

From: <>

Sent: Tuesday, December 17, 2024 1:59 PM

To: Airspace Modernisation <airspace.modernisation@caa.co.uk>

Cc:

Subject: Airspace modernisation - consultation on a UK Airspace Design Service. Submission

Helions Bumpstead Parish Council have prepared the attached submission to the CAA airspace modernisation consultation and would be grateful if you would consider it with the other submitted documents.

A summary of the main points is pasted below for your convenience.

Best Regards,
Neville Nicholson

Summary

The reorganisation of air traffic over Great Britain should prioritise the reduction of carbon dioxide emissions above other considerations. The arrival of commercial air traffic should be by direct, continuous descent to a point 5 miles distant from the destination runway. There should be no deviation from a straight flight path in British airspace and descent should be without level flight, any form of stacking or delay while airborne.

Clearly, stacking generates unnecessary carbon dioxide as well as other chemical and particulate pollution (1,2) but, because these aircraft are using flaps and slats for turning (3) in level flight at low altitude where the air is warm, high pressure and dense, they are operating at low efficiency (4) . For these reasons stacking aircraft need to use high power settings and are generating more carbon dioxide, noise and other pollutants than they would at cruising altitude (5) . One large stacking aircraft emits as much carbon dioxide as the winter heating for 10 starter homes and far more noise and pollution.

Technological improvements during the next 20 years will decimate the emissions of other large polluters such as energy generation, home heating, terrestrial travel, shipping, steel and construction (Appendix I). But it is the restriction of unnecessary emissions of greenhouse gasses during that period which will determine our ability to control the earth's rise in temperature.

Until a reduction in the rate of production of carbon dioxide becomes possible, it is the volume of unnecessary emissions that may cause an unstoppable, water vapour driven, positive feedback warming cycle on the Earth.. An initial, tolerable limit of 1.5 oC warmer than before industrialisation was set for the planet by the WEF (6) . Last year that limit was exceeded for the first time and the disruption of the climate, the oceans, fauna, flora and mankind - particularly in equatorial regions, is plain for those who care to observe it.

We welcome this review of the air corridors over Great Britain as an opportunity to eliminate commercial aircraft stacking. We demonstrate below (Appendix II) that stacking in all its forms, is among the most unnecessary and damaging of aircraft industry practices and suggest methods by which stacking can be avoided.

References

- 1 Aviation and the Global Atmosphere, Intergovernmental Panel on Climate Change (IPCC) Special Report, <http://www.ipcc.ch/ipccreports/sres/aviation/index.php?idp=31>
- 2 Risk factors of jet fuel combustion products, Irene Tesseraux, Toxicology Letters, 149, (1-3), April 2004, 295, <http://www.sciencedirect.com/science/article/pii/S0378427403005095>
- 3 <https://aviation.stackexchange.com/questions/34981/what-is-the-fuel-consumption-of-an-aircraft-in-a-holding-pattern>
- 4 <https://aviation.stackexchange.com/questions/1609/why-do-jet-engines-get-better-fuel-efficiency-at-high-altitudes>
- 5 Relationship between fuel consumption and altitude for commercial aircraft during descent: E. T. Turguta, M. A. Rosen, Aerospace Science and Technology, 17, (1), 65-73, March 2012, <http://www.sciencedirect.com/science/article/pii/S1270963811000459>
- 6 World Economic Forum, Climate Action; 28th July 2021; <https://www.weforum.org/agenda/2021/07/2c-global-warming-difference-explained>