

A Travesty of the UK's Limited Aircraft Noise Control Policies at Gatwick Airport and elsewhere

From my understanding as a lay person the control of aircraft noise in the UK is focussed around the CAA's aircraft noise contour model (ANCON) which primarily deals with sound energy volumes in the close proximity of airports and is known as Leq. This is based on an assessed continuous noise basis over 16 hours from 0700 to 23.00. Aircraft manufacturers have to ensure that the development of new engines are capable of meeting the International Civil Aviation Organisation (ICAO) sound level criteria to obtain certification and currently known as Chapter 4 requirements. This measurement is primarily concerned with engine thrust levels which, in the confined parameters of the ANCON modelling, means in the relative local vicinity of an airport. Little or no control is exercised on approaching flights.

The importance of reducing noise from engine thrust is paramount in meeting improved international guidelines and some manufacturers have relied on the development of the high bypass turbofan engine to do this. Deplorably, some of these designs have produced an engine which emits a loud siren like high pitched whine particularly on the variable long low flight path to touchdown. The main offenders appear to be Airbus A319/320/321s with the CFM56 engine and now used by a number of 'low cost carriers,' but not all: some use a different combination of this type of engine/aircraft and do not appear to create the same nuisance. The disturbance caused by the toxic combination of sound volumes (beyond 70/80dBA) and high frequency whine is a serious oversight in sound modelling. This debilitating nuisance seems to be continuous along movable flight corridors approaching four miles wide and in excess of 20 miles in length.

For the approach to Gatwick Airport for runway 28 R - used for 80% of all summer flights - some of this disruptive noise is over Areas of Outstanding Natural Beauty. These are the tranquil river valleys and upper reaches of the rivers Rother, Arun, Medway, Eden and Ouse and across the woods and downs of the High Weald and parts of the Ashdown Forest. These areas, used for holidays and weekend recreations of hiking, boating, bird watching, horse riding, golfing and other quiet and peaceful pursuits, are all now disturbed by these airborne sirens whose presence has grown alarmingly over the past few years. Many of those troubled, apart from local people in towns and villages, are day trippers from London and other built up areas all seeking their own refuge from the intrusive noise of daily urban life. It can be seen then that Noise Contours for Gatwick Airport are meaningless to many people suffering this nuisance. The official 57dBA Leq contour for the airport encompasses a derisory 40.4km². The reality is that the area affected by sound decibels in excess of 70/80dBA but with additionally screaming high pitched whines could be around 1172 km² and extends to the east as far as the historic spa town of Royal Tunbridge Wells and other built-up areas such as Tonbridge.

The latest CAA's reports for Gatwick Airport claiming that fewer people are affected today by aircraft noise and less complaints being received are misleading - if not downright dishonest for they only focus, as previously mentioned, on sound levels within a small defined area and for a continuous period of 16 hours. The industry, being in total denial, supports these claims to protect the status quo. It seems content to ignore that more people on a national and international level are being affected but not just by increasing flight movements but from the noxious mix of sound at excessive decibels and high frequency pitch from a group of jet engines and aircraft. There are jet engine manufacturers that have taken note of their social responsibility by suppressing noise in flight and a

minority of low cost carriers using the CFM type engine on B737-8s do not appear to suffer the same problems as others. If they can keep the combination of sound volumes and high frequencies at acceptable levels then why not others. Unfortunately there is no authority - government or otherwise that, for the moment, will do anything about it and certainly not the airport operators for their hands are tied. Not only that the airlines that are the greatest offenders are mostly the airport operator's biggest users, as far as Gatwick Airport is concerned.

The latest figures published by the CAA (see below) are allegedly of those households and population affected by aircraft noise from Gatwick Airport. Unfortunately, these figures are drawn from data within the restrictive parameters set down by Leq modelling. They bear no relation whatsoever to the real world of those suffering from the relatively new phenomena and the reality of the screaming turbofan engines.

Leq contour Level (dBa)	Area(km2)	Population	Households
>57	40.4	3,050	1,350
>60	23.0	1,150	500
>63	12.8	350	150
>66	6.9	200	100
>69	3.6	< 50	< 50
>72	2.0	0	0

The truth is that we have seen that over the past decade the transfer of aircraft sound and frequency nuisance has spread from the close-controlled Leq parameters to an uncontrolled sound contour of around 1172 km² . With the failure to control engine noise and high frequency level an intolerable situation will be made even more unbearable if further expansion at Gatwick Airport was allowed by the addition of a second runway. There has to be a growing realisation by responsible people that this type of nuisance is eroding into the well-being of human life and health and could seriously damage the tourism recreational values so important to local economies many of which are already vulnerable.

Gatwick Airport's Lack of Influence over Jet Engine Noise Nuisance

Gatwick Airport and others have little or no control over aircraft or jet engine noise nuisance outside of the UK Civil Aircraft Noise Contour Model – ANCON. As has been mentioned before the aircraft that have been identified with the most widespread problem of the high pitched whine are the Airbus A319/320/321 series using the CFM56 type of jet engines. In following up complaints of jet engine whine to CFM Gatwick Airport was advised by the manufacturer that: *‘ a large segment of the A319/320 is powered by the IAE engine and therefore it is quite possible that the CFM engines are not the primary issue.’* Gatwick Airport relayed this information verbatim but must have been as incredulous as any of us who have read the latest Environmental Research and Consultancy Department (ERCD) report which confirms that in 2011 of the 323 Average Summer Day Flights (ASDF) of Airbus A319/320/321 type aircraft at Gatwick Airport 289.8 were powered by the CFM 56 engines – which is 90% - up from 82% in 2010 and has grown even further. In 2008 there were only 183 ASDF of A319/320/321s powered by CFM56 engines. So we have seen an alarming increase of

58.2% in their use, whereas similar aircraft using the IAE-2500 engine has fallen over the same period by 43.8% being ASDf of 78 to 34.2.

We can now see that this high pitched whine nuisance has grown persistently year by year as various types of engine/aircraft combinations have been developed to improve operating cost benefits (mostly for low cost carriers) and reduce noise levels around airports but primarily on take-off. The price for this is being paid for by all those living, working, or at recreation beneath the long low flight path to touchdown. It is not only a blight on their lives but also a property blight but now potentially over an area vastly in excess of so-called official figures. Gatwick Airport claims in correspondence that it understands the concerns with aircraft disturbance and that it is working with the airlines to explore further ways of improving it. Clearly, it has failed to have any influence if the reply to them from CFM is indicative. It is Impotent in this type of situation.

It is not just the day flights we are concerned with for the aggravation to residents far from the airport itself continues through late evening into night and through to the early hours of the morning with less than an hours respite before overnight flights appear from North America to start the whole debilitating process again.

I would say this to all politicians at local, regional or national level '**Do you care?**'

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