



FARNBOROUGH AERODROME CONSULTATIVE COMMITTEE
“keeping people informed”

Question from XR FFC

Representing Extinction Rebellion.

As was advised to Members ahead of the last meeting in October, a number of questions were received from XR FFC after the submission cut-off for the meeting and were not addressed on the day, however the FACC and FAL did undertake to respond as soon thereafter as possible.

The questions together with responses from the FACC and FAL can be seen below; these were sent on 18th November 2020.

XR FFC submitted a number of follow up questions on 9th December. These were discussed at the meeting on 18th February 2021.

Farnborough Airport Ltd. took an action to respond to the follow-on questions by Friday 19th February 2021.

As agreed in the meeting, FAL has responded to those questions they can answer and has provided reasons for those to which they cannot respond.

The FAL response can be found below in GREEN.

All questions mentioned above can be found below.

19th February 2021.

FACC Meeting October 2020 - Response to Questions raised by Extinction Rebellion

FOR THE CHAIRMAN & FACC

- Q1. Does the FACC acknowledge the Climate Emergency ('CE') declared by the UK nationally and by Rushmoor Borough Council ('RBC') last year and aviation's growing contribution to the CE and what power does the FACC have to regulate private jet activity at Farnborough in such a way as to reduce its greenhouse gas ('GHG') emissions meaningfully over the next decade?

Answer: This question will need to be put to the FACC. It is certainly the case that both the Government and Rushmoor Borough Council have declared a climate emergency. The FACC is a consultative body; it does not have executive powers.

FOR FARNBOROUGH AIRPORT LIMITED (FAL)

- Q2. At our current rate of global emissions of 42 gigatons of GHG equivalent per year, we have 8 years until the global carbon budget to remain below 1.5°C of heating (334 gigatons of emissions, 66% probability) is exceeded. With an estimated average of 2.4 passengers per flight, private jet flight from Farnborough creates between 10 and 40 times more GHG emissions per passenger than a commercial flight. To help us better understand those travellers responsible for producing such high levels of GHG emissions, please provide:

- a. A characterisation of the users of private jets at Farnborough ('Users')? This could include estimated net worth, socio-economic type, purpose of travel including business/leisure, or destination/origin airport by country or internal/external to EEA (for EU ETS purposes).
- b. An explanation of why Users travel via Farnborough and not on Business or First Class commercial airlines via the world's second largest international airport just 24 miles away.
- c. The typical cost of a flight on a private jet to and from Farnborough for an average stage?
- d. The average stage length flown by a User to/from Farnborough?
- e. The average number of Users on each flight (excluding crew)?
- f. How many of the Users fly more than once in any year to/from Farnborough ('Frequent Flyers') and, just for such Frequent Flyers, the average number of trips to/from Farnborough taken each year?

Answer: Business aviation offers productivity and efficiency benefits to its users. Where FAL has access to specific user or flight information, it does not disclose for confidentiality and/or commercial reasons.

FAL recognizes the important role the broader aviation industry has in responding to global climate change. The airport is working with fuel suppliers and operators to accelerate the use of Sustainable Aviation Fuel (SAF) to assist in decarbonising the wider aviation industry.

- Q3. In metric tonnes, how much aviation fuel did FAL sell in financial year to 31 Dec 2019 ('2019') and how much was sold by FAL's predecessor TAG Farnborough Airport Ltd ('TAG') over the period from 1 Jan 2010 to 31 Dec 2019 (the 'Last Decade') and what was its value in GBP?

Answer: FAL does not release commercial information in relation to fuel volumes.

- Q4. How many tons of CO₂ equivalent have been produced by the fuel sold by FAL in 2019 and by TAG over the Last Decade, using an industry standard Radiative Forcing ('RF') factor?

Answer: Farnborough Airport does not release commercial information in relation to fuel volumes, however, recognizes CO₂ emissions are an increasing focus. Globally aviation generates 2% of all human-induced CO₂ with business aviation accounting for approximately 0.04%. Whilst business aviation plays a critical role in supporting economic connectivity, regional employment and inward investment, Farnborough Airport also recognizes the important role the aviation industry has in responding to global climate change.

As an early adopter of the Airport Carbon Accreditation scheme, Farnborough Airport has focused on emissions under direct control for over a decade, achieving reductions of more than 70%. This area of our work continues to reduce the requirement to offset residual emissions.

Now, in recognition of the need to contribute to the wider de-carbonization of our industry and to engage collaboratively with our aviation partners, we are working alongside fuel suppliers and operators to introduce Sustainable Aviation Fuel (SAF), once readily available.

- Q5. What % of the fuel sold by FAL in 2019 was classified as 'Sustainable' Aviation Fuel ('SAF')?

Answer: In 2019 zero percent of fuel sales were classified as SAF.

- Q6. How many tons of CO₂ were produced by FAL's infrastructure in 2019?

Answer : Scope 1 and 2 emissions calculated for 2019 totalled 1,459 tCO₂e. This includes direct emissions from stationary and mobile sources on the airfield and indirect emissions related to the electricity use and generation.

- Q7. In metric tons, how much carbon will be absorbed each year by the '1,000' trees planted by FAL last year (the 'Trees') to 'offset' the emissions from its infrastructure in 2019?

Answer : Carbon credits (verified carbon units) generated by Reducing Emissions from Deforestation and Degradation (REDD+) projects, were retired to meet 2019 offsetting requirements. The 2019 retirement can be viewed on the publicly available Verra VCU registry. The tree planting carried out locally is ancillary to the official offset and delivers the opportunity to provide economic, social and environmental benefit to the community. Carbon reductions related to these projects are not quantified.

- Q8. Following on from Q7, what percentage of the total emissions from private jet flying in 2019 will be absorbed by the Trees in 2020 at their current young age?

Answer: Under the Airport Carbon Accreditation Scheme, offsetting projects are engaged to address residual emissions under Scope 1 & Scope 2, together with emissions related to business travel undertaken by the organisation. Emissions related to aircraft movements are classified as Scope 3 and are not offset by Farnborough Airport.

Q9. How much did the planting of the Trees cost FAL?

Answer: Local tree planting projects are packaged with the official retirement of verified carbon units. Typical market costs for offset projects are between £5 – 10 per tonne.

Q10. In years, how long will it take the Trees to absorb all of the 2019 emissions from FAL's infrastructure?

Answer: Tree planting projects are not a part of the official offset program for carbon emissions. Emissions from the operation of aircraft are addressed through the ICAO CORSIA scheme (Carbon Offset and Reduction Scheme for International Aviation) to which aircraft operators must participate.

Q11. Over the Last Decade what was the total after-tax Net Profit earned by FAL and its predecessor, TAG?

Answer: Financial and ownership details of FAL are in the public domain and filed at Companies House.

Q12. Which legal entity benefited from the Net Profit earned in 2019?

Answer: Financial and ownership disclosures made publicly by FAL are done so via Companies House.

Q13. In 2010, how many Full Time Equivalents ('FTEs') did FAL's predecessor TAG employ in total and of those FTEs how many live in the local area?

Answer: Reference should be made to the Economic Statement provided by the Company in support of its planning application of May 2009

Q14. In 2019, how many FTEs did FAL employ in total and of those FTEs how many live in the local area?

Answer: FAL and the Aviator Hotel directly employ approximately 300 people.

FOR THE COMMITTEE AS A WHOLE

Q15. What proposals does FACC have to bring about a meaningful reduction in GHG emissions from private jet activity at Farnborough over the next decade?

Answer: The FACC has no executive powers; its role is to provide a forum for consultation on issues affecting the operation of the airport. It is a matter for the Committee as a whole to decide whether it wishes to urge the operator of the airport to encourage its customers to reduce carbon emissions from their aircraft. It has been pointed out that the airport itself fully complies with all current emission regulations and its own operations are carbon neutral.

FACC Meeting February 2021 - Follow-On Questions to Answers Provided by FACC and FAL

From Extinction Rebellion

Notes:

A. Original questions (submitted on 29 October 2020), in BLUE text, and the answers supplied (on or about 18 November 2020), in BLACK text.

B. Follow-on questions (asked on or about 9 December 2021, are in RED text and carry a suffix A-C. Responses supplied by FAL (on 19 February) are in GREEN text.

FOR THE CHAIRMAN & FACC

Q1. Does the FACC acknowledge the Climate Emergency ('CE') declared by the UK nationally and by Rushmoor Borough Council ('RBC') last year and aviation's growing contribution to the CE and what power does the FACC have to regulate private jet activity at Farnborough in such a way as to reduce its greenhouse gas ('GHG') emissions meaningfully over the next decade?

Answer: This question will need to be put to the FACC. It is certainly the case that both the Government and Rushmoor Borough Council have declared a climate emergency. The FACC is a consultative body; it does not have executive powers.

Q1A. Does the FACC formally acknowledge the Climate Emergency ('CE') declared by the UK nationally and by Rushmoor Borough Council ('RBC') last year and UK aviation's growing contribution to the CE (of 8% of national emissions in 2019, and expected to rise to approximately 25% by 2050i)?

Q1B. Does the FACC acknowledge that, at our current rate of global emissions of 42 gigatons of GHG equivalent per year, we have 8 years until the global carbon budget to remain below 1.5°C of heating (334 gigatons of emissions, 66% probability) is exceeded?

Q1C. How does the FACC intend to use its consultative powers to reach an amicable consensus on how to regulate private jet activity at Farnborough in such a way as to reduce its GHG emissions meaningfully over the next decade?

Q1D. Does the FACC accept that FAL has the power unilaterally to decline to answer any question correctly put to it by local organisations and residents in accordance with the FACC's constitution or does the FACC have the power to decide which questions FAL may decline to answer?

Q1E. Does the FACC accept that its current tempo of question and answer ('Q&A') is ineffectively slow in an era of Climate Emergency and will the FACC therefore mandate a faster mechanism for Q&A, including but not limited to requiring that questions and follow-on questions from committee members, local organisations and residents be answered by FAL within 15 working days of submission?

FOR FARNBOROUGH AIRPORT LIMITED (FAL)

Q2. At our current rate of global emissions of 42 gigatons of GHG equivalent per year, we have 8 years until the global carbon budget to remain below 1.5°C of heating (334 gigatons of emissions, 66% probability) is exceeded. With an estimated average of 2.4 passengers per flight, private jet flight from Farnborough creates between 10 and 40 times more GHG emissions per passenger than a commercial flight. To help us better understand those travellers responsible for producing such high levels of GHG emissions, please provide:

- a. A characterisation of the users of private jets at Farnborough ('Users')? This could include estimated net worth, socio-economic type, purpose of travel including business/leisure, or destination/origin airport by country or internal/external to EEA (for EU ETS purposes).

- b. An explanation of why Users travel via Farnborough and not on Business or First Class commercial airlines via the world's second largest international airport just 24 miles away.
- c. The typical cost of a flight on a private jet to and from Farnborough for an average stage?
- d. The average stage length flown by a User to/from Farnborough?
- e. The average number of Users on each flight (excluding crew)?
- f. How many of the Users fly more than once in any year to/from Farnborough ('Frequent Flyers') and, just for such Frequent Flyers, the average number of trips to/from Farnborough taken each year?

Answer: Business aviation offers productivity and efficiency benefits to its users. Where FAL has access to specific user or flight information, it does not disclose for confidentiality and/or commercial reasons.

FAL recognizes the important role the broader aviation industry has in responding to global climate change. The airport is working with fuel suppliers and operators to accelerate the use of Sustainable Aviation Fuel (SAF) to assist in decarbonising the wider aviation industry.

Q2A. Not a single part of Q2 was answered by FAL. Is such data routinely compiled by commercial airports?

Response - What commercial airports do is of course a matter solely for them.

Q2B. Given that such data is, we believe, routinely compiled by commercial airports and that no individual is expected to be identified in the answer process, why does FAL consider this data to be too sensitive for release? Note that guidance to the answer to Q2e (average number of Users on each flight) was provided during the 2009 planning application process as just 2.5 passengers per flight.

Response - Some commercial airports will collate information on generic passenger data to help inform strategies around retailing and passenger satisfaction. FAL does not. FAL does have limited access to proprietary confidential data however chooses not to externally report this data, even in aggregated form, as there is no requirement to do so and it avoids any data protection issues that may or may not arise. FAL notes the aggregate data of passengers per flight was disclosed as part of the 2009 planning process.

Q3. In metric tonnes, how much aviation fuel did FAL sell in financial year to 31 Dec 2019 ('2019') and how much was sold by FAL's predecessor TAG Farnborough Airport Ltd ('TAG') over the period from 1 Jan 2010 to 31 Dec 2019 (the 'Last Decade') and what was its value in GBP?

Answer: FAL does not release commercial information in relation to fuel volumes.

Q3A. In 2019, based on declared revenue of £30m for annual fuel sales, we calculate that FAL sold 13.1 million gallons of fuel, based on open source data and metrics. Is this estimate broadly correct? If not, please provide an accurate actual figure?

Response - FAL does not disclose information on fuel data as this is commercially sensitive.

Q4. How many tons of CO₂ equivalent have been produced by the fuel sold by FAL in 2019 and by TAG over the Last Decade, using an industry standard Radiative Forcing ('RF') factor?

Answer: Farnborough Airport does not release commercial information in relation to fuel volumes, however, recognizes CO₂ emissions are an increasing focus. Globally aviation generates 2% of all human-induced CO₂ with business aviation accounting for approximately 0.04%. Whilst business aviation plays a critical role in supporting economic connectivity, regional employment and inward investment, Farnborough Airport also recognizes the important role the aviation industry has in responding to global climate change.

As an early adopter of the Airport Carbon Accreditation scheme, Farnborough Airport has focused on emissions under direct control for over a decade, achieving reductions of more than 70%. This area of our work continues to reduce the requirement to offset residual emissions.

Now, in recognition of the need to contribute to the wider de-carbonization of our industry and to engage collaboratively with our aviation partners, we are working alongside fuel suppliers and operators to introduce Sustainable Aviation Fuel (SAF), once readily available.

Q4A. This answer did not address the substance of the question in any way. Based on the estimates used in Chapter 6 of the Environmental Statement JLJ0966 used at the 2009 planning application process, aircraft emissions in 2019 were estimated to be 1,999,978 tons of CO₂e (based on 50,000 private jet flights). On the basis that only 32,366 private jet flights took place in 2019, this figure reduces, pro rata, to 1,294,626 tons of CO₂e. Is this estimate broadly correct? If not, please provide an accurate figure?

Response – The quoted estimations were developed specifically for the planning application. FAL does not routinely produce these estimates annually as aircraft emissions beyond initial take-off and landing are not within the defined Scope 1,2 or 3 emissions. FAL cannot validate the stated pro-rata calculation or provide an accurate figure for the requested period.

Q4B. Does FAL acknowledge that it has Direct Control over the sale of aviation fuel at Farnborough?

Response - FAL provides fuelling services for its customers at Farnborough. FAL does not have Direct Control on the demand for fuel. The uplift of aviation fuel is an indirect consequence of the demand.

Q6. How many tons of CO₂ were produced by FAL's infrastructure in 2019?

Answer : Scope 1 and 2 emissions calculated for 2019 totalled 1,459 tCO₂e. This includes direct emissions from stationary and mobile sources on the airfield and indirect emissions related to the electricity use and generation.

Q6A. Does this figure include all forms of emissions (other than Aircraft) as set out in Table 6.1 of Chapter 6 of the Environmental Statement JLJ0966 used at the 2009 planning application process? If not, please provide an answer that does include like-for-like data (Building Infrastructure, Airside Ground Transport, Fire Training, Surface Access Transport Emissions and APUs)?

Response – The quoted figure includes all Scope 1 and 2 emissions. Scope 1 covers natural gas for heating; diesel and petrol for generators, GPUs and company vehicle movements; LPG, Jet A1 and CO₂ related to fire training and aircon F-Gas releases. Scope 2 covers energy

procurement used for temperature control, lighting, IT and electrical equipment and charging requirements.

Q7. In metric tons, how much carbon will be absorbed each year by the '1,000' trees planted by FAL last year (the 'Trees') to 'offset' the emissions from its infrastructure in 2019?

Answer : Carbon credits (verified carbon units) generated by Reducing Emissions from Deforestation and Degradation (REDD+) projects, were retired to meet 2019 offsetting requirements. The 2019 retirement can be viewed on the publicly available Verra VCU registry. The tree planting carried out locally is ancillary to the official offset and delivers the opportunity to provide economic, social and environmental benefit to the community. Carbon reductions related to these projects are not quantified.

Q7A. The Verra Registry was only launched in April 2020iv. A search of the Registry for proponent "Farnborough" returned no results. What was done in 2019 and prior years?

Response - Offsets prior to 2020 were detailed on the original APX VCS Registry, this was superseded by the Verra Registry. Offsets registered for 2017 – 2019 can now be located on the updated Verra Registry via the following links:

<https://registry.verra.org/myModule/rpt/myrpt.asp?r=206&h=31341>

<https://registry.verra.org/myModule/rpt/myrpt.asp?r=206&h=28284>

<https://registry.verra.org/myModule/rpt/myrpt.asp?r=206&h=18138>

Q7B. How much did FAL pay for the carbon credits retired in 2019 to meet its offset requirements via Verra?

Response - The 2019 offset was 1700t at a cost of £15,300 (which included additional costs for planting 1700 trees locally, in addition to the official offset).

Q7C. How many years will it take for those REDD+ projects funded by your carbon credits to absorb the CO₂ emitted in 2019?

REDD+ projects save around 264,000tCO₂ per year, of which FAL's carbon offsetting is just a small part. FAL offsets through purchase of carbon credits which relate to carbon savings already made in the past. The savings are independently verified against the Verified Carbon Standard.

Q9. How much did the planting of the Trees cost FAL?

Answer: Local tree planting projects are packaged with the official retirement of verified carbon units. Typical market costs for offset projects are between £5 – 10 per tonne.

Q9A. Based on your guidance, we estimate that the planting of the Trees cost FAL £7,500 in total in 2019. Is this estimate broadly correct? If not, please provide an accurate figure?

REDD+ project offsets and local tree planting projects are costed as a combined price per ton. Refer to Qu. 7b.

Q10. In years, how long will it take the Trees to absorb all of the 2019 emissions from FAL's infrastructure?

Answer: Tree planting projects are not a part of the official offset program for carbon emissions. Emissions from the operation of aircraft are addressed through the ICAO CORSIA scheme (Carbon Offset and Reduction Scheme for International Aviation) to which aircraft operators must participate.

Q10A. Once mature (after 10 years), the average tree sequesters 22kg of carbon per annum. All of that carbon will be released when the tree dies. Therefore the 1,000 Trees, when mature, will sequester 22 tons of carbon each year. Therefore it will take an estimated 70 years for the Trees to absorb the 1,459 tCO₂e emitted from infrastructure alone in 2019. Is this estimate broadly correct? If not, please provide an accurate figure?

Response – FAL does not make such calculations because local tree planting is not related to the official offsetting, it is supplementary and represents a positive contribution to our local community, combined with the official offset through the VCS.

Q10B. CORSIA does not come into operation until next year and then only by way of a voluntary pilot. So how have aircraft emissions been addressed by CORSIA in 2020 and prior years?

FAL does not own or operate aircraft and is not involved in the CORSIA program. The goal of CORSIA is to achieve carbon neutral growth in aviation from 2020.

Q10C. CORSIA will start operating in January 2021 with a voluntary pilot phase (that includes the UK) that will last to the end of 2023. However, the requirements only apply for operators with international emissions above 10,000t CO₂ per year. This means most of the world's private jets are exempt. What percentage of private jet flights to and from Farnborough are therefore expected to be subject to CORSIA?

FAL does not have this information.

ADDITIONAL QUESTION FOR THE CHAIRMAN OR SECRETARY

Q16. The TAG Farnborough Airport Master Plan – April 2009 ('Master Plan') noted, at para 12.2.1 that 'A TAG Sustainability & Climate Change Charter is being developed to provide a framework for delivering sustainability' (the 'Charter'). TAG was subsequently contractually obliged to produce the Charter in accordance with the S106 Agreement dated 29 June 2010 entered into as part of the Planning Appeal process to increase aircraft movements to 50,000 per annum. By minute dated 12 Sep 12 of the Development Control Committee Directorate of Community and Environment (Planning Report No: PLN 1242), RBC notes, at para 3.4, that 'The Sustainability & Climate Change Charter was first published in 2009'. Needless-to-say, publication of the Charter in 2009 is at odds with the contractual requirement to produce such a Charter placed on TAG in the 2010 S106 Agreement. Such reference may simply have been to the summary set out in the Master Plan. We have been unable to find the published long form version of the Charter, only reference to its development in the 2009 Master Plan summary. We suspect that the long form Charter has never been produced in accordance with TAG's legal obligation under the 2010 S106 Agreement to do so but has been left in summary form as set out in Section 12 of the Master Plan. Please confirm or, if the long-form Charter has been produced, please let us have a copy?

FOR FARNBOROUGH AIRPORT LIMITED (FAL)

Q17. The S106 Agreement entered into by TAG in 2000 (dated 10 Oct 2000) required TAG (at Sch 1, para 1) to report to RBC the aircraft registration and origin or destination (airport codes) of all private jet flights to and from Farnborough. Please provide such data for calendar year 2019.

Response - The Section 106 states we must keep a record of this data, there is no requirement to report. RBC have access to our track data in compliance with the S106.

In response to the request for origin and destination data related to 2019, FAL is prepared to provide the following aggregate data breakdown:

2019

- Short haul (domestic & Europe): 85%
- Mid / long haul: 15%

Q18. TAG's case to omit emissions from private jets as part of its 2009 Planning Application rested on the contention that '80%' of such movements would be covered by the European Union Emissions Trading Scheme (EU ETS). Multiple exclusions ('Exclusions') apply to the EU ETS, the most important of which for private jet operations at Farnborough are:

- a. For any flight either taking off from or landing at an airport outside the EU. This exemption was first introduced in 2013 and subsequently extended to 2023.
- b. For all operators emitting less than 10,000 tons per annum.
Given that many if not most of the flights to and from Farnborough could take advantage of these exclusions, what was the:
 - (i) actual percentage of private jet flights operating to and from Farnborough in 2019 that were covered by EU ETS?

Response - FAL does not have this information.

- (ii) estimated reduction in emissions (in tons CO₂e) from flights in 2019 brought about by EU ETS?

Response - FAL does not have this information.

Q19. What is the gross margin of aviation fuel sold in 2019?

FAL does not disclose information on fuel data as this is commercially sensitive.

REFERENCES

- i UK Committee on Climate Change Reducing UK emissions Progress Report to Parliament June 2020.
- ii <https://www.carbonbrief.org/analysis-how-much-carbon-budget-is-left-to-limit-global-warming-to-1-5c>
- iii Farnborough Airport: Planning Application to increase permitted aircraft movement Economic Statement May 2009 para 3.4.
- iv <https://verra.org/project/vcs-program/registry-system/>
- v <https://www.carbonpirates.com/blog/how-much-carbon-do-trees-absorb/>
- vi <https://www.carbonbrief.org/corsia-un-plan-to-offset-growth-in-aviation-emissions-after-2020>