

Appendix C



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21st February 2018

Matthew Heron
Planning Officer
Central Bedfordshire Council
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Dear Matthew,

Planning Application CB/17/05852/OUT Cranfield Airpark application

The Parish Council have considered this application, which contains a number of very technical and comprehensive documents. The Council wish to highlight that this application will fundamentally change Cranfield not just now, but for generations to come, so urge the Officers reviewing this application, and the elected Members considering the application, to thoroughly understand and appreciate the significant implications of what is being proposed.

The Parish Council are objecting to this application.

The Parish Council have set out their concerns below to show the main areas which they feel the local authority must ensure are completely satisfied with, and insist that very strict planning conditions are applied to this application if the elected Members are minded to grant approval. Without very clear and robust planning conditions in place, this proposal could have a catastrophe impact on the residents of Cranfield and their rural village.

CRANFIELD AIRPARK NOISE MITIGATION RECOMMENDATIONS

Under the Environmental Noise (England) Regulations 2006, Airports with above 50,000 movements a year are required to produce a Noise Action Plan designed to manage noise issues and effects arising from aircraft departing from and arriving at the airport.

Cranfield Airport does not at present meet this limit, so is not designated as a major airport. As a result, the competent authority is the airport operator. Under the airpark planning application the total number of movements is expected to rise to 46,355 by 2027. Given that this is just below the 50,000 threshold, the Parish Council considers it necessary that a Noise Action Plan is devised and implemented for Cranfield Airfield.

The applicant appears to be relying on historically higher level of flights to justify the additional noise associated with the proposed aircraft movements. The Parish Council recognises that the airfield has a 24 hour licence for up to 150,000 movements and this would be well within capacity. However the Parish Council makes the following points:

- Since 2003 many homes have been built in Cranfield and so there will be a significant new population in the village who will have only experienced the current low level of airport activity.
- Existing residents have got used to the current noise levels.
- There has been a change in the noise regulatory system for aircraft noise over the years; for example the introduction of the Aviation Policy Framework, 2013, affording better protection for residents living close to an airfield.

The following information on the aircraft noise regulatory environment is taken from Simon Urquart's Proof of Evidence to the Mill Road Phase II Appeal. (Mill Road Phase II Appeal, February 2018, APP/P0240/W/17/3181269):

Section 3, page 5 'The table [PPG Noise guidance which sets out the perception of noise and increasing effects] shows that as the exposure increases beyond the lowest observed adverse effect level boundary, consideration needs to be given to mitigating and minimising these effects.'

3.1.3 Increasing the noise exposure further will at some point cause the significant observed adverse effect level boundary to be crossed. In relation to this, Paragraph 30-005 of PPG-Noise states; "If the exposure is above this level the planning process should be used to avoid this effect occurring, by use of appropriate mitigation such as by altering the design and layout"

3.1.5 Only when the noise exposure crosses the unacceptable adverse effect level, where adequate mitigation cannot be provided, should development be prevented.

Aviation Policy Framework 2013

3.2.1 The Government's overall policy on aviation noise is to limit and, where possible, reduce the number of people in the UK significantly affected by aircraft noise. The Aviation Policy Framework (APF), at paragraph 3.17, states; **"We will continue to treat the 57 dB LAeq 16 hour contour as the average level of daytime aircraft noise marking the approximate onset of significant community annoyance"**.

3.2.2 Under the heading "Noise Insulation and Compensation", paragraph 3.39 of the APF states;

"As a minimum, the Government would expect operators to offer financial assistance towards acoustic insulation to residential properties which experience an increase in noise of 3 dB or more, which leaves them exposed to levels of noise of 63 dB LAeq 16 hours or more".

3.2.3 Paragraph 3.36 of the APF sets an upper limit to exposure to noise from aircraft. It states;

"The Government continues to expect airport operators to offer households exposed to levels of noise of 69 dB LAeq 16 hours or more, assistance with the costs of moving".

Civil Aviation Authority and the Department for Transport

3.3.1 The recently published CAA (CAP 1616 "Airspace Design") Guidance document requires airports to provide noise contours down to 51 dB LAeq, 16hr.

3.3.2 A Department for Transport document titled; Consultation Response on UK Airspace Policy: A framework for balanced decisions on the design and use of airspace, (Appendix 2), States; "2.72 So that the potential adverse effects of an airspace change can be properly assessed, for the purpose of informing decisions on airspace design and use, we will set a LOAEL at 51 dB LAeq 16 hr for daytime, and based on feedback and further discussion with CAA we are making one minor change to the LOAEL night metric to be 45dB LAeq 8hr rather than Lnight to be consistent with the daytime metric. These metrics will ensure that the total adverse effects on people can be assessed and airspace options compared. They will also ensure airspace decisions are consistent with the objectives of the overall policy to avoid significant adverse impacts and minimise adverse impacts."

He goes on to say that 'Compliance with Guidance on Noise

3.5.1 Based on the above guidance the following action levels are suggested; · 51 dB LAeq 16 hour. This is the Lowest Observed Adverse Effect Level (LOAEL) in PPG Noise. This level is also below onset of significant community annoyance in the APF. Therefore, there is no specific action required.

· 63 dB LAeq 16 hour. This is the Significant Observed Adverse Effect Level (SOAEL) in PPG Noise. This level is above onset of significant community annoyance in APF and the level above which airport operators should offer financial assistance towards acoustic insulation in existing properties. Therefore, the action required is to mitigate and reduce to a minimum.

· 69 dB LAeq 16 hour. This is likely to be above unacceptable adverse impact level in PPG Noise, and above the level at which APF says occupiers of existing properties should be offered financial assistance with moving. Therefore, the action required is to prevent.

3.5.2 In summary therefore, proposed residential properties situated between the 57 Db LAeq 16 hour and 69 dB LAeq 16 hour contours need to be provided with adequate sound insulation, and where necessary an alternative means of ventilation, to comply with national guidance and therefore with Local Policy DM3.' (page 8 S.Urquart Proof of Evidence).

The Cranfield Airpark evidence suggests that 715 houses by phase II in Cranfield will be within the 57dB 16 hour contour, 327 of them, new homes, and that 24 properties will be within the 63dB 16 hour contour. (Table 8.1, page 44 ES technical annex 7.) Of course this number of homes will rise over the next 9 years up to and beyond 2027. The Mill Road Phase II enquiry is an appeal for 78 houses close to the airfield, which Mr Urquart acknowledges fall within the 60-66dB 16 hour contour.

The airpark considers 'there are not expected to be any unacceptable adverse effects due to aircraft noise. That 'there will be permanent minor adverse effects arising from the impact of noise affecting residential receptors within the 57dB 16 hour contour once Phase I airpark reaches maximum capacity.' (page 4, ES technical summary annex 7.) This statement does not even mention the impact of phase II, and is completely at odds with Mr Urquart's evidence, which tells us that above 57dB 16 hour is the onset of significant community annoyance.

The Parish Council has no reason to doubt Mr Urquart's evidence as he is unlikely to over estimate harm when he is presenting noise evidence on behalf of an applicant who is seeking planning permission for 78 homes very close to the airfield boundary.

The Parish Council therefore concludes that the noise evidence provided by the airpark does not offer a fair assessment of the level of adverse effects that will be experienced by residential receptors within Cranfield.

Further more, the noise measures provided are all averages, and given the nature of the proposed aircraft movements particularly in the early morning – ie infrequent, they are likely to be more disturbing. This should be assessed as intermittent noise. The Parish Council therefore requests that intermittent noise data to be provided, and the noise contours to extend to the 51dBL in line with good practice. The Parish Council also considers that, if the application is recommended for approval that the following conditions should be applied to this application:

Cranfield Airport should put in place the below recommendations to show it has listened carefully to local community who want to see environmental and noise protections as part of the package. Note the ideas below are taken from various sources such as the London Biggin Hill Airport Noise Action Plan¹ and from TAG Farnborough Airport², as such they are accepted and common practice recommendations.

The below should take in to consideration existing and planned developments in the local community. The Parish Council feel there has to be a **noise action plan** produced by the applicant. With the Council also having the following recommendations:

- Cranfield Airport should draw up a Noise Action Plan that should be designed to manage noise issues and effects, including noise reduction if necessary.
- The Action Plan should be drawn up using the guidance issued by DEFRA 'Guidance for Airport Operators to produce noise action plans under the terms of the Environmental Noise (England) Regulations 2006 (as amended)' Attention should be paid to paragraph 3.14 and 4.1-4.15 in particular.
- Mitigation measures such as contribution toward improved acoustic insulation such as double glazing, ventilation or cash payments should be offered to those properties most affected.
- It should be an S106 requirement that an annual report on the effectiveness of the Noise Action Plan should be made
- It should be an S106 requirement that the noise maps and Action Plan are reviewed and updated before the second phase of the Airpark can commence.
- In preparing and revising the action plan the competent authorities must ensure that—
 - (a)the public is consulted about proposals for action plans;
 - (b)the public is given early and effective opportunities to participate in the preparation and review of the action plans;
 - (c)the results of that public participation are considered;
 - (d)the public is informed of the decisions taken; and
 - (e)reasonable time frames are provided allowing sufficient time for each stage of public participation.

In relation to **noise annoyance**, the local authority must be aware, ensure sufficient understanding of, and take forwards the recommendations:

- Annoyance responses in relation to exposure may be higher than predicted by the traditional annoyance curves.
- Monitoring of annoyance responses over the long-term using survey methods in the exposed population would be advisable.
- Annoyance responses at various times of the day should be examined.
- Surveys assessing baseline annoyance, in terms of annoyance responses prior to the development of the new Airpark would be useful for comparative purposes. Such monitoring would help the airport to identify any increases in annoyance related to operational decisions.
- The use of APUs (auxiliary power units) should be controlled by specifying a maximum running time, or the use of electric ones encouraged.

1 <http://cds.bromley.gov.uk/documents/s50033758/Appendix%203a%20Noise%20Action%20Plan.pdf>

2 <https://www.tagfarnborough.com/environment/>

- There should be real time monitoring of noise levels, with the data available to the public, as well as a publicised complaint system for annoyance issues to be reported. These should be included in the annual report.
- Cranfield Airport should acquire, install and maintain a continuous Noise Monitoring Track Keeping system (NMTK) that will provide the community with improved visibility of noise levels and track keeping performance of flights using the airport. This will utilise two fixed monitoring locations along with a mobile unit at the commencement of the scheme. Both the system and the location of the fixed noise monitors located underneath the flight path at each end of the runway, and a portable NMT which can be deployed to appropriate locations. Once sufficient data has been acquired the performance of the NMTKS will be assessed and a review of its efficacy will be conducted and any improvements or enhancements will be identified. All the acquisition, installation and running costs of the NMTKS could be met by Cranfield Airport from levies raised from aircraft using the airport.
- Live data from the NMTK should be made publicly available, so that the public can monitor the noise and movement of aircraft. It is suggested that Cranfield Airport uses a system similar to the WebTrak system as used by London Biggin Hill Airport.
- The community need a system in which it is simple and easy to access.
- Investigate, log and respond to all complaints relating to Cranfield Airport, reporting details to CBC and CPC on a quarterly basis.

In regards to **noise annoyance relating to aircraft**, there must be conditions applied to ensure:

- Cranfield Airport should require the use of idle power at reverse thrust unless operationally essential to do so e.g. for safety purposes.
- The use of APUs (auxiliary power units) should be controlled by specifying a maximum running time, or the use of electric ones encouraged.
- Cranfield Airport should offer discounts on landing fees for planes fitted with exhaust silencers.
- Implement a scheme to incentivise operators of light and training aircraft to install noise suppression equipment or to replace noisy aircraft.
- Implement a scheme to restrict circuit training to agreed operating hours.

Monitor and record the aircraft movements comprising details of movement numbers in each hour each day, and runway use.

Conditions around **airport operating hours and aircraft operating** must include:

- Limit airport operating hours to 06.30-23.00 on weekdays, and on Saturdays, Sundays and Public Holidays limit operating hours to 08.00-22.00.
- A cap on aircraft movements should be
 - Monday to Friday
 - A cap of 8 aircraft movements between 06:30 and 07:00 on any one day
 - A cap of 8 aircraft movements between 22:00 and 23:00 on any one day
 - Saturday, Sunday and Public Holidays
 - Circuit training will not be permitted before 09:00 or after 17:00 during British Summer Time
- From when the Airpark opens operate a ban on fixed wing aircraft which are not fully compliant with ICAO Chapter 3 or above noise certification numerical standards.
- Operate a ban on fixed wing aircraft that do not meet the ICAO Chapter 4 noise certification numerical standards between 06:30 and 07:00 and 22:00 and 23:00 (except for existing based aircraft).
- Operate the airport using reasonable endeavours to ensure that these Chapter 4 aircraft operate within a maximum noise level set by the noise characteristics of the Learjet 35 or a comparable aircraft.

There has to be a **Residential Sound Insulation Scheme (RSIS) and Estate Agent information:**

- Cranfield Airport to put in place a sound insulation scheme including double glazing for residential properties within the 57dB_L contour and above.
- The details of a grants scheme should be in line with U.K. practice and agreed with CBC prior to implementation.
- The Scheme should be advertised on the Airport's website. The advertisement will describe the Scheme, and clarify that eligible property owners will be approached, and so application to the Airport will not be required.
- Cranfield Airport should provide an information pack to local Estate Agents, and to those seeking information on local conditions prior to relocating to near the Airport or its departure and arrival tracks.
- Residential receptors subject to noise above the 69dB_L contour should be given financial assistance in moving.

The Council feel that in regards to **maximum sound levels**, this is not truly appreciated in the document, what significant high levels of sounds will come from the airfield with this proposal. The WHO Community Noise guidelines should be used as the guidance for the maximum permissible sound levels

- Indoors the dwelling during the day/evening – 35 dB LAeq 16 hour
- Outdoor living areas - 55 dB LAeq 16 hour to protect most people from being 'seriously annoyed' during the day-time.
- Night-time
 - Outside façades of the living spaces should not exceed 45 dB LAeq 8 hour and 60 dB L_{Amax} to protect from sleep disturbance.
 - Inside bedrooms - 30 dB LAeq 8 hour and 45 dB L_{Amax} for single sound events to protect from sleep disturbance.
- In line with the Environmental Noise (England) Regulations 2006 (as amended)
 - “L_{day}” covers the period 07:00 – 19:00 hours in any 24-hour period
 - “L_{evening}” covers the period 19:00 – 23:00 hours in any 24-hour period
 - “L_{night}” covers the period 23:00 – 07:00 hours in any 24-hour period
- Operate the Airport to ensure that the resultant noise, expressed in the form of Summer Daytime noise contour area does not exceed that specified, namely 4 km² at 57 dB LAeq,16h.
- Where ground operating noise is necessary for instance engine ground testing, this noise should be mitigated through incorporating the use of noise attenuating pens or earth bunds

There needs to be a commit to **research** by the applicant:

- Carry out a review of arrival and departure routes, based on the results trial any new procedure with the aim of reducing further the over flight of residential areas.
- Use reasonable endeavours to promote and support airspace changes in order to benefit local residents through the creation of greater amount of controlled airspace.
- Prepare and issue a quarterly complaints report to be supplied to CBC and CPC.
- Prepare and issue Integrated Noise Monitoring (INM) report when contours are prepared.
- Prepare and issue five yearly Performance Monitoring Report.
- Investigate the potential and benefit that might arise from introducing a departure noise preferential route track performance target, with penalties for recurrent failures to meet target.

There has to be communication of the above items, Cranfield Airport should actively and regularly communicate the above actions and in particular the NMTK system, the operating hours and movements to the local community through the use of appropriate mediums such as through its website, Cranfield Express and Facebook.

LANDSCAPE AND VISUAL CONCERNS REGARDING THIS APPLICATION

The Parish Council objects to the Cranfield Airpark proposals on the grounds of harmful landscape and visual impact.

Phase I

The airpark scheme that was consented in 2008 seems broadly comparable with the Phase 1 scheme in terms of scale and number of buildings, although it is configured differently. It seems difficult therefore for the Parish Council to sustain an objection to the Phase 1 scheme, although it will result in landscape and visual harm for all the reasons given below. The Parish Council also considers that these large buildings could be designed to integrate more into the landscape – please see below.

Phase II

The Phase II scheme however as well as having a cumulative effect in conjunction with phase I, is more harmful as it extends development further away from the University Campus towards Crawley Road and will introduce major built form into a rural landscape of wide expansive open views with little built development in it when viewed from Cranfield. The Parish Council are particularly concerned by the scale and massing of the aircraft hangars 9, 10 and 11, and by the proposed 5 storey hotel. With regard to the hotel the Parish Council has seen no indicative impressions or been given any indication as to how this may look within the landscape. The Parish Council feels very strongly that a 5 storey building would be completely out of keeping with the setting of the university in the Bedfordshire countryside, and strongly requests that, if CBC is minded to grant outline permission, that the height and number of storeys of the hotel is significantly reduced. The Parish Council does not consider that it would be reasonable to give outline permission for such a potentially dominant feature in the landscape with no information being provided.

These wireframes indicating the position of hangars 9-11 suggest that this building would completely dominate the views out of Cranfield and along Crawley Road, Wharley End, Astwood Road, and footpaths in the area, especially the re aligned FP 21/22, and the surrounding area, completely altering the current rural open character. The change would be overbearing, and would completely alter the character of this very rural landscape. At odds with the strong skylines, and conflict with the historic grain of a low landscape of open fields defined by strong hedgerows. The change is acknowledged to an extent in the Schedule of effects, (EIS Technical Appendix 11.3), although the Parish Council considers this to be an under representation of the scale of change and its effects. Furthermore, the Parish Council does not accept in particular that the effect on the Landscape Character Area 1A would only extend to a few hundred meters, and that overall there would only be a very low level of change to the entire LCA area.

The following extracts are taken from the Landscape Character Assessment for Area 1A.

The Parish Council considers that the proposed development conflicts with the following guidelines for future development: (reproduced in full, see in Appendix i)

1A.1.26 Avoid further linear expansion at Cranfield and ensure that cumulative effects of further development at Cranfield University and Technology Park and Airfield together with potential future development does not impact on the rural character and highly visible highest ground on the plateau.

1A.1.28 Conserve strong skylines. Avoid introducing large scale vertical features where these will detract from undeveloped skylines, key views or characterising landmarks.

Landscape Management Guidelines

1A.1.29 Ensure mid-long range views across the landscape are retained and that the historic grain of the landscape is respected.

The quality of the wire frames provided is dreadful. The Parish Council has not been given such small photo montages as part of a major planning application before, and yet the effect of the proposed buildings in the landscape is clearly overwhelming.

The Parish Council has done some research on line and found examples of high quality buildings that are designed to melt into their surroundings. The Parish Council requests that, if recommended for approval, a similarly high design code should be imposed.

Cranfield Parish Council would request that the visual and environmental impact of the proposed new buildings is minimised by techniques such as those shown below. Benchmark examples of buildings that have features to reduce their visual impact and help them blend in to the environment.





Adnams Distribution Centre Southwold. Architect: Aukett Fitzroy Robinson

Incorporates sedum roof, highly efficient lime / hemp wall, and to minimise the area of concrete, a reinforced grass surface has been used for car parking to blend in with the adjacent grassland. Golpla is a strong, honeycomb mesh, made from low-density recycled plastic. It controls erosion and provides sustainable drainage and control of storm water.



The use of a sedum roof and fascia colourings reduces the visual impact of this building.



This building uses Mobilane[®] Green screen, which is a pre-grown pre-cultivated screen that can provide disguising and also a security perimeter.



This shows the use of trellis with a growing green screen.

ECOLOGY CONCERNS REGARDING THE APPLICATION

The application does not appear to include much, if any mitigation, for the loss of roughly 14ha of semi-improved grassland, among other habitats. To get a sense of what scale of mitigation might be appropriate for the grassland loss one can use the biodiversity offsetting metric used during the Government's biodiversity offsetting pilot projects (<https://www.gov.uk/government/publications/technical-paper-the-metric-for-the-biodiversity-offsetting-pilot-in-england>). The metric can be a useful tool in an intellectual exercise to gauge the scale of mitigation required. Using this metric, 14ha of moderate-quality semi-improved neutral grassland would require 112 biodiversity units of compensation. That is:

14ha x 'distinctiveness multiplier' 4 x 'quality multiplier' 2 = 112

The Environmental Statement acknowledges that there will be a 'loss of the majority of habitats on site' but does not propose any mitigation or compensation. Given the extent of the landowner's estate one would expect that off site compensation should be entirely possible.

Paragraph 118 of the NPPF states that *when determining planning applications, local planning authorities should aim to conserve and enhance biodiversity by applying the following principles:...if significant harm resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused.* **Overall the Parish Council do not see how the proposed development enables the application to achieve no net loss of biodiversity as required by the NPPF.**

SUMMARY

The Parish Council would like to reiterate the significant and long term impact this application will have on the village. There are a number of elements, as highlighted, in the Parish Council's response, that Officers and Members need to carefully consider.

Yours sincerely

E. Barnicoat

Lizzie Barnicoat
Locum Cranfield Parish Clerk

Appendix i.

Guidelines for New Development

(Extracted from the Area 1A landscape Character Assessment, 2015)

1A.1.21 Potential for further woodland creation - expanding and linking the existing woodland resource through woodland and hedgerow planting e.g. further woodland planting along the urban edge of Cranfield village and University/Technology Park to enhance the interface with the adjacent rural fields. Appropriate species are likely to include field maple and hazel.

1A.1.22 New planting/ hedgerow restoration and woodland planting along the edges of new development where appropriate will help to integrate it with the rural landscape.

1A.1.23 Conserve the largely rural, undeveloped character of the area e.g. conserve the character of the rural roads and limit urbanising influences – widening/kerbing and ensure that traffic management measures are sympathetic to the rural character.

1A.1.24 Retain views from elevated areas to the lower lying Clay Vales (5c, 5d) and to the Wooded Greensand Ridge (6b) and conserve views to undeveloped horizons.

1A.1.25 Ensure that landscape and visual effects of the eastward expansion of Milton Keynes are assessed and respected in the context of views from this open, elevated landscape. Mitigate effects of increased development in views through sensitively designed development and appropriate mitigation such as woodland planting to avoid harsh interfaces with the rural landscape.

1A.1.26 Avoid further linear expansion at Cranfield and ensure that cumulative effects of further development at Cranfield University and Technology Park and Airfield together with potential future development does not impact on the rural character and highly visible highest ground on the plateau.

1A.1.27 Monitor the introduction of large scale industrial style agricultural buildings into the landscape. Integrate new large scale buildings into the landscape with appropriate broad leaved planting.

1A.1.28 Conserve strong skylines. Avoid introducing large scale vertical features where these will detract from undeveloped skylines, key views or characterising landmarks.

Landscape Management Guidelines

1A.1.29 Ensure mid-long range views across the landscape are retained and that the historic grain of the landscape is respected.

1A.1.30 Conserve the ancient woodland blocks and spinneys e.g. Holcott Wood and apply an appropriate management strategy to enhance ecological interest e.g. reintroduce coppice management.

1A.1.31 Maintain and enhance surviving historic boundaries, and enhance the condition and structure of hedgerow boundaries by focussing hedgerow restoration between remaining sections so as to strengthen the landscape pattern – this is a key requirement alongside field boundaries and roads.

1A.1.32 Enhance the historic landscape setting of Brogborough Park Farm ringwork, currently isolated within former brickfields.