



HAMBLETON DISTRICT COUNCIL

BAGBY AIRFIELD APPLICATION AND CONDITIONS REVIEW

FINAL REPORT

DECEMBER 2018



York Aviation

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Dated: 19th December 2018

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Dated: 18th December 2018

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1 INTRODUCTION AND BACKGROUND

1.1 In March 2017, York Aviation was commissioned by Hambleton District Council (HDC) to undertake a review of the most recent planning application (16/02240/FUL) from Bagby Airfield and to make recommendations in relation to suitable planning conditions and controls. The output from this work will be used by HDC in determining the application and applying suitable control measures on the Airfield. The scheme involves¹:

- Demolition of the existing clubhouse and control tower;
- Demolition of the hangar and storage located to the eastern edge of the site;
- Demolition of the single storey extension on hangar B;
- Demolition of hangars C and D on the southern boundary of the Site;
- Change of use and external alterations of the existing engineering building to be used as a clubhouse and control tower;
- Change of use of Hangar B to be used as the engineering workshop and hangar;
- Development of a new tractor shed on the northern boundary of the site;
- Development of a new hangar (C1) on the southern boundary in place of hangars C and D;
- Creation of a Fixed Fuel Facility on the eastern boundary of the site;
- Formation of a new access drive; and
- Introduction of hard and soft landscaping.

1.2 The purpose of this report is not to make a recommendation on approval for the application, nor do we seek to measure the acceptability of the application against local planning policy. Instead the report seeks to provide specialist advice in relation to aviation matters, including consideration to policy where relevant, to allow HDC to make considered decisions in relation to the application. The decision must be taken by the LPA, in accordance with s.38(6) P&CPA 2004.

1.3 Bagby Airfield has a long planning history and has undergone a number of Public Inquiries. However, this Application needs to be considered on its own merits (in accordance with the statutory test), including understanding the concerns raised by local residents and others in their objections to the proposals, independent from the previous applications submitted by the Airfield. Nonetheless, in compiling this report, we have been mindful of previous objections and concerns and have taken account of the Inspector's Decision in each of the previous appeals.

¹ *Bagby Airfield, Planning, Design and Access Statement*, Barton Willmore, October 2016, Page 13 and letter from Barton Willmore to Tim Woods, dated 14th March 2018, outlining amendments to the application.

- 1.4 It is important to recognise that, in certain respects, the Council currently has no control over the Airfield and that the Application, if successful, is recognised by both HDC and the Applicant as providing a way of putting those controls in place. This may (on the basis of a balanced judgment) be an advantage for local residents if the right conditions and controls can be imposed and, importantly, monitored accurately.
- 1.5 We have sought to deliver conclusions and recommendations which achieve the best balance of controls to mitigate historic and current concerns of local residents, whilst maximising the benefits for the Applicant and economy which could be derived from the application, in accordance with national and local planning policy. In doing this, we have aimed to understand what the Airfield really needs in order to be successful whilst drawing out clear limits to give real certainty and protection to local residents (which has been missing for so long).
- 1.6 Following an initial review of the application, York Aviation, along with Tim Wood of HDC, engaged with the agents acting on behalf of the Applicant to understand in further detail areas of the Application. A number of key questions for clarification were provided to the agents and responses were received to these and are presented in **Appendix A**. In addition to the core application documents, we have relied upon this engagement to inform our review and subsequent recommendations.
- 1.7 It is also important to note that over recent years, the Airfield has already made attempts to improve its local environmental impact through a voluntary² code of conduct, some aspects of which have been maintained, whilst others have yet to be implemented pending a successful planning application. These have been aimed at mitigating some of the historic issues identified, including aerobatic flying and hot-refuelling of helicopters among others.
- 1.8 The remainder of the Report is structured as follows:
- **Section 2** – we outline the key points raised by Inspectors in each of the recent Planning Appeals, for consideration in the review;
 - **Section 3** – we set out our review of the application, focusing on individual areas for consideration;
 - **Section 4** – we provide our recommended controls and conditions with a justification for each drawn from Sections 2 and 3;

² The Code of Conduct cannot currently be enforced by the LPA because it is not secured by a condition or s.106 obligation.

2 KEY INQUIRY POINTS

2.1 This section is not intended to act as a detailed review of each of the recent individual appeals, which are well known to the LPA. Rather we summarise the key considerations underpinning each of the Inspectors' decisions in so far as they may be relevant to the current application.

2011 Inquiry

2.2 Four appeals were heard at a Public Inquiry in 2011, covering three refused planning applications and one appeal against an enforcement notice. Some aspects of these appeals remain common to the current application and as such the Inspector's findings have a relevance which needs to be considered. However, there has been a change in national policy since then, with the adoption of the National Planning Policy Framework (NPPF). Further, the evidence supporting the current scheme is materially different and more detailed. Accordingly, the weight to be attached to this decision as a material consideration is limited.

2.3 The Inspector made several key comments and observations which were³:

- There was significant uncertainty over the actual number of movements undertaken at the Airfield, but that some of the matters being considered would not of themselves generate additional movements;
- A recognition that L_{eq} assessments of noise may not be appropriate for a small airfield like Bagby, as highlighted in Planning Policy Guidance 'Planning and Noise' (PPG24, Appendix 3), whilst recognising that there is a noise nuisance from the Airfield in the local area, particularly from circuit flying, helicopter operations and aerobatic flying;
- The greatest intrusion of noise, arising at weekends and in the summer, coincides with the leisure time of the local residents when they may wish to spend time in their gardens, or with windows open;
- Increased hangarage would likely lead to increased numbers of based aircraft, whilst increased facilities for servicing would likely result in an increase in aircraft movements;
- "The proposed development, with imposed conditions as required by the Appellant, would result in a significant increase in aircraft noise and would thus have a significant, if not serious, effect on disturbance for residents of the dwellings in nearby villages and the surrounding area"⁴. It should be noted that this comment however related to a limit of 1,000 movements per month, above the average now being sought;

³ Appeal Decisions by John Braithwaite, 28th June 2011, The Planning Inspectorate

⁴ Ibid, Para 57

- No suitable business case was provided to accurately determine the employment impacts.
- 2.4 A combination of the likely increase in noise associated with increased aircraft movements and the failure to provide evidence of the economic benefits through a business case led to the failure of the Appeal due to conflicts with Local Development Plan (LDP) policies and a failure to comply with other LDP policies respectively.
- 2.5 The Inquiry did allow two of the four appeals, related to operational issues such as the runway matting (Appeal C) and the construction of new hangarage, implementation of the runway matting and further concreting in the vicinity of the hangars and runway (Appeal D). These were allowed subject to conditions.
- 2.6 The proposed refuelling facility was dismissed however, with one of the key findings of the Inspector being a concern that the Facility could encourage greater use of the airfield by helicopters which in turn could result in greater disturbance for residents. This is relevant to the amended application being considered in this report.

2012 Inquiry

- 2.7 An Inquiry was held in 2012⁵ covering 13 Enforcement Notices issued by HDC to Bagby Airfield between October and November 2011. During the Inquiry, the Appellant withdrew four of the appeals.
- 2.8 Only two out of the remaining nine appeals were allowed. On the whole, the majority of those enforcement notices upheld were done so under two main areas:
 - The schemes actually constituted ‘development’ or were not ‘permitted development’;
 - The schemes have not subsisted for four or ten years, such that they are not immune from enforcement action and have become lawful.
- 2.9 The latter of these is particularly pertinent. The Inspector found, with regards to existing hangars that changes from storage to use for aircraft maintenance were a material change of use from the originally permitted uses of these buildings. This has relevance to the existing application in so far as the uses for any permitted development must be clearly laid out and enforced.
- 2.10 Appeal 1 within the Inspector’s Decisions may also be a consideration in the current application because it deals with the unlawful use of the cross runway, which subsequently led to the suspension of use of this facility, which in itself had been a contributor to noise and nuisance to local residents and would be reflected in historic objections to the site.

⁵ Appeal Decision by George Mapson, 30th July 2013, The Planning Inspectorate

2.11 Of the two successful appeals, only one has direct relevance to current considerations and that relates to the use of Hangar E, and whether the use for helicopters was permitted, operating either as Air Taxis or otherwise. The Inspector concluded that the hangar was lawful, as tested by a previous Inspector, and conditions associated with the building did not exclude the operations determined to be operating at the time of the Inquiry.

2013 Inquiry

2.12 Two appeals were heard in June 2013, related to enforcement notices issued by HDC to Bagby Airfield in December 2012⁶. The first of these has particular relevance to the current application in that it was considering intensification of use of the site and considered the number of permitted aircraft movements which had long been an area contested by the Appellant and HDC.

2.13 This was a significant Inquiry in that the conclusion was that the claimed changes in movements on site did not constitute a breach of planning control, indicating that even with an accepted increase in activity, the Inspector was content that these had not materially led to a change in character of the use.

2.14 However, within this report, it is important to note that we have taken the figures from the Joint Statement of Peter Forbes (for the LPA) and Paul Pritchett (for the Applicant)⁷ as being agreed by HDC and the Applicant in the current application for historic movements. These figures were contested by Action4Refusal (A4R) and local residents.

2.15 As with previous inquiries though, the Inspector did acknowledge the nuisance caused to local residents, both in terms of direct take-offs and landing, but also in relation to the general use of the airspace around the Airfield and the issues around shared amenity time between those on the ground and those using the facility.

2016-17 Inquiry

2.16 Two appeals were heard at an Inquiry in early 2017⁸, both covering enforcement notices. The first related to potential new tarmac and taxiway widening and this appeal was allowed on the basis that the works were de minimis and the Inspector deemed the works did not constitute a breach of planning control.

⁶ Appeal Decisions by Diane Lewis, 22nd January 2014, The Planning Inspectorate

⁷ *Joint Statement of Peter Forbes of Alan Stratford Associates (on behalf of Hambleton District Council) and Paul Pritchett of Pritchett Consulting (on behalf of Martin Scott t/a Bagby Airfield)*, 26th July 2013.

⁸ Appeal Decisions by J A Murray, 27th February 2017, The Planning Inspectorate

2.17 The second appeal related to fuel tanks and dispensing facilities for Jet A1 aviation fuel, and the Inspector concluded that because these were mobile and self-sustaining without the need to be plugged in to fixed power supplies, they could not be deemed buildings and as such could not be deemed to constitute breaches of planning control. Accordingly, the fuelling of aircraft can now mobile for this fuel type, although JetA1 storage is a feature of the fixed fuel facility included as part of the amended application.

Summary of Inquiries

2.18 The decisions of each of the Inspectors do provide some considerations which need to be accounted for in determination of the current application and the setting of controls and conditions. The 2011 Inquiry laid out a number of areas of concern around the operation of the facility and concluded a likely increase in activity associated with the development, which is similar to that being proposed currently, should not be granted consent on the basis of the evidence and policy presented at that time.

2.19 However the 2011 Inquiry was reliant on highly uncertain movement estimates and, although not considered to be without some inaccuracies, an agreed position was reached between HDC and the Applicant in relation to the 2013 Inquiry (albeit one disputed by A4R). With suitable controls in place and in light of this updated information, it may be easier to estimate the impacts of the new development as part of this application.

2.20 In a number of cases, the Inspectors highlighted the significance of clarifying wording within planning conditions, and some appeals were successful because uses were not adequately identified in conditions when permission was granted.

2.21 The implementation of a voluntary Code of Conduct by the Airfield has already sought to address some of the points raised by the Inspectors, such as the banning of aerobatic flying over the airfield, and the closure of the cross-runway will have removed one area of nuisance in terms of impact on the village of Bagby and the local residents.

3 GOVERNMENT POLICY

- 3.1 In determining the Application, we believe it is worth drawing out the support in policy terms for general aviation (GA) as a whole by central government. In developing the Aviation White paper, which is yet to be published in its final form, the Department for Transport (DfT) set out a recognition of the economic benefits of the sector in the UK within the next steps document, *Beyond the horizon: the future of UK aviation*⁹. This document highlights:

*“The government believes that it is important to ensure a long term strategic vision for the GA sector that helps it to realise its full economic potential.”*¹⁰

- 3.2 This follows on from the General Aviation Strategy¹¹, published by the DfT, which looked specifically at the sector. The document is very specific in recognising the economic and wider benefits of GA and provides overall support in policy terms towards strengthening the sector. Key aims arising from this included:

*“Stimulating employment in GA in terms of how many people are involved and how much they participate;”*¹² and

*“Supporting infrastructure that is appropriate in its extent, capability and location to deliver a mixed, modern fleet of aircraft flying between appropriately equipped aerodromes across well-defined airspace.”*¹³

- 3.3 The proposals put forward by the Applicant appear to contribute towards both of these main goals and therefore meet overarching policy for the sector.

- 3.4 A key commitment arising from the General Aviation Strategy was to make amendments to the NPPF to make reference to GA aerodromes as part of a network. This was implemented in March 2018 and indeed the NPPF now states that planning policies should:

*“recognise the importance of maintaining a national network of general aviation airfields, and their need to adapt and change over time – taking into account their economic value in serving business, leisure, training and emergency service needs, and the Government’s General Aviation Strategy.”*¹⁴

⁹ *Beyond the horizon: The future of UK aviation*, Department for Transport, April 2018

¹⁰ *Ibid*, Para 5.38

¹¹ *General Aviation Strategy*, Department for Transport, March 2015

¹² *Ibid*, Page 9

¹³ *Ibid*

¹⁴ *National Planning Policy Framework*, Ministry of Housing, Communities and Local Government, July 2018, Page 31

- 3.5 In our view, the Application is a clear recognition by the Airfield that they need to change their business model to adapt to changes in the sector over recent years. This may mean that the nature of activities could vary from those seen historically, but this fits with policy in this regard.

4 APPLICATION REVIEW

- 4.1 The Application has been provided with a significant number of supporting documents and evidence, which overcome some of the former criticisms related to previous applications, including by the Inspector in the 2011 Inquiry which covered similar developments. In particular in 2011, the Inspector noted the lack of a Business Case to support the application to allow the benefits, both to the applicant and the economy, to be judged. This has now been overcome. The amendments to the application, submitted in March 2018, do not provide a further update on this because the applicant perceives there to be no change in the Business Case or subsequent economic impacts arising from the relocation of the maintenance facility or the provision of a fixed fuelling facility.
- 4.2 A key starting point has been to understand the reasons for the application. As highlighted by the Business Case, the Airfield has consistently made small profits since 2011¹⁵ and as such we have sought to understand the benefits of the expansion, particularly as the Airfield is willing to be restricted on overall movements, but also any risks to the sustainability of the current business from not undertaking the redevelopment. Through discussion with the agents¹⁶, it was highlighted that it is the state of dilapidation and ongoing decay of existing facilities which is driving the application. They consider that even the current profit of the business may be at risk without the ability to provide new facilities. Among the key arguments for new and replacement hangars is the fact that new generation aircraft are increasingly required to be stored in higher grade buildings than those on site. This is true and modern avionics, as highlighted in the written response, need to be stored in low humidity environments. Furthermore, we are aware that many insurance companies now also expect aircraft to be stored indoors, which influences the location decisions of some aircraft owners.
- 4.3 However, the proposals go beyond simply replacement of the existing hangars with newer equivalents and, throughout the Business Case and supporting documents, a key theme is around improving the quality of the revenues and business and it is this which appears to drive the extended programme of redevelopment on site. This is a common theme with other airfields in the UK which are run as businesses, whereby operators seek to focus on a lower volume of higher value movements and trade these off against the former high-volume, low value small leisure aircraft. The two are not mutually exclusive in a balanced business and there is no suggestion that there will not be a balanced portfolio of movements in the future at Bagby. However, this does explain why the Applicant is willing to propose limits on movements for the first time. We will consider movement levels in more detail below.

¹⁵ Bagby Airfield: Business Case V6.2, Prepared by Peter Bondar, Papa Bravo Ltd, 29th February 2016, Page 11, Para 5.3.1

¹⁶ Conference call held on 18th May 2017, and accompanied by written responses provided on 6th June 2017 and included as Appendix A.

- 4.4 Both of these key points, the risks of degrading facilities and the desire to focus on a different, more quality driven, market are credible in our view.
- 4.5 During discussions with the agents, it was repeatedly highlighted that the Airfield is currently unrestricted in terms of movements and activity, and thus the proposals, would allow some control to be gained over what the Airfield could do in future. In theory this is correct, but conversely it must be remembered that activity levels and based aircraft numbers have been below peak levels for some time and the thrust of the justification for the redevelopment is that the current facilities on site are not attractive to current aircraft owners and operators. It is likely that simple refurbishment of the existing hangars may not overcome this, and so the Application may lift movements from current levels and retain them in the foreseeable future. Continued degradation of the current facilities therefore makes it less likely that the Airfield can take advantage fully of its claim to unrestricted movements and in reality, on this basis, it would be hard to see how the Airfield could grow back to higher levels.
- 4.6 This is not to say that it could not grow again without the redevelopment as many facilities would still be useable. Perhaps, more importantly, some of the activities already curtailed, such as the aerobatic flying and hot-refuelling, may lawfully be reinstated if the operator feels the need to diversify to retain a profitable business. Many of the activities which have already been excluded by the current Code of Conduct, because they were unpalatable to local residents, are also likely to be unattractive to the residents near other airfields and airports. As a result there may be a lucrative opportunity for the applicant to attract these back if they cannot sustain the airfield through the proposed redevelopment. Overall, airfields are likely to come under pressure to exclude these activities as they grow, and as such Bagby Airfield, with no current lawful constraints, may be in a strong position to charge a premium for movements and operations which cannot be accommodated elsewhere. In our view it would be likely that the Airfield would be able to improve profitability by reintroducing aerobatic flying and allowing hot-refuelling of helicopters. In the case of the latter, these aircraft would not need any improvements to facilities as they would only be visiting. With no planning constraints on aircraft size or noise, the Airfield could be very attractive to helicopter operators on the popular north-south routing along England for such refuelling, and this could include helicopters of all sizes. Clearly there would be an incentive for the Applicant to attract larger helicopters because they would uplift more fuel and increase profits, despite their negative noise impacts locally.
- 4.7 The uncertainty over whether the Airfield would completely shut without the development, or whether it would change its focus means that without the Application being approved, there will be no way to bring controls over areas such as circuit flying or helicopter approach routes as now proposed and a real risk of diversification back to less appealing activities

- 4.8 However, this means that the individual controls need to be considered in detail and it is necessary to work out what the Airfield needs to successfully deliver against its economic proposals, whilst not simply setting arbitrarily high restrictions which bring no environmental certainty and benefits to the local community.

Aircraft Movements

- 4.9 In considering aircraft movements it is important to recognise that a Lawful Level of Use already exists (which we understand to be 7,288 movements) but that a cap cannot be placed on aircraft movements presently without a material change in the character of use. This means that in reality movement numbers could be much higher than the Lawful Level identified. It is also reasonable to expect aircraft movements to continue in the future without this consent, though the level of such movements is uncertain.
- 4.10 There have been a number of attempts to define the historic level of aircraft movements at Bagby, undertaken by both the Airfield and Local Planning Authority. Much of this evidence was contested by A4R and local residents, who suggested the true level of movements was likely lower. However more recent evidence of actual movements, including raw data provided to ourselves, suggests that actual movements remain substantial and are likely to continue even in the 'Do Nothing' scenario.
- 4.11 A key cornerstone of the application is a proposal by the Applicant to restrict annual movement levels to 8,500 (down from an initial proposed figure of 9,500, and amended 8,787). Movement figures, agreed between the Applicant's agents and advisors to HDC in 2013, illustrated that since 2003 the peak in movements occurred in 2007, when the Airfield handled nearly 11,250 movements. On the whole movement figures have fallen however and in the five year period from 2012 to 2016 inclusive, there were an average of 6,830 annual movements, though peaking at 8,830. These figures can be seen in **Table 3.1**. Criticisms have been made of these figures in terms of their accuracy by local residents and A4R. They do, however, represent a reasonable basis on which to assess movements, given the absence of comprehensive data.
- 4.12 It is crucial to also acknowledge that general aviation is heavily weather dependent, much more so than commercial airline flying, and therefore prolonged periods of bad weather can impact on movements in any one individual year. We believe this may be the case in 2014 due to the winter storms in January and February of that year, which saw movements suppressed below the same months in the years either side of this.
- 4.13 As can be seen from Table 3.1 the 10-year average movements to the end of 2015 was 8,457 and to the end of 2016 was 8,446. These figures exclude the Yorkshire Air Ambulance (YAA) movements which do not form part of the consideration today.

Table 3.1: Agreed and Documented Annual Movements					
Year	Fixed Wing	All Helicopter (Excl. YAA)	Touch & Go	Total (Excl. YAA)	Helicopter %
2003	8,519	261	3,812	12,592	2.1%
2004	5,757	239	2,581	8,577	2.8%
2005	5,897	258	2,639	8,794	2.9%
2005	4,593	281	2,056	6,930	4.1%
2007	7,584	269	3,394	11,247	2.4%
2008	6,741	291	3,017	10,049	2.9%
2009	6,521	318	2,918	9,757	3.3%
2010	6,462	396	2,892	9,750	4.1%
2011	6,176	353	2,764	9,293	3.8%
2012	4,632	471	2,073	7,176	6.6%
2013	-	-	-	6,335	-
2014	-	-	-	5,199	-
2015	-	-	-	8,829	-
2016	-	-	-	6,822*	-
		2015 10-Yr Total Average		8,457	
		2016 10-Yr Total Average		8,446*	
		2016 5-Yr Total Average		6,872*	
Notes:					
There appear to be some discrepancies in the calculations of figures presented in Table 2.2 of the Business Case Addendum, which appear to be the result of discrepancies in the figures produced by Peter Forbes in the Joint Statement presented as Appendix 2 of the Planning, Design and Access Statement. The Peter Forbes table appears to count the Yorkshire Air Ambulance (YAA) in the total helicopters in some cases and not others and then adds these on to the final total value either way afterwards. For the purposes of this table we have assumed Total (excl YAA), Fixed Wing and T&G Movements are correct and calculated the total helicopters, excluding YAA, back from this.					
*2016 data only goes to 4 th December 2016, so we have assumed December movement levels as per 2015 to estimate 2016 final movements and this is reflected in 5- and 10-year averages					
Source: Planning, Design and Access Statement, Appendices 2 & 4 and 2016 Airfield Supplied Data					

4.14 However, we believe that it is overly simplistic and wrong to suggest that aircraft movements will remain the same in the future and the application should not be judged on that basis. Rather the proposed level of movements, secured in the conditions, needs to be justified in its own right. If this is the case, then there is undoubtedly a benefit to local residents of having certainty over the maximum annual aircraft movements.

4.15 Some of the proposals have the potential to drive growth in movements at Bagby, even though the Application indicates in a number of places that this is not expected to be the case. Examples of potential increases are:

- Currently the hangars are not full, housing up to 33 aircraft currently, but it is indicated that this could increase to 40 aircraft upon completion of the redevelopment, resulting in a 21% uplift in based aircraft which must have an associated increase in movements if the existing aircraft remain in situ and continue to fly at current rates;
- As no bedrooms are available for accommodation currently, this may deter people from flying to Bagby at present, but could act as an attractor going forward; and
- Similarly, the extended maintenance facilities for Graham Fox Engineering, and the suggestion that the business will grow to employ more engineers, suggests that this operation could generate new movements. The Business Case Addendum indicates that the expansion “will not necessarily have much of an impact on air movement numbers”¹⁷, whilst the Business Case¹⁸ acknowledges that doubling the number of aircraft supported could generate between 130 and 500 additional movements annually.

4.16 In response to each of these examples, the Applicant and agents have highlighted:

- For based aircraft, the intention of the business is to add value by leveraging the better quality new facilities to increase hangarage prices and actively manage tenants to make best use of the facilities over time. It is highlighted that higher value aircraft will likely fly less as their use tends to be more orientated toward specific flying to destinations (A to B) rather than just to local leisure flying;
- They do not believe that anybody is currently excluded from Bagby by the lack of rooms because there is alternative accommodation available nearby and used by pilots when needed. Furthermore, they believe that presently pilots plan their trips to avoid overnight stays rather than avoiding Bagby altogether; and
- For the maintenance operation it is suggested that the expanded and improved facilities will allow the maintenance company to diversify and offer maintenance on more complex aircraft which will require longer in the hangar and will justify the employment uplift to cover more specialist areas of modern aircraft maintenance, adding value to the business, without significantly expanding flying.

¹⁷ *Business Case Addendum: Compliance with Policy DP25*, Barton Willmore, October 2016, Page11, Para 4.7

¹⁸ Bagby Airfield: Business Case V6.2, Prepared by Peter Bondar, Papa Bravo Ltd, 29th February 2016, Page 18, Para 7.11

- 4.17 It is hard to gain firm evidence based on the case for the accommodation, though clearly if the justification is true, then there is merit, both financially for the Airfield, and locally for employment, of encouraging overnight stays at the Airfield if the movements are occurring anyway. On the remaining two points, based on our experience at other General Aviation airfields, both of these are credible, and fit with the general approach being outlined in the Business Case. However, we do not believe there will be no movement increases associated with these elements, but that these may be less than prime facie analysis may suggest.
- 4.18 To some extent, any repositioning of the business towards higher value activities that has already taken place may already be reflected in the recent drops in overall movements. Based on this it is questionable as to whether the ten year average for assessing movement requirements is the right approach as this will be bolstered by activities which have since declined and may not be expected to return as the Airfield focuses on higher value activities.
- 4.19 On an annual basis therefore a more appropriate approach may be to take the five year average which is more likely to reflect the nature of demand going forward and then make allowance for new activities which would be necessary to fully drive the economic benefits and sustainability of the Airfield, taking into account the statements of the Application that very few additional movements are expected to be generated by the increased maintenance facilities. This would mean:
- The average of the last five years as a starting position: **6,870**
 - An additional uplift of 21% for new based aircraft and assuming non-based aircraft grow pro-rata: **+1,440**
 - The suggested 130 annual movements for the expanded maintenance facility: **+130**
 - **Total Required Movements to meet economic plan: 8,440¹⁹**
- 4.20 Taking this approach coincidentally arrives at a figure close to the actual ten-year average figures calculated from Table 3.1. In reality this approach may overestimate the actual annual movements required to achieve the full economic benefit. However, this does reflect the fact that the Airfield could instead chose to abandon the redevelopment and instead refocus on higher levels of activity. There will need to be some compromise on the part of both the Applicant and HDC in conditioning a movement figure, and if this can be properly monitored (which we consider later in this section), then this will also bring some certainty for local residents. However, central to this compromise will be the exercise of a balanced planning judgment which needs to take into account the need to protect the amenity of local residents from such issues as noise impact from air movements.

¹⁹ All figures have been rounded to the nearest 10 as it would be our recommendation to simplify the figures for the purposes of planning conditions. The net result is 3 additional annual movements permitted through rounding.

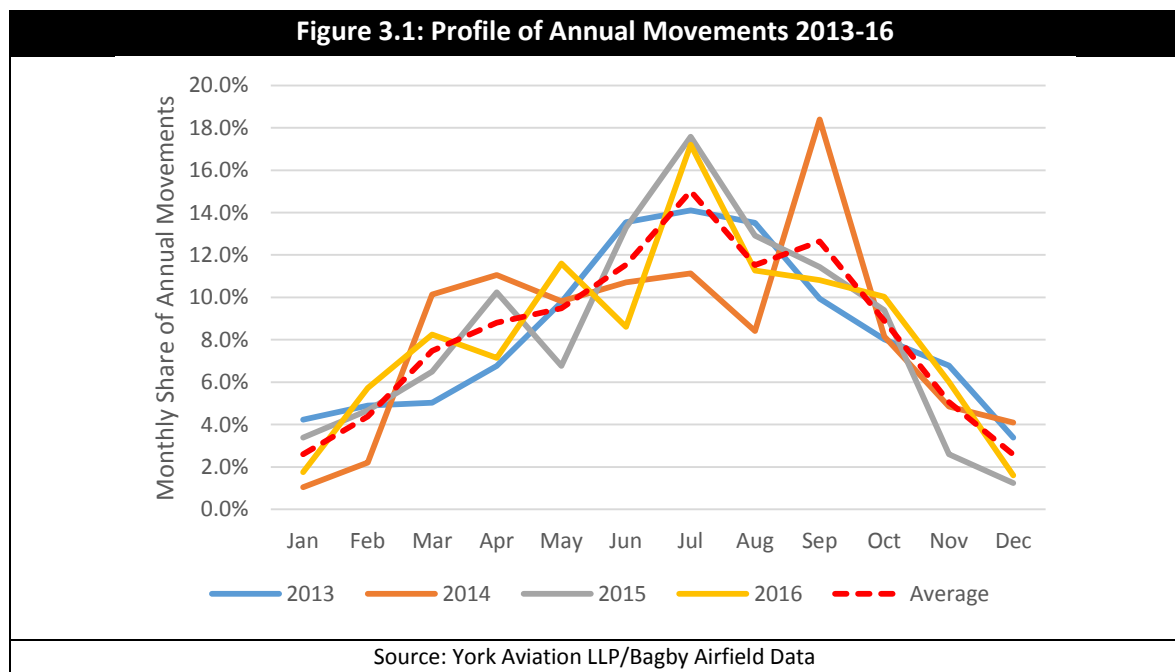
- 4.21 During the most recent consultation on the amended application, some local residents did express concerns that the process was a way for the Airfield to grow. In reality, this does not appear to be the case, otherwise the Applicant would not be willing to agree the cap broadly in line with the 10-year average if it was intending to grow movements. Any future growth beyond this would need to be subject to a separate application at that time which would need to be assessed on its own merits.
- 4.22 Although the Applicant has suggested including the annual movement limit within a voluntary Code of Conduct as part of a Section 106 agreement, we believe that it will be more appropriate to apply this as a Planning Condition otherwise anything voluntary will have no controls attached, and this would be in line with the approach taken by other Planning Authorities and The Planning Inspectorate/Secretary of State in the UK, for example:
- In 2011, Farnborough Airport had a planning condition limiting annual movements to 50,000 at a Public Inquiry²⁰, with a maximum of 8,900 movements at weekends;
 - London City Airport has recently had its annual movement limit lifted to 111,000, restricted by Planning Condition²¹;
 - Dunsfold Aerodrome had a planning condition limiting total movements to 5,000 per annum imposed in 2003²²
- 4.23 There are two other areas that we believe should be controlled however, these are:
- Monthly limits on movements; and
 - Operating hours restrictions by time of day.
- 4.24 Certainly in recent comments provided by the public in relation to the amended application, there was some concern that the proposed movement limit for the year would not prevent intensification of movements over a shorter period.
- 4.25 We have attempted to understand what the Airfield would need to drive economic growth in relation to each of these, though on the latter it is less clear and we have relied more on our own experience, the restrictions in place at other UK Airfields and Airports and on information provided by the Applicant in their responses and updated Code of Conduct.

²⁰ http://www.landmarkchambers.co.uk/userfiles/documents/resources/TAG_Farnborough.pdf

²¹ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/541064/16-07-26_DL_IR_London_City_Airport_3035673.pdf

²² <http://plandocs.waverley.gov.uk/Planning/StreamDocPage/obj.pdf?DocNo=4136820&PDF=true&content=obj.pdf>

4.26 Limits on monthly movements (within a calendar month) is a benefit because it will bring certainty to local residents that, even if the business plan and operations of the Airfield change over time, this will not lead to a concentration of the permitted annual movements in a much more condensed period of the year (such as the summer when they might reasonably expect to enjoy their gardens more). We have analysed the movement data for the last 4 years at Bagby to look at the current annual profile of movements through the year. The results can be seen in **Figure 3.1**.



4.27 With the exception of 2014, the peak month for movements is typically July, and the peak share of annual movements has been around 17.5%²³. There may always be some variance though in peak monthly shares as a result of factors such as weather and how weekends fall in each month in a year. This suggests that the Airfield would need some more leeway than simply applying a figure of 17.5%. However, even the obscure 2014 peak only reached 18.4% despite the low level of winter flying and so we believe that the Airfield would not need much more than the 17.5%. As a result, we would suggest a maximum figure of 1,518 movements in any one month, equating to 18% of the annual total. This has been included in the updated Code of Conduct, although we believe this needs to be more firmly applied as a planning condition.

²³ The peak was higher in September 2014, but this figure would have been lower if it had not been for two months of consecutive low movements due to the winter storms at the start of that year.

4.28 In relation to operating hours, many UK Airfields and Airports impose restrictions on opening hours and/or movements in certain periods of the day. This does not just affect small airfields, for example Belfast City Airport is restricted through planning to be open from 0630-2130 and London City Airport is only open from 0630-2200 each day, with further restrictions on movement numbers in the pre-7am period and at weekends and bank holidays. For general aviation airfields some examples include:

- Despite being the UK's busiest general aviation airport, handling large numbers of business aircraft, maintenance and emergency service helicopters, Gloucestershire Airport imposes the following voluntary restrictions on opening hours through its Green Policy²⁴:
 - Mon-Fri 0830-1930 local time year round, Sat-Sun 0900-1930 in summer and 0900-1830 in winter;
 - A ceiling of 1.25% of annual flights operating no more than 30 minutes outside of these hours (except emergency use and for early or late arrivals for specified operational reasons); and
 - No more than 100 movements per calendar year permitted to take place between 2300-0600
- Farnborough Airport was restricted to opening hours by way of condition in the 2011 Appeal Decision, restricting hours to 0700-2200 on weekdays and 0800-2000 on Saturdays, Sunday and Bank Holidays²⁵;
- Dunsfold Aerodrome was limited by conditions in 2003²⁶ to flying only between 0730-1930 during the winter and 0730-2030 during the summer, no flying from 1500 on Saturdays until 0730 on Mondays and no ground running of engines between 1830-0730 the next day, or from 1500 on Saturdays until 0730 on Mondays.

4.29 In the latest proposed Code of Conduct, included in **Appendix B**, the Applicant has taken some of our originally proposed operating hours and restrictions, and has proposed:

- Aircraft movements at Bagby Airfield shall only take place between 7am and 10pm Monday to Fridays and between 8am-9pm Saturdays, Sundays and Bank Holidays;
- On Monday to Fridays, no more than 5 movements may take place per day before 9am, and no more than 2 of those movements may take place before 7.30am.
- On Saturdays, no more than 4 movements may take place per day before 9am.

²⁴ <https://www.gloucestershireairport.co.uk/wp-content/uploads/2016/05/20090316-GLO-GREENPOLICY-ISSUE-3.pdf>

²⁵ http://www.landmarkchambers.co.uk/userfiles/documents/resources/TAG_Farnborough.pdf

²⁶

<http://plandocs.waverley.gov.uk/Planning/StreamDocPage/obj.pdf?DocNo=4136820&PDF=true&content=obj.pdf>

- On Sundays and Bank Holidays, no more than 2 movements may take place before 9am.
 - On Monday to Fridays, no more than 6 aircraft movements may take place after 8pm and only 2 of these are permitted to take off after 9.30pm.
 - On Saturdays, Sundays and Bank Holidays, no more than 4 aircraft movements may take place after 8pm.
- 4.30 All circuit training will be banned prior to 9am on Monday to Saturdays and after 9pm on Monday to Saturdays as well as Saturday afternoons (1pm-9pm) and at all times on Sundays. A previous commitment in the Code of Conduct, related to visiting aircraft only being permitted to operate between the hours of 0900-1900 has been removed in the latest version of the document. The removal of this proposed restriction needs to be considered against the backdrop of an overall reduction in the number of movements permitted at each end of the day in the latest Code of Conduct, and the view proposed by the Applicant that, if there are restrictions on movements across the day, does it matter whether these are generated by visiting or based aircraft. We consider this point further below.
- 4.31 The principle of adding in such restrictions was accepted after our previous conversations with the agents, and is a welcome amendment to the Code of Conduct, with most restrictions based on our own suggestions and analysis as previously provided to HDC. In determining what the Airfield would really need, we have been unable to get adequate movement data for analysis as this is not stored by Bagby.
- 4.32 In relation to operating hours, there is one difference between our previous recommendations and the latest Code of Conduct however, in that our proposed condition on movements after 2100 hours was for a maximum of 2 movements (i.e. take-offs OR landings) in this time period up to 2200. By comparison, the latest Code of Conduct narrows this window to 2130-2200 and indicates 2 take-offs, suggesting no limit on arrivals other than the overall limit of 6 movements between 2000-2200.

- 4.33 As previously highlighted in our advice to HDC, the airfield lighting and navigation provision does not seem adequate to support wide ranging operations in the early morning or late evening, and whilst we accept that the light conditions in the summer may allow extended hours, it is difficult to see how frequently movements would really occur in these periods. The accepted overall operating hours now included within the proposed Code of Conduct better reflect the conditions used at other general aviation facilities, including major airfields such as Farnborough. A more significant upgrade in airfield lighting would be a pre-requisite to wide scale morning or evening operations, and this would likely change the nature of the facility such that it may no longer fit within its lawful use status. As such, we recommend a condition to prevent the addition of further runway lighting, other than to replace existing lighting as and when necessary.
- 4.34 In making recommendations on the time periods for flights, we recognise that there will be a demand for those aircraft based at Bagby to have access to morning departures and evening arrivals, which is the typical pattern of operation for many aircraft, particularly those used for business purposes. On the whole the Code of Conduct restrictions would allow for this pattern of operation, whilst giving residents some certainty over the operating hours. However, with the removal of the clause related to no movements by visiting aircraft outside of 0900-1900, combined with the adjustment to the number of movements permitted after 2100, the Applicant has opened the opportunity for conditions to be less attractive to local residents, including an increased chance of departures later into the evening. If only based aircraft were permitted to operate in the evening then this would lead to a higher chance that the movements after 2000 would be arrivals, which are generally quieter than departures, because this would reflect based aircraft returning at the end of their day. However, by removing the visiting aircraft constraint, this effectively opens up an increased chance that the pattern is reversed and that movements after 2000 will be noisier departures as these aircraft return to their bases, and therefore negates the Applicant's key argument of whether it matters if aircraft are based or visiting providing they remain within any controls on overall movements by time of day.
- 4.35 Furthermore, by changing the 2-movement restriction after 2100 to being 2 take-offs (after 2130), this effectively removes any control on total movements in the more sensitive later periods in the evening. This could mean that all 6 permitted movements could take place just before 2200 hours providing only 2 were departures and the remaining 4 were arrivals. This provides little certainty for local residents in our view.

- 4.36 No evidence or justification to support the proposed opening hours suggested by the Applicant in the Code of Conduct has ever been provided. Given that the busiest general aviation airfield in the UK, Gloucestershire Airport, has more restrictive operating hours than proposed, it remains unclear why operations after 2000 and 2100/2130 need to be so much more relaxed for Bagby. We accept that Gloucestershire's operations may be more commercially focused (i.e. aircraft maintenance, flying schools etc.) which will be more likely to operate during the day and therefore we need to reflect a different operation at Bagby, but the purpose of allowing movements later into the evening than at comparator airfields was to give based aircraft the opportunity to return home in a reasonable time window. In order to justify less restrictive operations in this time period, we would need to see evidence that the economic case for the development would be undermined. In our experience, there would likely be little or no economic loss through the more restrictive conditions in the evening as originally proposed.
- 4.37 We recognise that as most aircraft are owner-operated (i.e. the owner is the pilot) at Bagby, then there will be times when they will need to fly in the evenings after work in order to keep up their annual hours or undertake training. However, this must be balanced against the needs of the local residents.
- 4.38 In light of the lack of evidence or justification to support what is proposed by the Applicant in the Code of Conduct, we would suggest our more demanding original condition be applied:
- ➔ There shall be no more than 2 movements per day by resident aircraft after 2100 Monday to Friday and a maximum of 6 movements per day after 2000 Monday to Friday and a maximum of 4 movements after 2000 Saturdays, Sundays and Bank Holidays;
- 4.39 The alternative to this would be for the reinstatement of controls over the times in which visiting aircraft could fly at Bagby to 0900-1900. This would then increase the chances that movements after 2000 are arrivals, not take-offs. However, as the Applicant had a clear preference to remove this, then the more demanding condition on evening movements overall should apply. Only on this basis is there little or no impact from the differentiation between based and visiting aircraft.

- 4.40 Again we recognise that the Airfield currently has no restrictions applied to it, but when compared to facilities such as Gloucestershire, Farnborough and Dunsfold, the suggested times above may be viewed as a reasonable balance. We recognise the importance of early morning departures to some operators, such as the Homeserve helicopter, but one of the key advantages of using private aircraft for business purposes is the greater flexibility it affords and shorter overall journey times, which means that many pilots are likely to actually want to leave later than they would on equivalent scheduled flights or trains, many of which wouldn't offer domestic departures until around 0700-0730 anyway. The same would be true on the whole for homebound aircraft at the end of the day, where the advantage comes in arriving home before the last trains or scheduled flights would allow.
- 4.41 In all cases related to operating hours, we believe that these need to be applied through conditions, rather than just as part of the voluntary (or s106 linked) Code of Conduct.
- 4.42 Finally we note that the Applicant's original preference to exclude Fly-In day movements explicitly from the total annual movements has also been lifted. The application now requests a limit of 150 movements on up to 3 Fly-In days per annum, with these included in the overall annual total. These days can be important sources of income for small airfields, generating landing fees (often discounted though on the day), fuel sales and refreshment sales where facilities are provided. Therefore we would suggest that this is an appropriate approach, particularly as Fly-In day movements were included in the figures used to underpin our analysis around annual movements earlier in this section. We would also endorse the three remaining aspects of this proposal in the Code of Conduct (i.e. a maximum of three per year, a requirement to notify the Council in advance, and a maximum of 150 movements in the day), so as to provide some clarity over the scope and frequency of such activities.

Helicopter Movements and Activity

- 4.43 As has been a recurring theme through previous Applications, Inquiries and objections and complaints by residents, helicopter noise can often be more intrusive than fixed wing operations at an airfield (and this has been referred to in the decision letters).
- 4.44 Within the Code of Conduct, the Applicant has suggested a limit on the number of helicopters to 700 per annum. The figures seen in Table 3.1 illustrate that between 2003 and 2012, total helicopter operations peaked at 6.6% of annual movements (excluding the YAA which is no longer a consideration). The number of helicopters in more recent years is less clear, hence their exclusion from Table 3.1. However the number of turbine movements are known and these will be helicopters. Therefore, if it is assumed that 17.5% of helicopter movements are by non-turbine helicopters, as in 2012, then we can calculate that in 2015 around 7.9% of total movements were by helicopter falling to 7.3% in 2016.

- 4.45 On this basis, we believe that the appropriate figure would be a maximum of 675 helicopter movements per annum, amounting to 8% of our suggested 8,440 total movement figure. This figure is above all historic levels since 2003, except 2015 (23 less estimated) and 2013 (1 less estimated). The figure of 700 such movements per year, proposed by the Applicant, would be above typical historic years and therefore does not fit with the assertion within the ES that the fleet mix does not need to be assessed in detail as there will be no change to this from historic. For this reason we recommend that the number of helicopter movements be restricted, by condition, to 676 (this is one above 675 to reflect that movements will generally be in pairs).
- 4.46 Previously the Applicant had also proposed that non-resident helicopters could be restricted to a maximum of 4 movements per day at weekends. However, this element of the Code of Conduct has now been removed. Given that helicopters are such a large generator of noise, and therefore concern by residents, then it is surprising that this restriction is no longer proposed. The benefit of the previous proposal was that this would help control noisier activities at a time when the highest number of local residents may wish to enjoy their outdoor amenity space, whether this be their gardens or the areas surrounding the Airfield. As many of the non-resident helicopters are actually likely to be commercially chartered or operated, then we believe there would be little impact on re-instating this restriction as a condition, and this would be unlikely to impact on the economic case or the Airfield's viability.
- 4.47 The Code of Conduct, in restrictions 7 & 8 of Section 2, deals with the maximum number of helicopter movements per day. However, these appear to contradict each other, with the former suggesting a limit of 10 and the latter a daily limit of 12. The figure of 12 would appear to provide some leeway in operations because, based on data provided by the Airfield, between 1st January 2016 and the 22nd August, the maximum number of helicopter movements in any one day was 8, and this level of movements occurred on five days out of the 196 days of the year to that point, equating to just 2.5% of days. It is hard to see, on this level of usage, how the Applicant has established the figure of 12 movements. We accept that in totality 2016 had a lower number of helicopter movements than in some previous years and thus there may historically have been occasions when there were more movements in a day, but it is difficult to be certain of this. On this basis, we suggest that the movement restriction of 10 per day be adopted, excluding in the event of an emergency or essential utility flight. This represents a leeway of 25% against movements seen in 2016.
- 4.48 The Airfield has taken already action over another area of concern to local residents, rotors-running refuelling (known as hot-refuelling) and within its current operating environment has voluntarily banned this for all but emergencies and essential utilities aircraft. The wording in the latest proposed Code of Conduct is:

"Helicopters shall shut down their engine(s) during the process of refuelling save for emergencies or essential utility aircraft as defined above at Bagby Airfield."

4.49 There is some ambiguity over what falls within the definition of ‘emergencies and essential utilities’. Typically, when airfields have exemptions in operating requirements to allow for emergencies these tend to relate to emergencies whereby an aircraft needs to land urgently for safety reasons, and it is used as an allowance to movement or operating hour restrictions. This is clearly not the case in relation to rotors-running refuelling because if aircraft have undertaken an emergency landing then they are unlikely to need to refuel with such urgency that they cannot shut down their engines. We sought to understand the frequency with which this activity had occurred since the introduction of the policy, but no specific figure was provided. Instead, the following was provided:

“Hot refuelling is only conducted in emergencies.

An emergency consists of a time whereby a helicopter needs to make an unscheduled landing and requires fuel at short notice. This could consist of the Yorkshire Air Ambulance requiring fuel on route somewhere or if a PDG helicopter needs to make a quick turnaround for fuel when undergoing essential powerline (power outage) works and needs to turn around immediately for safety reasons.”²⁷

4.50 This seeks to clarify the position, and indeed in relation to emergency helicopters such as the YAA and police helicopters, this is relatively straightforward, being times when to continue an essential emergency operation they need to land for fuel. However, over time there is some risk that the use of the words around utilities may be abused and that some normal operations may be included. It is probably reasonable to assume that even local residents, opposed to rotors-running refuelling, would be keen to ensure utilities’ helicopters could operate quickly if there was a power outage, but ‘essential powerline works’ is certainly open to wider interpretation.

4.51 As this activity occurs on the Airfield rather than in the air, it can be dealt with through a Planning Condition rather than through the Code of Conduct. We suggest therefore that more specific wording be included within a condition indicating the precise conditions under which utilities helicopters could take advantage. So as to deter abuse of the condition, it should also be a requirement that each rotors-running refuel be logged and made available to the Council on request which would allow the Council to monitor activity and track movements associated with complaints where necessary.

4.52 The proposed Code of Conduct also indicates a number of other restrictions applying to helicopters. Our summary view on these are:

→ *Helicopters approaching or leaving Bagby Airfield must use the designated helicopter flight path: This is considered below.*

²⁷ Appendix A, KQ23 answer

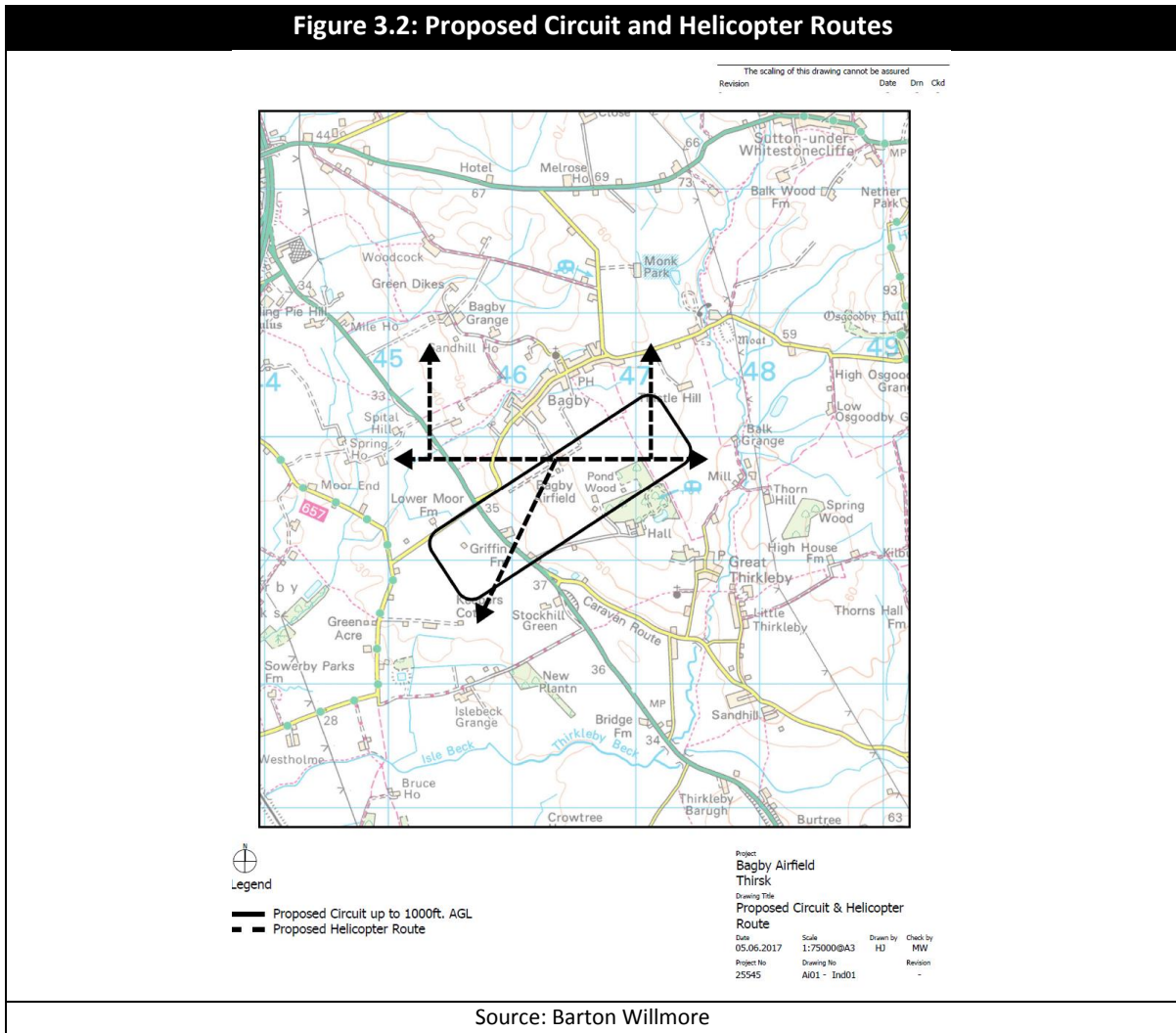
- *No helicopter hover practice shall take place from Bagby Airfield other than for the purposes of taxiing, landing or taking off from the airfield:* This is appropriate and should be retained so as to reduce the noise nuisance of helicopters. However, the exceptions in this do not appear to relate to training or practice and as such it is suggested these exceptions can be removed.
- *Helicopter circuits whether landing, taking off or training shall be limited to 2 circuits per helicopter and shall not exceed 10 minutes in duration:* This brings certainty for local residents and limits harm to amenity. It is therefore appropriate.
- *Quiet Periods – Bagby & Balk Parish Council can request quiet periods when all helicopter flights to and from the airfield will be banned save in relation to emergencies. Notice of such a quiet period must be given at least 1 month before its intended operation. (This is intended to cover particularly noise sensitive activities in the village such as weddings & christenings. In addition, if a quiet period is required for a funeral then if the period is specified only 24 hours (sic) notice need be given):* This is a worthwhile concession to the local community and goes beyond examples seen elsewhere. In building relations with the community we believe this to be a good control. However, there are some issues with the scheme, such as the extent to which Bagby Airfield has the discretion to refuse, or the frequency with which local residents may request a quiet period (as clearly it would not be practical for these to be too frequent). As such there are limitations to the scheme which need to be recognised. It may be most appropriate, assuming a Consultative Committee can be re-established, for such requests to be discussed and considered at Consultative Committee meetings to allow Bagby Airfield and the local community to jointly determine the importance of such requests.

Circuit Flying and Helicopter Routes

- 4.53 We have already highlighted the Applicant's proposed restrictions on circuit flying in terms of days of the week and times permitted. During discussions with the agents, it became clear that there is very little formal training now taking place at Bagby in terms of aspiring pilots learning to fly. That is not to say there is not a little of this operation, and this is now permitted at non-licensed airfields, but most of the training appears to be associated with personal development or associated with maintaining licensing for existing pilots. We understand that much of this is pilots with their own aircraft based at Bagby rather than professional training companies bringing in pilots from out of the area. The impact of this appears to be that the level of training movements has fallen and this is reflected in the agreed movement figures seen in Table 3.1 which show a significant reduction in touch & go movements between 2003 and 2012, nearly halving over this time period. We understand that this may have fallen further, though the most recent data provided is unable to separate these out from the overall movement levels.

- 4.54 The nature of circuits leads to a continuous presence of aircraft in close proximity and low altitude to the Airport and therefore the surrounding residences. This has long been a cause of complaint by residents. Furthermore, this type of flying activity is often focused at times when the weather is good and as such often coincides with times when local residents are in their gardens or have windows open, as recognised by the Inspector in 2011. Therefore it is important that improvements and controls over this activity can deliver real certainty to residents and protection of their amenity.
- 4.55 As described in the Pooleys Flight Guide²⁸ the circuit is already designed not to overfly the village of Bagby. However there is no further guidance on markers and waypoints which would help pilots avoid overflying other more densely built up areas locally, including Great Thirkleby and Little Thirkleby. Provision of further information through such sources would be appropriate going forward once a suitable circuit is determined. Other airfields explicitly publish plans of their circuits.
- 4.56 Although the applicant has indicated a willingness to put in place a fixed circuit through the Code of Conduct, the revised version of this makes no comment on circuits or circuit routings other than the previously mentioned time and day restrictions. We have however been provided with a drawing of the proposed circuit which is shown in **Figure 3.2**. This circuit is quite tight to the airfield and remains to the north west of Great Thirkleby and Little Thirkleby. The circuit is not without some compromise in that it does overfly Thirkleby Hall and the leisure park there. However, it must again be recognised that there are currently no constraints applied and the activity has been in place at Bagby for many years. Full relief from the circuit cannot be achieved without an outright ban and as such the proposed circuit route does appear to give more certain relief to permanent residential properties in the area, making this the best option, though not perfect. For this reason, we would endorse this.

²⁸ *Pooleys Flight Guide, 5rd Edition 1962-2015*, Pooleys, 2015, Page 88



4.57 We did discuss whether there may be options for more innovative approaches to the circuits with Peter Bondar, acting on behalf of the Applicant. One question focussed on the point that in some cases, during low wind conditions, some pilots choose to take-off and land in opposite directions to take advantage of the slope in the runway (i.e. they take-off downhill on runway 24 and then land uphill on runway 06), and we questioned whether aircraft could then fly straight ahead, undertake a loop and return. This was considered to be unsuitable as, by their nature, circuits lead to aircraft undertaking touch and go's in the direction of approach to the runway, which would leave aircraft heading in the wrong direction to undertake the same pattern of movements. This is a reasonable explanation and concurs with the need to maintain a more traditional circuit around the airfield.

- 4.58 Given that the agents and evidence has been indicating a fall in training activity, we believe that there may be merit in imposing a limit on the number of touch and go movements that can be handled within the overall movement limit. If set correctly, this should allow those on site to continue to undertake essential training, but discourage use of the airfield for this purpose in future, in order to provide some measure of protection to local residents. Given that the business strategy is to move towards higher value activities which will not seek to undertake high levels of such movements, then this should pose few problems for the operator whilst bringing increased protection and certainty to the residents.
- 4.59 Based on our previous assessment, the Applicant has proposed a limit of 1,700 such movements in the Code of Conduct, and we believe this can be included as a planning condition. We established this figure through analysis of data provided previously. In 2012, based on data provided within the agreed movement figures in the 2013 Planning Appeal²⁹, 28.9% of all movements were touch and go's. If training activity has decreased further since then, as indicated to us, then this figure is likely to be higher than required presently. This suggests lowering the figure, but this must reflect the fact that there may be some expansion of the maintenance flying which may require some circuits for aircraft testing. On this basis, we suggested a limit of 1,700 touch & go's per annum based on approximately 20% (rounded) of all annual movements against the 8,440 total suggested earlier. This figure is lower than the 2012 number of such movements, but would correlate with a desire to move away from this sort of lower value activity as highlighted throughout the Application. The inclusion within the latest Code of Conduct indicates that the Applicant can live with this constraint.
- 4.60 In addition to the fixed circuit route, we also discussed, with the agents, formalising the approach routes to the airfield for helicopters. This would serve two purposes:
- It would control the approach and departure paths of helicopters which, although requested presently not to overfly Bagby village, do have relative free rein on what they overfly and thus may not be avoiding populated areas effectively; and
 - It would allow aircraft monitoring devices to pick these up better by seeing aircraft arrive at more fixed locations than they may do currently. We consider this further below.
- 4.61 The suggested routings, provided by the Applicant, for helicopter approaches and departures, also shown in Figure 3.2 do appear to avoid the most built-up areas around the Airfield whilst maximising the operational options available to, and needed by, helicopters.

²⁹ *Joint Statement of Peter Forbes of Alan Stratford Associates (on behalf of Hamelton District Council) and Paul Pritchett of Pritchett Consulting (on behalf of Martin Scott t/a Bagby Airfield), 26th July 2013.*

- 4.62 Neither the helicopter approach routes, nor the circuit routing can be conditioned within an approval as these fall under the Air Navigation Order which covers aircraft once they are airborne. They could however be covered by a Section 106 agreement covering the Code of Conduct, and outlining these routings explicitly in this document. Furthermore, as part of this it should be required that the Applicant publish these in all relevant public documents used by pilots, including Pooleys, websites and any NOTAMs or AIPs related to the Airfield.
- 4.63 The movement cap on touch and go's could however be restricted by condition and this is an appropriate control, which would meet the test for conditions in NPPF and NPPG.

Noise Impact

- 4.64 In considering the noise impact of the proposals we have sought to give a high level view of the implications and issues. HDC have commissioned Bickerdike Allen Partners LLP (BAP) to provide a more comprehensive review of the work undertaken in support of the Application by KP Acoustics (KPA) and WSP Parsons Brinkerhoff (WSP PB). This has been supplemented by further work by BAP in relation to the amended application. We deal with the noise impacts of the new fixed re-fuelling facility and the new location for aircraft maintenance after our overall considerations of noise.
- 4.65 As with all elements of the proposals, it is important to recognise from the outset that at present there are no controls over the Airfield with respect to noise or noise limits, and whilst the Airfield has made some progress on a voluntary basis, such as through the banning of aerobatics over the site, ultimately they could, without any constraints applied, seek to increase movement numbers and accept older, noisier aircraft (provided this did not amount to a material change of use³⁰). If pushed to seek alternative sources of revenue, there remains some risk that aerobatics could be reinstated if that secured additional based aircraft. Aerobatics were a significant source of complaints at the first Inquiry. We also believe that without controls, it would be financially attractive for the Airfield to also seek to reinstate hot-refuelling activities for helicopters which would come with significant noise impacts.
- 4.66 The KPA assessment³¹ is a brief document which seeks to illustrate current noise impact and then project what the impact may be following the proposals with further mitigation, such as landscape screening in place. However, in assessing this, there are a number of key questions that we have sought to understand:
- What was the fleet mix of aircraft during the assessment period?
 - Was the assessment carried out in a year/period which was comparable to future years once the redevelopment has been completed?

³⁰ This was the issue considered comprehensively by Inspector Lewis

³¹ Bagby Airfield, Thirsk: Noise Impact Assessment, Report 12184.NIA.01 Rev.F, KP Acoustics 27th April 2016

→ What fleet mix is assumed for the future assessment?

4.67 We are also aware of an e-mail from legal representatives of A4R³² which raises five key points in relation to the noise assessments, these are:

- The noise implications of the 23% increment in proposed movements over current numbers is ignored altogether;
- Monitoring appears to have taken place from points in the middle of the village rather than more relevant and sensitive locations;
- No audio recording of peak noise events (take offs and landings) has been carried out with reliance being placed on unattended 10 minute samples (which are too long);
- Similarly, the Leq90 reading that has been used (which captures noise over a 16 hour period) is recognised as inappropriate for airfields with their pronounced peaks and troughs;
- Seasonal peaks have also been ignored; contrary to normal assessment exercises involving airfields, an annual daily movement of 25 is assumed throughout the year. In reality 50 is more likely to be accurate for the summer months (the applicant only limits helicopters to 12 a day and otherwise has no daily limit so this is crucial).

4.68 In reality these comments appear to reflect the later work undertaken by WSP PB and we will consider this further below. However, in relation to points 1, 3, 4 and 5, we give consideration to these as far as possible, though BAP have provided more detailed commentary on key noise points in their own separate report

4.69 Our initial concern has been, as with A4R's, whether the right starting assessment period has been used and would therefore be valid for future assessments. As highlighted by the agents, the KPA assessment was carried out in the summer period of a year in which over 8,800 movements were handled, and therefore they believe that this is comparable to the level of movements expected in future. This overcomes the first of the points made by A4R because their assessment of a 23% increase in movements is based on a return from the currently lower levels of 2016.

³² E-mail to Tim Wood from Stephen Hornsby on 5th May 2017

- 4.70 However, the agents were not in a position to indicate what the fleet mix was during the year or assessment period, nor how this could alter going forward. The key justification is that *“Noise from aircraft should not change given the type and level of use not changing from the Proposed Development”*³³. However, this is neither evidenced, nor necessarily true, as there is no evidence of the current or future fleet mixes to be certain that types will not change, particularly given a desire to focus on higher value activities which may bring larger aircraft.
- 4.71 It is not clear whether the KPA assessment of future impact factored in any changes in fleet or a higher proportion of helicopters. This is relevant because it is important to test the scope of the permission granted. The mix could alter within the confines of any conditions imposed. Given that helicopters are a significant issue in noise generation, then it would not be reasonable to provide an assessment which did not reflect the potential increase in activity by these aircraft. The only way to have confidence that the impact from helicopters would be comparable to the present would be to apply a more rigorous restriction on movement numbers than proposed by the Applicant, which further justifies our earlier recommendation to limit helicopter movements to 676 per annum. Any proposed helicopter limit above that of 2015 (estimated at 698 by us based on 17.5% being by non-turbine helicopters) would certainly reduce the weight which could be attached to the noise assessment as a basis for determining the Application.
- 4.72 During discussions with the agents, the point was also made that as the Airfield focuses on higher value activities, so this will bring newer generation aircraft which will typically be quieter than older aircraft they replace, thus the noise is not expected to be worse in future than currently assessed. We would concur that, where aircraft are replaced like for like by equivalent newer versions these will typically be quieter. However, again there is no evidence or certainty that replacement activity will be like-for-like to bring this benefit. For example, whilst a newer generation twin-engined aircraft will would bring benefit if its replaces an older generation twin-engined aircraft, the same new-generation twin-engined aircraft may actually be nosier than older single-engined aircraft if it were to replace this. Therefore noise could increase.
- 4.73 The WSP PB assessment was carried out for a 29 day period in 2016, a year in which movements were lower than those which may be expected if the Airfield reaches a proposed movement limit. This was undertaken solely to provide further validation of the KPA approach and to cover specific questions put forward by HDC. WSP PB have not attempted to project the implications for future impacts and this falls back to the KPA approach. Clearly however there are issues in that the assessment period was not in a year in which movements matched the levels which were experienced in 2015 or could be expected and permitted in the future.

³³ *Bagby Airfield, Planning, Design and Access Statement*, Barton Willmore, October 2016, Page 37, Para 6.27

- 4.74 In validating KPA's 2015 results therefore there is some risk that the results are not like-for-like. The assessment period for KPA was 83 days, with an average of 43 movements per day during that time. By comparison the assessment period for WSP PB was only 29 days, however, the average number of movements was in fact higher at 46, suggesting that these results may actually be exposed to a higher level of noise impact than the earlier work undertaken over the longer summer period. It should also be noted that even in attempting to measure single event noise, the WSP PB work was exposed to a more intensive number of movements per day than the equivalent period a year earlier, up from 41 in 2015 to 46 in 2016. This should have increased the chances of exposure to higher noise events, though we cannot be certain of this as we do not have comparative data for both years to know the fleet mixes in each.
- 4.75 Based on our experience of smaller general aviation airfields, A4R are right to assert that typically noise assessments should at least cover single event noise as the pattern of operations tends to be less regular than at commercial airports. This was also the approach of Inspector Braithwaite. The WSP PB review of the work by KPA³⁴ makes some attempt to breakdown the data to identify when noise events could be related to aircraft activity, but again this does not explicitly indicate the levels reached to be able to determine the noise levels of single events, nor indeed the drivers of those (i.e. was it a particular aircraft type, activity or specific routing that caused these) such that conclusions or conditions could be considered against these.
- 4.76 Based on their own assessments³⁵, WSP PB attempt to present evidence that single events are obscured within short time periods by the general background noise, but again it is not clear what peak noise levels were at any point and which of these actually relate to aircraft movements, nor is any attempt made to identify causes of increased activity when they do occur. We will allow BAP to comment further on this approach.
- 4.77 A further update to the Noise Chapter of the ES was provided as part of the amended application in March 2018³⁶, but this deals primarily with aircraft refuelling and the maintenance facility, as these are the main changes from the previous application. We therefore deal with these in turn later in this section.

³⁴ *KP Acoustics report review*, WSP / Parsons Brinkerhoff, 28th February 2017

³⁵ *Further noise data analysis*, WSP / Parson Brinkerhoff, 28th February 2017

³⁶ *Environmental Statement, Chapter 7: Noise and Vibration*, WSP / Parsons Brinkerhoff, March 2018

- 4.78 A key difficulty with the noise assessment remains, as highlighted earlier, that there are currently no limits in place on movements or noise and therefore in reality without the planning application and suitable controls applied from this, the Airfield could increase its noise impact on an average or single event basis anyway in the future (provided there was no material change of use as a result). Changes in aircraft types, increases in helicopter operations, a return of aerobatic flying or increasing levels of circuit flying could all occur in any event. Evidence provided by local residents to HDC in August 2018 illustrated an apparent diversification of helicopter types more recently³⁷. We know from our own experience at Bagby and the recent objections, that many of these are the events which residents are concerned about rather than the overall average noise across a long period of time. In reviewing noise complaints over a long period of time BAP concluded that historically these had related primarily to aerobatic flying, and more recently appeared to be related to helicopters and in particular helicopter refuelling. This confirms the greatest areas of concern. The inability to identify individual noise events from the analysis undertaken means the only sensible fallback for determining what controls should be applied is in relation to the general movement types, which may encompass some quieter activities amongst the louder movements.
- 4.79 Given the uncertainty around broad aircraft types, but our acceptance that in future aircraft should generally get quieter, then the only ways to control noise impact would be:
- Specific conditions or controls applied to activities which have generated complaints and concerns historically; or
 - Imposition of a noise contour of some form around the airfield to be monitored annually.
- 4.80 The latter is unlikely to be an effective measure because, even if appropriate contours could be agreed, the cost burden of setting up and monitoring these would likely be beyond what a small airfield could sustain and this would potentially mean that any such obligation would damage the viability of the proposal so as not to make it compatible with guidance laid out in the National Planning Policy Framework. This would also struggle to control the single events which cause greatest concern (per Inspector Braithwaite).
- 4.81 Therefore we believe that the most effective approach (consistent with national policy and guidance) remains to apply conditions and obligations which relate to specific movements and activities, including overall movements and limits by time of day where necessary. This would be in line with Inspector Lewis' findings in 2013. Those outlined earlier in this section, applying to total movements, helicopter movements and circuit flying would be critical elements of this, whilst we also consider controls over aerobatic flying, as proposed by the Applicant are an essential element of controlling noise impacts.

³⁷ E-mail from Tim Wood on 17th August 2018

- 4.82 We understand that previously HDC considered imposing weight limit restrictions on aircraft that could operate at Bagby. The benefit of this would be to prevent a material change in the character of the airfield through changes in broad aircraft types and, by inference to this, preventing significant changes in the noise impact arising from larger, potentially noisier, aircraft. A4R have also drawn attention to this measure in its correspondence with HDC.
- 4.83 However, in considering this as a possible control, the Applicant requested that we consider more specific conditions related to the actual noise impact of aircraft, rather than an arbitrary limit on aircraft size which bears little or no relationship with actual noise impact. The Applicant highlights that complaints have related to noise, not the size of aircraft using the Airfield. This is true, although we consider further the relationship between size and the Lawful Use of the airfield and ability to control its growth later in this section, as there is some relationship between the two, and recent submissions through the summer 2018 consultation period have expressed concern over the changing nature of the Airfield which we need to address.
- 4.84 We recognise that the weight limit was a relatively crude measure in this regard but highlighted uncertainties around historic fleet mix which made it difficult to ascertain the right noise figures to use. To support further consideration of this, the agents have undertaken more detailed analysis of the data provided for January to August 2016 (and York Aviation further broke down this analysis) to allow us to analyse what the certified noise characteristics are of aircraft using the Airfield, along with their frequency of use and maximum take-off weight. Data was taken from the G-INFO database as publically available on the CAA's website³⁸ and added to the database of movements held by the Airfield. In analysing the data in this way there were two key issues:

³⁸

<https://publicapps.caa.co.uk/modalapplication.aspx?catid=1&pagetype=65&appid=1&mode=searchnoresult>

- Not all aircraft have noise certificates to indicate their noise profile; and
- Certification of fixed wing aircraft is to one of two different standards and the two are not comparable. Helicopters are again certified to one of two different standards, and again the results of these are not directly comparable.

Fixed Wing Controls

- 4.85 In the eight months to the end of August 2016, around 2,500 fixed wing movements at Bagby were flown by aircraft that did not have noise certificates. As highlighted by the agents however, many of these were homebuilt or microlight aircraft which are not required to have a noise certificate under the CAA's 'light touch' approach to smaller general aviation types which is designed to make regulation straightforward so as not to deter the sector, which is seen as economically valuable at a UK level. In addition to these, there were a number of older aircraft and ex-military types which were never required to have noise certificates, and a small number of aircraft which did not have noise certificates themselves, despite their type more generally having these. This does not mean that controls based on noise levels are not appropriate, only that this approach potentially leaves a significant number of movements which could not be controlled based on a publically available standard document and would require a secondary mechanism of control, which we consider later.
- 4.86 In determining the appropriate noise levels we have been mindful of the two factors which need to be controlled as outlined earlier, and on the basis of these have analysed the noise levels associated with fixed wing aircraft in relation to their MTOW. This approach allows us to determine what the noisiest aircraft are which fall above and below the 2,730kg MTOW which is viewed by the CAA as being the differentiator between light general aviation types and more commercially orientated aircraft. We also broke this analysis down between the two noise standards (Chapter 6, measured at a fixed overflight height of 300m and Chapter 10 which is the overflight noise on departure at 2,500m travelled distance from the start of the take-off roll).
- 4.87 This analysis showed in both cases, the noisiest aircraft using Bagby Airfield, with known noise certificates, were both well inside the 2,730kg MTOW limit, and therefore would be allowed to operate if the constraint applied was based solely on aircraft weight, as previously proposed by HDC and as appears to be advocated by A4R. This clearly illustrates that a weight limitation would do nothing to reduce the current noise position of the Airfield as the noisiest aircraft could continue to operate.

- 4.88 By inference, A4R's advocacy of this weight limitation suggests that they must be accepting of the noise profiles of all aircraft under this weight restriction, and therefore we believe it appropriate to set the noise limit based on the current highest known levels at Bagby for fixed wing aircraft, which would be **79.6dB(A) for Chapter 6** aircraft (the same as a Piper Cherokee with MTOW of 1,542kg) and **82.7dB(A) for Chapter 10** aircraft (the same as a Bulldog aircraft with MTOW of 1,066kg). These levels may allow some aircraft over the weight limit to operate, but as their noise implications would be less than the limits set by smaller aircraft then this should not lead to a negative impact on the amenity of local residents in relation to noise, the greatest area of complaint. These selected noise levels would prevent a number of larger general aviation aircraft, such as all but one of the UK's Cessna Caravans, from operating which will prevent the wide scale use of aircraft which could alter the nature of the airfield. There may be noisier aircraft, with noise certificates, which fall inside the 2,730kg weight category, but we do not feel it is necessary to account of these in determining the appropriate noise controls as they do not appear to have played a part in the recent use of Bagby Airfield (this also indicates the superiority of a noise-related condition, because a simple weight restriction could let in noisier aircraft which have not been experienced in recent years). Going forward, as aircraft technology improves, we would expect that few, if any, aircraft under 2,730kg MTOW would be excluded from Bagby.
- 4.89 For the remaining fixed wing aircraft, those without noise certificates, we believe that the secondary mechanism for constraint could fall back to the MTOW limit previously suggested (2,730kg). The weight certificates of all aircraft are also available publically on the G-INFO website (and international equivalents) as well as contained within aircraft registration information, therefore there are no aircraft which will not be caught by this secondary approach if they do not have noise certificates. This limit reflects the nature of the Airfield and types which may have historically used the facility. This would also mean that the economic benefits from the maintenance facility would on the whole not be hindered because we understand that Graham Fox Engineering's (GFE) licence limits the business to maintaining aircraft up to 2,730kg only, meaning there would likely be very few aircraft which would not be able to visit the facility. We would expect that if GFE were replaced by another maintenance company then it would be subject to similar licence conditions. It must be recognised however that this approach, based on weight, is only for those aircraft without a noise certificate, pilots cannot choose to operate under one or the other control measure (so noisier, smaller aircraft with noise certificates would be excluded from using the Airfield).

4.90 The two conditions above will potentially still exclude some aircraft which have operated historically and some of these may be among the noisiest types to have used the Airfield. This would bring amenity benefits to the residents compared to the present position. However, there is some risk to the business plan and economic value of the airfield as a result of these exclusions because, whilst they may be infrequent visitors for large parts of the year, they are often types which are pivotal to the success of fly-in days, acting as a draw for crowds and visitors. This in particular includes ex-military aircraft such as Hurricanes and Spitfires. Therefore we believe it is appropriate, for the success of the airfield, to find a compromise on these activities for the purposes of fly-in days only. The agents have therefore proposed the following criteria, a minimum of two of which must be met to allow such aircraft to be brought to Bagby for fly-in days³⁹:

1. The aircraft was first manufactured more than 50 years prior to the current date;
2. They do not currently have an internationally recognised certification basis;
3. They can evidence that they (their type) were at one time, on a military register.

4.91 The information to ascertain these criteria is available on the G-INFO website and we believe that the need to meet two or more of these criteria will ensure that this applies to a more limited basket of aircraft. There are two further considerations however which are:

- These aircraft are likely to arrive in advance of the fly-in day so as to be on display in time for the commencement of the fly-in day; and
- Pilots need the discretion to choose when to fly into and out of Bagby for safety purposes based on weather conditions at Bagby, their destination, en-route or at likely diversion airfields.

4.92 We believe this can be dealt with by permitting a window before and after the fly-in day for arrivals and departures. For arrivals the window can be relatively fixed because pilots can make a conscious decision to fly to Bagby or not if they have concerns around weather. However, for departures away from Bagby the window needs to be more open ended, because aircraft may arrive and then find weather conditions are unsuitable for a number of days after the fly-in day. In these circumstances, a limited window could leave the aircraft trapped at Bagby until the next fly-in day, which clearly would not be sensible. The agents have suggested the following wording for these aircraft:

³⁹ E-mail from Peter Bondar to HDC and York Aviation, dated 20th October 2017 at 16.18 hours.

"It is proposed (by PB) that for weather related reasons such aircraft can arrive up to 48 hours prior to the commencement of such an open day and that they should leave either on the day, or the day after such a show, or at the reasonably earliest opportunity thereafter, consistent with weather related conditions, at Bagby, their intended destination, any diversion and the enroute weather."⁴⁰

- 4.93 In our view the 48 hours arrival window seems appropriate. For both arriving and departing aircraft though it will be necessary to impose a further restriction to prevent aircraft from arriving 48 hours in advance and then making additional flights before the fly-in day itself, or departing and then arriving again after a fly-in day. We suggest amended wording to this condition therefore.

Helicopters

- 4.94 As with the fixed wing aircraft, our approach to helicopters has been to review current activities to determine what existing levels of noise may be arising from the existing fleet using Bagby Airfield. We recognise that the weight of helicopters may be greater than equivalent fixed wing aircraft, but these would still constitute appropriate use for Bagby Airfield as these constitute typical aircraft at small general aviation airfields.
- 4.95 As with fixed wing aircraft, there are two noise standards. A significant difference between these is that, for Chapter 8 certified aircraft, the Take-Off, Approach and Overflight noise levels are all certified, whereas for Chapter 11 helicopters, only the Overflight noise is recorded. This again indicates a need to distinguish between the certification levels. However, unlike fixed wing aircraft, the majority of helicopters do have noise certificates which means only a limited number will not be subject to a suitable noise-related condition. In the eight months to the end of August 2016, only 8 out of 322 helicopter movements (2.5%) were by aircraft with no noise certificate.
- 4.96 In determining a suitable noise limit for helicopters we have been acutely aware of these activities as being major generators of complaints, a fact recognised by Inspectors during each of the inquiries previously. As the CAA's recognition of 2,730kg is less relevant to helicopters, then we believe it is more critical to establish what would permit the majority of movements presently, but perhaps excluding any outliers which are less frequent. It is hard to be certain whether these less-frequent outliers may or may not have been included within the EIA noise assessment, and as such we believe it appropriate to be conservative in our approach and to exclude these. Those aircraft operating more frequently are more likely to have been part of the EIA noise assessment.

⁴⁰ E-mail from Peter Bondar to HDC and York Aviation, dated 20th October 2017 at 16.18 hours.

- 4.97 It was originally suggested by the agents that, to reflect that helicopters have asymmetrical noise patterns on take-off and departure, an average of these two noise levels could be used for Chapter 8 certified aircraft as the basis for a control condition (this would not apply to Chapter 11 certified aircraft). However, this averaging has the risk of being overly generous and expanding the range of helicopters which could use Bagby Airfield. Furthermore, as noise issues at the Airfield often relate to single-event noise, then it would not be appropriate to open the airfield to individually loud take-off or landing movements by helicopters. We therefore suggest that, for Chapter 8 aircraft, a limit is applied to both the certified take-off and approach noise.
- 4.98 Based on the data available, we believe that most helicopter movements, which are typical of what would have been assessed in the EIA, would be able to continue operating with the following limits:
- For Chapter 8 certified aircraft, an approach noise limit of 94dB(A) and departure noise limit of 92dB(A); and
 - For Chapter 11 certified aircraft, an overflight limit of 84dB(A).
- 4.99 These controls would have excluded 12 movements out of the 314 with noise certificates in the first eight months of 2016 (3.8%). In discussing these limits with the agent they highlighted that:
- For the Airfield's major client related to the utilities sector, PDG, 5 of their 19 helicopters would be unable to operate; and
 - A number of current common types, including some operated by air ambulances and police forces, would not be able to operate.
- 4.100 However they accept that, given that none of these aircraft operated in the 2016 sample period, then it appears no movements would be excluded from the base case on this basis.
- 4.101 In August 2018, local residents did provide photographs to HDC of some larger helicopters using Bagby and these were forwarded to us for consideration⁴¹. Out of these, we concluded that two of the pictured aircraft would be unable to operate, and the third was a type in which some aircraft would be above, and some below the noise threshold. This illustrates the effectiveness of the proposed conditions because it would exclude aircraft directly highlighted as a concern by local residents. The larger of these aircraft were not part of the 2016 assessment, and so we believe there is no need to make an allowance for these, whilst the third would be an aircraft which could be part of the 3.8% which would be excluded. Importantly however the use of the Airfield by these types highlights the sort of diversification which the operator could seek without suitable planning controls.

⁴¹ E-mail from Tim Wood, 17th August 2018

4.102 Finally, for the small number of helicopters which did not have a noise certificate, we would suggest imposing the same criteria as per fixed wing aircraft, i.e. a MTOW limit of 2,730kg. Due to their nature and the strong cross-over between commercial and private use, there are very few helicopters without noise certificates and those that do not have them are likely to be smaller in nature. Consequently they are likely to be under this weight limit.

Permanent Refuelling Facility

4.103 The relocation of the fuel facility is being dealt with as a retrospective aspect of the Application as the Applicant carried out the works and implemented their use with no prior permission. This is an example of poor airport management and shows a disregard for local residents and the environment which is not in keeping with sustainable development within the aviation sector. Whether the Applicant believes there to be little impact or otherwise, this should have been assessed adequately before the relocation. Such behaviour, in our view, highlights precisely why controls on the Airfield must be applied by condition rather than any voluntary code of conduct.

4.104 The facility acts as storage for both Avgas and JetA1 fuels. Previously the Avgas tank and dispensing unit were located around 50 metres further to the south-west of the new facility. JetA1 has been stored in mobile bowsers which have been moved about the site for refuelling. The assessment for the EIA in relation to the relocation of the fuelling facility has concentrated on the noise impacts.

4.105 BAP have undertaken a detailed analysis of the revised noise and vibration chapter of the EIA in relation to this facility and found that the assessment may not be adequate to give confidence over the level of true impact on the local community. Of course, where there are positive economic impacts from development, the planning system does allow for some negative impact, but it is hard to be certain what either the positive or negative impacts would arise from this development to be able to make such an informed decision. Furthermore, it is not clear what other options were considered before determining that this was the most suitable location, despite being closer to the village of Bagby, this would be essential to weighing up the benefits of the development in our view.

4.106 The assessment focuses essentially on aircraft types which would have refuelled with Avgas in its previous location (on the old Helipad H1 for helicopters), on the assertion that jet turbine helicopters, refuelling with JetA1, have been refuelled close to the location of the new fuel farm for some time after the enforcement action in relation to Helipad H2 south of the runway. However, it is difficult to be certain that this has been the case and under any circumstances there are two key reasons why this is not a suitable assessment position to take in our view:

- The new H1 helipad will be in a position currently occupied by a building which means it is not possible that such helicopters have been operated so close to the village location before; and

- Even if helicopters have been operated close to this location, the existing hangar and 'Storage 1' buildings may have provided some acoustic screening which will be removed.

4.107 Indeed on the second of these points, the updated Noise Chapter acknowledges that:

*"However, acoustic screening effects associated with on-site structures and buildings may differ following completion of the Development"*⁴²

Regardless of whether JetA1 related helicopters have been refuelled close to this location, the very fact that this statement is made means that it should not be possible to state "The new refuelling facility will therefore not result in significant change to Jet refuelling operations"⁴³. Whilst screening measures are being put in place, without a suitable assessment it is not clear that these would actually deliver any benefits lost through the removal of the hangar and Storage 1 buildings.

4.108 In their report, BAP conclude that the single-engined, Avgas powered, helicopters, such as the R44 are likely to have only a small noise impact, only marginally above the ambient levels (which were themselves potentially presented conservatively low, presenting a worst-case scenario in the assessment), and that this impact would be similar to that of the previous Helipad 1 location⁴⁴. Therefore it appears that BAP believe that this type of activity would be acceptable in the new Helipad 1 location.

4.109 However, BAP conclude but that twin-engined types could have a significantly greater impact and that this is not adequately assessed. Whilst the Homeserve Bell 429 appears to be the dominant aircraft of this nature and is apparently refuelled adjacent to Hangar E, this is by no means the only twin-engined jet turbine helicopter, and indeed noisier jet turbines continue to use the Airfield which would presumably move towards the Helipad 1 location for refuelling.

4.110 There is no clear evidence in the Application as to why the new fuel facility had to be in this location over other possibilities on site (perhaps for example on the South-Western boundary of the site, closer to the original Helipad 1) which would likely have had less noise impact locally. We do not see that the choice of location can be justified as having any positive economic uplift which could not have been achieved if the Facility had been placed elsewhere on site. With no uplift in the economic benefits it appears there should be no reason for residents to suffer greater negative impacts as a result of the relocation.

⁴² *Environmental Statement, Chapter 7: Noise and Vibration, WSP / Parsons Brinkerhoff, March 2018, Para 7.110*

⁴³ *Ibid, Para 7.108*

⁴⁴ *Bagby Airfield, Hambleton District Council, Planning Application: 16/02240/FUL: Aircraft Noise and Control, Bickerdike Allen Partners, December 2018, Page18*

- 4.111 BAP's view on the assessment undertaken in the updated ES suggests that for single-engined avgas powered helicopters the relocation will have no greater impact than the previous location. The same may not be true for noisier helicopter types, but there is insufficient evidence to know for certain either way. On that basis it appears the only solution to ensure local residents are not negatively impacted by the relocation is to apply conditions on its use by aircraft types which could generate the most noise.
- 4.112 The issue then is to determine a suitable location for noisier aircraft to be refuelled. The Applicant clearly indicates that such aircraft are currently refuelled in the area close to the new refuelling facility. The enforcement notice of 2014 is likely to have pushed these activities back from Helipad 2 towards the northern side of the runway, in the area to the front of the existing club house and maintenance hangar, which would confirm the Airfield's stance on existing refuelling location. Furthermore, this also needs to be seen in the context once again that there are no constraints on the Airfield presently and as such these helicopters could operate from anywhere in this area. In our opinion though, the lack of constraints and ability to allow operations in any location is only a valid argument where the Development does not result in a degradation of conditions for residents, and clearly this may not be the case as a result of the Development.
- 4.113 Given the uncertainty over the impacts, balanced with current operations, there needs to be some compromise on a condition associated with this activity. We suggest that this should be to ensure activities by noisier aircraft do not creep closer than necessary to the northern boundary. Given that the Airfield will retain a JetA1 bowser to refuel the HomeServe aircraft, then we believe this could be used for all other such aircraft too, and therefore we suggest that the original Helipad 1 area should provide a good position for refuelling such helicopters. However, the wider development of the site may render this specific location unsuitable going forward (for example for aircraft taxiing round to Hangar F) and as such there may need to be some flexibility on the actual location used. The current Helipad 1 sits approximately 40m from the new fuel facility and therefore an equivalent distance from the fuel farm would seem an appropriate way of controlling this activity for jet turbine aircraft.

Relocated Maintenance Facility

4.114 The amended application seeks to change the use of Hangar B from aircraft storage to a maintenance and engineering hangar. This effectively is to house the current maintenance firm on site, G. Fox Engineering (GFE) which is being relocated, in order to convert their former building into the new club house and control tower. Furthermore, we understand that the GFE, following a licence review by the CAA, have been required to move into a more suitable facility and Hangar B will provide this. On a previous visit to the site we noted the much higher quality of Hangar B compared to the original GFE building, and this would appear to better meet the requirements of the CAA. Furthermore, the hard standing to the front of the building should make it more robust for year round activities and therefore better support the growth of the business to deliver economic benefits.

4.115 In considering this aspect of the development, we are aware that GFE recently had a temporary suspension of their licence (now restored) and that A4R expressed concern over the appropriateness of determining the application with such risks⁴⁵, particularly as they felt this could undermine the economic case being made. We understand that the approval being sought however is not for a 'personal permission' and this was confirmed by HDC to A4R⁴⁶. Consequently the assessment on suitability and possible controls relates to the concept of a maintenance and engineering firm occupying the building, rather than GFE specifically. In our view this is consistent with the approach taken on planning applications for a variety of developments, and as such the economic benefits of this would be assessed in the same way as any speculative development. In many cases airports and airfields build hangars speculatively and build their case to do so, both for business and planning purposes, on an expected nature of use. This perhaps translates similarly to other commercial facilities, such as shops or warehouses which are not necessarily constructed with a particular tenant in mind. On this basis the question then becomes, would a similar operator generate a different pattern of activity, and in reality the answer to this is likely to be "no". We are very familiar with the pattern of operations of similar maintenance companies across the UK and believe that there is nothing extraordinary about the GFE operations which sets it apart from the others. Therefore, if the building is backfilled by a similar operation then the impact would likely be negligible. This does of course mean the building needs to be used for maintenance and this can be conditioned as such, which would overcome previous ambiguities around hangar usage as picked up by the Inspector in 2012.

⁴⁵ E-mail from Stephen Hornsby to Tim Woods, 26th June 2018

⁴⁶ E-mail from Tim Wood to Stephen Hornsby, 28th June 2018

- 4.116 There also appears to be some concern from local residents over the scale of aircraft which could be maintained in the future as a result of using this larger building, as well as the potential for more movements as a result of the larger hangar. We have considered the latter of these earlier in our report and ultimately the number of movements for the Airfield will be fixed by planning condition, so any growth in the business would be at the expense of other movements within the overall cap. On the second point, this relates to a broader concern of residents as to the potential for larger aircraft and a changing nature of the Airfield, and as a result we consider this as part of our consideration of other issues below.
- 4.117 The main risks associated with the relocation of maintenance are related to noise and vibration, and as a result this is considered in the revised ES, and also in the work of BAP. The relocation of the hangar takes it away from the main residential area of Bagby. The relocation would see the closest receptor being 345m from the building, further away than the nearest receptor when Hangar F was previously proposed for the relocated maintenance facility. However, the orientation of the building means the opening doors and associated apron space would directly point towards the village and closest receptor, unlike in the current permitted facility.
- 4.118 The revised ES states that internal activities, such as the use of an angle grinder, would have a negligible impact on the closest receptor, generating only around 35dB of activity noise levels. This is modelled, and it is assumed that the building structure would reduce that impact still further. It is highlighted that some maintenance work actually takes place outside the currently permitted maintenance hangar because the facility is not large enough to accommodate all the aircraft simultaneously and therefore the new hangar should reduce the incidence of this. BAP do not appear to disagree with the findings of the ES in relation to this type of impact. Recognition of the value of the building structure and insulation suggests that HDC need to be content with the level of noise insulation provided, and that the hangar doors should be kept closed as far as possible. These should be conditioned.
- 4.119 In relation to engine tick-over, BAP indicate that the assessment methodology used is confusing and does not actually feature the approach initially suggested in the revised ES. However, BAP do highlight that, whilst the single event noise difference is 10dB, the approach taken may in fact be conservative⁴⁷ as it uses ambient noise levels below those actually measured. BAP conclude that, had the original suggested approach been taken, this would lead to minor or moderate impacts arising from the change.

⁴⁷ *Bagby Airfield, Hambleton District Council, Planning Application: 16/02240/FUL: Aircraft Noise and Control*, Bickerdike Allen Partners, December 2018, Page17

4.120 However, this may still amount to some change and it has to be established whether this is acceptable. Ultimately this needs to be considered against the economic merits of this part of the development, and the relocation is expected to increase employment on site. In our view, such an increase in capacity would mean a maintenance provider would need to grow in order to justify the space they will be paying rent on. Therefore allowing the relocation will help secure the economic benefits. However, in understanding the implications of allowing this relocation, it is important that the benefits can be derived, and consequently this further adds to the benefits of restricting, by condition, the use of the building to maintenance activities.

Economic Impact

4.121 Both the Business Plan and the Business Plan Addendum aim to overcome the criticism from the 2011 Inspector's Report that no economic evidence was calculated or provided. Both documents make reference to projected employment increases. The Business Case⁴⁸ outlines a total of 22 full time employees and the Business Case Addendum⁴⁹ highlights a total of 27 positions in total once the redevelopment concludes. We have sought to clarify that these two figures are consistent and understand that the figure of 22 in the Business Case document is actually a Full Time Equivalent (FTE) figure rather than an actual 'full time' figure⁵⁰. This leaves a slight discrepancy between the two documents as the Addendum document equates to 23.5 FTE. This appears to be explained by the upgrade of one position from part time to full time, and some rounding. Therefore in assessing the employment benefits we rely on the figures in the Addendum document.

4.122 However, we are also aware that more recently there has been a reduction in employment on site, and this may impact on the overall level of future employment if this position (Airfield Manager) is not replaced. For the purposes of our assessment we assume that with the introduction of a new club house, accommodation and requirements to monitor activity at the airfield arising from this application, this is a position which will likely need to be restored. If the position of Airfield Manager is not reinstated then clearly this will lead to a slight downward adjustment on the final economic impacts, however there may be a trade-off between this and the ability to generate overall net growth in employment on site, including through the aircraft maintenance firm which will bring higher value employment into the area due to the typically higher than average salaries of those working in this skilled sector.

⁴⁸ Bagby Airfield: Business Case V6.2, Prepared by Peter Bondar, Papa Bravo Ltd, 29th February 2016, Page 46, Para 15.7

⁴⁹ *Business Case Addendum: Compliance with Policy DP25*, Barton Willmore, October 2016, Page15, Paras 5.7-5.9

⁵⁰ See Appendix A

- 4.123 It is estimated that 7 indirect jobs will be created after the provision of 14 wholly new jobs on site (again this appears to be actual jobs rather than FTE). This suggests a multiplier of 0.5 for indirect employment in the local area. This appears quite high, and when we asked for the basis of this, the agents were unable to provide the reasoning behind the choice of 0.5⁵¹.
- 4.124 York Aviation is one of Europe's leading experts in the field of aviation economics and undertakes economic impact assessments for most of the leading UK airports and has also supported applications and inquiries for a number of general aviation airfields in this way. Our experience shows that, for a local multiplier, 0.5 is very high, with typical Type 2 multipliers for the local area (covering both Indirect and Induced employment rather than just Indirect as outlined in the application) more likely to be in the range of 0.25-0.35. It has not been within our brief to study in detail the local impacts of airfields on the economy, but if we took the higher figure of 0.35 as a multiplier then this would suggest a total wider benefit of 5 jobs rather than 7. National multipliers may be more in the region of the 0.5 used here due to the wider reach of some suppliers, such as fuel providers or specialist aircraft parts suppliers. In reality, the difference is small, but this needs to be considered in determining the benefits to the local economy of approving the Application.
- 4.125 An unusual approach has also been taken to estimating the economic impact of the Airfield, as outlined in the Business Case⁵². It appears that to estimate the value to the economy it has been assumed that this equates to the aggregated revenues of all operators on site. For future years, the business case projections of on-site revenues is used. This is not a standard technique as it misses several key areas where revenue may not make it into the economy, for example in relation to foreign imported goods such as fuel or aircraft spares. A more usual approach is to estimate the Gross Value Added (GVA) impact of FTE employees as their contribution to the economy, which factors in their productivity and contribution to the profits of businesses. This could have been done by multiplying the number of FTEs by the average GVA per employee in the region or more specifically broken down into categories, such as those in the catering side of the business and those in the aerospace/maintenance business. With a more than doubling of FTEs on-site this would be expected to show a more than doubling of economic value. However, based on the outlined approach we would place little reliance on the economic contribution figures therefore.

⁵¹ Ibid, KQ8 answer

⁵² Bagby Airfield: Business Case V6.2, Prepared by Peter Bondar, Papa Bravo Ltd, 29th February 2016, Page 12, para 5.3.3 and Page 46, Para 15.7

4.126 On the whole, there is a reasonable chance that the site would develop as outlined, with re-growth in higher-value movements and the creation of a restaurant which will be dependent upon employees to be successful. The result is that if this can be achieved, then there will be a positive impact on the local economy, to which weight needs to be attached in the overall planning balance. However, given the limitations identified above, the weight to be attached to such benefits must be reduced.

Movement Monitoring

4.127 A repeated and key concern for local residents and all those involved historically in the planning process surrounding Bagby Airfield has been the reliable and accurate monitoring of movements. It appears on a number of occasions that local residents have disputed the movement levels claimed by the Airfield. Going forward therefore, effective control of the Airfield and acceptance of this control by the resident population is going to be highly dependent upon an accurate and open approach to monitoring of movements. One of the difficulties to date has been that the Airfield is not always staffed such that not all movements have always been accurately recorded, so the solution needs to be effective even during such periods.

4.128 The Applicant has proposed two technologies to monitor flight activity and believe that these will capture virtually all movements likely to operate at Bagby in the future. The arrangements can be seen in detail in the Business Case⁵³ and a supporting letter⁵⁴, but briefly comprise:

- A virtual radar system, logging information from transponders of aircraft using the Airfield; and
- A camera based tracking system which will link to image recognition software to log movements by type for those not caught by the virtual radar system.

4.129 There are currently no examples in the UK of this approach being taken to monitoring aircraft and so the combined approach is not 'tried and tested'. However, clearly a technical solution does need to be found because current logging and reporting approaches are not trusted locally and not seen as transparent. On this basis we discussed the solution with the agents to determine its likely effectiveness and to express concerns around some aspects, namely:

- Will the camera system be guaranteed to capture all helicopter movements when some of these may make non-standard approaches to the Airfield and may be missed by the network of cameras?

⁵³ Bagby Airfield: Business Case V6.2, Prepared by Peter Bondar, Papa Bravo Ltd, 29th February 2016, Pages 37-41

⁵⁴ Letter to Tim Wood (by e-mail only) dated 8th March 2017, signed by Jane Beckett

- Are many of the aircraft flying to/from Bagby actually equipped with transponders which would make the virtual radar system effective at all?
- 4.130 The supporting letter does outline the proposed location of the cameras and how these and proposed air traffic management on site should ensure that all aircraft are captured. The described pattern seems sensible and could be finally refined with the newly proposed helicopter routings as provided and shown in Figure 3.2. However, the fact remains that some helicopters may still be able to miss the cameras. As helicopter operations are one of the key concerns of local residents, then this would not be acceptable. A solution to this particular issue may be found through transponder use however.
- 4.131 In considering our second question, the agents indicated that, whilst not sure of the number of aircraft currently using Bagby without transponders, they believe that an increasing number of aircraft have these fitted. Certainly it was indicated that all aircraft operating commercially have these fitted which will cover most of the helicopters using the site, and this may deal with the problems of recognition outlined above because it would appear that very few helicopters would not be picked up by the radar based system anyway.
- 4.132 As a further back-up to this, and in response to these points, the Applicant has included a provision, within the Code of Conduct, that all resident aircraft must have transponders fitted. This will reduce the uncertainty around the camera recognition system. Again, we believe this could be imposed through a Condition which would bring greater certainty. It is a reasonable and proportionate measure.
- 4.133 We would also suggest some definition for the purposes of ensuring that based aircraft are captured. At present we understand that one helicopter is only based at the site for a portion of the year, and whilst in reality this a commercial aircraft which will have a transponder fitted, the same may not be true of any future aircraft that is based on site for shorter periods of the year. It might be suggested that 14 continuous days as the main operating location of an aircraft could constitute 'based', with an exclusion for those visiting Graham Fox for the purposes of maintenance.
- 4.134 There is a recognition in the supporting letter that even some fixed wing aircraft may be missed by the camera system. However, the argument put forward around the low likelihood of this are sensible, in terms of pilots not wishing to turn off or enter runways in unusual places for fear of damaging their aircraft. At many airfields, including Bagby, a lot of effort has been put into improving infrastructure to prevent aircraft damage (such as the matting at Bagby and the concrete areas around some buildings) and as aircraft have become more valuable and more expensive to repair, pilots are more likely to be cautious with their approaches to using grass sites.

- 4.135 We have considered whether it may be possible to require all aircraft that operate to Bagby to have a transponder. This is a difficult area for control because it is not immediately clear whether this could actually be controlled either through a planning condition, or the Code of Conduct. However, as all visiting aircraft do have to seek permission to land at Bagby, either by telephone or (during the summer) by air to ground radio, then it should be possible for the Airfield to log every movement and allow this to be correlated against the automatic system to ensure a cross-check. This will require a manual log of all non-based aircraft to be kept as a condition, as well as a condition to ensure that somebody is available at all times that the Airfield is open to take PPR calls⁵⁵.
- 4.136 Although untested as a combined system, we believe that the approach outlined by the Applicant to monitoring aircraft will present sufficient measures to provide an accurate evidence base. This will need to be tested once the system is in place and prior to any wider development commencing. A key to this will be ensuring that the data is made publically available in quick time to allow local residents to accept its authenticity and to quickly raise queries where they may occur.

Other Issues

- 4.137 We have outlined our review of most of the key areas that we see within the Application above. However, we have a small number of final areas worthy of comment.
- 4.138 The first of these is regarding aerobatics on fly-in days, which the Airfield wishes to permit above the site, despite banning aerobatics on all other days. As outlined earlier, these days can be important to the financial success of small airfields and aerobatics is likely to be a key driver behind this. Therefore we believe that this is an appropriate condition of the Airfield given the low number of days on which this can actually occur. Further, local residents can have advance notice of such days and can plan their day accordingly.
- 4.139 Secondly, we have considered whether there would be merit in applying a limit on the number of based aircraft above and beyond that of the helicopters as outlined earlier. The reason for this is that, whilst the Airfield highlights an increasing need for indoor storage of aircraft, there may be circumstances in which smaller aircraft may return over time and seek to be parked outdoors. However, it seems likely that there is little merit in applying a based aircraft ban because in reality the impact of this, more flying, is already controlled through the overall limit on movements and potentially the limit on touch and go movements which would act as a deterrent to small aircraft that may see a return to more club type flying training. In reality, if the Airfield wanted to accept more based aircraft, then the impact would simply be fewer available movements per based aircraft within the planning limits imposed.

⁵⁵ Prior Permission Required (PPR) is a system whereby visiting aircraft will need to seek permission to arrive at an airfield prior to landing. This can be done by telephone before a flight, or during the flight by radio.

4.140 We would also draw attention to potential risks in the deliverability of the Business Case and the achievability of the much higher profits as shown. Our experience of the general aviation sector is that it is particularly difficult for airfields to make consistent profits over time, and there may be areas of optimism in the Business Case that exaggerate the value of the works to the Applicant. However, the Business already clearly has a good control over costs if it is delivering the existing profit before the refocus on higher value activities and the regrowth in movements that may be expected from the work. Being unlicensed, the Airfield does not need to make provision for permanent air traffic control or fire services which are often among the biggest cost centres for general aviation airfields. As a result it is possible that increased profits will follow. However, HDC should be aware that there may be some risks which could lead the Applicant to return with future planning applications to lift controls and conditions in order to help achieve better profits. At this time, we would not speculate on these, and such a future approach would need to be judged on its merits at that time.

4.141 A number of issues were raised by local residents through the summer consultation period on the revised application, including:

- ➔ Airfield getting bigger/expansion of the airfield operation: There is a recurring theme that the application is a first step in the growth of the facility. We believe this is dealt with by conditions limiting the number of movements. Any application to increase activity/movements would need to be dealt with on its own merits at a later stage;
- ➔ Changes in aircraft type/nature of airfield: There are a number of comments related to potential for larger aircraft to use the airfield. However, these statements are not qualified, so it is not clear what the concerns actually are, although we assume the issue is a perception that larger aircraft will be noisier. Whilst we recognise a concern over the potential to change the nature, the reality is that the impact will be controlled in two ways. Firstly our suggested noise conditions will limit the noise created by aircraft and therefore, regardless of their size, they will need to be quieter than small aircraft which are very much in keeping with the historic uses of the Airfield. Secondly, the runway length will always act as a constraint on the size of fixed wing aircraft and the application is not seeking to extend this;

- Longer hours and intensity of use: There were concerns that the credit card style dispensing of fuel would lead to 24 hour usage, and also that the 8,440 movement cap could lead to intensification of use by day, week or month. The first of these is controlled by the suggested opening hours condition. For the second of these, we have also considered this in detail at a monthly level earlier in this report, and this is dealt with through the suggested condition on movements. The level of activity on a daily or weekly basis may still fluctuate, but this will always be the case because of weather conditions etc. However, if the full movement quota for a month was used up very quickly, then this would lead to a large part of the month with no movements which may also be appealing to some residents. However, in reality, the monthly limit on movements acts as an incentive on the operator not to intensify usage as this would remove the flexibility they will need in running an airfield. We cannot think of any examples where the pattern of operations and associated intensity, varies wildly from that seen at Bagby, so we do not believe there is significant risk of the pattern, or spread of operations changing;
- Expansion of maintenance firm into larger (commercial) aircraft: The Business Case is clear that the larger hangar for maintenance will lead to more space and potentially more aircraft in the building at any time. This does not necessarily translate to larger aircraft. However, as with the more general comments around larger aircraft and growth of the airfield, the actual capabilities of the airfield will be jointly restricted by the noise related conditions and by the runway length;
- Airspace congestion: There is concern that there is insufficient space in the air for extra movements from Bagby. However, the same respondent also pointed towards the closure of nearby military airfields which actually will reduce the demands for airspace locally. However, the key point here is that Bagby will be operating at movement levels below historic highs, and indeed general aviation, using uncontrolled airspace, is also operating well below historic highs. Given the overall level of movements which will be capped at Bagby, we have no concerns that the airspace will be able to handle this activity.
- Jet aircraft: One respondent indicated that they had experienced a jet aircraft landing at the Airfield. This will not be permitted in future if our suggested condition is applied (except for Jet Turbine helicopters).

4.142 HDC have also made us aware that at a recent meeting with local residents, they raised the matter that one operator on site, responsible for a number of training movements (and one of the more intensive flyers), was relocating their aircraft away from Bagby, and would have an impact on the business case and business model of the Airfield. We do not agree with this as, in reality, there will always be fluctuations in the operators at small airfields, and so some will come and go with less or more movements. The economic drivers for the Airfield are not focused on this operator or their services in providing training, and as a result the economic benefits highlighted by the Applicant are not at risk as a result.

- 4.143 We are aware that the Precision Approach Path Indicator (commonly known as PAPI) may have been taken out of service at present at Bagby, and the agents suggest that they may wish to see the system reinstated to an operable condition.
- 4.144 In our view, the provision of PAPI at an airfield such as Bagby does little to broaden the range of aircraft which will use the facility, but will provide extra safety benefits which must be seen a positive position. Given the light general and business aviation types which dominate Bagby at present, we do not believe these will generally have been deterred from operating with the recent absence of PAPI. However, if some pilots have decided not to use the Airfield without PAPI, but would wish to return if it were reinstated, then this should cause no further environmental impact than assessed in the planning application because of the movement limit controls to be imposed.
- 4.145 It seems sensible therefore, given that PAPI will mainly bring further safety benefits, to allow the Airfield to reinstate this system if they wish to do so. We have not made a suggestion as to a planning condition for this, but HDC may wish to find a way of including for this reinstatement.
- 4.146 Finally, we note that there have been previous attempts by the Airfield to form a Consultative Committee with the local Parish Councils and residents. We also note that there has been significant resistance to this from the community. Whilst it is not for us to comment on the choices of the community not to engage, we have seen how effective these can be in building trust between airports and those impacted by them and allowing open dialogue, challenge and questions. It is our view that the Airfield should attempt to re-open this channel and we would strongly encourage local residents to partake and engage in order to have an input into the activities of the Airfield.

Summary of Review

- 4.147 Overall we believe that the Application goes a long way to addressing deficiencies in the previous applications and meeting the points raised by the Inspector in 2011. There is a clear strategic plan which fits with the approach being adopted elsewhere in the UK in terms of focusing on higher value activities and using these to replace lower value, higher volume activities, some of which have already left the Airfield. This approach is inherently sensible and would allow a more sustainable business, which could then deliver greater economic value. This is also in keeping with government policy for the general aviation sector.
- 4.148 There remain deficiencies within the noise assessments provided in support of the Application and further comment will be provided on these by BAP. It appears, given that there are currently no constraints on movements or noise, that any solutions which can be implemented to bring certainty and control of noise will be of more value than the current position.

- 4.149 We believe that many of the areas of concern for local residents and those who have historically objected to the Airfield can now finally be overcome with appropriate Planning Conditions and Controls. The Applicant has made a number of valid suggestions around these, all contained within a voluntary Code of Conduct. However, we believe that, in line with other airfields in the UK, it is more appropriate to condition some of these if planning is approved. Throughout this section we have attempted to identify the appropriate levels of control which should be considered. We bring these together in the next section.
- 4.150 Finally, we make no recommendations on whether the Application should be approved or otherwise, as our role has been to test the aviation and economic aspects rather than measure these against the relevant local planning policies. However, we do believe that on the whole the Applicant has made a fair representation and based on our knowledge of general aviation activity elsewhere, we believe that the proposals are reasonable and accurate. With sensible conditions and controls, we believe that this may present an opportunity to finally bring about certainty of operations for local residents which has long been missing.

5 RECOMMENDED CONDITIONS AND OBLIGATIONS

- 5.1 In considering suitable conditions and controls over the Airfield in relation to the Application it must be recognised that there remain some constraints on what the Local Planning Authority, in this case HDC, can apply to airports and airfields. Once aircraft are airborne or make decisions around their flying activity in the air, this is covered by the Air Navigation Order. In relation to airborne activities, though, HDC will be able to seek ‘best endeavours’ where there are areas of concern and the Airfield has the ability to lay out to pilots its preferences that they should aim to follow, and indeed the Code of Conduct proposed by the Applicant is an example of this, with the ability to apply penalties to based aircraft that contravene any of these requirements. We will consider this further below.
- 5.2 In relation to planning conditions and obligations, guidance on the application of these is provided in the National Planning Policy Framework⁵⁶. As indicated here, planning conditions and obligations represent an opportunity for otherwise unacceptable development to be made acceptable. Based on the Inspector’s view in 2011 Inquiry and the acceptance of nuisance in the 2013 Inquiry, it seems appropriate that control measures applied to Bagby Airfield would make development more acceptable, particularly in an environment where movement numbers have fallen as the facilities have become increasingly inadequate for modern general aviation requirements.
- 5.3 The National Planning Policy Framework also outlines how planning obligations may be used to address unacceptable impacts where conditions cannot be applied. This has relevance to the Airfield at Bagby because a number of areas of activity do create noise nuisance in the local area and will need to be controlled. However, as identified earlier in this section, these are airborne activities which cannot be controlled by planning conditions and must therefore be controlled by obligations on the Applicant to fulfil. As with the planning conditions, application of planning obligations must meet certain tests, namely:
- Necessary to make the development acceptable in planning terms;
 - Directly related to the development; and
 - Fairly and reasonably related in scale and kind to the development.
- 5.4 Obligations can have a financial requirement where funds are taken from an applicant to offset negative elements of the Application. At this stage, we do not envisage that there is a requirement for this, but rather a Section 106 Agreement may be put in place so that there is an enforceable approach to the Code of Conduct (which we will consider in an amended version below).

⁵⁶ *National Planning Policy Framework*, Ministry of Housing, Communities and Local Government, July 2018, Page 16

5.5 The remainder of this section outlines in simple terms our suggested conditions and obligations. The justifications for each are contained within Section 3, although a small number of the conditions are simply lifted from the proposed Code of Conduct and have not required detailed analysis earlier in this report. We recognise that HDC may wish to expand on these conditions. In terms of the wording, we have aimed to be precise below, though we recognise that HDC and its legal counsel may wish to change language or wording to make this more precise (and therefore potentially enforceable) as necessary. It is the premise and content of the suggested conditions which we are essentially making recommendations on in this section. Suggested Planning Conditions

1. **Maximum Permitted Aircraft Movements:** The number of all movements at the Airfield shall not exceed 8,440 per calendar year of which:
 - a) A maximum of 676 may be by helicopters;
 - b) A maximum of 1,700 may be Touch & Go movements; and
 - c) There will be a maximum of 1,518 movements of all types in any calendar month;
2. **Operating Hours:** The permitted operating hours will be:
 - a) Between 0700-2200 local time Monday to Friday for resident aircraft, with no movements permitted outside of these hours except in the case of emergencies;
 - b) Between 0800-2100 on Saturdays, Sunday and Bank Holidays for resident aircraft, with no movements permitted outside of these hours except in case of emergencies;
 - c) Between 0900-1900 each day for non-resident aircraft, with no movements permitted by non-resident aircraft outside of these hours except in case of emergencies.
3. **Maximum Permitted Movements between 0700 hours and 0900 hours Monday to Friday:** The maximum number of aircraft movements between 0700 and 0900 hours local time, Monday to Friday shall be 5 on any day, of which a maximum of 2 may operate between 0700 and 0730 hours.
4. **Maximum Permitted Movements between 0800 hours and 0900 hours on Saturdays:** The maximum number of aircraft movements between 0800 and 0900 hours local time on Saturdays shall be 4 on any day.

5. **Maximum Permitted Movements between 0800 hours and 0900 hours on Sundays and Bank Holidays:** The maximum number of aircraft movements between 0800 and 0900 hours local time on Sundays and Bank Holidays shall be 2 on any day.
6. **Maximum Permitted Movements between 2000 hours and 2200 hours Monday to Friday:** The maximum number of aircraft movements between 2000 and 2200 hours local time, Monday to Friday shall be 6 on any day, of which a maximum of 2 may operate between 2100 and 2200 hours.
7. **Maximum Permitted Movements between 2000 hours and 2100 hours on Saturdays, Sundays and Bank Holidays:** The maximum number of aircraft movements between 2000 and 2100 hours local time, on Saturdays, Sundays and Bank Holidays shall be 4 on any day.
8. **Maximum Permitted Daily Helicopter Limits:** The maximum number of helicopter movements permitted in any one day shall not exceed 10.
9. **Weekend and Bank Holiday Non-Resident Helicopter Limits:** The maximum number of non-resident helicopter movements permitted on Saturdays, Sundays and Bank Holidays shall not exceed 4.
10. **Fixed Wing Aircraft Operating Restrictions:** Only fixed wing aircraft certified to the following noise standards may operate at Bagby Airfield:
 - a) In the case of Chapter 6 certified aircraft, a maximum overflight limit of 79.6dB(A); or
 - b) In the case of Chapter 10 certified aircraft, a maximum overflight limit of 82.7dB(A)

Only in circumstances where fixed-wing aircraft do not have a valid noise certificate, such aircraft with a certified Maximum Take-Off Weight (MTOW) of no greater than 2,730kg shall be permitted to operate. By exception, movements which do not meet these noise and weight criteria may operate in relation to fly-in days only on the following basis:

- c) That they can be proven to have at least two of the following characteristics:
 - 1) The aircraft was first manufactured more than 50 years prior to the current date;
 - 2) They do not currently have an internationally recognised certification basis;

3) They can evidence that they (or their type) were at one time, on a military register.

and

d) Such aircraft can arrive once in the period up to 48 hours prior to the commencement of such an open day and they should leave either on the day, or the day after such a show, or at the reasonably earliest opportunity thereafter, consistent with weather related conditions, at Bagby, their intended destination, any diversion and the enroute weather. No return shall be permitted after departure once the open day has ended except in the case of emergencies.

(NOTE: HDC may wish to separate the above condition into two separate conditions, isolating the fly-in day movements separately.)

11. **Helicopter Operating Restrictions:** Only helicopters certified to the following noise standards may operate at Bagby Airfield:

a) In the case of Chapter 8 certified aircraft, a maximum Take-Off limit of 92dB(A) and a maximum Approach limit of 94dB(A); or

b) In the case of Chapter 11 certified aircraft, a maximum overflight limit of 84dB(A).

Only in circumstances where helicopters do not have a valid noise certificate, such aircraft with a certified Maximum Take-Off Weight (MTOW) of no greater than 2,730kg shall be permitted to operate.

12. **Refuelling Location:** Jet Turbine and/or twin-engined helicopters shall not be refuelled within 40 metres of the fuel storage facility.

13. **Fly-In Days:** No more than 3 fly-in days shall be permitted in any one calendar year, each of which shall have been previously notified to the Local Planning Authority at least 30 days in advance. There shall be a maximum of 150 movements on any Fly-In day.

14. **Rotors-Running Helicopter Refuelling:** Helicopters shall be required to shut down their engine(s) during the process of refuelling, except for emergency helicopters engaged in emergencies and essential utility aircraft engaged in powerline works at times of power outages. A detailed log of each rotors-running refuelling must be maintained covering the date, time, helicopter operator and reason justifying such a refuelling. This log shall be available to the Local Planning Authority upon request.

15. **Movement Monitoring:** The Aircraft Surveillance Cameras and Virtual Radar provision in the Planning Application 16/02240/FUL) must be provided and maintained as operable in the manner outlined in the supporting Business Case (dated 29th February 2016) and with data and public access websites available to the Local Planning Authority and any interested parties as specified within the Application.
16. **Aircraft Transponder Requirements:** All aircraft resident at Bagby for a period of 14 or more consecutive days at Bagby in any calendar year must have transponders fitted and operable which are compatible with the Virtual Radar outlined in Condition 11, except for aircraft remaining at Bagby exclusively for the purpose of maintenance for 14 or more consecutive days.
17. **Movement Log:** A log of all aircraft movements shall be maintained at the Airfield. The log shall record the runway in use and details of all flights including aircraft type, registration, name of pilot in command and time and date of arrival / departure. The log shall be kept up to date and made available to an authorised officer of the LPA within 7 working days of a written request for inspection. The log shall also be made available to the meetings of the Airfield's Liaison Committee.
18. **Hangar Usage:**
 - a) Hangars A, C1, E, F, G and H (as shown on drawing 1452-10), shall be used solely for the purpose of aircraft storage and associated day to day maintenance of aircraft for the purposes of keeping aircraft airworthy. No commercial maintenance activities are permitted;
 - b) Hangar B (as shown on drawing 1452-10) shall be used solely for the purpose of aircraft maintenance by commercial engineering firms. No aircraft shall be stored in Hangar F other than those awaiting maintenance in relation to the primary use of the building.
19. **Engine Ground Running:** With the exception of Low Rev engine running, all ground running and High Rev testing of engines may only take place at the threshold of Runway 06.
20. **Hangar B Insulation:** Prior to occupation for the purposes of aircraft maintenance, Hangar B, as shown on drawing 1452-10, shall be lined with appropriate sound insulating materials to a standard to be agreed with the Local Planning Authority.
21. **Hangar B Operation:** The aircraft access doors on Hangar B, as shown in drawing 1452-10, shall remain closed at all times except to allow access to and from the building for aircraft.

22. **Aircraft Movement on Site:** No aircraft of any type shall enter the area on the northern side of the runway at any time save for the purpose of access and egress from and to the hangars.
23. **Runway Usage:** Except in cases of emergency, Runway 15/33 shall not be used for aircraft movements at any time and must be shown as unavailable for general use in published documents.
24. **Complaints:** A log of all complaints shall be kept by the Airfield. The log shall identify as a minimum the name of the complainant, the nature of the complaint made, the date and time recorded and any action taken by the airfield.
25. **Runway Lighting:** Other than the existing runway lighting and /or its replacement, no additional external lighting shall be installed other than in respect of fuel installations or in complete accordance with a scheme that has been previously approved in writing by the Local Planning Authority.
26. **Jet Aircraft:** Except in cases of emergency, Bagby Airfield shall not be used by any fixed-wing turbo-jet or turbo-fan aircraft, excluding fixed wing turbo-prop aircraft.

Suggested Planning Obligation

- 5.6 It is our suggestion that a Section 106 Agreement be put in place with the Applicant to cover areas for which control is sought, but which cannot be covered by Planning Conditions due to these being covered by the Air Navigation Order. We do not propose any enforcement options associated with failure to comply with these, but believe it will be for HDC to determine appropriate measures.
- 5.7 It is assumed that the Code of Conduct would be updated to reflect our suggestions and this may also need to cover the Planning Conditions to make these clear to operators. However, for the purposes of outlining appropriate controls, we have not included any of the conditions already covered above, focusing solely on areas to be covered by the Section 106 Agreement and voluntary elements of the Code of Conduct.
 1. All circuit training (where aircraft take-off, circle the airfield and return to the runway to land or undertake a touch and go) will be banned prior to 0900 on Monday to Saturdays and after 2000 on Monday to Friday and after 1300 on Saturdays and all day Sundays.
 2. All Circuit training must follow the approved circuit as provided to the Local Planning Authority.
 3. Helicopters approaching or leaving Bagby Airfield must use the designated helicopter flight path as provided to the Local Planning Authority;

4. No helicopter hover practice shall take place from Bagby Airfield.
5. Helicopter circuits (where aircraft take-off, circle the airfield and return to the runway to land or undertake a touch and go) whether landing, taking off or training shall be limited to 2 circuits per helicopter and shall not exceed 10 minutes in duration.
6. Quiet Periods – Bagby & Balk Parish Council can request quiet periods when all helicopter flights to and from the airfield will be banned save in relation to emergencies. Notice of such a quiet period must be given at least 1 month before its intended operation. (This is intended to cover particularly noise sensitive activities in the village such as weddings & christenings. In addition, if a quiet period is required for a funeral then if the period is specified only 24 hours notice need be given). The request will be determined in conjunction with the Consultative Committee.
7. No aircraft shall take off from Bagby Airfield for the purposes of performing aerobatics overhead the airfield or within a circle radius of 2 nautical miles.
8. Aerobatics over the airfield shall be limited to fly-in days pre-arranged by the Management of Bagby Airfield. Prior Notification of the fly in days will be given to the Local Planning Authority in writing at least 28 days prior to the fly-in day.

APPENDIX A: RESPONSES TO YORK AVIATION QUESTIONS

Question/ Comment	Document and Paragraph	Question/Comment?	Question to Applicant?	Minutes from the Conference Call and Applicant's Response/Action
KQ 1	ES - Non Technical Summary Para 3.14	What is the evidence of 'No Development' limiting effective use of the site? It is profitable presently and it is claimed there will be little growth in movements?	Yes	No development would mean the dilapidation of the clubhouse and hangers on site. Dilapidation of certain buildings is accelerating and rendering them totally unsuitable for modern aircraft. This would mean they would be completely unfit for purpose and would not be able to be used for safety reasons. This would deter airfield members from keeping their aircraft at the site which would therefore result in the airfield losing income and becoming unprofitable. Modern aircraft need better accommodation than is presently available from a number of the Airfields existing Hangars. To attract these aircraft which have in the main a much quieter noise footprint it is considered essential that current hangarage is upgraded to keep up with general advances in general aviation, particularly modern avionics which are considerably more sophisticated than in the past. The airfield remains profitable but maintenance costs of the old hangars is disproportionate to their rental returns or their rateable value.
KQ 2	ES - Non Technical Summary. Para 8.6	How will a 21% increase in based aircraft not realistically generate an increase in movements? If this is about the 'quality' of based aircraft, will there be an active plan to manage out higher activity current aircraft?	Yes	<p>The airfield wish to take a holistic approach to gradually improve the quality of the aircraft and clients at the airfield. Whilst the airfield do not wish to prejudice the existing client base, the upgrade of facilities will enable the airfield to charge higher hanger rents and also provide selective packages of hangers and airfield use together with the requirement of clients needing certain insurances. This will promote the airfield to clients who have better quality aircraft and therefore would not necessarily increase the movements as it would also deter 'circuit bashing'. RC suggested this would bring some certainty to the local community and it could be seen as 'giving something back to the community'.</p> <p>This matter has been discussed with Mr Scott and whilst there is the above intentions to increase the quality of aircraft, it has also been decided by Mr Scott that he can also offer to manage circuit training by limiting training within core hours of 9am-9pm and by also not allowing circuit training on Saturday afternoons and Sundays. The Proposed Code of Conduct has been updated to reflect this.</p>

KQ 3	Business Case Addendum Para 3.4	Will Graham Fox continue to make use of Hangar A in the future? If not, who will be based in the newly extended hangar? To what extent will new aircraft types being maintained by Graham Fox cover higher performance aerobatic type aircraft?	Yes	<p>It was set out that it Graham Fox would not need the use of Hanger A anymore for the storage of aircraft awaiting maintenance or collection.</p> <p>It was highlighted that Graham Fox would continue to undertake maintenance on traditional types of aircraft but also newer aircraft of the same type - ultimately quieter equivalents of previous types of aircraft due to the noise footprint of aircraft being reduced to new technologies.</p> <p>Graham Fox does not carry out maintenance on high performance aerobatic aircraft and Peter Bondar pointed out that maintenance of aerobatic aircraft was undertaken by John Poole at Wombelton.</p>
KQ 4	Business Case Addendum Para 3.6	If Hangars C&D are currently dilapidated, are they currently used at all for aircraft storage?	Yes	<p>It was set out that at present Hangers C and D are used for storage of limited aircraft. It was explained whilst dilapidated, the hangars still have their rooves and are water tight so allow for storage of smaller aircraft given their size.</p> <p>Mr Scott has confirmed that there are single aircrafts in Hangar C and D together with micro lights.</p>
KQ 5	Business Case Addendum Para 3.17	What is the typical flying pattern? How much time is spent in circuits? Are these four operators the only generators of Touch&Go activity?	Yes	<p>Peter Bondar set out that there is currently no structure or pattern to training or touch and go movements. Many of the training operators are either no longer based at the airfield or are infrequent. Mark Badmington is the main trainer at the airfield with John Dundon doing the occasional training but this just goes to the mix of activities which go on at the airfield every day weather permitting.</p> <p>Richard Connolly enquired whether there could be restrictions on training but Peter Bondar said that would be unlikely given that some level of training at all airfields are required for safety especially at Bagby given that the airfield is challenging for pilots. It was suggested that the proposed Code of Conduct could help deal with the operations and management but there is an opportunity to add 'best practice' management handbook.</p> <p>New restrictions on circuit training have also been offered through the amended Code of Conduct.</p>

KQ 6	Business Case Addendum Para 4.7-4.8	How would a significant increase in floor area and employment "not necessarily" convert to significantly increased movements? The main business case is more accepting of a potential uplift.	Yes	<p>It was highlighted that an increase of Graham Fox's staff by double the amount would not directly relate to double the amount of movements. Peter set out that newer and better quality aircraft need specialist and quality work and therefore there is no linear relationship between employment and movements.</p> <p>RC agreed that this was a sensible approach but considered there would likely be some increase in movements from the business expanding. It must however be highlighted that there would be a proposed cap in place and therefore Graham Fox would have to operate within that cap and the airfield would also ensure their members would have sufficient movements alongside Graham Fox's business.</p>
KQ 7	Business Case Addendum Para 4.12	Any estimate on the number of new likely levels of new movements generated?	Yes	<p>Richard Connelly asked for further detail on existing and proposed movements. It was highlighted that there should not be an increase in movements. Peter Bondar stated that the level of movements depends on the expectation of the future users and members of Bagby. The movements could range due to the distribution and profile of the aircraft and will vary in reality year on year.</p> <p>The type of movements on any one day will be dependent on weather - the worse the weather, the less likely it is that the lighter micro light aircraft will fly, yet perversely it does not increase the use of heavier aircraft who basically fly only if they have to go somewhere whatever the weather (as long as the flight is legal). Equally larger aircraft tend to be less evident in good weather as their pilots often only use the aircraft for transport and not recreation</p> <p>Enclosed with this note is a copy of the 2016 movements incurred up until December 4th 2016.</p>
KQ 8	Business Case Addendum Para 5.9	What multiplier has been used and why was this selected? What indirect/induced employment types are expected to arise? What evidence support this? Multiplier seems high for local area Type 2 multiplier.	Yes	<p>The multiplier used to determine the jobs to be created in the local area from the proposed development at Bagby Airfield was from an understanding of the airfield and the local area together with discussions with the airfield.</p> <p>As highlighted at Paragraph 5.9 is highlights that the development could create (or at best protect the following):</p> <ul style="list-style-type: none"> • 4 supply chain jobs – which includes engineering/aviation contractors, mechanics, couriers for maintenance parts and supplies, food and beverage suppliers, cleaners. • 3 other business/leisure tourism jobs – including business and jobs involved with bed and breakfasts, taxis drivers, restaurant

				<p>and café, fuel for new contractors and taxi drivers visiting the site, horse racing industry.</p> <p>There could therefore be 14 new jobs created at the airfield with an additional 7 jobs created in the local economy as an indirect result of the development</p>
KQ 9	Business Case Addendum Para 6.9	Where do the £680K and £1.2m figures come from? Are these all employments (Direct/Induced/Indirect) or just direct? Are these GVA figures?	Yes	<p>The £680,000 figure is detailed in the Papa Bravo Business Case at paragraph 5.3.3 and includes only the airfield user's revenues.</p> <p>The £1.2 million figure is also derived from the Papa Bravo Business Case and is the airfields direct output from an increase of employment on site from 10 full time people to 22 full time people on site.</p>
KQ 10	Planning, Design & Access Statement Para 4.13	With no current accommodation on site, are some operators currently excluded from using Bagby? If so, then surely there will be a direct impact on movements?	Yes	<p>No operators are currently excluded from Bagby as there is alternative accommodation they can use such as bed and breakfasts if required and at present most pilots plan their trips accordingly to avoid night's stays.</p> <p>The three rooms proposed provide pilots with more flexibility on times they can arrive and leave and also provide accommodation in times of emergencies. The income from these rooms will then help contribute towards the cost of operating the club house.</p>
KQ 11	Planning, Design & Access Statement Para 6.8	Seems less certain over likely new impact here? If aircraft were to be smaller, could the figure actually be higher than the estimated 40? (Business Case talks about more modern aircraft such as the Diamond, which are larger scale than some of what could be based in hangars)	Yes	<p>It was stated that the amount of aircraft stored on site would range depending on the size and quality of the aircraft. It is thought that the number of aircraft stored on site would be between 35 and 40 but this number could be higher or lower year on year.</p> <p>Richard Connolley asked if a cap could be put on resident aircraft – This has been discussed with the Airfield and this is not an offer that can be agreed to. It is the intention to increase the quality of the aircraft on site, however it is not positive or viable for the Airfield to put a cap on resident aircraft. The hangars proposed are of a certain size and capacity to hold approximately 35-40 aircraft and therefore there is a limit on the number of aircraft that can be stored in these buildings. However the Airfield does not want to be limited to a certain amount of aircraft due to potential future economic uncertainty and the aim to maintain a profitable rural business that can benefit the local economy.</p> <p>Finally it must be remembered that due to a variety of factors numbers of aircraft hangared at the airfield does not always correlate with numbers of movements. Like all airfields Bagby has a number</p>

				of aircraft which rarely fly yet provide the airfield with income for hangarage.
KQ 12	Planning, Design & Access Statement Para 6.9	Suggests that Hangar A will no longer be used for storage, is this correct?	Yes	Hanger A will be extended to allow additional aircraft to be kept within it, including many of those currently kept in Hanger F which is proposed to be converted to the new Maintenance Facility.
KQ 13	Planning, Design & Access Statement Para 6.10	<p>1) Taken figure higher than 2015. Why average of 10 years not three or so given changes in activity recently and going forward? Surely shorter timeframe is more representative for noise and movements? Shows a growth trajectory</p> <p>2) 10% is much higher than seen historically (8.8% in 2013, 8% in 2014 and 6.7% in 2015). Agreed figures in Inquiry showed typically around 5%. Why is this?</p> <p>3) Is this arriving & departing movements, or just departures? i.e 8 or 16 movements per weekend?</p> <p>4) Why just apply the ban to based aircraft?</p>	Yes	<p>1) A 10 year average was taken as it was seen as a proportionate range and gives a reflective average of the airfields use and activity. Richard Connelly suggested a 3-4 year period as it is more reflective of the aviation industries upturn. It was explained that due to the state of the airfield and the poor weather conditions over the last few years that movements were not reflective of what the airfield could be achieving in terms of movements and that a 10 year period was a balanced and objective approach to setting a cap for future movements.</p> <p>2) It was explained that through this planning application, Mr Scott was restricting helicopter use at the Airfield above and beyond previous restrictions and the figure of 10% has been provided to restrict helicopter movements but to not compromise the use of helicopter use at the airfield. The restriction at present allows for the existing helicopter movements at the airfield together with an additional number of movements for circumstances whereby PDG need to undertake more than normal maintenance on the powerlines in any one year. Other helicopter restrictions have also been introduced through the proposed code of conduct and therefore the proposed helicopter use restrictions are considered suitable and acceptable, especially given the fact there is unrestricted use at the airfield at present.</p> <p>3) The restriction under the section referenced is that non-turbine non-resident helicopter use per weekend is 4 movements altogether per day (2 arriving and 2 departing).</p> <p>4) The ban on aerobatics is related to all aircraft taking off from Bagby Airfield for the purposes of performing aerobatics overhead the airfield or within a circle radius 2 nautical miles.</p>

KQ 15	Planning, Design & Access Statement Para 6.20	What levels of operations take place throughout different time periods currently? Pre-7am, pre-8am, post 18.00, post 19.00, Post 21.00?	Yes	<p>Richard Connelly highlighted that other airfield/airports have a cap on flights at certain times of the day such as early in the morning and late at night. Richard Connelly gave Gloucester GA airfield as an example. Peter Bondar highlighted it was hard to give an exact figure on movements at specific times of day given the range of profile of aircraft and it would need someone to look at the annual profile. Richard Connelly highlighted that 11pm is an unusual cut off time and they would look to reduce flights between certain times such as 7am-9am and 7pm-11pm to adhere to best practise.</p> <p>This matter has been discussed with Mr Scott and it has been agreed to introduce caps on movements at certain times of days. Therefore for resident aircraft it is proposed through the amended code of conduct that movements are limited to 10 per day before 9am and 8 per day after 9pm.</p>
KQ 17	Planning, Design & Access Statement Para 6.24	This assessment was done in a year when movements were below 8,787. Have they modelled what it might look like in a year with the higher number of movements? What assumption about aircraft types?	Yes	<p>It was explained that at present there is no cap on movements and there is not an increase on movements as part of the proposed development. The noise survey by WSP was undertaken between July and August in 2016 which was one of the busiest periods of the year for the airfield and therefore was reflective of a period of high movements.</p> <p>Also the KP Acoustics Report also submitted with the planning application undertook noise monitoring in 2015 over 3 summer months when the movements were at 8599 and came to the same conclusions as the WSP noise chapter.</p> <p>The Noise Chapter as part of the Environmental Statement together with the additional submissions in relation to noise provide the context and background on noise and conclude the impact would be minor adverse at worse and this only relates to ground and maintenance activity.</p> <p>Furthermore the aircraft fleet will hopefully be modernised which would reduce the noise footprint in the future.</p>
KQ 18	Planning, Design & Access Appendix 1	Pooleys indicates shorter operating hours in summer than proposed in the Code of Conduct. Why is this? What is the current position? Could this be made firm in a planning condition?	Yes	<p>It was discussed that it is believed that the hours stated in Pooleys (9am-7pm) is for visitors. This has been confirmed by Mr Scott. Richard Connelly asked to add this as a control in the Code of Conduct. Mr Scott has agreed to this and the Code of Conduct enclosed has been updated accordingly.</p>

KQ 20	Planning, Design & Access Statement Appendix 4 Para 2.16	Are there any views on a suitable fixed location operation for refuelling?	Yes	<p>The recent appeal decisions were discussed and the fact the mobile fuel facilities did not require planning permission. It was discussed that fixed points for refuelling would be safer and it is best practise to have fixed points. It was also highlighted that this could also help reduce noise if there was a fixed point on the south-east of the runway for aircraft away from Bagby village.</p> <p>This matter has been discussed with the Airfield and the viability of providing a fixed fuelling facility on the south-east of the runway is not feasible or practical. It has been confirmed that a fixed point for fuelling for both Avgas and Jet fuel could be provided but the favoured position would be to the north of the runway to the east of the taxiway to be located where Hanger I would be located. It would be proposed to relocate the Avgas fuelling point here as well as Jet fuel. This area would still be screened with landscaping in accordance with the proposed plans but would provide an area for refuelling. This would ensure there was one single point for refuelling which would provide a safer and more logical solution to refuelling. Details of this can be conditioned if this is considered a suitable option by the Local Planning Authority.</p>
KQ 21	Planning, Design & Access Statement Appendix 4 Para 2.20	What location does the applicant propose for ground running of engines?	Yes	<p>It was highlighted that a letter dated 8th March 2017 provided details on the maintenance activity and that it was proposed to do low rev or ticking over type of testing outside the maintenance facility, however higher rev engine testing and run ups would be done at the end of the runway which is standard aviation practice.</p>
KQ 22	Planning, Design & Access Statement Appendix 3, Internal Appendix 4 Para 2.22	Need to see the circuits in more detail and understand if, and how, they feel that changes to military zones in the area may open up opportunities? Also, if many movements are off runway 24 and back onto 06 anyway, then is there an opportunity for aircraft to head off, turnaround and come back?	Yes	<p>It was explained that a circuit plan was submitted previously and a copy is enclosed with this submission.</p> <p>Richard Connelly asked for more information on the military zones being opened up and whether they would impact the circuit and whether the circuit route could now change? Bagby Airfield has confirmed that the use of the military airfields in the local area, particularly Topcliffe has increased lately so the airfield is having to strictly adhere to the published circuit pattern. Amending the circuit pattern to allow direct routing is not consistent with safe operations and to keep a strict circuit would avoid more village overflight. It is therefore proposed to retain the circuit pattern shown on the attached plan.</p> <p>Richard Connelly also asked for more information on the type of aircraft and the change in type of aircraft over the years (trends), also the type and size of resident helicopters. Trend wise Bagby</p>

				<p>Airfield no longer caters for any aerobatic aircraft. Younger people are no longer taking up flying in the same numbers as they used to so training has seen to decrease in recent years and flying and use of Bagby is becoming either an older persons pass time or a business tool.</p> <p>The aircraft themselves are becoming much more sophisticated and A to B travel flying is becoming a much greater part of the airfield than it was previously.</p> <p>In terms of resident helicopters, the following helicopters are kept at Bagby Airfield: Harpin's – Bell 429 G-HAPIN Max Smith - R44 G-MAXD (Notice given) PDG –Eurocopter squirrel G-PLMH (May until July)</p>
Aircraft Types	Bagby Airfield Business Case Para 2.4	No real evidence provided on current or historic aircraft types. To what extent has matting enable larger twins? To what extent have larger turbine helicopters been operating?	Yes	<p>It was explained by Peter Bondar that in general the older twins were becoming economically obsolete and so not a real issue at Bagby Airfield in terms of frequency or impact in terms of noise and movements as far as runway and/or matting.</p> <p>The airfield has always accommodated larger twin aircraft with or without matting (Islanders, DA 42's, Seneca's, Beechcraft Baron and the like). Currently there is one Seneca based at the airfield though the Airfield would anticipate this will go in the winter (even though the matting is there allowing in effect all year round use). In terms of permanent twins based at Bagby historically the maximum number has been three any one time.</p> <p>Currently in addition to the Homeserve helicopter the Airfield have the PDG carrying out pylon inspection work annually. This means that for the period April through to July the Airfield has up to 8 movements a day of heavy turbine helicopters (twin and Single). This has not however raised complaints.</p>
KQ 23	Bagby Airfield Business Case Para 10.10	What is the recent frequency of hot-refuelling for 'emergency' use? What constitutes emergency use? Could a limit be applied to this?	Yes	<p>Hot refuelling is only conducted in emergencies.</p> <p>An emergency consists of a time whereby a helicopter needs to make an unscheduled landing and requires fuel at short notice. This could consist of the Yorkshire Air Ambulance requiring fuel on route somewhere or if a PDG helicopter needs to make a quick turnaround for fuel when undergoing essential powerline (power outage) works and needs to turn around immediately for safety reasons.</p>

KQ 24	Bagby Airfield Business Case Para 12.1.2	What other locations have been considered for ground running? Why was the proposed location judged to be best?	Yes	Please see letter of 8 th March 2017 and comments above on question KQ 21.
KQ 25	Bagby Airfield Business Case Para 12.1.5	Do they have thoughts on where a refuelling could happen to reduce noise impact?	Yes	Please see above the answer to question KQ20.
KQ 26	Bagby Airfield Business Case Para 13.7.1	The Code of Conduct doesn't seem to specify to this level. Are there further proposals on this?	Yes	As set out above, the Code of Conduct has been amended to introduce further restrictions on movements at times of day and types of movements on certain days. Aircraft types have also been limited in the proposed Code of Conduct but in any event are limited in terms of their size and weight due to the airfields technical constraints, such as the length and gradient of the runway.
KQ 27	Bagby Airfield Business Case Para 13.7.6	Can we see these? Are they already included in a document and just been missed by YAL?	Yes	A circuit plan showing the proposed circuit together with the approach and exit lanes for helicopters is enclosed.
KQ 28	Bagby Airfield Business Case Para 13.9.3	How will the system recognise non-standard approaches, such as by helicopters? Will they be required to overfly the runway threshold at a certain height?	Yes	It was highlighted that in the letter of 8 th March 2017 (which is enclosed) also sets out the monitoring system proposed and Peter Bondar provided further information on the two systems to be put in place.
KQ 29	Bagby Airfield Business Case Para 13.9.4	Any examples of where currently used in the UK?	Yes	The software the Airfield plan to use for image capture is GPRSG: http://www.generalpicturerecognition.com/info1.php http://www.generalpicturerecognition.com/info2.php At present it is known to track and identify ships in ports, which have similar problems to aircraft in terms of being identified. The technology has enormous functionality. Bagby Airfield will be one of the first airfields to use and implement this type of technology.

KQ 30	Bagby Airfield Business Case Para 13.10	What proportion of a/c using Bagby do not have a Mode-S transponder? What do based microlights have?	Yes	<p>Peter Bondar highlighted that most aircraft now have some form of transponder. The figure of non-transponder aircraft was not known but it was suggested that this could be a control at the airfield which would require all aircraft based at Bagby Airfield in the future to have a transponder.</p> <p>Mr Scott has confirmed that the requirement for all resident aircraft to have a transponder was acceptable and this has been added to the Code of Conduct as a requirement.</p>
KQ 31	Bagby Airfield Business Case Para 14.6	What are the routings?	Yes	Please see the plan enclosed which provides a circuit plan for aircraft as well as the exit and entry routes for helicopters.
KQ 32	Bagby Airfield Business Case Para 15.7	Says 22 full time on site, but Business Case Addendum says 27 employees. Are these FTE figures, and therefore the same as the addendum?	Yes	It can be confirmed that the 22 employees stated in the Business Case refers to full time positions or the equivalent of full time positions. There will be 27 jobs on the airfield but some are part time so there will be 22 full time equivalent jobs altogether.
KQ 33	Bagby Airfield Business Case Para 15.9	Appears to be different from the figures in the Business Case Addendum. What basis is this calculated on, and with what evidence? Which is right, this or the Addendum figure?	Yes	The Business Case Addendum figures relate to jobs in the local economy which have been derived from speaking to the Airfield and a local knowledge of the area. It is acknowledge that additional jobs could be created further afield but these will not necessarily impact the local economy which is what the Business Case Addendum is referring to when examining Policy DP25 of the Hambleton Local Development Framework Development Policies (February 2008). The jobs further afield are also hard to quantify given their indirect relation to the airfield however it is recognised that more than the multiplier jobs set out in the Business Case Addendum could be created as a result of the proposed development.

APPENDIX B: UPDATED PROPOSED CODE OF CONDUCT

**BAGBY AIRFIELD (EGNG)
CODE OF CONDUCT**

SECTION 1:

The following restrictions are applicable to ALL Flights.

- 1) Aircraft movements at Bagby Airfield shall only take place between 7am and 10pm Monday to Fridays and between 8am-9pm Saturdays, Sundays and Bank Holidays.
- 2) No aircraft of any type shall enter the area on the northern side of the runway at any time save for the purpose of access and egress from and to the hangars.
- 3) The total number of aircraft movements shall not exceed 8,500 per annum of all types of aircraft including fixed wing, microlight, and helicopters.
 - a. Of these movements, a maximum of 1,700 may be Touch & Go movements.
- 4) There will be a maximum of 1,518 movements of all types in one calendar month.
- 5) Except in an emergency Runway 15/33 shall not be used.
- 6) All circuit training will be banned prior to 9am on Monday to Saturdays and after 9pm on Monday to Saturdays as well as Saturday afternoons (1pm-9pm) and at all times on Sundays.
- 7) On Monday to Fridays, no more than 5 movements may take place per day before 9am, and no more than 2 of those movements may take place before 7.30am.
- 8) On Saturdays, no more than 4 movements may take place per day before 9am.
- 9) On Sundays and Bank Holidays, no more than 2 movements may take place before 9am.
- 10) On Monday to Fridays, no more than 6 aircraft movements may take place after 8pm and only 2 of these are permitted to take off after 9.30pm.
- 11) On Saturdays, Sundays and Bank Holidays, no more than 4 aircraft movements may take place after 8pm.
- 12) No aircraft may operate at the Airfield other than in accordance with the following requirements
 - a) in the case of aircraft with Noise Certification on the UK under Chapter 6 Noise Register with a maximum overflight limit of 79.6dB(A) or
 - b) in the case of aircraft with Noise Certification on the UK Register under Chapter 10 Noise with a maximum overflight limit of 82.7dB(A).
 - c) In circumstances where fixed-wing aircraft do not have a Noise Certificate on the UK Register such aircraft with a certified Maximum Take-Off Weight (MTOW) of no greater than 2,730kg shall be permitted to operate
- 13) All aircraft resident at Bagby for a period of 14 or more consecutive days at Bagby in any calendar year must have transponders fitted and operable which are compatible with the Virtual Radar system.

- 14) Log of all aircraft movements (A/C Ms) shall be maintained at the Airfield. The log shall record the runway in use and details of all flights including aircraft type, registration, name of pilot in command and time and date of arrival / departure. The log shall be kept up to date and made available to an authorised officer of the LPA within 7 working days of a written request for inspection. The log shall also be made available to the meetings of the Airfield's Liaison Committee.
- 15) All aircraft movements will be monitored by the Airfield by Aircraft Surveillance Cameras and a Virtual Radar. This system together with the log books will record all the aircraft movements at the Airfield.
- 16) A log of all complaints shall be kept by the Airfield. The log shall identify as a minimum the name of the complainant, the nature of the complaint made, the date and time recorded and any action taken by the airfield. (Excluding members of the public who have indicated that they do not wish to communicate with the airfield directly or indirectly).

The following restrictions are applicable to ALL Flights on designated Fly-In Days Only

- 17) The Maximum number of Aircraft Movements on a Fly-In Day shall be 150.
- 18) No more than 3 fly-in days shall be permitted in any one year, each of which shall have been previously notified to the Council.
- 19) On notified fly-in days only aircraft that do not meet a) or b) above may operate when they are proven to have at least two of the following characteristics:
 - a. The aircraft was first manufactured more than 50 years prior to the current date;
 - b. They do not currently have an internationally recognised certification basis;
 - c. They can evidence that the aircraft (or their type) were at one time, on a military register.

Any aircraft operating under 2 above shall not arrive more than 48 hours prior to the commencement of a fly-in day. The aircraft may not depart from and return to the airfield during the fly-in day. The aircraft shall leave either on the day of the fly-in day or at the earliest reasonable opportunity thereafter consistent with weather related conditions, at Bagby, their intended destination, any diversion and the en-route weather. No return shall be permitted after departure on the fly-in day.

Miscellaneous Restrictions (for information)

- 20) Other than the existing runway lighting and /or its replacement, no additional external lighting shall be installed other than in respect of fuel installations or in complete accordance with a scheme that has been previously approved in writing by the Local Planning Authority (LPA).
- 21) Hanger B proposed to be used for the purposes of repair, servicing, maintenance and storage of aircraft, shall only be used for such purposes and for no other purpose except with the prior written permission of the LPA.

- 22) With the exception of Low Rev engine running, all ground running and High Rev testing of engines may only take place at the threshold of Runway 06
- 23) All new buildings that are to be provided on-site will be used for airfield related activities only and for no other business purpose.
- 24) Except in an emergency, Bagby Airfield shall not be used by jet aircraft of any type (excluding jet turbine aircraft).

SECTION 2:

The following restrictions are applicable to HELICOPTER Flights

- 1) All Restrictions listed 1-12 in Section 1 above.
- 2) No helicopters may operate other than in accordance with the following requirements.
 - a) In the case of aircraft with Noise Certification on the UK Register under Chapter 8, a maximum Take-Off limit of 92dB(A) and a maximum Approach limit of 94dB(A); or
 - b) In the case of aircraft with Noise Certification on the UK Register under Chapter 11, a maximum overflight limit of 84dB(A).
 - c) In circumstances where helicopters do not have a Noise Certificate on the UK Register such aircraft with a certified Maximum Take-Off Weight (MTOW) of no greater than 2,730kg shall be permitted to operate.
- 3) Helicopters approaching or leaving Bagby Airfield must use the designated helicopter flight path.
- 4) No helicopter hover practice shall take place from Bagby Airfield other than for the purposes of taxiing, landing or taking off from the airfield.
- 5) Helicopter circuits whether landing, taking off or training shall be limited to 2 circuits per helicopter and shall not exceed 10 minutes in duration.
- 6) Helicopter movements will be restricted to 700 total annual flights.
- 7) Helicopter movements will be restricted to 10 per day.
- 8) Except in the event of an emergency or essential utility helicopter flights (air ambulance power line, railway inspection and police and royal flights) no more than 12 helicopter movements (a helicopter movement being defined as a landing, touch down or take-off) shall take place on any one day.
- 9) Helicopters shall shut down their engine(s) during the process of refuelling save for emergencies or essential utility aircraft as defined above at Bagby Airfield.
- 10) Quiet Periods – Bagby & Balk Parish Council can request quiet periods when all helicopter flights to and from the airfield will be banned save in relation to emergencies. Notice of such a quiet period must be given at least 1 month before its intended operation. *(This is intended to cover particularly noise sensitive activities in the village such as weddings & christenings. In addition, if a quiet period is required for a funeral then if the period is specified only 24 hours notice need be given).*

SECTION 3:

The following restrictions are applicable to AEROBATIC Flights

- 1) All restrictions listed 1-12 in Section 1 above.
- 2) No aircraft shall take off from Bagby Airfield for the purposes of performing aerobatics overhead the airfield or within a circle radius 2 nautical miles.
- 3) Aerobatics over the airfield shall be limited to fly-in days pre-arranged by the Management of Bagby Airfield. Prior Notification of the fly in days will be given to the Council in writing.

The Management

Bagby Airfield (EGNG)

February 2018