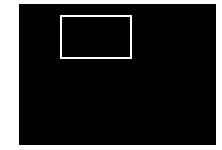
| From: Sent: To: Cc: Subject:   | 16 November 2020 14:46  RE: [EXTERNAL] NEW INSTRUMENT APPROACH AT BIGGIN HILL  |
|--|--|
| Hi,  |  |
| strange times, meant this is<br>(Challenger 350) who also to<br>company. I also have had t   | conse, unfortunately I was on a flying Tour previously and other priorities, even in these is the first opportunity I have to review your document. I am one of the Company Pilots fulfils an additional role as a Operations, Regulatory and Technical Support Officer for the the opportunity to fly into Biggin Hill on many occasions and also to review any issues, arise with other crew utilising Biggin Hill.  |
|  | nent, specifically the Core Design Principles and priorities from an external assessor's and at are in agreement with the ranking you have given. I have the following minor assion ONLY.  |
| approaches purely for envir<br>see that RNP approaches o<br>you are not yet ready to de<br>(Replication) could be cons<br>the opportunity to overfly l | king closely with other European Airport and National Authorities designing RNP ronmental concerns- mostly noise pollution and impact on the local populace. Here, we ffer a unique opportunity to allow specific tracks and approach paths (however, I suspect evelop RNP AR with RF legs!) So I would argue D (Environmental) should be Core and F idered Desirable, especially if a divergence from Replication offers a new track which has lower population density areas. By making Environmental Concerns a core principle you re-proof what is an area which will only grow in importance. |
| That is it! Please feel free t clarification or additional co  | to contact us again at the Ops Technical Address above should you require any omment,  |
| Best Regards,  |  |
| Regulatory & Technical Dep   | partment   |
|  |  |
|  |  |
| From: Sent: 29 October 2020 11:0 To: Cc: Subject: RE: [EXTERNAL] NE  | D3<br>EW INSTRUMENT APPROACH AT BIGGIN HILL  |
| Good morning   |  |
|  | she has relayed all the information to us. riate point of contact for these matters and will be working on providing the feedback you  |

| I see the deadline is 13NOV2020, which I believe won't be an issue for us.  |
|---|
| All the best,   |
|   |
|   |
| From:   |
| <b>Sent:</b> 27 October 2020 08:07 <b>To:</b>   |
| Subject: FW: [EXTERNAL] NEW INSTRUMENT APPROACH AT BIGGIN HILL  |
|   |
|   |
| From: Sent: 27 October 2020 08:00   |
| То:   |
| Subject: [EXTERNAL] NEW INSTRUMENT APPROACH AT BIGGIN HILL  |
| <b>CAUTION:</b> This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.  |
| Good Morning  |
| We have just commenced an Airspace Change, as required by the UK CAA, to introduce a new procedure to London Biggin Hill Airport – see attached PDF. I have sent information through your website contact address, but I wanted to be sure that the information was received by the best person at to provide a suitable response. Please could you pass this information on to the best person within to respond to our Engagement regarding this new procedure. |
| Regards,  |
|   |
|   |
|   |
|   |

| From:<br>Sent:<br>To:<br>Subject:    | 07 November 2020 13:43 RE: NEW INSTRUMENT APPROACH PROCEDURE  |
|--------------------------------------|---|
| Hi <b>lls</b> ,                      |   |
| Is an email suffici                  | ent or do I need to provide feedback elsewhere?   |
| I am assuming yo<br>priority.        | ou only need me to comment on your draft design principles and rank them in   |
| Please accept this response from the | s response on behalf of second ; please note this <u>IS NOT</u> an official/formal as a whole, as that will come from at the appropriate point.   |
|                                      | ur design principles would mirror the exact order of which you have listed them, is yould be our priority 1, and principle F would be priority 6. |
| Regards                              |   |
|                                      |   |
|                                      |   |
|                                      |   |
|                                      |   |
|                                      |   |
|                                      |   |
|                                      |   |

Classification: Confidential



#### Response to Design Principle Engagement – 12 November 2020

To whom it may concern,

Thank you for the recent engagement on the Design Principles element of your RNAV (GNSS) Approach Rwy21 airspace change. It has reviewed the engagement material and at this stage can confirm we are fully supportive of your approach to the proposed airspace change which is set within the broader Airspace Modernisation programme and EASA regulatory requirements. We consider that the six draft design principles are appropriate and provide a sound basis for Biggin Hill to progress this Airspace Change. We have noted that the change will not change routes above 3000' and we envisage from this that there will be no alteration to the current traffic flows within the London TMA. We do not have a preference for order of priority save that certain DPs should be a must and therefore ranked highest as follows;

- 1. Safety
- 2. Compliance

We look forward to continuing to engage with you as the airspace change develops.

Yours Sincerely

**Sent:** 06 November 2020 17:20

**To:** EGKB Runway 21 RNAV Approach

**Subject:** AIRSPACE CHANGE

Thank you for contacting me. I have no comment except to say that I hope the inauguration of this instrument approach (if approved) will not serve to further restrict already cluttered airspace in a very congested area. It would be nice to think it won't be used as an excuse to exclude access to transit traffic as a matter of course rather than need.

Regards

Sent from my iPhone

**Sent:** 09 November 2020 11:14

**To:** EGKB Runway 21 RNAV Approach

**Subject:** FW: NEW INSTRUMENT APPROACH PROCEDURE

## Biggin

I see that safety is your number one design principle which is good but I do not see one that states minimal impact to other airspace users. That said as you are replicating the ILS approach there should not be any additional impact.

Yours



#### Dear Sir/Madam

Thank you for the opportunity to comment on the proposed RNAV approach procedure for runway 21 at Biggin Hill.

The is a UK-wide professional organisation which promotes the highest standards in all aspects of air traffic management and is dedicated to the safety of all who travel or gain their livelihood in the air, with membership drawn from both civilian and military controllers. We are heavily involved in the work of the International Federation of Air Traffic Controllers' Associations (IFATCA), which includes representations to ICAO and SES, amongst others.

This letter constitutes our formal response to the consultation.

has no objection with the timelines proposed and look forward to providing feedback on future elements of the consultation procedure.

Thank you for allowing us the time to respond to your change proposal.



| From:                     |   |  |
|---------------------------|---|--|
| Sent:                     | 10 November 2020 14:51                  |  |
| To:                       | EGKB Runway 21 RNAV Approach            |  |
| Subject:                  | RE: NEW INSTRUMENT APPROACH PROCEDURE   |  |
| Hi,                       |   |  |
| Thank you. The agree      | e with your proposed design principles. |  |
| We look forward to furthe | r engagement as this ACP progresses.    |  |
| Kind regards,             |   |  |
|                           |   |  |
|                           |   |  |
|                           |   |  |
|                           |   |  |
|                           |   |  |
|                           |   |  |

**Sent:** 11 November 2020 11:57

**To:** EGKB Runway 21 RNAV Approach

Cc:

**Subject:** Feedback on Draft Design Principles - ACP-2019-86

**Good Morning** 

Please see the feedback on the draft design principles for **ACP-2019-86** 

| Draft<br>Design<br>Principle | Feedback   | Priority Order |
|------------------------------|--|----------------|
| A                            | Add the following text to the design principle:  "Must not erode existing 'safety barriers' that are in place with adjacent ANSPs."  | 1              |
| В                            | No Comment   | 6              |
| С                            | No Comment   | 5              |
| D                            | No Comment   | 4              |
| E                            | No Comment   | 3              |
| F                            | Add the following text to the design principle:  "The design must enable existing ATC Procedures to be maintained with adjacent ANSPs. This must include tactical and flexible positioning of aircraft. It must not add to or increase the complexity and workload of adjacent ANSPs." | 2              |

#### Regards



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From: Sent: 26 October 2020 17:13 To: EGKB Runway 21 RNAV Approach Cc: 'Representation' Subject: Mailchimp Enquiry Hi, I reply in the double capacity of representing and also as a In both capacities, we agree that A, B and C are in the correct order. We would then place E next, with D at the end. So: 1 A 2 B

From an operational point of view, we do not think that F should be on the list (though we do understand why it might be expedient.)

3 C 4 E 5 D

The main reason for eliminating F is that the procedural approach is barely ever used (I have been operating from Biggin since 1985, and I can't remember using it since the mid 90s) so most users (pilots, ATCOs) will only be familiar with it in theory, and local residents will be completely unaware of it. Thus changing it will have no impact.

Accordingly, if the RNP approach is to be introduced, the Initial and Intermediate segments should match PANS OPS standards (ie a T or, more likely, L shape). In practice, this will make little difference, as Thames will still mainly radar vector, but the idea of RNP approaches is that more aircraft are expected to be cleared for the procedure, being less reliant on vectoring, and if that happens it should be a familiar shape.

If it is decided that the current DME Arc is replicated, a decision will have to be taken as to whether a RTF leg is used, or one or more straight line. While the RTF option would be obvious and attractive, it should be borne in mind that many GNSS navigators in widespread use do not support RTF legs. This is true of Garmin GNS models (still the most widespread in light singles and twins) and, when I last looked, Avidyne IFD. That means that a large proportion of light aircraft (up to turboprop twins) would not see the procedure, only the final track. This is true of the 21 ILS overlay procedure at Lydd, for example, which contains a DME Arc.

The same considerations must be applied to the right turn back to the overhead in the MA. This might better be designed as a right turn DCT ALKIN, or a number of straight legs towards TUNEL, as an RTF leg will mean the whole procedure doesn't appear in a lot of navigators.

I hope that this is the kind of feedback you wanted. Please call me if I can be of further help.



12 November 2020

London Biggin Hill Airport EGKB, Biggin Hill, Bromley TN16 3BH

Dear

# stakeholder engagement response

Thank you for the opportunity to engage with you about your proposed Airspace Change to introduce RNAV to the approach to Runway 21. does have a number of observations, which I would encourage you to seriously consider as you take this proposal forward.

I am sure you understand that views the opportunity to minimise noise disturbance for residents as absolutely integral to any airspace change, along with any other environmental improvements that can be made.

You will know that both the and local residents have expressed this view to the airport, through direct enquiries, the Airport Consultative Committee and to the I am aware you have taken on board much of what has been said, which is welcome. I would encourage you to continue to engage with the people of in this way to recognise, understand and address their concerns, seizing the chance to reduce noise disturbance at every possible opportunity.

Within the context of this particular airspace change proposal, we would like to explore the possibility of keeping aircraft higher for longer as a way of minimising the intrusive aircraft noise experienced by residents, particularly those living directly under the flightpath. Adjusting the angle of descent would diminish such invasive noise, not just for those living very locally to the airport, but also those in the north of the borough who reside under or close to the Runway 21 ILS flightpath. Whilst I accept that the Airport

would need CAA permission to alter the angle of descent, please can you look carefully at what might be acceptable and seriously explore this with the CAA. I do believe this proposal does accord with the principles being outlined by Government and would minimise noise disturbance for many residents if the angle were increased.

In preparing this request, we have been in contact with our acoustic noise consultant, who has confirmed that there may be some benefit to taking this action.

We accept that the implementation of RNAV is an important technological step to take to improve the workings of the airport and don't raise any objections to this, but at the same time we would like time to study the future proposals fully to ascertain if there are any other ways you could improve the situation for residents, a goal I recognise you are committed to achieving.

Given that safety is always paramount, our focus must be on noise reduction for residents, so we would rank the first 2 design principals equally and in the following order:

- 1 Environmental Concerns
- 2 Safety
- 3 Replication
- 4 Efficient Routes
- 5 Navigation Standards
- 6 Compliance

Our thanks for taking these views under consideration and making noise minimisation a priority of this process.

Please continue to keep informed, as I know you will about the progress of this early stage application. I would be grateful for your views on our suggestion to increase the angle of descent, which I would want to share more widely.

Yours sincerely



Biggin Hill airspace consultation team By e-mail



13 November 2020

Dear Sir, Madam,

### **Biggin Hill Airport – Consultation on Airspace Design Principles**

I am writing in response to the consultation by Biggin Hill Airport on its airspace design principles. This submission is provided in line with the responsibilities for aviation, including its environmental and public health impacts.

We recognise the thrust of the Civil Aviation Authority (CAA) Airspace Modernisation Strategy and in particular its potential to make more efficient use of London's congested airspace. As well as the added resilience and capacity, this opportunity should be used to reduce the emissions profile of flights at Biggin Hill and the noise impacts experienced by local communities – and these should be core principles.

Central to what is being proposed is the implementation of performance-based navigation (PBN), which enables flight routings which are significantly more precise compared to today. However, when coupled with the principle that flight paths replicate those flown today, this has critical implications for noise exposure. Whereas the current technologies effectively spreads the flights — and so the noise impacts — across a wider corridor, under PBN, the precision means the same volume of flights are concentrated over a relatively small area.

We are aware that PBN can be successfully deployed in this way in rural areas, where flights can be precisely routed to avoid villages and other dwellings. But it is simply not possible to devise precise routes over an urban area like London – even outer London – which completely avoid overflying peoples homes. Deploying PBN at Biggin Hill while replicating existing routes, as appears to be

proposed, risks concentrating the worst of the noise exposure on a disproportionately small number of people – and we have sadly already seen this played out elsewhere in the London airports system.

This can be exacerbated by a simplistic interpretation of the noise exposure metrics. By deploying PBN in this way, it might be possible to show a numerical reduction in those impacted by noise, even when, at the same time, those still exposed experience a very substantial noise increase. Such an inequitable concentration of the noise impacts is completely unacceptable and must not be incentivised by the new framework for the airspace around Biggin Hill.

If PBN is to be deployed, it needs to be coupled with designation of multiple routes to spread the noise impacts in a way that effectively replicates the less precise flight routings flown today. If you allow PBN to be deployed while precisely replicating existing routes, the resulting concentration of the noise impacts risks leading to much anguish – and potentially worsening health outcomes for those suffering increased exposure – as well as eroding public trust in Biggin Hill Airport more generally.

We would urge you to ensure that this airspace change process is used to reduce the environmental impacts of flights at Biggin Hill while ensuring an equitable distribution of the noise exposure.

Yours faithfully,

# Feedback and comments in answer to the BHAL Airspace Change document released 27<sup>th</sup> October 2020

|   | Draft Design Principle - Category | Current description          | Comments  | My<br>ranking |
|---|-----------------------------------|------------------------------|---|---------------|
| Α | Safety                            | Core                         | Agreed  | 1             |
| В | Compliance                        | Core                         | PANS OPS are Operational requirements and as a given they should not rank higher than Environmental Concerns  | 3             |
| С | Navigation<br>Standards           | Core                         | Performance Based Navigation (PBN) is agreed as a Core requirement, it should not rank above Environmental Concerns. PBN has been criticised at other airports for restricting flightpaths to a narrow funnel rather than spreading flights over a wider area. This narrowing aspect must be avoided during this work. (See Replication below)  | 4             |
| D | Environmental<br>Concerns         | <del>Desirable</del><br>Core | The Draft Design Principles must be uprated from Desirable to Core to fully acknowledge the impact of aircraft noise below 7,000' on LBB residents living under flightpaths as well as the impacts of emissions emanating from the route under development. We know that Climate Change is now a significant material consideration and this must be given due weight within the ranking. Helicopters are noisy and disruptive and whilst they are classified as small aircraft, their routes must be properly incorporated within this process to minimise impacts on those living nearby. Avoiding noise Sensitive Areas should be added to this heading within the Design Principles. This Design Principle must receive a higher ranking. | 2             |
| E | Efficient Routes                  | Desirable                    | Agreed  | 5             |
| F | Replication                       | Core                         | Care needs to be exercised here to address the PBN point made in C above. Residents under the existing ILS flightpath report that existing movements are spread over a relatively wide area. During the new instrument approach work flightpaths must not be altered into a concentrated and narrower approach funnel, which penalises  | 6             |

Sent:

10 November 2020 23:23

To:

EGKB Runway 21 RNAV Approach

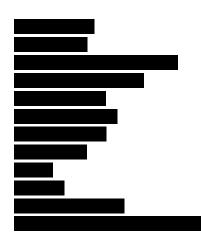
Cc:

Subject:

New Instrument Approach Procedure

I consider that all Environmental Principles should be CORE.

Kind regards



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| From: Sent: To: Cc: Subject:   | 29 October 2020 14:21 EGKB Runway 21 RNAV Approach New Instrument Design Procedure  |
|--|---|
| To Whom it may concern   |   |
| I write on behalf of the am currently the  | with regard to the New Instrument Design Procedure. I and our thoughts and suggestions are as follows.  |
| We feel, as residents of population" should be of a much revised list below.                             | , that Environmental issues, including "minimising noise" and "overflight of higher priority than you have rated and should be core. Please see our suggested |
| A. SAFETY B. ENVIRONMENTAL C. REPLICATION. D. COMPLIANCE. E.NAVIGATIONAL STANDARDS. F EFFIECIENT ROUTES. |   |
| I look forward to receiving your t   | feed back.  |
| Kind regards   |   |

**From: Sent:**13 November 2020 11:36

**To:** EGKB Runway 21 RNAV Approach **Subject:** Re: Biggin Hill - our response

**Dear Sirs** 

| Thank you for including                          | in the engagement exercise on the proposed changes to   |
|--|---|
| Instrument approach procedure as set out under   | er the proposed change: ACP-2019-86.  |
| Our response on the Design Principles priorities | s is set out below. It is driven by the views of our community which  |
| lies on the edges of the Gatwick CTA, under the  | e SE stack for Heathrow, and which, while appreciating the need and   |
| indeed the benefit of technology changes, wou    | ıld resist vigorously any increase in current (pre- pandemic)   |
| · · · · · · · · · · · · · · · · · · ·            | of flights crossing has increased as has the associated reciates the business that the airport can bring to the area, and would             |
| •          | uld not support any proposals that would look to increase the ncrease the size of aircraft crossing or tracking near to at lower altitudes. |

We look forward to taking part in further stages of this exercise.

| Order    |  |             |               |  |
|----------|--|-------------|---------------|--|
| of       | Draft Design principle   |             | Category      | Reason for priority  |
| priority | 3 <b>3</b> p   |             | ,             | order  |
| 1        | A : SAFETY – new routes must be safe   | Core        | Safety        | Key underlying principle for all aviation issues   |
| 2        | B: COMPLIANCE – route should where possible, be designed to be PAN OPS compliant   | Core        | Technical     | Key to adopting new system   |
| 3        | C: NAVIGATION STANDARDS - new routes must be designed to use PBN   | Core        | Operational   | Purpose of making change   |
| 4        | F: REPLICATION: Procedure should be designed to mimic existing procedure where possible, whilst meeting the requirements of DP2 & 3. This will minimise the requirement to overfly areas not previously overflown by aircraft making an ILS approach | Core        | Environmental | Position of on the edge of Gatwick CTA and under Heathrow SE stack cannot accept further noise disturbance |
| 5        | D: ENVIRONMENTAL CONCERNS — arrival routes should where possible be designed to minimise the impact of noise below 7,000ft and should avoid the overflight of populations not previously overflown.  | Desirable?? | Environmental | Position of on the edge of Gatwick CTA and under Heathrow SE stack cannot accept further noise disturbance |
| 6        | E: EFFICIENT ROUTES: arrival routes should where possible, be designed to minimise emissions and optimise operational efficiencies   | Desirable   | Environmental |  |

**Sent:** 08 November 2020 12:19

**To:** EGKB Runway 21 RNAV Approach

**Subject:** Mailchimp Enquiry

Draft Design Principle.

In Order of Priority:

1. D. Environmental Concerns. Move from Desirable to Core.

2. E. Efficient Routes.

Move to Core.

Retain the present "funnel" from Bexley, Petts Wood and Crofton; avoid minimising it further which would inflict more noise and visual impact by the landing flights to R21 on those residents already adversely affected.

Fly higher for longer. City Airport manage steep ascents/decents so BHAL could do also.

Regards,

**Sent:** 26 October 2020 17:09

**To:** EGKB Runway 21 RNAV Approach

Subject: Re: NEW INSTRUMENT APPROACH PROCEDURE

Hi

This is rather complex to understand but I believe you are asking for my feedback even though feedback comes later in the process.

I understand you want me to rank the design principles from my point of view. See below with 1 being the most important.

- 1 Safety
- 2 environmental concerns (noise and overflight over woldingham especially)
- 3 efficient routes
- 4 replication
- 5 compliance
- 6 navigation standards

This is from the point of view as a local resident and without knowing the details about the technical or regulatory aspects.

Regards

| From: Sent: 29 October 2020 07:39  |
|--|
| To:  |
|  |
| Subject: RE: NEW INSTRUMENT APPROACH PROCEDURE   |
| Dear Control of the C |
| will instruct the ACP team to ensure any future notifications are made through your Clerk.   |
| Kind Regards   |
| 1  |



**T:** +44(0)1959 578519 **F:** +44(0)1959 540406

Kind regards,

London Biggin Hill Airport EGKB, Biggin Hill, Bromley TN16 3BH, UK



London Biggin Hill Airport EGKB, Biggin Hill, Bromley TN16 3BH

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| From:   |
|---|
| Sent: 28 October 2020 19:22   |
| То:   |
|   |
| Subject: Re: NEW INSTRUMENT APPROACH PROCEDURE  |
| Thanks for the clarification  |
| , I note that had not forwarded this we would not have had notification. Our Clerk and thus   |
| our is still not receiving consultation and correspondence from BHA. Could you please correct this with some urgency and ensure we officially receive notification through our Clerk? |
|   |

| From: Sent: 28 October 2020 17:22 To:   |
|---|
| Subject: RE: NEW INSTRUMENT APPROACH PROCEDURE  |
| Hi <b>Table</b>   |
| The technical term for 'messing up the approach' is called a 'Executing a Missed Approach' and you are right in that it is the existing, rarely used, route. The rest of the approach will mirror exactly the ILS on runway 21.         |
| Cheers  |
| From: Sent: 28 October 2020 16:36 To:   |
| Subject: Re: NEW INSTRUMENT APPROACH PROCEDURE  |
| Hello Lovely to hear from you.  Thank you so much - the briefing pack would be very useful. Its basically the route taken if a pilot messes up their landing on 21 which is the current route any way as I understand it.  Kind regards |
|   |
|   |
| From: Sent: 28 October 2020 13:33 To:   |
| Subject: RE: NEW INSTRUMENT APPROACH PROCEDURE  |
| Good afternoon grow,  |
| The consultation for an RNAV overlay on the Approach to runway 21 is effectively a 'technical upgrade' of the existing approach from the North.   |

It has no impact on the interests of full open engagement, I asked for you to be included

on the distribution list.