

[REDACTED]

31 August 2021  
Reference: F0005388

Dear [REDACTED]

Thank you for your request of 5 August 2021, for the release of information held by the Civil Aviation Authority (CAA).

Your request:

*Can you confirm what the Government has previously claimed the Plane air systems are 99.9% capable of filtered out Covid Virus. If not, how can myself and family be safe when seated next to an unknown person for 4 hours with a face covering. Without screens that are not regarded as safe or suitable, no complete air condition. I know that Manufacturers have recommended full air curtain, before and during flight. Why not supply N45 masks 5 or 6ply to all passengers. I want to fly but not with current risks. Further how often filters and scrubbers cleaned and changed? Manufacturers have only recommended standard maintenance. Airlines would appear to be able to fill Planes to 100%, surely without proper protection from N45 Masks this is not safe.*

*I am in favour of getting airplanes flying safely again. Until the Industry get the Public assurance that they will not catch Covid, they will not fly in the numbers prior to the Pandemic.*

*What can you do to improve safety from Covid in Planes. This also applies to Crew.*

Our response:

To the extent that your enquiry is a request for recorded information, we have considered it in line with the provisions of the Freedom of Information Act 2000 (FOIA). Where your request is not a request for recorded information the CAA is not obliged to consider it under FOIA, however we hope that the information below is helpful.

### **Aircraft certification**

- The design requirements for commercial aircraft are specified in legislation (all current aircraft will have been certified under EU regulations, overseen by the European Union Aviation Safety Agency (EASA); however these regulations were retained in UK law following the UK's exit from the EU and the end of the transition period)

Civil Aviation Authority

Aviation House, Beehive Ring Road, Crawley, West Sussex RH6 0YR. [www.caa.co.uk](http://www.caa.co.uk)

Email: [foi.requests@caa.co.uk](mailto:foi.requests@caa.co.uk)

- These design requirements include the regulatory specification for the ventilation system
- The aircraft manufacturer is responsible for complying with the design regulations and the design has to be certified by the regulator
- The aircraft operator is responsible for operating the aircraft in accordance with the manufacturer's specification; details of this will be included in the operator's manuals, which must be approved by the regulator as part of the operator's certification

### **Recirculation systems**

- Most (if not all) large commercial jet aircraft re-circulate approximately 50% of the ventilation air supplied to the passenger cabin and all modern aircraft that use this, including all such aircraft operated by UK operators, have filtration systems fitted with High Efficiency Particulate Air (HEPA) filters; these are of the same standard as those used in hospital operating theatres and remove 99.99% of all particulate matter in the air, including bacteria, fungi and viruses
- Over time the efficiency of the filters at removing particles actually increases, as the filtered particles are retained within the filter (where they desiccate and become non-infective); periodic replacement is required as part of routine scheduled maintenance because, as the pores within the filter become blocked, it needs more pressure to maintain the required rate of air flow across the filter and this increases fuel usage
- Testing during the pandemic has confirmed that the HEPA filters used on aircraft do remove the SARS-CoV-2 virus that causes Covid-19
- The design of the aircraft ventilation system must ensure that every occupant receives the minimum permitted ventilation; the airflow is delivered through vents in the ceiling of the aircraft cabin and extracted through vents in the side of the cabin at floor level; the air is circulated around the cabin, not along the cabin, and there is little mixing of air from front to back
- A number of new studies have been published during the pandemic which have investigated the potential for Covid-19 infection during flight and these have consistently shown that there is very little risk, even between passengers seated in adjacent seats, and this is further mitigated by the requirements for wearing of masks and for testing prior to flight

### **Transmission of Covid-19 during passenger flights**

- During the pandemic there have been a small number of published reports of cases of transmission of Covid-19 on board commercial flights; however, over this period millions of passengers have travelled by air and therefore the risk to any individual passenger is much lower than in other 'indoor' environments
- From a public health perspective, the risk of Covid-19 transmission during air travel is low; the restrictions on travel reflect the risk that individuals who are infected but who have a negative test, for example because of a low level of virus, and are asymptomatic, may subsequently become infectious and disseminate the infection within the community after arrival

Please also see also the information on the CAA website in relation to Cabin Air Quality <https://www.caa.co.uk/Passengers/Before-you-fly/Am-I-fit-to-fly/Health-information-for-passengers/Passenger-health-FAQs--The-aircraft-cabin---your-health-and-comfort/>

If you are not satisfied with how we have dealt with any FOIA elements of your request in the first instance you should approach the CAA in writing at:-

 @caa.co.uk

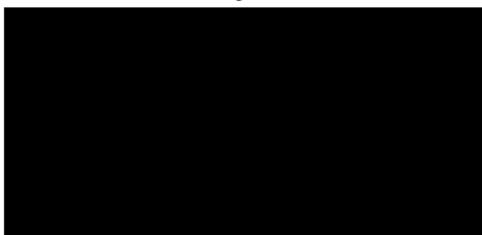
The CAA has a formal internal review process for dealing with appeals or complaints in connection with Freedom of Information requests. The key steps in this process are set out in the attachment. A request for an internal review should be submitted within 40 working days of the date of this letter.

Should you remain dissatisfied with the outcome you have a right under Section 50 of the FOIA to appeal against the decision by contacting the Information Commissioner at:-

Information Commissioner's Office  
FOI/EIR Complaints Resolution  
Wycliffe House  
Water Lane  
Wilmslow  
SK9 5AF  
<https://ico.org.uk/concerns/>

If you wish to request further information from the CAA, please use the form on the CAA website at <http://publicapps.caa.co.uk/modalapplication.aspx?appid=24>.

Yours sincerely



**CAA INTERNAL REVIEW & COMPLAINTS PROCEDURE**

- The original case to which the appeal or complaint relates is identified and the case file is made available;
- The appeal or complaint is allocated to an Appeal Manager, the appeal is acknowledged and the details of the Appeal Manager are provided to the applicant;
- The Appeal Manager reviews the case to understand the nature of the appeal or complaint, reviews the actions and decisions taken in connection with the original case and takes account of any new information that may have been received. This will typically require contact with those persons involved in the original case and consultation with the CAA Legal Department;
- The Appeal Manager concludes the review and, after consultation with those involved with the case, and with the CAA Legal Department, agrees on the course of action to be taken;
- The Appeal Manager prepares the necessary response and collates any information to be provided to the applicant;
- The response and any necessary information is sent to the applicant, together with information about further rights of appeal to the Information Commissioners Office, including full contact details.