

## **LURP Review May 2015 Submission #26b**

### Noise Contour development Time line

The earthquakes have considerably altered the need for safe land available for development in and around Christchurch. The land around the Airport is safe, highly desirable for residential purposes and a wide range of other purposes but is locked out of any reasonable development process by the current inefficient regime aimed at reducing Christchurch International Airport Limited (CIAL) business continuity risks.

The Resource Management requires the efficient and effective use of land. It also requires a balancing under sections 9 and 32 of the rights of land owners to be recognized and where regulatory intervention is justified a balancing of these land owners rights with the needs of others to be carefully considered.

I submit that at the very least, land owners adjacent to the Christchurch International Airport (CIA) impacted by the current noise contour lines and associated and growing restrictions have the absolute right to have those contours modeled on current, accurate data in any balancing exercise carried out.

This paper intends to identify the facts that have resulted in the current noise contour regime and actual contour lines and conclusively show that they are currently based on very flawed data sets. It will also briefly identify how the contour line process came into being and why.

The requirement for existing contour lines to be reassessed in 2018 as part of the agreement entered into by CIAL in developing the existing contours, will also be highlighted. Given the earthquake changed planning arena and the current Christchurch Replacement Plan review I submit that in the interests of a process that actually is efficient and effective and one that transparently balances the concerns of all parties that this reassessment of the contour lines should be carried out immediately as part of the Christchurch Replacement Plan review.

The reality is CIAL have always had a major fear of curfew constraints to its core aviation business.

This fear was made obvious in submissions made in Council Plan Decision 2 in 1998. This decision document informs the rationale used by CIAL and CCC in adopting the noise contour process that currently exists from a list of six alternative options aimed at ensuring the ongoing development of CIA without any risk of curfew.

I refer you to point 2.18 at page 9 of that decision which states:

2.18 Below this are the “environmental results anticipated” for this zone. These include the following:

- (a) The operation of activities within the Rural 5 Airport Influences Zone, in a manner which maintains the continued safe and uncurfewed operation and development of the International Airport.
- (b) Some adverse environmental noise effects associated with the proximity of aircraft operations and associated activities at the airport, with gradual use of quieter aircraft but with substantially greater numbers of aircraft movements.
- (c) A level of intensity of land use and activities future subdivision activities within this zone, so as to ensure that neither of these leads to demands for curfewed airport operations.
- (d) Recognition of the likely airport noise environment and achievement of noise insulation as a means of ensuring adequate mitigation of adverse environmental effects which might otherwise be experienced by residents in this zone.

Some land in the zone is outside the 50 dBA noise contour.

With regard to Rural 5 land at 2.17 of this document it states.

The zone’s purpose is primarily the continuation of farming activities while managing land activities to avoid compromising airport operations and development.

At Point 2.2 of the same document under the heading **Background and context of Plan Provisions- Airport Noise** CIAL representatives stated that in the year to the end of June 1996 there were 83,815 scheduled aircraft movements and 50,670 general aviation movements.

At this time CIAL gave evidence that the number of scheduled aircraft movements were expected to grow very dramatically at Christchurch International Airport (CIA) while acknowledging that the noise from each individual scheduled flight event would decrease significantly.

This expected decrease was due to noise complaints resulting in curfew rules in many of the world's airports that were driving designers and manufacturers to design and build much quieter aircraft. Such curfews exist for example at Wellington Airport and were seen as an extreme business continuity risk by CIAL, to be avoided at all cost.

A significant factual problem that CIAL now faces is that the projected growth on which the existing noise contours were projected has simply not eventuated. Additionally the aircraft noise profiles of the current fleet are very significantly quieter than that of the fleet used in the modeling process that generated the noise contours currently in existence.

The current contour lines were generated in 2008 by an expert panel of noise specialists. This occurred as part of the process in determining several appeals against the proposed Selwyn District Plan. Prior to this the then existing noise contour lines projected by CIAL and adopted by CCC were so large that effectively large parts of what is now Rolleston township fell under the 50 dBA noise contours, thereby totally restricting residential development.

The appellants engaged internationally recognized noise experts to support their argument that no noise harm existed especially at the 50dBA levels and that the CIAL data was simply flawed. CIAL realizing that their previous projections, that had determined the then huge noise contours, were at real risk of being exposed as flawed, reluctantly agreed to a deal. This deal took the form of a three day workshop attended by the high quality internationally recognized noise experts

engaged by the appellants and CIAL engaged noise experts. The result was an agreed set of assumptions on which the current contours were modeled and developed. The result was a very significant shortening of the contours with some widening closest to the airport itself. The result was increased residential development in Rolleston.

As part of that deal all parties including CCC and CIAL agreed to review the assumptions using the same input types but with latest accurate data using the latest version of the modeling software originally used, and to do so every ten years. Hence this remodeling is due to be carried out 2018. (refer Executive Summary; page 2 Expert Panel Report 31 January 2008)

Given the current earthquake altered planning arena, the intent of the Land Use Recovery Plan, the Christchurch Replacement District Plan and CCC plan PC84 that specifically proposes a comprehensive change to the provisions of the Special Purpose (Airport) Zone (SPAZ) I strongly submit that the modeling exercise be carried out immediately. Failure to do so simply provides no balancing of CIAL development restriction aspirations with adjacent land owner's use of their land rights. Would be inefficient as it is highly likely the new contours would be significantly smaller thereby freeing up land that would be otherwise subject to unnecessary and severe restrictions. Further failure to base the replacement plan on current accurate data would fail all natural justice and reasonableness tests.

More positively an immediate review using current fact based data sets will accurately inform all of the above processes. The result will be new contour lines based on accurate data and real time assumptions that would still allow for CIAL growth, but would certainly free up land that is currently under significant usage restrictions. Efficient and effective land use combined with an honest attempt to balance the needs of CIAL and its neighbors.

Importantly the actual process of reviewing the modeling is very straight forward the modeling algorithms are in existence the inputs are clear the modeling software has an up to date version in existence and ready to receive inputs. No development of the process is required at all.

All that would be required would be a process that could facilitate an ethical and fact based agreement between the parties of the actual new data set quantities to be input into the latest model. Issues such as CIAL growth projections would need to be put under scrutiny and agreed. However once input data is agreed the modeling process can simply be run using the data and the new contour lines would be generated.

The importance of immediately carrying out this remodeling is obvious when the degree of exaggeration of the previously used data sets is exposed.

In the 1998 modeling process CIAL was successful in having the actual projected scheduled flight number to used in the modeled scenario set at 175,000 scheduled flights per year.(refer Expert Panel Report in the Matter of Several appeals against the proposed Selwyn District Plan under clause 14 of the First Schedule of the Resource Management Act 1991: page 4 part 11 Introduction point c. headed Agreement on Modeling Assumptions).

To be very clear the actual input data was 175,000 **scheduled Flights not any combination of schedules flights or other aviation movements just the Scheduled flight figure supplied by CIAL as the scenario data to be used.**

There is no explanation as to how this figure was derived as being reasonable to use in the scenario but given actual scheduled flight levels it is clearly very high and has distorted the size of the contours very significantly.

The 2014 full year actual scheduled flights to and from CIA were 50,633.

In 2010 there were 54,668 scheduled flights hence the number while adversely impacted by earthquakes has recovered to about pre earthquake levels in 2014. Therefore the impact of the earthquakes to 2014 could be seen as a reduction of some 4000 scheduled flights.

As already outlined in this document, CIAL's evidence at the time they were debating their desires in Council Plan change 2 indicated that the scheduled flights in 1996 numbered 83,815.

I am not sure if this was accurate data at the time it was given, but if so it shows a large decrease in scheduled flight activity in 1996 to that which occurred in 2014.

Clearly CIAL would desire to factor in growth assumptions into any remodeling exercise.

I note that Auckland International Airport is projecting 70% growth in its scheduled flight operations over the next 20 years. I submit it would be reasonable to assume that growth at CIA would be considerably lower than this.

Air New Zealand's recent decision to remove its direct Christchurch to Tokyo flights to Auckland is one example of the impact Auckland's phenomenal growth is having on CIAL's scheduled flight growth aspirations. I submit CIAL would not be able to match let alone exceed Auckland International Airports growth.

Even if 70% growth from the current 50,633 scheduled flights was used in the modeling input data the resulting number of scheduled flights would be 86,076 flights.

This is 88,924 fewer than the currently modeled 175,000. This data change alone would produce very significantly smaller contour lines.

The second major aspect to the modeling is the actual noise profiles of the aircraft fleet mix actually making the scheduled flights.

The current contours were projected using noise profiles of the B777-300 fleet mix. Since that time the fleet mix has significantly changed to aircraft that exhibit radically quieter noise profiles on landing, take off, approach to and egress from the airport. By inputting the current aircraft fleet noise profile data yet further reductions of the existing contours would be expected.

As both the major assumptions that drive the models contour outcomes are hugely exaggerated it is clear that the current noise contours are extremely exaggerated and are unreasonably restricting development activities and aspirations of land owners. The level of protection they give to CIAL is simply unreasonable and does not represent any likely growth schedule flights will ever

reach. This is certainly not an efficient and effective use of the land as required by the RMA.

The reality is that the current contours are unnecessarily heavily restricting development opportunities on land unnecessarily impacted by the current exaggerated contour line. At the very time the Land Use recovery plan desires to maximize development of safe desirable land. This being the case they are contrary to the Land Use Recovery plan and actively working against such goals of residential intensification and efficient and effective land use.

Further these contours based on inaccurate data are contrary to Chapter 6 – Recovery and Rebuilding of Greater Christchurch of the Christchurch Regional Policy Statement intentions, as the contour regime fails to provide a clear planning framework and in fact creates more uncertainty with regards to land and activity restrictions over land impacted by the current contours. This fact is further evidenced by CIALs ever growing list of activities they seek to have restricted. Now new engine testing contours are proposed and new bird strike lines/contours over Rural 5 land and the new urban fringe land where farming activities are desired. Has CIAL forgotten that just a few years ago it was cutting hay on its runways with no adverse bird strike outcomes.

The combined impact of all existing and continually growing list of restrictions is the totally unnecessarily curtailing of development of otherwise highly desirable and safe land.

I submit that any factual, reason based, equitable, honestly applied balancing act between CIAL business continuity risk management and its neighbor's development aspirations demands accurate data be used in determining the actual size of contour lines which are at the very heart of the issue.

Especially given the fact that the current contour lines include the draconian 50dBA restriction contour, used nowhere else in the world and at a noise level

well below the recommended New Zealand Standard for the restriction of activities due to alleged harm.

The very use of this 50dBA restriction contour line clearly exhibits the existence of an imbalance of between the weighting given to the needs of land owners and CIAL desires contrary to what the RMA requires. Failure to immediately rectify this by applying current factual data simply gives further evidence of bias.

CIAL has signaled very clearly in their submissions to the Christchurch Replacement District Plan their desire is to have adopted a raft of new restrictions on the development aspirations of its neighbors in the 50dBA existing contour.

New 13 mile long bird strike contours, all over rural 5 farm land, new engine testing noise contours, removal of residence ability to have tariff paying visitors like Bed and Breakfast operations and so the list grows.

At the same time CIAL seek approval for Backpacker accommodation inside the SPAZ where the noise levels are at the highest levels. Truly anti-competitive behavior on the one hand, and behavior seeking a competitive advantage on the other.

The existing inefficient non effective and confused planning framework is one which continually sees CIAL seeking additional activity restrictions to be imposed on its neighbors while seeking the ongoing dilution of “airport purposes” linkage to its own development aspirations. At each step reducing clarity and frankly simply become more conflicted as time goes on.

The solution to all these issues is a very simple. It was contemplated back in 1996 but rejected at that time. However is currently being adopted by CIAL and CCC in several individual resource consent applications for new residential properties inside the 50dBA noise contour. It is worth while looking at the options and the easy solution to all these issues one specifically offers.

Council Plan change number 2 looked at a range of six options designed to mitigate complaints that could led to curfews that were initially proposed. These options are articulated at points 2.37 to 2.45. on pages 14-17 .



Options ranged from doing nothing, adopting curfew or restricted operations, purchasing land, which in fact CIAL has been active in doing for many years that and acquiring further land by way of designation were all submitted and rejected on what could be seen as reasonable grounds .

The fifth option, the imposition of a “non-complaint” clause however caused the presiding Commissioner to make the following comment

“It may well be useful as a technique for individual circumstances but I am not convinced that it is a sufficient permanent safeguard, given the importance of uncurfewed operations and the likelihood that noise will increase.”

Importantly a significant reason for rejecting this **useful option**, “the likelihood that noise will increase” has now some seventeen years later proven to be incorrect. That likelihood was founded on inaccurate data relating to the number of scheduled flights principally and secondly the underestimated reduction of noise generated per flight, as already canvassed in this paper.

Existing case law has established that the imposition of a “non- complaint” clause **is lawful**: refer (AP190/96) and “BC and BK Rowell V Tasman District Council High Court (AP16/95).

Therefore the only remaining impediment to implementing this approach to the management of airport aircraft landing and taking off operations is the question is it a sufficient permanent safeguard against CIAL feared curfews?

The benefits of adopting this option now when compared to the existing contour led noise harm debate, continued growth in activities to be restricted and reverse noise sensitivity processes are many.

The existing process is based on alleged noise harm even at the 50dBA level. Noise harm at these levels is a myth as proven by the existence of the preschool with its open air facilities in what was the 65dBA contour within the SPAZ. A preschool attended by the children of many CIAL executives and employees children. Not a single child has in anyway been harmed by airport noise at this safe and well run facility.

This harm myth is simply dishonest, it is purely a process CIAL ably assisted by CCC uses to reduce the business continuity risk of curfews, that it perceives will flow from complaints. Hence the basis of the process is inherently dishonest.

Adoption of the “no complaint” process eliminates the need for perpetuating this myth. While I accept that following numerous Court decisions the curfew risk argument initially submitted by CIAL has morphed into a noise harm mitigation debate both are inherently dishonest.

Interestingly while airport noise impacts widely over existing intensive urban residential properties no call for curfews from these potential complainants has resulted. Nor a single victim has come forward with noise harm injuries. Why is it that the restrictions are all focused on restricting rural intensification of activities when existing intensive urban development has not generated the feared curfews nor harm victims? Yes simply a myth that suits CIAL and CCC business development aspirations.

The existing process has led to huge levels of litigation, which will simply be ongoing. The “no complaint” option would remove the need for litigation it would be seen as fair and would provide clarity with regards to development around the airport while completely changing what is fast becoming a volatile relationship between adjacent land owners and CIAL.

It would enable CCC to correct its reputational and conflict of interest issues with regards to it’s non-management of CIAL desired resource management applications.

The resulting planning arena would be clarified with the focus being on enabling development around the Airport to the benefit of both CIAL and its neighbors.

Desired outcomes in the LRUP such as residential intensification could be facilitated as could be a wide range of other activities such as preschools bed and breakfast commercial activities and so on.

All providing increased efficient and effective land use with nil risk to CIAL.

## **RECOMMENDATIONS**

That the Christchurch City Council be required to immediately facilitate the remodeling of the existing Airport noise contours using the same modeling process used in 2008 but using current input data sets that represent the actual current scheduled flight data plus an agreed growth percentage and the current aircraft fleet noise profiles together with other up accurate data inputs. Further that this process utilize the most current version of the same modeling software then used.

Due to CCC ownership of CIAL that a truly independent body be appointed in that process to oversee the process and ensure that the data is not manipulated in a manner that advantages any party.

While this remodeling is required to be carried out as agreed in the Experts Panel Report in 2018, It should be done so immediately. To do so will enhance the goals of the Land Use Recovery Plan (LURP). It would also better inform the Christchurch District Plan Review as the outcome will undoubtedly be a significant reduction of existing contour lines hence making available safe and valuable land for development. This I would potentially also offer residential intensification opportunities and area where the current LURP is having difficulties.

That the “no complaint process” be introduced with regards to consents impacted by noise contours thereby leading to a truly effective and efficient planning process that enables a variety of activities in a transparent manner rather than the current restrictive model that are based on exaggerated data sets and noise harm myths

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