



## FARNBOROUGH AERODROME CONSULTATIVE COMMITTEE

### MINUTES OF MEETING HELD ON 21<sup>st</sup> October 2021 Held Online with MS Teams.

#### In Attendance:

Philip	Riley	Chairman
Whittacre	Hope	Secretary
Chris	Axam	Hart District Council
Gareth	Andrews	Farnborough Airport Ltd
Joe	Barrass	Farnborough Airport Ltd
Rod	Cooper	Hampshire County Council
Ian	Dickson	NATS
Les	Freer	Farnborough Airport Ltd
Brian	Edmunds	Farnham Town Council
Wally	Epton	WJE Associates
Paul	Follows	Waverley Borough Council
Simon	Geere	Farnborough Airport Ltd
Sarah	Kinsley	Mytchett, Frimley Green & Deepcut
Norman	Lambert	Crondall Parish Council
Geoff	Marks	FARA
James	Radley	Hart District Council
Jenny	Radley	Fleet & Church Crookham Society
Gareth	Saunders	Church Crookham Parish Council

**Attendance: 47 Including the above.**

## Introduction

The Chairman welcomed the Committee to the fourth online meeting of the FACC.

He reminded all attendees that recording of the meeting was about to start.

The Chairman reminded members he had written on 11<sup>th</sup> October explaining why this meeting was being held online, adding he would prefer to have the meeting face to face when circumstances permit.

He made a few general points: everyone must bear in mind that the function of this Committee is to consider issues relating to the operations of Farnborough Airport and to communicate its views to the airport operator. It is not the role of the Committee to question whether or not there should be an airport at Farnborough nor to challenge whether certain users of the airport should be entitled to fly from it. The fact is that the airport operates in accordance with planning consents given by Rushmoor BC and in full compliance with the relevant UK CAA regulations.

The governance for the Committee follow DfT Guidelines for consultative committees.

### Item 1 Apologies Received:

Virginia Barrett	Farnborough College of Technology
Stephen Hunt	Farnborough College of Technology
Ben Gleeson	Farnborough International
Marwan Khalek	GAMA Aviation
Maurice Sheehan	Rushmoor Borough Council

### Item 2. Minutes of Meeting held on 17<sup>th</sup> June and 16<sup>th</sup> September and Matters Arising.

The Minutes of these meetings, had been circulated to members.

Actions from the Meeting:

1. *Action: Simon Geere agreed to outline Scope 1, 2 and 3 operational categorisations.*

Response issued with the papers for this meeting.

2. *Action: Simon Geere agreed to outline Scope 1, 2 and 3 operational categorisations and to indicate what measures it applies to reduce emissions in these areas.*

Response issued with the papers for this meeting.

3. *Action: The Chairman and James Radley will arrange a meeting of the Committee to take the review of the Constitution forward.*

Two meetings were held and MS Teams to progress this matter. A draft of a proposed new Constitution was presented, discussed and approved for recommendation by a special meeting of the Committee on 16<sup>th</sup> September. The final version of this document was issued with the papers for this meeting.

4. Action: Simon Geere agreed Farnborough Airport would respond to Mr Grants questions as asked of the Committee by Cllr Follows before the next FACC meeting.

Response issued with the papers for this meeting.

5. Action: The RBC Members on the Committee, Cllr Paul Taylor and Cllr Maurice Sheehan, to investigate the requirement in the 2012 planning approval for Farnborough Airport to develop a long-term SCCC and report back.

Circulated with papers for this meeting.

6. Action: Les Freer agreed to send the Secretary the CAA definition of Overflight.

The CAA definition of Overflight is to be found in CAA CAP 1498. Please see link below:

[CAP 1498 V2 APR17.pdf \(caa.co.uk\)](#)

Matters arising:

Jenny Radley - Fleet & Church Crookham Society, reminded the Committee that she had asked if the presentation by Alison Nichols – RBC relating to the Farnborough Airport Community Environment Fund could be put on the FACC website as requested.

Action: The Secretary agreed to arrange to put the Farnborough Airport Community Fund presentation from the June 2021 meeting on the FACC web-site.

Jenny Radley reminded the Committee that Les Freer – FAL, had agreed to review and update the content on the FACC website and asked when this would be done?

Les Freer said this was in progress. Jenny Radley asked if she could comment/assist him and the Webmaster in this process.

Action: Les Freer and Webmaster to continue the review and update the FACC website. JR to offer comments.

Jenny Radley reminded the Committee that Les Freer – FAL, had agreed to investigate why Farnborough Airport was not a designated airport under Section IV of the CAA Airports Act 1986.

Les Freer said he had talked to the CAA and written them a letter in this regard and would feed back any response.

Action: Les Freer to feedback any response from the CAA on the Airport designation question.

The Minutes of Meeting held on 17<sup>th</sup> June 2021 were approved by the Committee.

The Minutes of Meeting held on 16<sup>th</sup> September 2021 were approved by the Committee.

### **Item 3. Review and Approve New Constitution.**

The Chairman opened the meeting to discussion.

James Radley - Hart District Council, Geoff Marks – FARA, Brian Edmunds - Farnham Town Council and Jenny Radley made comments and suggested amendments to the draft of the constitution circulated by the Secretary. All amendments were discussed and those approved by the Committee will be added to the document.

The Chairman asked the Committee to approve and adopt the new constitution as amended.  
**The Committee approved adoption of the new constitution.**

To amend the Constitution the meeting needs to quorate, 50% of Members (13) need to be present and 75% need to vote in favour of adoption. 15 Members were in attendance and none voted against adoption.

The Chairman commented Woking Borough Council, Guildford Borough Council and Ewshot Parish Council will be invited to join the FACC.

*Action: Secretary to amend and circulate the New agreed Constitution to Members.*

*Action: The Webmaster will upload the New Constitution to FACC website.*

*Action: The Chairman and Secretary will contact Woking BC, Guildford BC and Ewshot PC to invite them to join the Committee.*

### **Item 4. Farnborough Airport Operational Update & Statement – Simon Geere.**

- FAL is seeing a strong recovery in traffic activity with August and September reflecting the return to pre-pandemic levels of demand.
- In terms of the rest of the year, it is anticipating it still to be below 2019 levels with the outlook remaining somewhat uncertain.
- FAL is progressing plans for developing a new hangar which will be situated in the middle of the airfield. This is being developed to meet the excess demand for covered aircraft parking.
- The CAA has advised FAL that the Post Implementation Review (PIR) for the Airspace Change Programme (ACP) has been pushed back until February next year. Les can clarify any further questions around this under Item 6 of the agenda.
- Since the introduction of sustainable aviation fuel (SAF), take-up has been quite slow. Whilst FAL has supply limitations, there is also general hesitancy around the new fuel technology itself and there is also a cost differential. Another consideration is that larger users already have their own offset programmes.
- FAL is in talks with a number of eVTOL (electric Vertical Take-off & Landing) aircraft manufacturers around research partnerships, looking at the viability and operational practicalities of this type of aircraft technology.

- From an awards and recognition perspective:
  - FAL was re-certified for ISO14001 in relation to our Environmental Management System;
  - FAL was also certified for the first time for ISO45001 for Occupational Health & Safety Management System; and
  - FAL won the best Fixed Base Operation award at the Air Charter Association.
- Occupancy at FAL's sister company, the Aviator Hampshire Hotel, has also been strong. About 40% of the rooms booked are to pilots and crew.
- FAL will run a Winter Wonderland event at the Swan pub between November and January. They would welcome support from members of the Committee.
- SG informed the Committee that the Farnborough Airport group of companies repaid all furlough money it had claimed under the UK government's support scheme, this included all the money claimed by its hospitality businesses of the Aviator Hampshire and the Swan, both of which were greatly affected by the pandemic. The board of FAL approved the return of all the financial support it had received to maintain employment throughout the pandemic. None of the group of companies made any redundancies and FAL is proud of the economic contribution it makes both at a regional and national level.
- Unfortunately, on Saturday 2<sup>nd</sup> October FAL experienced operational disruption and criminal damage by protestors. Whilst FAL fully supports the right to peaceful protest, on this occasion criminal damage was caused to the airside security fence, which put at risk the safety and well-being of the airport and its people. FAL has absolutely zero tolerance for such action and it looks to the Committee to reinforce this zero-tolerance position.
- At the last FACC, FAL agreed to provide further detail around their carbon emissions.
- The Committee has previously recognised that global Aviation generates 2-3% of Global Greenhouse emissions (GHG) and Business Aviation 0.04% (according to the Intergovernmental Panel for Climate Change, IPCC).
- FAL has engaged an external consultant to produce a report on Scope 1, 2 & 3 emissions. FAL will make this available in the New Year and develop metrics to track performance in relation to CO2 emissions. This will be reviewed annually.
- SG gave a snapshot of what FAL knows so far:

FAL emissions are approx 10,000 tCO<sub>2</sub>e (tonnes carbon dioxide equivalent) per annum, these are the emissions the airport has direct or indirect control of, or some influence over. A more accurate number will be provided as part of the external consultancy work. The majority of FAL emissions relate to the Landing and Take-Off (LTO) cycle of aircraft. Putting this into perspective:

- On an absolute basis, FAL emissions are a small fraction of those produced by any normal commercial passenger airport.
- A major UK regional airport can easily generate over 300,000 tons of carbon emissions per annum, whilst international hubs like LHR generate in excess of 2,000,000 tCO<sub>2</sub>e pa. Many UK airports publish this data.

- On an air traffic movement (ATM) basis, FAL emissions are only a small fraction of those generated by much larger commercial passenger airports.

Naturally business aviation has a very different passenger profile to commercial airlines, with fewer passengers per flight. However:

- FAL is a business aviation airport and has restrictions on the types of flights it can handle. In particular it is not allowed to handle scheduled flights or inclusive tour flights. These scheduled or tour flights would have a lower carbon emission profile per passenger but generate significantly higher carbon emissions.
- If FAL was a normal commercial passenger airport its emissions would be over ten-fold what they are today.
- Over 50% of a normal commercial airport's carbon emissions relate to surface access from passengers.
- The low passenger numbers at FAL mean that there are hardly any surface access emissions or associated traffic congestion issues.
- A commercial airport with a similar number of air traffic movements would, on a conservative estimate, generate in excess of 50,000 tCO<sub>2</sub>e from surface access alone. FAL generates approx 10,000 tCO<sub>2</sub>e in total.
- All this said, FAL recognise there is work to do on those emissions that it has control or influence over:
  - FAL is a growing business and recognises that its emissions profile per passenger is different to a normal commercial passenger airport, as is its total carbon footprint.
  - FAL will establish appropriate measures for tracking our emissions performance and report back to the FACC in due course.

### **Questions**

James Radley – Observed the carbon footprint per mile of a business aviation passenger as compared to a commercial aviation passenger, would be very different.

Brian Edmunds – Wanted to congratulate FAL for paying back all Furlough Funding it received from the Government.

Commenting on SAF he asked if the fuel had any other negative issues?

Les Freer – Said no, it did not.

Sarah Kinsley - Mytchett, Frimley Green & Deepcut, asked Simon, was the carbon figure he quoted net of offset? [In other words, did the number quoted include the benefit of any carbon offsetting arrangements?]

Simon Geere – Answered no.

Jenny Radley – Pointed out that 10% of reported travel movements in February '21 related to 'other aviation activity' and asked if this could be broken down? Could it be that this 'higher than average monthly figure' related to clients taking flights for leisure purposes during the half term break, as mentioned in previous years?

Gareth Andrews – FAL agreed to do this.

**Action: Gareth Andrews to provide a breakdown of the 'other aviation activity' figure in February 2021.**

#### **Item 5. Farnborough Airport Reports – Gareth Andrews.**

The Reports provided to the Members 'were taken as read'.

##### **Questions.**

Gareth Saunders - Church Crookham Parish Council asked why, in the latest Complaints Report, there are something like 36 instances where "aircraft not on perceived track" have been excused by "ATC instruction " ?

His understanding of the ACP was that it would give certainty to all over where Farnborough-related traffic would be operating, and had been designed to reduce the amount of people overflown in the local area. ' I get the need to keep aircraft apart, but averaging more than two a week in the reporting period makes it seem like it is becoming "standard practice" '. From his home in Church Crookham he has seen numerous aircraft leaving the STAR and being given a short cut - why is this, when the arrival route is clearly-defined ?

Ian Dickson – NATS responded, if no conflicts exist ATC will leave aircraft on their respective SID (Standard Instrument Departure) and STAR (Standard Arrival) tracks, however often, when an inbound and an outbound aircraft are operating at proximate times, It is necessary for ATC to issue tactical interventions to ensure that 3nm lateral separation is achieved between the flights.

ID is happy to discuss this with Mr Saunders, using real life ATC scenarios to demonstrate this rationale.

ATC at Farnborough do not routinely provide aircraft with 'shortcuts' and keep aircraft on the consulted track as accurately as possible.

Jenny Radley – mentioned 38 pages of the Complaints Report seem to mainly relate to one individual in Hindhead. Are FAL doing anything to approach this person?

Simon Geere – The individual has been invited to the airport but has to date not accepted.

Chris Axam - Hart District Council, Jenny Radley, Geoff Marks and Gareth Saunders all suggested it would be better if the Complaints Report could distinguish between these complaints to make finding complaints from other areas easier to find.

Gareth Andrews – Agreed he would re-order the Complaints Report in future.

Geoff Marks – asked who was the FACC Representative for this individual?

**Action: Gareth Andrews will liaise with the Secretary to facilitate contact with the individual complainant concerned.**

**Action: Gareth Andrews will re-order the Complaints Report in future.**

#### **Item 6. Update on Airspace Change Proposal – Les Freer**

All members will be acutely aware that due to COVID-19 and its impacts on air operations around the globe, including in the UK, the CAA suspended the PIR (Post Implementation Review) data collection in August 2020. In Feb 21 a further delay was announced with a commitment to undertake the review in Oct 21.

The CAA has reviewed this position once again and it is their view that the ongoing effects of the pandemic on the use of airspace continues to result in a very different use of available airspace. In their view the data collected over the last 18 months, under both CAP765 & CAP1616 (stage 7 annex H), would not be suitable for the purposes of conducting a proper PIR.

As such, the CAA has taken the decision to further delay the re-commencement of PIR data collection until Feb 2022, at which point it will review the situation again. LF appreciates this may be frustrating, but if the CAA used the last 12 months ARR / DEP data this would of course have been very swayed towards the airport due to lower ATM's.

#### **Background to ACP PIR**

Whilst the impact of any particular Airspace Change can usually be simulated and the subsequent outcomes predicated, there may be unpredicted consequences that appear once a change is actually implemented. These consequences could be safety related, operational, technical, or environmental. The PIR would usually commence 12 months after the change has been implemented.

PIR's provide a rigorous assessment by the CAA, as the independent regulator, of whether the anticipated impacts and benefits, set out in the original ACP proposal and decision, were delivered, and if not to ascertain why, and to then determine the most appropriate course of action.

The PIR is necessary to identify any subsequent requirements that may be required to further modify flight procedures or the airspace structure, the need for which can only be determined after a period of operational experience post ACP implementation.

The PIR **does not**, however, set out to re-run the original decision associated with the Airspace Change.

#### **The PIR Process**

Data and analysis required by FAL to be collected under the original terms of the PIR and will be published on the on-line portal.

After this data is published, stakeholders will have 28 days in which to submit any evidence or views on the data that they want the CAA to take into account. FAL will make relevant stakeholders aware (including those who responded to the initial consultation) to direct them to the on-line portal to submit any feedback. No assurances can be given by the CAA for submissions submitted outside of this timeline. We are receiving a lot of questions that are related to this process, in some cases with questions about what else could be included and this is the forum to channel these into.

The CAA will aim to publish the results of a PIR within three months of receipt of FAL's data. The outcome of the PIR can lead to two possible outcomes. The CAA may decide to:

1. Confirm that the implemented design satisfactory achieves – within acceptable tolerance limits – the objective and terms of the CAA's approval; or
2. Require FAL to modify elements to better achieve the objective and terms of the CAA's approval.
  - a. Once the modifications have been implemented and operated for a period (usually 6 months) there are three further possible outcomes:
    - i. Noting that any modifications didn't better achieve the objective, then the CAA may conclude that the original design was satisfactory and thus confirmed.
    - ii. Noting that the modification did not better achieve the objective and terms of the CAA' approval, the CAA may conclude that the original design was 'not satisfactory'.
    - iii. The CAA may conclude that the modifications do better achieve, within acceptable tolerance limits, the objective and terms of the CAA's original approval, and confirm the design.

It is important to remember that FAL's ACP was carried in line with the requirements of CAP725 and is now being reviewed under CAP1616.

#### **Questions.**

Geoff Marks – Thanked Les for an informative explanation, he added that the CAA PIR criteria appeared to be moving towards those he has mentioned i.e. CAP1616. He added that understanding the detail of the inputs/measures/outputs was very important. Residents need to understand how noise will be measured.

Jenny Radley – Asked if FAL would undertake to present the ACP and PIR at local community events, as agreed in the past before Covid-19 disrupted the plans? It would especially benefit residents new to the area.

Les Freer – Said, PIR requires the Airport to undertake a feedback process with the original local stakeholders and FAL would do that. He made the point, the ACP consultation was not being re-opened.

#### **Item 7. Members Questions, Questions from Members of the Public.**

##### **Members Questions**

Geoff Marks submitted a number of questions, thoughts on Public Safety Zone (PSZ) and Noise Metrics. These, with answers from FAL, are attached. He was looking forward to his meeting with RBC and FAL in this regard.

Les Freer – Thanked GM for all his input and told the Committee he has a meeting with RBC regarding PSZ on 10<sup>th</sup> November. He would send out a communication after that.

## Questions from Members of the Public

Colin Shearn - Farnborough Noise – Submitted a number of questions to the meeting, these are attached along with answers from FAL.

Mr Shearn asked why FAL had cancelled his meeting with NATS the previous week?

Les Freer - Responded that he had taken the decision and asked NATS to postpone the meeting for safety reasons ( following the events of the previous weekend). Les Freer invited Mr Shearn to meet with FAL.

Hugh Sheppard – CPRE Hampshire - Submitted a number of questions, these are attached with the responses from FAL, and he spoke to them.

Mr Sheppard feels that FAL should disclose the split between flights for business and those for pleasure.

Simon Geere answered that the Airport has no information on this.

Mr Sheppard, referred to his question relating on the issue of overflying Areas of Natural Beauty (AONB) and the answers provided by Ian Dickson to Mr Shearn.

A conversation ensued between various members including Cllr Saunders, Mr Shearn, Mr Sheppard with FAL and NATS representatives.

FAL and NATS to review the questions and responses and respond further as necessary.

**Action: FAL and NATS to review the questions and responses to Mr Shearn and on AONB.**

The Chairman referred to emails received by the FACC from Frensham Parish Council and Worpleston Parish Council. He suggested that in the first instance the issues raised should be directed to the local FACC Representative to assist.

Colin Shearn – Commented that the CAA/PIR should look at the knock-on-effect of Airspace Change Proposal (ACP) on general aviation (GA).

Joe Barrass – FAL - Responded that GA could do what it wants, FAL has no influence over it.

Jules Crossley - Blackwater Valley Friends of the Earth- Reminded the Chairman that BVFoE had already made a written application to join the FACC.

Jules Crossley -Said that Mr Geere refers to the economic benefits of the airport to the area. Was there any real evidence for this?

Simon Geere - Responded, FAL and RBC are looking to co-commission an economic review of the Airport's impact on the local economy, he anticipates this will be available next year.

**Item 8. Matters Raised by the Committee not on the Agenda.**

Chris Axam and Gareth Saunders asked how the new environment member on the Committee would be selected and when would that person be appointed?

The Chairman mentioned that as this decision had only been approved at this meeting, little thought had been given as yet to the selection process, but the qualifying criteria were detailed in the new Constitution.

James Radley – Suggested that once applications had been matched to the criteria, those organisations who were selected as viable should be invited to present themselves to the Committee.

The Chairman suggested that they would publicise the vacancy for the seat on the FACC website in the local press.. He proposed that the deadline for applications should be before Christmas, maybe on the 15th December.

**Action: The new role on the Committee would be advertised in the local press and on the FACC website by 15<sup>th</sup> December.**

There were no other matters raised by the Committee not on the Agenda.

**There was an additional question from the Public.**

Geoffrey Pierson – A resident in the village of Churt in Surrey explained that the village is being constantly overflowed. Why was this, what is happening, when will it stop? Mr Pierson described 15 flights per hour overflying his home.

Simon Geere, asked Mr Pierson to contact him with the details.

**Item 9 Date of Next Committee Meeting.**

The next meetings of the Committee will take place on:

**Thursday 24th February 2022**

**Thursday 23rd June 2022 and**

**Thursday 27th October 2022.**

Medium/Location to be advised.

**The Meeting was declared closed.**

## **ACTIONS FROM MEETING HELD ON 21<sup>st</sup> October 2021**

- Action 1:** The Secretary agreed to arrange to put the Farnborough Airport Community Environment Fund presentation from June 2021 on the FACC website.
- Action 2:** Les Freer and the Webmaster to continue to review and update FACC website. JR to offer comments.
- Action 3:** Les Freer to feedback any response from the CAA on the Airport designation question.
- Action 4:** Secretary to amend and circulate the New Constitution to Members.
- Action 5:** The Webmaster will upload the New Constitution to the FACC website.
- Action 6:** The Chairman and Secretary will contact Woking BC, Guildford BC and Ewshot PC to invite them to join the FACC.
- Action 7:** Gareth Andrews to provide a breakdown of the 'other aviation activity' figure from February 2021.
- Action 8:** Gareth Andrews will liaise with the Secretary to facilitate contact with the individual complainant from Hindhead.
- Action 9:** Gareth Andrews will re-order the Complaints Report in future.
- Action 10:** FAL and NATS to review the questions and responses to Mr Shearn and Mr Sheppard on AONB.
- Action 11:** The new role on the Committee would be advertised in the local press and on the FACC website by 15th December.

## FACC Meeting – 21<sup>st</sup> October 2021.

### Thoughts on Noise Metrics by Geoff Marks - FARA

At the February Meeting a member of the public asked what measures will be put in place to monitor noise after ACP/PIR?

Miles Thomas - FAL Responded saying Section 106 details routine noise monitoring requirements to which FAL complies. Additional noise monitoring and modelling did not form a part of the approved Airspace Change Proposal (ACP) process and will not form a part of the associated Post Implementation Review (PIR).

After a discussion on the subject Chris Axam suggested and Geoff Marks kindly agreed, to take an action to “ **provide some thoughts on noise metrics**”.

Please note, both the questions and answers are Geoff’s alone; his aim being to explain the technicalities of noise metrics to the Members.

Many thanks Geoff.

### Some Thoughts on Noise Metrics:

As noise metrics are described in depth by the CAA in its CAP1616a, and in the absence of a more specific mandate, the following offering is a Q & A focussed on the noise metrics invoked in the S106 legal agreement and then, briefly, on measures that could enable better communications with the wider overflowed communities..

The most widely used noise measurement is the LAeq metric. The recently disbanded Independent Commission on Civil Aviation Noise (ICCAN ) defined LAeq,T as “ ***a notional continuous A – weighted sound level over a given time period, T, that contains the same amount of energy as the actual time varying signals over the same time period***”. ICCAN went on to emphasise the essential need to define the time period (T) over which the LAeq is measured, the applicable days of the week, and whether the average number of daily noise events are an ‘annual daily average’ or a ‘3 month summer’ period (eg an annual daily movement being the total number of annual movements divided by 365).

LAeq is a concept that is not easily grasped. The ‘L’ is short for level; eq is an abbreviation of ‘equivalent’ noise generated by a number of noise events above a certain threshold over a given time ( note that equivalent is not an average level of noise); and the ‘A’ denotes the range of noise frequencies that the human ear can hear. The level of the ‘equivalent’ sound is expressed as a number of dB – a dB being one tenth of a Bell (the Bell being the unit of sound pressure named after Graham Bell).

### **Question 1. Why is the ‘T’ applied in our case 16 hours and not the 15 or 12 hours that the airport is open on week days and weekends respectively?**

One plausible explanation is that 16 hours is a ‘standard day’ time between 0700 and 2300 hours, and as it is universally applied it enables comparisons with other airports to be drawn in Environmental Impact Assessments. LAeq 16 hour contours will be marginally smaller than 15 hour contours, but significantly smaller than 12 hour contours.

**Question 2. Do the contours invoked in the planning agreements comply with ICCAN's precise definition?**

Clause 12.1 of the current S106 agreement under the heading 'Specific noise limits' says "For up to 50,000 Aircraft Movements such Aircraft Movements other than Other Aviation Activity shall not exceed 72% of the land area with the 55 dB(A) Leq contour\* (& 2.5% being 6.6 sq km) and shall not exceed 60% Of the total land area within the 60dB(A) Leq contour (being 2.4 sq km)". They do not fully comply inasmuch that (a) the limits fail to recognise that a single set of contours cannot apply to both weekends and weekdays given the differences in opening hours and permitted number of annual movement and (b) whilst the conversion of a number of individual noise events into a continuous wave is an 'averaging' process it is not an 'average' level of noise; whereas the number of movements must be as specified – ie as an 'average' number or, as in our case, a 'never exceed' number.

**Question 3. Are the contour areas modelled on the basis of 50,000 BA movements per annum?**

The Environmental Assessment produced by Bickerdyke Allen Partners in support of the 2009 planning application refers to 'Annual Contours' and notes at paragraph 11.6.3. that "***The contours take into account Business Aviation movements as well as Other Aviation Activity movements that are not subject to the planning restrictions.***" The number of movements and its mix is unclear given that, contrary to the S106, an undisclosed number of Other Movements was included in the modelling process.

**Question 4. Are there any other modelling factors to be considered?**

Yes. Unless otherwise specified the contours are modelled on the basis of reciprocal runway use. This is also an averaging process that will always understate noise as portrayed by the contours. The CAA, in its CAP 1616a, describes single runway use under the heading "***100% mode contours***". Modelling on the basis of single runway use over time T would result in 2 contours – one for each runway.

**Question 5 Can the contour areas invoked in the S106 be amended?**

Clause 2.1(b) of the current S106 says that "***where a noise benefit can be demonstrated then subject to reaching prior agreement in writing with the Council (all parties acting reasonably) the site can be operated within a noise budget defined by noise contours of differing land areas or positions***". This clause is effectively carried forward as a Local Plan policy, which differs from the S106 only in as much that a reduction in contour areas is not just at FAL's instigation, but also a prerequisite of Rushmoor's determination of any future planning application; its specific policy being "***proposals to change the pattern, nature and /or number of business aviation movements will only be acceptable if they lead to a noise contour budget smaller than the agreed noise contour budget determined as current at the time of the application for change.***"

**Question 6. Has the airspace change triggered contour changes?**

Not so far. The reasons, perhaps, being (a) there might be very little change as the impact assessment was based on 32000 movements per annum and not the full 50,000, and (b) the contours do not extend to the point where aircraft exit the take-off phase and are vectored by the local air traffic controllers (ATC) to join the new PBN routes (Performance Based Navigation). Rather than rely on contour changes, FAL projected reductions in the number of people overflown at heights below 4000 feet. It is for the CAA to assess, through its Post Implementation Review (PIR), whether the claim is valid. A robust approach could entail pre and post airspace change modelling of the larger 51dBA Lowest Observed Adverse Effect (LOAEL) contour coupled with 'secondary' Nx contours.

**Question 7. What are Nx Contours, and would they be an appropriate supplementary metric in our case?**

Nx contours are a very simple concept. The CAA's opening statement in its CAP 1616a is "*Nx contours show the locations where the number of events ( ie. flights) exceeds a predetermined noise level, expressed in dB L<sub>max</sub>*". Given that aircraft fly at heights below 4000 feet over areas that extend well beyond our existing Laeq contour boundaries, and that the mitigation of noise generated by aircraft operating below 4000 feet has priority over fuel burn, Nx contours must be a useful tool to be used in determining PBN routes and any respite measures.

**Question 8 How should daily compliance with limiting contours be demonstrated?**

The S106, under the heading '*Predictive modelling*', sets out 4 provisions the first of which says "*t the end of the second quarter in each year the INM model will be used to produce noise contours based on a 6 months annual movements and a second set of theoretical contours for the next 6 months*" This averaging process is unnecessary. For the reason set out in the answer to question 2, unless changes in the daily mix arise (in which case modelling would be required on a daily basis) compliance is simply established if the actual number of daily movements fall below the number assumed in the modelling process.

**A Conclusion**

Laeq contours do not, according to many noise experts including the CAA, "*properly represent the impact and effect experience.*" Confirmation that the Laeq contours are modelled on the basis of a maximum number of daily movements, as opposed to an 'average' number, would be a welcome step for those who are overflowed. LOAEL and Nx contours would also be beneficial as they would quantify noise impacts over more of the affected areas, and thereby inform decisions aimed at mitigating noise.

Geoffrey Marks OBE

October 2021.

## Members Questions, Questions from Members of the Public

### Public Safety Zone (PSZ) Consultation Questions – Geoff Marks – FARA.

Dear Secretary,

I assume PSZs will not be an agenda item for next week's FACC. Under AOB, and unless circumstances change between now and next Thursday, I will draw attention to the following.

Papers given to members at the February meeting included Rushmoor's response to the CAA's Public Safety Zone (PSZ) consultation. The revised policy is posted on the CAA website. It can be accessed via the following link:

<https://www.gov.uk/government/publications/control-of-development-in-airport-public-safety-zones>

The policy starts with a diagram illustrating inner (red) and outer (blue) zones; the former denoted '1: 10,000' and the latter '1:100,000'. These numbers are the current upper and lower annual individual risk thresholds that inform the current PSZs.

The revised policy introduces fixed zones that are no longer defined by modelled annual individual risk. They are significantly smaller to reflect the evidence that a crash involving third parties is likely to be closer to the airport boundary than previously assumed. That said the policy continues to recognise that the risk of a catastrophic event increases as the number of movements increase as it says "PSZs need to be redefined if there is an increase in commercial traffic movements (ATMs) on the runway."

The policy also says "The basis of the policy of restricting new development within PSZs is constrained to a cost benefit analysis." It goes on to explain "The cost versus benefit analysis is a risk appraisal principle under which individual risk is reduced to a tolerable level (my emphasis) irrespective of cost and then further reduced only if the benefits of doing so exceed the costs."

If PSZs are to be redefined if permitted movements are increased, and if the CBA upon which the land use policy continues to rest takes into account individual risk tolerability thresholds, then the establishment of smaller fixed zones will constrain the number of movements to a level below that permitted by the present larger PSZs, unless the crash rate applied in a modelling process is significantly reduced. This must be an unintended consequences that FAL and Rushmoor will wish to consider.

Geoff Marks, OBE

Les Freer FAL – Thanked GM for all his input and told the Committee he has a meeting with RBC regarding PSZ on 10<sup>th</sup> November. He would send out a communication after that.

## Members Questions, Questions from Members of the Public

### Airspace Change Proposal - Post Implementation Review Questions- Geoff Marks – FARA.

Dear Secretary,

I assume the airspace change PIR will figure on the upcoming FACC agenda. In updating the committee it would be helpful if FAL would address questions stemming from the following post on the CAA's airspace change portal:

*“For the Farnborough ACP, the CAA is not planning to extend the suspension for the commencement of PIR Data collection beyond 1 October 2021. If aviation has not recovered sufficiently by this time to enable meaningful collection of PIR Data, the CAA may reconsider or look for alternative approaches to PIR data collection/consideration. To satisfy a typical and accurate measure of all aviation activities is realised, a 12-month period will be measured. Farnborough will additionally provide the CAA with data after 6-month period in accordance with the Secretary of State guidelines, but not for publication. A meeting is planned for September 2021 to review the strategy”.*

Appendix B to the Consultation Feedback Report notes that the projected impact assessments are based on a forecast of 32000 annual movements, a long way short of the level permitted under the planning permission.

Q1

Do acceptable alternatives to PIR data collections exist? If so what are they? Whether or not they exist then:

**FAB will conduct the PIR in accordance with the CAA's requirements, following CAP1616.**

Q2

What are the projected levels of air movements over the next 12 months on weekdays and at weekends, including non FAL air traffic both within its controlled airspace and that utilising the bordering uncontrolled airspace corridors?

**As per the Airports S106 agreement business aviation movements are capped at 50,000k p.a with weekend movements accounting for 8,900 of these. For 2022 FAB are predicting the market to normalise to pre-pandemic levels.**

**FAL do not know the predicted movements for our neighbouring airports/ General Aviation flyers, therefore cannot comment on aircraft utilising bordering uncontrolled airspace. FAL can, however, say that aircraft are able to request entry into the Farnborough Controlled Airspace structure and there have been very few instances where this entry has not been facilitated.**

Q3

Assuming the levels enable an “accurate” comparison of the projected benefits and adverse environmental impacts, can this be satisfactorily ‘scaled up’ to predict the safety and environmental impacts should the planning limits be reached?

**FAL aren't looking to increase agreed planning limits.**

Q4

On what grounds is the data to be collected by FAL over the first 6 months of the trial period to be withheld from the public domain?

**As outlined above in 'PIR process' section**

Kind regards, Geoff Marks, OBE

October 2021.

## Members Questions, Questions from Members of the Public

### Questions from Colin Shearn - Farnborough Noise

Answers in red.

**N1:** Many aircraft are not following the flightpaths defined in the controlled airspace changes, aircraft are circling and more people are being overflown by aircraft not flying direct routes to/from Farnborough. This is against the argument put forward in the original 2012 consultation. When complaints have been raised, FAL has said that NATS directed the flights to fly a different route so no breach will be recorded. Regardless of who directed the flights, they are impacting the public on the ground. Why are these variations not being registered as breaches?

All aircraft are planned to operate as close to the centre line of the consulted flight paths as possible. There are occasions where tactical ATC intervention is required to manoeuvre aircraft away from the 'centreline' and may be required to be vectored for traffic sequencing, holding for weather/technical reasons etc.

As per the ACP consultation documentation (Part B figure B10 & B11) Runway 24 and Runway 06 arrivals will most likely be vectored close to the consulted flight path centreline, however the consultation did make allowances for arrival to be vectored in a wider area that follows the same general area, albeit with wider tolerances, and finally, the consultation allows for occasional arrivals to be vectored in a much wider area if needed.

**N2:** When aircraft don't follow the defined flightpaths and complaints are submitted, FAL has stated that it is only responsible for the course flown by aircraft within 3 miles of the runway. It doesn't matter who is responsible for them, they are disturbing residents and breaches must be recorded. Why is FAL not recording and following up on these breaches?

FAL understand that aircraft may cause disturbance and can be recorded as a complaint. FAL are not quite sure what you mean when you refer to 'breaches'. Please clarify which regulations are being breached by aircraft? Breaches are a cause for concern for all parties and can be reported to the appropriate regulatory authority.

FAL aims to monitor the three miles of approach and departure to make sure aircraft fly in an acceptable manner of nearby communities. FAL in no way audit air traffic performance, if there are significant/unwarranted deviations they will be recorded and reported onward.

**N3:** FAL has stated that aircraft noise is only recorded at Farnborough Airport but this is not the only place that aircraft noise disturbs the public. The PIR needs to include monitoring of aircraft noise where there is an impact – be that 3 miles away or 10. This is especially the case for people living under the designated flightpaths. Will the PIR include noise monitoring in areas further away from the airport?

The PIR review of FAB's ACP will be carried out as per the requirements of CAP1616. As part of this process the CAA will seek feedback and opinion from original stakeholders who will then have the opportunity to make suggestions such as these for consideration in the PIR process.

**N4:** The changes in controlled airspace have had a direct consequence on other commercial aircraft (such as helicopters) and General Aviation that is now flying much lower than before and is therefore noisier. This needs to be considered in the PIR. What will be the scope of the PIR to ensure that all the various impacts of the new controlled airspace and the operations at FAL are considered?

As per N3.

**N5:** Commercial aircraft (such as Castle Air and Arena Air helicopters) are avoiding flying through Farnborough's controlled airspace and using the open airspace at heights of 1,500 – 2,000ft and travelling at 500mph. This is dangerous and noisy. What percentage of General Aviation is requesting access to Farnborough airspace? Why aren't these aircraft required to use controlled airspace?

All radio equipped aircraft are eligible for access into Farnborough's Controlled Airspace. FAL do not know what % of aircraft request access; however, FAL do know that access has very seldomly been refused. Farnborough Airport or ATC has no influence on the behaviours of General Aviation aircraft or the rules they are required to operate to. This is a matter for the CAA, and a CA 939 (ABNAL) report should be submitted if it is believed a pilot has contravened UK Aviation Legislation.

**N6:** There are noticeably more scheduled flights to/from Heathrow and Gatwick that are passing this area at 7,000 – 9,000 feet. Why has this changed in the past year?

Farnborough Airport or ATC have no influence on the flight paths at Heathrow or Gatwick. There has been no published change to their procedures (if there was, an ACP would likely be required). This matter should be raised with NATS En-Route Limited (NERL) and/or the CAA. It should be noted that NERL have no material connection to NATS Farnborough, as they are a government funded organisation operating under license, and therefore at arm's length from NATS Farnborough.

NERL provide the approach services for Heathrow and Gatwick as well as En-Route ATC for the London TMA from Swanwick centre.

**N7:** The 'Air Navigation Guidelines 2017' state that National Parks and Areas of Outstanding Natural Beauty should not be overflown below 7,000ft unless there is no possible avoidance. British Helicopter Association guidelines state aircraft should fly as high as possible to avoid noise disturbance to people on the ground. Clearly, these regulations and guidelines are being breached every day. What are the CAA/NATS/FAL doing to address this problem caused by the airspace changes resulting from FAL's operations?

Response from ID:

- ATC do not ensure aircraft are operating in accordance with the Air Navigation Order- we are not the police.
- We have no knowledge of the locations of AONB.
- Within Controlled Airspace it would not be practicable to operate above 7000ft at all times.
- VFR flights are free to track over the ground on their own navigation, ATC may offer routings to them, however, the exact track is up to the pilot.

Despite having introduced controlled airspace in Feb 2020, GA pilots have the right to transit through Farnborough's controlled airspace (subject to ATC approval). For safety reasons, they are often requested to remain below a certain altitude during the transit. In uncontrolled airspace (class G), pilots are free to roam as they please, this is a matter for the CAA (as previously mentioned in N5).

**N8:** FAL has stated that Sustainable Aviation Fuel (SAF) is available at Farnborough. While this fuel is not 'sustainable' as it is derived from fossil fuels, the data on its performance is provided in its undiluted form. I believe it is diluted with non-SAF fuel. What is the % blend of SAF with standard fuel? What is the relative cost vs standard fuel? What has been the take-up? Approximately how much has been sold? Where is the fuel coming from (Neste has facilities in Rotterdam but plans to supply from Singapore)?

Below is a link to information FAL have made publicly available.

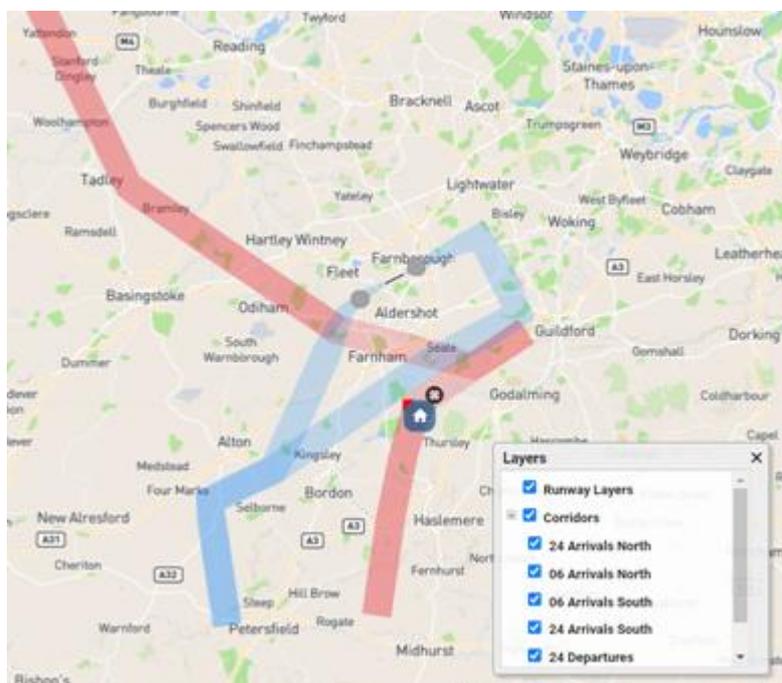
<https://www.farnboroughairport.com/wp-content/uploads/2021/07/Farnborough-Airport-Introduces-Sustainable-Aviation-Fuel-for-Lower-Emission-Flights-V2.pdf>

## Members Questions, Questions from Members of the Public

### Questions from Colin Shearn - Farnborough Noise

#### Understanding-

Q1. What are the flight paths for east/west, north/south, departures/arrivals. It seems the paths on Webtrak aren't complete or aircraft aren't following them



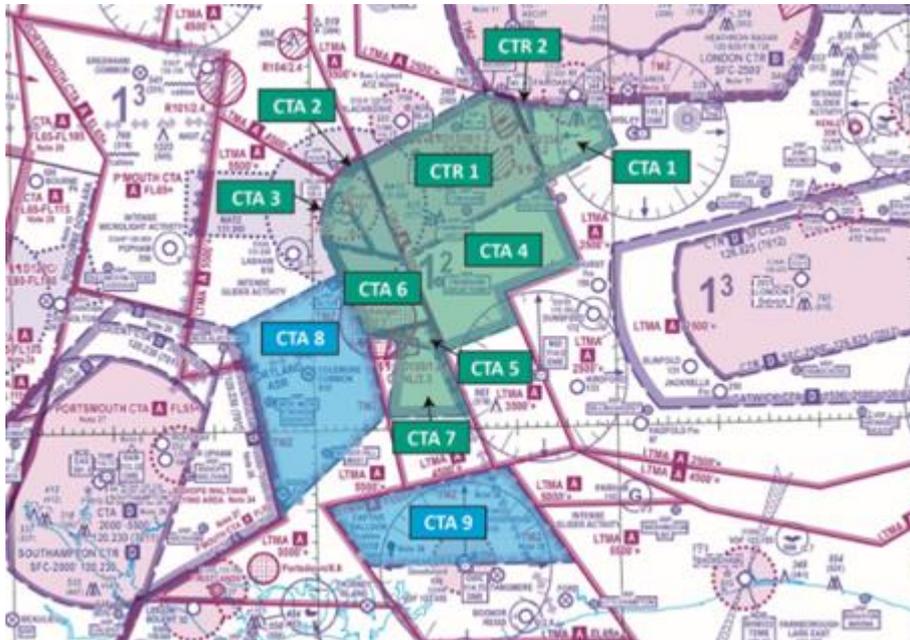
A1. The Blue tracks are the Standard Instrument Departures (SIDs) and show the complete routes from both Runway 06 and 24 until the aircraft are handed off to the next ATC agency.

The Red tracks show the Standard Arrival Routes (STAR) from the North and the South. The STAR ends at a hold called VEXUB, which is just short of Guildford.

In order for ATC to transition aircraft from the STAR onto final approach, an amount of vectoring (steering) is required. For Runway 24, this is simple and only requires a left turn of 90 degs (Base Leg) and then a further left 90 deg turn onto final approach. Runway 06 however, is more complicated, with it being less desirable for aircraft to make their turn towards VEXUB (as this elongates the mileage the aircraft will fly, and also exacerbate any conflicts between arrivals and departures). Before the STAR makes its right turn, ATC will provide vectors towards Odiham in order to be further steered onto final approach for runway 06.

These are the 4 main routes into/out of Farnborough, and are captured on webtrak, apart from the final ATC vectoring element as described above.

Q2. Previously, GA was flying up to 3,400ft. Now, the ATC “floor” for CTA4 is 2,500ft. Minimum vertical separation is 1,000ft. There are a lot of GA aircraft breaching 1,000ft minimum height regulations. Does NATS have the capability to track these by radar (many are ‘below the horizon’ from Farnborough)? The CAA won’t accept reports using web services like FlightRadar24.



A2. The base of LF CTA 4 is indeed 2500ft. ATC will not operate at the very bottom of an airspace volume as aircraft outside of controlled airspace (underneath) are allowed to operate right up to the base (2500ft in this case) and still be classified as remaining outside. 500ft separation can be used in this instance as the traffic inside the airspace is IFR (instrument rules) and the traffic outside VFR (visual rules). In this IFR vs VFR, no standard separation is required, ATC are simply required to inform both pilots of each other’s presence.

The 1000ft above built up areas rule contained within the Air navigation Order is a rule that the pilot is required to observe, and it is not for ATC to enforce. Pilots should be cognisant of the height of the terrain below them and adjust their altitude (height above Mean Sea Level) to remain 1000ft above the ground whilst remaining outside of controlled airspace.

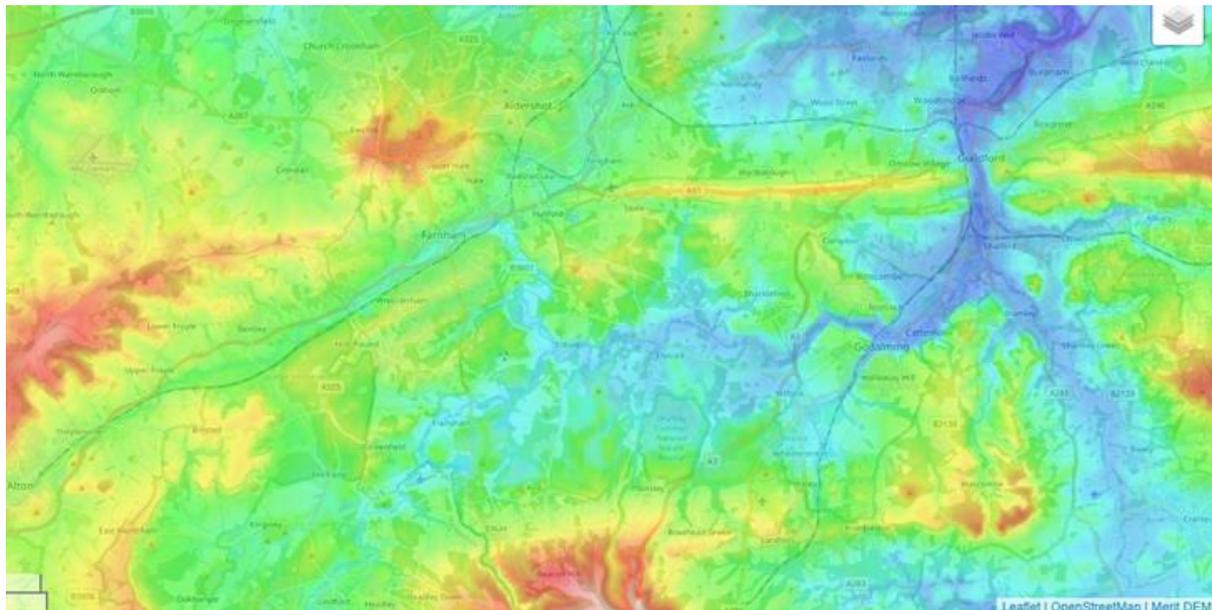
If entry into controlled airspace is requested, this will likely be granted by ATC.

I understand from the CAA that if a digital photograph is taken of a suspected low flying aircraft using a DSLR with a know lens focal length, analysis can be undertaken to ascertain the height of the flight. This would be in support of a CA939 report that would need to be submitted by the reporter.

Q3. Aircraft heights reported are “ASL” but ground here is 250 – 600ft so frequently below 1,000ft “AGL”. How do pilots stay above 1,000ft AGL?

A3. As mentioned above, it is a requirement on the pilot that they are aware of the terrain that they are flying over, and that they adjust their altitude appropriately.

Q4. Farnborough ATC has meant GA is having to fly lower. The topography means most GA is flying through the Guildford Gap then Godalming/Tilford/Alton over the same people (blue areas below) to have more airspace between the ground and ATC floor.



A4. The airspace above Guildford has not changed, this is long standing London TMA, which has a base of 2500ft.

ATC cannot influence if pilots wish to operate their flights at a lower altitude than they previously have, however, ATC have the procedures and staffing available to facilitate entry into controlled airspace for GA pilots wishing to operate at higher levels. Farnborough ATC have allowed many aircraft into the controlled airspace and have refused/delayed very few.

#### Questions

1. Why are aircraft still sometimes circling over the area before landing? (should be held at altitude earlier in the flight) **Answered in other Q&A's**
2. Why are northerly arrivals flying south over Farnborough/Farnham before turning north then east to land? (Increases the number of people overflown) **This is the consulted flight paths, all arrivals into Farnborough will fly on a southerly circuit prior to landing.**
3. Why are some aircraft not following the defined flightpaths? (I'm told NATS is directing flights on different paths – why?) **Answered in other Q&A's**
4. A flight that doesn't follow the correct path is only a "breach" when it is less than three miles away from the runway (Why – it is disturbing people further away than 3 miles so should be recorded as a breach) **Answered in other Q&A's**
5. What percentage of General Aviation is requesting access to Farnborough airspace? Most GA is now flying under it **Answered in other Q&A's).**

6. What height would you expect GA to be flying at under Farnborough airspace. Outside the airspace it should be 7,000ft (Air Navigation Guidance 2017). They could fly at 2,500ft so why are they flying at 1,000 – 1,500ft? **GA crews are free to operate how they see fit as long as they are in accordance with the Air Navigation Order and remain clear of Controlled Airspace (unless they have clearance to enter). If any breaches of the ANO are suspected, the CAA should be informed via CA939 (ABANAL)**
  
7. There appear to be more scheduled flights going overhead at 7,000 – 9,000ft into Heathrow & Gatwick. Has this changed since the ATC was introduced? **Answered in other Q&A's**

## Members Questions, Questions from Members of the Public

### Questions from Hugh Sheppard on behalf of CPRE.

Dear Chairman & Secretary,

Further to the Draft Minutes of the June Meeting, may I ask for FAL comments re. 2 minuted points under my name to be revisited, together with a 3rd point arising from recently cc'd correspondence as forwarded. In the absence of any note to the contrary I await an invitation to the online meeting but, in case attendance is restricted to members, these are the points as written questions:

- Page 9; Minute to Item 4:

'Hugh Sheppard - CPRE Hampshire, said that while FAL makes no distinction between Business aviation and personal or holiday flights, a recent report by the Transport & Environment Group (Belgium) quotes 64% of such movements in Europe in the latter category. The distinction may well be relevant in view of the Climate Change Committee's advocacy of 'dampening demand' to reduce aviation emissions.

This was put as a question for FAL. While unanswered, the topic is surely germane to any review of the FACC's role with respect to climate change and whether taxes and/or duty could have a part to play.

The Chairman suggested these issues could be discussed at a further meeting of the Committee where all three groups Users, Local Authorities and Local Interests were represented.'

This meeting presents just such an occasion, would the FACC please re-present this proposal for FAL to distinguish Business and Leisure activity for discussion?

- Page 11, Minute to item 7:

'Hugh Sheppard asked/suggested some areas of conversation/discussion above could be simpler to define if FAL became a designated airport under [Section IV of the Airports Act 1986]. Les Freer said FAL would investigate this'.

Would FAL please inform the meeting as to the progress of the investigation and of any response from the DfT?

### **New Question:**

In Farnborough ACP Consultation documentation Part B Page 16 references 'Tranquillity' for movements under 4,000ft over AONBs. ie.:

'The Government guidance (see Appendix A) specifically mentions AONBs and National Parks and so we have highlighted them in Figure B3 and in the worked examples later in this section.'

Representation to me on behalf of CPRE Surrey of low overflying of the Surrey Hills AONB accords with concern expressed by Mr. Colin Shearn in his 'Noise Question' paper under point **N7**: 'The Air Navigation Guidelines 2017' state that Areas of Outstanding National Beauty [AONBs] and National Parks should not be overflown below 7,000 ft unless there is no possible avoidance'. He then asks '*What are the CAA/NATS/FAL doing to avoid this problem caused by the airspace changes resulting from FALs operations*'?

The FAL response is provided by 'ID', presumably representing Air Traffic Control on behalf of NATS. who says:  
'ATC do not ensure aircraft are operating in accordance with the Air Navigation Order - we are not the Police.  
And then: We have no knowledge of the locations of AONB.

Yet, in addressing the related point in Mr. Shearn's 'Routing Question' paper, FAL's A3 response is:  
.... it is a requirement on the pilot that they are aware of the terrain they are flying over, and they adjust their height accordingly.

In sum, please would FAL confirm that at no time is ATC/NATS expected to be aware of the terrain being overflown by aircraft under their advisory control?

Hugh Sheppard (On behalf of CPRE Hampshire).  
October 2021.