

1st April 2022

Ref; Farnborough Airport; Airspace Change Post Implementation Review (PIR)

We have received confirmation from the CAA outlining the requirements of the airport's Post Implementation Review (PIR) which is due to commence on the 1st April 2022. Whilst it had originally been expected that the CAA would commence Stage 7 of the PIR process in the latter part of 2020, the significant impact of the COVID-19 related crisis reduced the activity levels of Commercial Air Transport and General Aviation (both GA Business Aviation and IFR/VFR Class G users) to a point where any resulting analysis would not have been suitable for the intended purposes of the PIR. Consequently the CAA took the decision to delay UK ACP's which was a view supported by sponsors and GA stakeholders.

The CAA's airspace change process is a seven-stage mechanism that is set out in detail in CAP 1616. Stage 7 of this process is a PIR that normally begins one year after implementation of the change. The PIR is an assessment of whether the anticipated impacts and benefits in the approved change and published decision are as expected and where there are differences, what steps (if any) the CAA requires to be taken

Irrespective of whether the CAA decision to approve the change was made under the previous process (set out in CAP 725), all PIRs should normally be in accordance with the process requirements of CAP1616. However, when assessing the expected impacts against the actual impacts, the methodology adopted at the time of the original CAA decision should be used.

Farnborough Airport will now commence a twelve-month data capture process in line with the CAA's pre-requested data requirements, the results of which will be sent to the CAA in April 2023 for publication on the portal. Thereafter there will be a 28-day window during which any stakeholder may provide feedback directly to the CAA about whether the impacts of the change are those expected, 12 months on. For clarity, the online portal will not accept stakeholder feedback until the complete set of data has been published in April 2023.

The PIR is a requirement of any Airspace Change Process and looks to identify any subsequent requirements to further modify flight procedures, or the airspace structure (as applicable) to ensure compliance with the original CAA decision (Stage 5 of the ACP process).

As part of the PIR, Stakeholders will be invited to comment on whether the implementation of the Airspace Change has had the impacts that were anticipated when the decision to agree to the change was made by the CAA. The PIR is not a review of the decision on the airspace change, and neither is it a re-run of the original decision process. Data and evidence will be gathered from both the Change Sponsor and other Stakeholders, which will be assessed by the CAA.

For further information on the objectives of the ACP details can be found on page 6 of the CAA's decision document (CAP1678) a copy of which can be found using the following link;

[CAP1678_20180710 TAG Farnborough Airspace Change Decision-FINAL2_Redacted.pdf \(caa.co.uk\)](#)

Details of the CAA's scope and requested data are shown in appendix 1 of this letter. Further information can be found in CAA's CAP 1616 appendix H.

The PIR can lead to two possible outcomes, the CAA may-

- Confirm that the implemented design satisfactorily achieves – within acceptable tolerance limits – the objective and terms of the CAA's approval, and the change is confirmed; or
- Require modifications to better achieve the objective and terms of the CAA's approval; once the modifications have been implemented and operated for a period (approximately six months), there are three further possible outcomes:
 - noting that the modifications did not better achieve the objective and terms of the CAA's approval, the CAA may conclude that the original design was satisfactory, and the original change is confirmed; or
 - noting that the modifications did not better achieve the objective and terms of the CAA's approval, the CAA may conclude that the original design was not satisfactory, and the original change is not confirmed. In this case, in order to pursue its change, the change sponsor will need to commence a fresh airspace change proposal from Stage 1; or
 - the CAA may conclude that the modifications do better achieve – within acceptable tolerance limits – the objective and terms of the CAA's approval and so the modified design is confirmed.

We will be contacting key stakeholders from the original ACP consultation process in the coming weeks. In the meantime, if you have any questions regarding the Post Implementation Review process then please contact us at acp-pir@farnboroughairport.com in the first instance.

Yours faithfully



Les Freer

Airport Operations Director

For and on behalf of Farnborough Airport Ltd

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Airspace Change Process Post Implementation Review Data Request

ACP Project Reference:	ACP-2013-07		
Title of Airspace Change:	TAG Farnborough Airport airspace change proposal		
Change Sponsor:	TAG Farnborough Airport [now Farnborough Airport]		
CAA Decision Document:	<i>[Insert Link of Airspace Portal page or CAA website]</i>		
CAA Decision Date:	11 July 2018	AIRAC Date(s):	27 February 2020
PIR Data Submission Requested:		PIR Data Submission Required by¹:	

General Observations

		Required for the review?	Format of the data required.	Information of relevance in support of the request.
a)	An overview statement on whether, in the change sponsor's view, the original proposal met the intended objectives as described on the CAA's decision to approve the change.	Yes <input checked="" type="checkbox"/>	Narrative.	<p>The CAA CAP1678 Decision Document did not specify the implementation date</p> <p>The impact on aviation resulting as a consequence of the Covid pandemic</p> <p>Expand on why the AIRAC 03/2020 was selected as the implementation date on 27 Feb 20.</p>
b)	On overview statement on whether, in the change sponsor's view, the original proposal met any conditions described on the CAA's decision to approve the change (if applicable).	Yes <input checked="" type="checkbox"/>	Narrative.	
c)	Confirm that implementation occurred on the dates identified in the Decision Letter. If no implementation date was specified in the Decision, please state so.	Yes <input checked="" type="checkbox"/>	Narrative.	
d)	If there was a significant delay between the planned and actual implementation date, please provide an explanation.	Yes <input checked="" type="checkbox"/>	Narrative.	
e)	Identify whether any other issues of significance have occurred during the period	Yes <input checked="" type="checkbox"/>	Narrative.	

¹ A 28-day period to collate the data is usually requested, however an extension to the 28-day response period may be granted if sufficiently justified.

	12 months after date of implementation ² .			
f)	Other than normal promulgation activity (e.g. NOTAM, AIC etc.), identify what steps were undertaken to notify local aviation stakeholders that the airspace change was about to be implemented.	Yes <input checked="" type="checkbox"/>	Narrative.	

Safety Data

		Required for the review?	Format of the data required.	Information of relevance in support of the request.
a)	Data concerning any recurring instances of Instrument Flight Procedures (IAPs, SIDs, STARs, Holds) not being flown correctly. ³	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Narrative evidenced by data (flight data).	
b)	Report concerning any known Mandatory Occurrence Reports (MORs).	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Narrative supported by copies of the original MOR Report(s).	
c)	Report concerning any known AIRPROX reports.	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Narrative supported by copies of the original AIRPROX Report(s).	
d)	Report concerning any known Air Safety Reports (ASR) ⁴ .	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Narrative supported by copies of the original ASR Report(s).	

Service provision/ resource issues

		Required for the review?	Format of the data required.	Information of relevance in support of the request.
a)	Data on refusals of service.	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Narrative evidenced by supporting data (table format).	
b)	Data regarding air traffic delays.	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Narrative evidenced by supporting data (table format).	

² CAP 1616 Part 1 The Airspace Change Process: Paragraph 270.

³ Any instances of IFPs not being flown correctly must be notified to the assigned CAA Project Officer.

⁴ This may include relevant reports submitted through CHIRP.

c)	Details of additional resource allocated, considering daily and seasonal traffic patterns.	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Narrative evidenced by supporting data (table format).	
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Utilisation of Continuous Climb Operations (CCO) and Continuous Descent Operations (CDO)

		Required for the review?	Format of the data required.	Information of relevance in support of the request.
a)	The % of traffic achieving CCO and/or CDO, compared monthly before and after the change (e.g. comparing the month of July before and after the change).	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Narrative evidenced by supporting data (flight data).	Not required as this was not included in the justification detailed in the ACP

Infringement statistics

		Required for the review?	Format of the data required.	Information of relevance in support of the request.
a)	Data on the % change in infringements, compared on a monthly basis before and after the change.	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Narrative evidenced by supporting data (table format).	

Traffic figures (air transport movements)

		Required for the review?	Format of the data required.	Any information of relevance in support of the request.
a)	Data on the actual vs predicted figures.	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Narrative evidenced by supporting data (table format).	Covid Pandemic impact
b)	Data on the % change compared monthly before and after the change.	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Narrative evidenced by supporting data (table format).	
c)	Reconfirmation that there have been no factors that would cause a material change to the traffic forecasts provided in support of the original proposal, i.e. that the original forecasts are still reasonable. ⁵	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Narrative.	
d)	Any changes to operating fleet mix.	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Narrative evidenced by supporting data (table format).	

⁵ Includes the impacts of COVID-19 pandemic.

Traffic dispersion comparisons

		Required for the review?	Format of the data required.	Any information of relevance in support of the request.
a)	Density plots that show concentration and lateral dispersion.	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Narrative supported by density (heat) plots showing where aircraft have concentrated within the acceptable tolerances of the procedure design.	All density plots should be overlaid on the same maps/charts and those identified within the environmental sections The maps/charts should be suitable such that they can be understood by non-aviation stakeholders and contain sufficient detail for those affected to identify where they live in relation to any changes in traffic pattern
b)	Density plots that show vertical profiles.	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Narrative supported by density (heat) plots showing height gained or lost.	The individual lateral dispersion plots will be governed by the data. The vertical profile plots can be colour coded and broken down into 1000, 2000 or 3000ft swathes depending on the procedure being considered.
c)	Weather/MET impacts.	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Significant weather events affecting the data should be identified.	

Operational Feedback

		Required for the review?	Format of the data required.	Any information of relevance in support of the request.
a)	Any direct feedback from airlines/ air traffic controllers.	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Narrative supported by a table showing the feed-back in relation to the change and explaining what the change sponsor has done to address the feed-back.	This is not just negative feed-back. The presented format must make it clear that the change sponsor has dealt with the feed-back within the context of the implemented change.
b)	Any additional feedback from relevant flight operation sub-committee (sub-group of airport consultative committee).	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Narrative supported by evidence of minutes or notes of actions from meetings.	

Denied Access

		Required for the review?	Format of the data required.	Any information of relevance in support of the request.
a)	Data concerning the refusals of access (month	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Narrative evidenced by	

	on month/ before and after the change).		logged refusals. (table format).	
b)	Reasons for individual refusals of access.	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Narrative evidenced by logged refusals. (table format).	

Utilisation of SIDs/STARs/IAPs

		Required for the review?	Format of the data required.	Any information of relevance in support of the request.
a)	Data on the % of flights that actually flew the procedure(s) vs the total number of flights (departing or arriving), compared for the relevant time periods before and after the change.	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Narrative evidenced by supporting data (table format).	The utilisation figures must match the figures in the density, lateral and vertical plots in order to see only the aircraft that flew the new procedures; the data would be skewed by VFR departures for example.

Letters of Agreement (LoAs)

		Required for the review?	Format of the data required.	Any information of relevance in support of the request.
a)	Evidence of usage of operational agreements between ANSPs and airspace users.	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Narrative.	Explanation of FUA Trial and expand on why there has been a delay on finalisation of LGS LoA.
b)	Data concerning the activation/ utilisation of LoA procedures.	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Narrative evidenced by supporting data (table format).	

Impact on environmental factors (including noise)

		Required for the review?	Format of the data required.	Any information of relevance in support of the request.
Local Air Quality – required where:				
<ul style="list-style-type: none"> • Where there is the possibility of pollutants breaching legal limits following the implementation of an airspace change, determined where: <ul style="list-style-type: none"> ○ there is a change in aviation emissions (by volume or location) below 1,000 feet; and ○ the location of the emissions is within or adjacent to an identified AQMA. 				
a)	Ambient air quality limit concentrations (in $\mu\text{g.m}^{-3}$).	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Narrative describing impact on AQMA with supporting concentration data (table format).	There is no requirement to assess local air quality as there are no designated air quality management areas (AQMAs) located within an area where the change would impact aircraft below 1,000ft. Therefore it is concluded that the implementation has not led to a breach or worsening of legal air quality limits.
b)	DfT TAG Local Air Quality workbook outputs.	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Workbook outputs (table format).	
c)	DfT TAG Air Quality Valuation Workbook outputs.	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Workbook outputs (table format).	

d)	Description of prediction model and version number.	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Narrative.	
e)	Supporting input data and assumptions (for example movement logs).	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Narrative evidenced by supporting data (table format).	
Noise – required where:				
<ul style="list-style-type: none"> There is a change which below 7,000 feet alters lateral aircraft tracks or dispersion, or changes aircraft height, (above mean sea level) over an inhabited area. 				
f)	Leq contours (down to 57 dB LAeq,16h / 45 dB LAeq,8h).	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Noise contour figures overlaid on Ordnance Survey Maps (or similar).	The sponsor should provide confirmation with supporting evidence that the airspace change has not had an impact upon the airport's 57 dBA Leq contour with particular reference to the categories of data identified in Table 2.1 of CAP2091 CAA Minimum Standards for Noise Modelling
g)	Leq contour population counts (in thousands), area counts (in km ²), and noise sensitive area counts.	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Table format.	
h)	Description of prediction model and version number.	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Narrative.	
i)	Description of modelling assumptions, for example forecasts, modal split, route utilisation and respite.	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Narrative evidenced by supporting data (table format).	
j)	Supporting input data (for example movement logs).	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Narrative evidenced by supporting data (table format).	
Overflight and Operational Diagrams:				
k)	Operational diagrams (for example, radar track diagrams and track density diagrams).	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Operational diagrams overlaid on Ordnance Survey maps (or similar).	The sponsor should provide separate assessments of any change in climb and descent performance that results from implementing the proposal. The illustration of vertical profiles as depicted in the Consultation Feedback Report (Part B) should be used. A comparison between pre-implementation and post-implementation traffic patterns, for aircraft up to 7,000ft should be made. Arrivals and departures should be portrayed separately, using comparable and representative traffic samples. Diagrams should include illustrations of the spread of traffic, plus illustrations of traffic density.
l)	Calculation of overflight	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Table format.	

				Calculation of overflight population counts should use the same methodology as that used within the proposal. An additional assessment of overflight using CAA's CAP1498 Definition of Overflight may be provided.
m)	Supporting input data, assumptions and methodology.	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Narrative evidenced by supporting data (table format).	
Fuel and CO2 emissions:				
n)	Annual fuel and CO ₂ usage (tCO ₂).	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Table format.	Sponsor to provide an updated CO ₂ emissions assessment, using actual fleet mix, traffic numbers and radar data of routes flown to determine the annual impact on CO ₂ emissions. If the impact is assessed as positive, a qualitative assessment supported by explanation is adequate (narrative format).
o)	Per flight fuel and CO ₂ usage (tCO ₂).	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Table format.	
p)	Supporting input data	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Narrative evidenced by supporting data (table format).	
q)	Description of any modelling assumptions, including details of prediction model where used .	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Narrative.	
Tranquillity and Visual Intrusion:				
r)	Operational diagrams clearly identifying traffic over relevant AONBs and National Parks up to 7,000ft.	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Narrative and Operational diagrams overlaid on Ordnance Survey maps (or similar).	Tranquillity and Visual Intrusion diagrams may be combined with requirement k. The ACP concluded there is unlikely to be an increase in traffic over the National Parks and AONBs identified in Figure B3 of the submission. Additionally, the sponsor was expecting improvements in aircraft vertical profiles such that they will typically be higher over these areas.
Biodiversity:				
s)	Assessment of biodiversity factors including any specific to local circumstances identified through engagement.	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Narrative.	The ACP concluded that there are unlikely to be any impacts on biodiversity. The sponsor should provide re-confirmation with supporting evidence that the airspace change has not had an impact upon biodiversity factors identified within the ACP.

	Impact on International obligations	Required for the review?	Format of the data required.	Any information of relevance in support of the request.
a)	Details on any feedback from operators or neighbouring States.	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Narrative.	There are no international obligations associated with this airspace change

Impact on Ministry of Defence operations

		Required for the review?	Format of the data required.	Any information of relevance in support of the request.
a)	Details on any feedback from Ministry of Defence.	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Narrative.	Specifically relevant to the interaction with RAF Odiham operations

Stakeholder feedback

		Required for the review?	Format of the data required.	Any information of relevance in support of the request.
a)	Feedback/complaints received by the change sponsor and CAA in the period between implementation and post-implementation review.	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Narrative evidenced by supporting data (table format).	Although this is self-explanatory, we would expect the sponsor to undertake regular bilateral engagement meetings with both LGS and Southdown GC to satisfy the post-decision arrangement agreed by Manager AR and President LGS in March 2020.
b)	Details of location of complaints.	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Ordnance Survey map identifying pinned locations.	

Other information of relevance (if appropriate)

		Required for the review?	Format of the data required.	Any information of relevance in support of the request.
a)	<i>Transit GA traffic potentially rerouting around the CTR/CTA complex</i>	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	<i>Narrative evidenced by supporting data (table format)</i>	
b)	<i>[Insert data requirement]</i>	Yes <input type="checkbox"/> No <input type="checkbox"/>	<i>[Insert format]</i>	
c)	<i>[Insert data requirement]</i>	Yes <input type="checkbox"/> No <input type="checkbox"/>	<i>[Insert format]</i>	