to the CAA's ERCD was accepted by the CAA precisely on this basis. As such, the Applicant's unsupported assertion that it is "highly unlikely" the previous flight paths would be accepted by the CAA under CAP 1616 and FASI-S is totally without merit.

14. Runway Splits

Thanet District Council's Local Impact Report, (REP3-010), raises concerns regarding the viability of the Applicant's preferred runway use, stating at paragraph 4.3.8, (bold added for emphasis):

"The airport operator will seek to operate take-offs from Runway 28 and landings on Runway 10 subject to such operations being in accordance with CAA guidance and the aircraft operator's own limitations and safety management systems. **This** provides no certainty that the airport will operate in this manner."

14.1. In order to assess all possible scenarios - and thus incorporate a genuine and realistic worst case - our brief to the CAA's ERCD was to produce noise contour reports showing:

100% departures to the East100% departures to the West70/30 split departures between East and West70/30 split departures between West and East

This accounts for more likely and realistic scenarios that may apply - and have applied historically - given operational changes that may be required due to weather conditions, aircraft weight and "aircraft operator's own limitations and safety management systems".

⁵ Appendix 03: Email to CAA's ERCD department, dated 13 May 2019

Appendix 01

Charter for the Environmental Research and Consultancy Department (ERCD) of the Civil Aviation Authority (CAA)

CHARTER FOR THE ENVIRONMENTAL RESEARCH AND CONSULTANCY DEPARTMENT (ERCD)

Mission

ERCD's mission is to provide a source of independent and impartial expert technical advice on the environmental effects of aviation to external and internal customers.

In accordance with the CAA's mission, values and guiding principles ERCD aims to offer independent and impartial advice by adhering to the highest standards of professionalism and integrity.

Roles

ERCD's roles are:

- a) to provide technical advice to the Department for Transport (DfT) and other Government departments under the terms of annual letters of agreement;
- b) to provide technical advice, including the provision of noise exposure contours, to airport operators, local authorities and others on a commercial basis; and
- c) to act as an internal consultancy on environmental matters to other parts of the CAA through a cross-charging mechanism.

Obligations

ERCD will:

- carry out its activities in an objective and impartial manner;
- produce results that stand up to challenges of credibility, reliability and objectivity;
- follow guidance laid down by Government on scientific analysis and policy¹;
- maintain corporate membership of the Institute of Acoustics and follow its ethical quidelines;
- publish the results of its research and analysis;
- not unreasonably exclude any stakeholder from access to its services;
- calculate costs to its customers on an equitable basis;
- · encourage its staff in their professional development; and
- acknowledge that although it does not make regulatory decisions itself, it does provide advice to inform both DfT and CAA in making their regulatory decisions.

Review

This charter will be reviewed annually as part of standard risk management process.

¹ HM Government, Guidelines on Scientific Analysis in Policy Making, October 2005

Appendix 02

East Midlands Airport Flight Log 09 May 2019

East Midlands area, Mode-S flight log (local time)
Flights below 1500ft

Last Update 9-May-19 18:30 From 9-May-19 05:56

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EXS650	RYR65VE	RYR101	ELE13	EXS031E	BEE1EG	TOM3YH	EXS3ER		EXS1U	GDACF	GJCOP	TCX830	EXS65C	EXS80SH	RYR5141	REV10S	RYR3851	RYR72NG	RYR45WP	CG61	BCS1443	GYRTE	EXS4QD	Callsign	
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Appendix 03

Email to CAA's ERCD, dated 13 May 2019



Jason Jones-Hall < @gmail.com>

Re: Manston Airport Noise Contour Maps (proposal)

1 message

Jason Jones-Hall @gmail.com>
To: @gmail.com>
Cc: Samara Jones-Hall @gmail.com>

Mon, May 13, 2019 at 11:38 AM

Hi hope you had a good weekend.

First of all, apologies for all the recent changes and any confusion this may have caused.

I can see has already been in touch regarding some of her changes and mentioned we would be in touch separately with our own requirements for an additional scenario.

To keep this as simple as possible

- 1) Flight tracks are as per previous instructions and as attached, i.e. based on historical flight tracks from Manston. In the absence of any existing flight tracks since the airport is not currently operational, it is our understanding that historical flight tracks would be a credible option under Cap 1616 and FASI-S.
- 2) Runway splits are as per previous instructions i.e. 100% East, 100% West, 70/30 East and 70/30 West.
- 3) I have attached a spreadsheet with our Fleet Mix scenario for Runway 28 and Runway 10, (two separate sheets in the same Excel workbook). I have already put in the calculations for peak day movements, based on ATMs divided by 365 and rounded as discussed, so these should be good to go. I have also put in the General Aviation splits according to ANCON types, as per your last email
- 4) No night operation scenario is required for this mix it will be daytime only.

Please let me know if you need any further information on this.

Re: Contracting/Payment

Once again, sincere apologies for any confusion caused with these late changes and thank you very much for your patience and

As far as this particular scenario is concerned, we are good to go from our side and keen to progress this ASAP. Please revert with contract and payment details and also ETA for completing this scenario.

Kind regards Jason

assistance.