

May 17, 2013

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Response Submission, Aviation and Climate Change

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GNAT STRAINING & THE CLIMATE VICE

1. INTRODUCTION

Aviation and the environment has been a topic since the Wright Brothers' engines began to make noise, but as seen in this paper it has reached centre stage. The Commission is dutiful to address it, but has also given a fair chance for other views and even asks the question (7.2), "Are there alternative analytical approaches that could be used to understand these issues?" I believe there are and herewith present my take on this topic.

2. POINTS TO PONDER

99.99% of all negative planetary climate related effects are not caused by aircraft engines.

Chinese overseas tourism spending rose 40% in one year, from 2011 to 2012.

"The other main carbon effect of capacity constraints is to increase emissions from aircraft holding in arrivals 'stacks' before they can land. NATS estimate that aircraft circling in arrival holds before they land accounted for around 2% of all the CO₂ in NATS' controlled airspace. Compared to the issues discussed, however, the effect is relatively small." (5.18 & 19)

3. HISTORY AND DEVELOPMENTS

Ecology is a twin of the jet age. Before the jet age there was no modern ecology movement. The first 'earth day' was in 1970, ten years into the jet age. Before the transformative year of 1989, aviation had never even been drawn into environmental concerns as is the case today. Carbon trading schemes, climate

change policy legislation, etc., are all post-wall, recent phenomena. This is too easily forgotten, but histories, especially in parallel can tell us something. The thrust of this discussion paper must also be seen in its historical context, being as the views presented therein represent not only scientific viewpoints, but also historical developments and dimensions that must be examined in a completely wider nexus.

4. A NEW ECOLOGICAL STAGE

“It’s part of the new way.” “New way, what new way?” (Clockwork Orange)

Certainly by chapters 4 and 5 in the DP, significant changes are underway. The blessings of carbon trading are recognizable to all and a new era of climate improvement is dawning, one that leaves prior stages behind. In the eagerness to support the climate, a stage is introduced and discussed in detail and at some length in which capacity expansion must also do its part. This new wrinkle is piggybacked onto the (still controversial) carbon trading schemes, (actually only one yet exists if the truth be told and this suspended), as if this were the most natural thing in the world to explore next. The approach rapidly transmogrifies, individual airports and even individual routes could come in for scrutiny (4.15). Ecology moves fast.

Is this what we want? Nobody is opposed to enjoying a clean environment, but this seems more significant somehow than the situation calls for. Does this not actually represent a radical departure and break with what has gone before. And indeed, upon closer examination this turns out to be a whole new stage. We are in untested and unexplored territory here. Uncharted waters. This turns out to be a real game changer. Considerations to restrict capacity expansion are different from carbon trading schemes. Those do not intersect mobility rights and restraint of trade issues so directly as what is so casually under discussion here. There is a suspicion that mobility itself must be curtailed for any of this to work properly. Do we want to take this next step? Was not serfdom overthrown largely through mobility? Can we in effect force planes not to fly because they cannot land? Has aviation rationing reached the ecology stage?

A subtle but most interesting shift has taken place, pregnant with ramifications. For the first forty years of the jet age we were constantly assured that demand was simply not there. Now suddenly it is explained differently to us; it is there (and in truth this can be observed; this tried and true objection is unravelling fast), but it is ‘bad’. The objection had a new objective. All expansion must pass the emperor’s veto of ecology. Emission concerns starts where demand denial no longer receives any traction. But this is not a slight elongation, or small extension of what has gone on previously. It has nothing to do with, for example, market based measures. The attempt to just slide by should be halted.

We are confronted with a true oversimplification. We are not on common ground here. The Commission must address all concerns, but this one is not minor, nor without throw weight on a whole plethora of fronts. The Commission should be alert to this.

5. ECOLOGY & THE CAPACITY REMIT

But along with the implications we must also enquire as to this topic's very suitability for the Commission's grand assignment. Once again nobody questions ecology's legitimacy, only its misapplication. Is the Commission's path being derailed and hijacked? Picture, for example, a different expert committee than the one recently appointed, where every expertise in climate matters were replaced with industry experts on airframe safety issues. To be sure safety (and security) cannot be more important issues, but what would they be doing in a capacity discussion? Should we restrict infrastructure allotment in the hopes of cutting down on air crashes? This might be notionally conceivable, but this issue is both subsidiary and at the same time more than worthy of a discussion of its own. Likewise with environmental issues. We seem to be engaged here in a categorical error. Climate is on the one hand too important to be confused with capacity issues; on the other hand, emissions should not take pride of place in a forum where serious and pressing capacity decisions of national import must be taken. What is the ratio of climate experts to airport capacity experts on the expert panel? Has capacity become a subsidiary topic rather than the *raison d'être* of this government agency?

Moreover, civil air transportation is mass transportation. The ecology movement's dearest principles revolved around the promotion of mass transportation, of which aviation remains the best of the various mass possibilities. Any retardation of aviation is a betrayal of the very core values of the ecology movement. Environmentalists should be leading the charge in the promotion of new capacities for Britain's airports.

6. A POSITIVE SIDE TO AVIATION ECOLOGY

Ironically, aviation probably supplies the earth's best hope of positive climate change. But nowhere in the entire DP is there even a hint about the positive aspects of world aviation. Are not engines performing as well as polluting? Why not mention this? Even the World Wildlife Fund is noted for their 20% initiative. But consider the fire department and their many fire trucks. Would we not be amazed at any discussion that zeroed in on the noise they make, the fumes their engines and tailpipes emit, and, not to forget, the residual water damage they leave behind, without a single reference or mention that they put out a very dangerous conflagration? The overarching benefit of global aviation is probably inestimable on the positive side of the ledger. Take away all aviation

and watch the pollution graph spike! Do we really want to kill the goose that lays the golden egg? Perhaps the WWF were better advised to undertake yet more business flights and thus raise standards of living in the vital effort to curtail the accelerating poaching of tusk and rhino. Business flights must have at some point been a vital part of their success story up to now to be in a position to cut back so radically. How can ecology succeed without an informed discussion of priorities and the place of all elements in the overarching picture of positive change?

7. The Three Fractions of Aviation Statistics

Though the real problem is the airline industry being under certain pressures to accept unquestioningly the pollution percentages being bandied about and cited faithfully in the DP, this whole conundrum deserves its own thought processes. So much of what is said in the DP depends solely on the upside down pyramid of percentages. And let us begin by taking a figure that aircraft emissions contribute 1% of the problem. (It should be noted in this context that airports, in this specific sense, do not emit. One receives the impression after reading the DP that they somehow do. The emissions here under discussion take place mainly in the sky). This suggested 1% represents a numerator over a denominator, the numerator being fairly measurable; namely, aircraft engine emissions, although even this is under dispute and rightly so. But we leave it unchallenged to concentrate on the denominator, where immediately problems pop up. How can this all important (for our percentage determination) denominator figure possibly be measured accurately? Are military aircraft movements part of this measurement, which are conducted under strict rules of secrecy? Are other air components included: cargo aircraft, business jets, agricultural aviation? But this is just one industry. Do we possess the capability to assemble and digest the absolute entirety of anthropogenic emissions necessary for accurate percentages? Or are we 100 times off and the true figure for the airlines is more like .01%? Does the measurement of bunker fuel percentages include efficiencies (airlines are characterized by the “devotion to efficiency”, Joseph Conrad) or are load factors considered which compare full airplanes to one occupant cars? How many aircraft are manufactured in a month; how many automobiles? It may be time to call in the statisticians such as Prof. Murali Haran who states, “Without the language of statistics and probability, you can’t talk about climate change and risk.”

And this is the least important of the three relevant fractions. For the whole fraction cited above becomes itself the nominator for a yet more important fraction, that of the percentage of anthropogenic emissions as a portion of the entire ‘cosmogenic’ emissions. There was climate change before the Wright Brothers and even before the industrial age. Now the comprehensive calculation of these ‘emissions’ (anthropogenic and cosmogenic) will take some doing. It

can safely be called an approximation and, combined with the first fraction's uncertainties, we are left with an approximation of an approximation.

But the discussion centres around yet a third, and most important of all, fraction. That is the nominator representing the absolute reading on how much airport expansion was nullified, vis-à-vis the denominator of the entire world's airports' existing capacities to determine first of all the contributions envisioned, and then applied to the other two fractions to derive the climatic benefit. But this third fraction is also not that easy and must be afforded approximations status. We are therefore left at close of day with an approximation of an approximation of an approximation. Welcome to the challenges of climate control. We are arguing about .01% and this may be a wrong focus. Should capacity decisions depend upon percentage disputes?

8. THE WORKABILITY OF AIRPORT CLIMATE SCHEMES

“Keep your cabins, you do assist the storm.” (The Tempest)

It serves only distraction purposes to climb into the ring of percentages wrestling. A much more germane domain is the very workability and teleology of what is under discussion here. Apply for a moment this concept to shipping and ports. Would deferring desperately needed port facility's infrastructural expansion somehow bring such a benefit to the global climate so as to adequately compensate its unavoidable downside repercussions? And just how would this be enforceable globally, and especially in a just and equitable manner. Would Asia participate in this new scheme? They do not go in big for moratoriums. Who will heed this call for 'capacity collusion' ?

The DP hangs in the air on this question, actually seven sheets to the wind. Is England being asked to go it alone? Is this not unilateral capacity disarmament, compounded by an absolute solitude? We see the difficulty of getting everyone on board even on a carbon trading platform. And this is just the aviation sector. Where are the 99? Actually the entirety of emissions providers should be compelled to participate in all such trading. Why is aviation the only such industry compelled in this fashion, as the head of IATA rightly mentioned recently in a television interview? And is not England already doing enough?

9. LEAKAGE

England is already doing more than its fair share. Looked at perversely, Heathrow does more than any other airport on earth for the earth and for climate change by virtue of the worth of its slots. Here slot denials equate to emission savings. And this is true of the country as a whole. The overhang of slot denials should grant England a permanent exception to any expansion debilitation. At

this rate British airports will remain in the champion's league for decades to come.

The DP treats of leakage as a future phenomenon. Actually something much more attention getting has been going on since at least 1975, and has truly hit its stride since 2000. But this is hardly leakage, try haemorrhaging. England's greatest export is aviation demand. And the logic of leaking needs some clarification. Perhaps we need not be over concerned that some demand (and its pollutants) be leaked to foreign lands. It might surprise you to learn that they are glad to get it and they even ask for more! In point of fact England has been the greatest leaker of demand that world aviation has ever seen. What is "emissions" to the DP suddenly becomes jobs and revenue and quality of life to the unfortunate recipients elsewhere. There is no thought in rival lands of loading the burden of ecology onto the backs of the unemployed. The DP's take on leakage produces some of the oddest logic in aviation: "As more and more airports fill up, there is progressively less scope for flights to be displaced elsewhere." (5.16) Of course, exactly the opposite is the case. If you fall into an ice covered lake in deep winter and cannot find the original hole through which to surface, you make a new hole for yourself. And should the scope of this logic apply exclusively to domestic airports (as, to be fair, is the case), then this is even worse than leakage. This becomes then transportation leakage, and transfers onto less efficient modes of transportation. The travel does not go away. As has been said, the only recourse is to ban mobility altogether. And is England prepared to ruin its international ascendancy in an experiment to see how much full domestic airports save on emissions? The whole discussion is a true confession that capacity hog-tying is a non-starter, whose theoretical defence soon involves the promoter in reductions ad absurdum. Also faulty is the reference to the 30 year life-times of airplanes that do not allow for quick technological turnarounds. The jet engines can be replaced by newer technologically advanced versions in 3 days. Name a car that can match that.

10. THE DISCOVERY OF DEMAND

One of the most interesting facets of this ecology DP is the obviously felt necessity to underscore the dangers of emission and the need for the suppression of even leakage given the suddenly revised demand forecasts contained therein. Whereas in the demand prognosis DP we brooded over a pessimistic 1% outlook to 2050 for Great Britain's airport system, the winter of our discontent has been made at least glorious spring by an announcement, no, now of a 90% growth increase in forecast flights for this same period (4.8); and, miracle of miracles, now the broadcasting of a surely over-optimistic full 200% (!) demand increase when it comes to emission dangers (4.12). Where was this government information in the demand paper? Perhaps the figures were simply mistakenly

exchanged, and the demand numbers are indeed 200% and the emission numbers 1%. This depicts a truer reality.

11. OPPOSING SOLUTIONS AND CONCLUSIONS

This DP report does the Commission a disservice. First by switching the target of the Commission's remit away from capacity and much more onto climate change, in and of itself a noble goal, but this is not the way to go about it. This DP report then goes on to offer as a solution additional congestion, and this to a problem whose problematic is congestion. This is repeated often in the Commission's setting out of its duties. Namely the remit of the Commission is thereby reversed. The solution is more problem.

The true answer looks different. Ring-fence capacity deliberations from ecology amputations and redirect environmental concerns to much more worthy culprits. The enhancement of mobility is a great good for all mankind, but even more for the aspirations of positive climate change. There will always be some who would suppress aviation regardless of the evidence of the toll this is taking in the overall scheme of things. The real answer is still decongestion and the attendant boost in the quality of life under which true ecology thrives. If you must scheme, then have as the basis solely the percentages of domestic flights, thus thrusting the burden of responsibility onto those countries with heavy domestic traffic. International traffic like the oceans cannot be schemed. But decongested airports may even turn out to reduce more emissions than the current promises manufactured by quota schemes. And to reiterate, ecology is not England's problem, congestion is the problem. We do not have the luxury of emissions concerns in the midst of a capacity crisis with issues of immediacy and urgency. Let us not mistake the cure the patient desperately wants for the side effect he will address if he lives.