

Embracing Aircraft noise Complaints for a Sustainable Aviation Future

**A presentation to the Airservices Forum on a Sustainable Aviation Future, by Ron Brent,
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At many airports around the world people complaining about aircraft noise have stood in the way of the development of the aviation sector. Movement caps, curfews or other time-related operating restrictions, restrictions on noisy aircraft, and restrictions on where aircraft can fly have all limited the capacity of airports to work as efficiently and effectively as they might. Despite such constraints, demand for aviation services continues to grow. Given the valued, indeed critical, contribution of aviation to communities and economies it is imperative that the forecast growth is managed in a sustainable way that acknowledges the noise impacts borne by some for the general good of all. By embracing aircraft noise complaints, we gain insight into the best path to achieving a sustainable and balanced future for aviation.

It might seem odd to suggest that there could be any value to be derived from aircraft noise complaints, particularly when they can often seem to call for unrealistic measures such as curfews, closing runways or even closing a major airport. However, I have seen time and again that to ignore or down-play the seriousness of community concerns – even when they seem extreme or unreasonable – is to risk an unknown and unpredictable intervention, which is hardly compatible with ensuring a sustainable future. I hope to convince you today that aircraft noise complaints are one of the best resources available to ensuring long term sustainability.

I accept that aviation might be best positioned to grow if there were no complaints about aircraft noise at all. But of course this is unrealistic. .

We can respond to aircraft noise complaints in many ways but perhaps the most common are: One; ignore them. Two; record them and do nothing. Three; respond with useful and constructive information but do nothing more. Four; give genuine consideration to whether there is a possible improvement in noise outcome and, if possible, actually improve the noise outcome. If no improvement is possible then explain clearly and in simple terms, why not.

Sure, this last approach – what I like to call ‘embracing complaints’ – costs money. On the other hand it also ensures that complaints will be a constructive contributor to the improvement of aviation services rather than a potential inhibitor to the growth of the aviation sector.

It is important to appreciate that complaints are a legitimate component of a modern democratic and free society. If the aviation sector doesn't deal effectively with the issues and concerns of communities, it is likely that these issues will escalate. If the aviation industry is not engaged with its community there is a real risk that imposed solutions will result in outcomes that inhibit the development of a sustainable future for aviation, while often delivering a less effective response to the original concern than an industry driven response could achieve. In my view, it is important for aviation stakeholders to work collaboratively across the sector to engage with complainants to ensure a fair outcome if possible.

What is a fair outcome? Interestingly in the space of aircraft noise there are frequently no easy right and wrong answers and often no 'fair' outcomes. On the other hand there are often: 'better noise outcomes'

To illustrate this point I will present a long running aircraft noise complaint that we have on our books: Mr Sensitive bought a house right near the beach, and right next to a significant airport. His house is right opposite a helipad. Mr Sensitive is now outraged at the noise from the heliport and insists it must move. I think we can all agree that Mr Sensitive is being highly unreasonable. If he can't cope with the noise why buy a house right next to an airport?

Now let me present another case we have. Mr Reasonable bought a house right next to an airport. When he bought the house the airport had relatively few jet arrivals and minimal helicopter traffic. Since moving in the number of jet aircraft has increased dramatically. Mr Reasonable has no problem with this. He accepts that this is the sort of risk you run if you buy next to an airport. Another change, however, is more problematic. The airport has a helicopter training school that ran a very small operation from the airport that barely had an impact on noise levels and was not 'visible' to the public. This operation has seen exponential growth. It is now one of the busiest helicopter training operations in the country. Helicopters are hovering over the helipad for many hours each day and flying in and out day and night. In response to this all he asks is that the training operations move to the helipad at the other end of the airport where it is well removed from surrounding houses.

Some of you may have worked out where this is headed. Here is the thing: Mr Sensitive is the same person as Mr Reasonable. I should say immediately that the airport, and indeed the helicopter operator, have worked hard to move as much traffic as possible to the other helipad and indeed away from the airport. The airport has been sensitive to Mr Sensitive and very reasonable with Mr Reasonable. As with a great many aircraft noise issues this case does not have a fair outcome and no easy right and wrong. The airport has been fair to our complainant and must provide this critical aviation service, while our complainant could not have foreseen this very significant noise intrusion.

Very rapid growth in air traffic, and in the size of planes, has meant a significant increase in the amount of noise that many residents in large cities experience. Much has been made of the dramatic improvement in how much more quiet modern aircraft are but it is important to understand that this comes in the context of large growth in the number of aircraft flying, the size of those aircraft, and the increased frequency of aviation activity during the night and other noise-sensitive times.

Some of the conventional measures that provide composite noise indices would rate the decrease in the noise from each aircraft ahead of the increased volume of traffic. Here in Australia the Australian Noise Exposure Forecast is calculated with a formula prescribed in an Australian Standard. It would have us equate a 3dB reduction in the average noise generated by each aircraft with a doubling in the number of events. Personally I have my doubts whether this matches the perception of the average citizen.

This mismatch between the measures of noise and the likely perception of that noise by citizens is only one of many difficulties in constructive management of aircraft noise. Some other complexities include:

- The very different responses individuals will have to the same noise
- The minimal understanding of aircraft operations in the broader non-aviation community
- The variability of aircraft noise in terms of time of day, weather, seasons, traffic peaks, etc
- The complex mix of interests and agencies involved in managing aviation issues including the obvious: airports, air traffic control, airlines and smaller aviation operators, federal aviation regulators and policy-makers, environmental agencies (state and federal), planning agencies (state, federal and local), and so on.

So what is to be done? There is no doubt that the best option is to reduce aircraft noise at source. And this is happening. Even if the scope for further technological advances in this field declines merely transitioning from the noisiest aircraft in operation to the quietest (as fleets are renewed) will deliver substantial reductions in noise at source.

But this is not where the key opportunities lie given the inevitable further growth of aviation operations (albeit growth that may well be unreasonably constrained by interventions driven by aircraft noise complaints). From the complaints I am seeing, the key opportunities lie in four areas:

- Improvement in aviation operations through explicitly targeting noise improvements, such as in the development of new air routes, better air traffic management, improved airport construction and operations, and better flight management systems. Importantly, this will be most effective if managed collaboratively by aviation stakeholders rather than buck-passing over who is responsible for aircraft noise outcomes.
- Better information about aircraft noise both in response to requests for information and when taking the initiative to provide public information.
- Improved engagement with complainants to ensure that all complaints are handled fairly, efficiently and with the twin objectives of achieving the best possible outcome in noise management and the best possible outcome in explaining the reason for noise that cannot be reduced. Importantly this includes the capacity to bring complaints to a close where there is nothing further to be done on the case.

- Improved land use planning around airports including the scope for rezoning of land and transitioning land in high aircraft noise corridors to uses that are not noise sensitive.

I will now explore each of these opportunities in more detail.

Improvement in aviation operations

When I began in the role of Aircraft Noise Ombudsman I came with an assumption that aircraft noise is a given. Over time aircraft might get quieter, and occasionally there may be opportunities to shift noise from one place to another and hopefully impinge on fewer people and/or infringe on people less severely.

As it has turned out there have been a great many opportunities to improve noise outcomes. These have ranged from moving engine cut-out training from over suburbs and instead conducting it over the airport, to moving a part of a flight path over bushland and away from houses, from minor changes in flight procedures (such as changing the height at which a turn is initiated) to more substantial procedural shifts such as creating separate night time procedures.

Statistics in this area are probably of little value given the highly variable context in which improvements might be sought but I will note that somewhere between 15 and 30 percent of all cases that have been raised with my office have resulted in a change that has delivered at least a small improvement.

Importantly, where we have pursued a possible improvement and it has proved not to be viable we have still improved our position. The genuine attempt at seeking a solution has demonstrated our commitment to deliver the best possible outcome, increased the prospect of being able to convince people that there is no better option, and in turn increased the willingness of complainants to accept an outcome that results in no improvement.

If we are to deliver a sustainable future for a growing aviation industry it is essential that the aviation sector should seek to deliver better noise outcomes. To achieve this in the interconnected aviation context we must make collaboration and consistency core requirements of the response to aircraft noise concerns.

Better Information about Aircraft Noise

Anyone looking out of their window can see how very large the sky is. It is truly huge! As a result it can often be very difficult for individuals to understand that in this massive space the aircraft have to come over their houses with such regularity.

For the average citizen with no special understanding of aircraft operations it is easy to think of aircraft operating like cars or trains, expecting them to adhere strictly to 'roads in the sky'. Consequently it can be hard to understand why aircraft tracks splay widely on some turns, and are narrowing in other sectors, why the height of departing aircraft over a specific location can vary greatly, even for identical models of aircraft, and so on.

Furthermore it can be very easy for those contemplating living near an airport to get a very wrong picture of the noise they will confront: “I bought a house outside the *N70 twenty events a day contour* so how come I had 40 aircraft at 70dB yesterday?” [because it is an average number of events contour], or “how come I get an average 20 events at about 70 dB when I deliberately bought outside the 20 event 70 dB line?” [because just outside the N70 contour you will get virtually the same noise level] and so on.

Standards Australia will shortly produce a handbook which is intended to guide those putting out information about aircraft noise. This document is just one of many that have been (or are being) developed to improve the clarity and comprehensibility of aircraft noise information. Improved information is vital to setting realistic public expectations about aircraft noise which is in turn vital in improving acceptance of aircraft noise.

Improved Complaint Handling

Complaint handling specialists have developed large quantities of material to assist in the best practice management of complaints. Some of the key features of best practice are:

- A corporate culture that accepts the complainant’s concerns with empathy, but not necessarily endorsement, and seeks to use complainant feedback constructively
- A commitment to achieving fair results and providing accessible efficient and responsive opportunities to complain.
- Staff who have the professionalism, skill and training to deliver high quality complaint handling.
- An effective processes to deal with complaints, including elements such as an open mind to possible solutions, systems that can deliver change where change viable, and a clear end point when the complaint has been taken as far as is reasonable.
- High quality analysis of complaints including a willingness to accept that there may be better options and a capacity to deliver clear and comprehensible explanations where change is not possible.

I should confess that these principles have been drawn from the Commonwealth Ombudsman publication “Better Practice Guide to Complaint Handling” a document I had a significant part in producing.

Importantly, for the data from complaints to be useful in understanding problems the data must be robust. A particular feature of many aircraft noise complaints systems from around the world is a tendency to count every contact from a complainant as a separate complaint. This is not the practice in other areas of complaint management, and is not helpful or constructive.

Not only is it misleading to record 26,000 contacts from one complainant in Perth as 26,000 complaints, it will also encourage and reward complainants who make frequent contact to no real purpose. If a complainant's concern is about every aircraft flying overhead this can be recorded on the first contact, and the number of aircraft concerned can best be counted from aviation industry data. If it is one complainant with one issue it is one complaint regardless of how many times someone rings up or presses the keys on their computer.

Improved Land Use Planning

The early photos of Moorabbin airport in Melbourne, Parafield airport in Adelaide and indeed Melbourne airport at Tullamarine all show a location beyond the urban boundaries of the cities that they are now firmly within. The same will be true of many other airports. The airport came first! But now each of those airports generates significant levels of complaint from the suburbs that have crept ever closer to the airport fences. What does this tell us? It can certainly suggest that a lot of home buyers don't do enough research about the house they will buy. But it also tells us that there is a lot of room to rethink urban planning around airports.

This is something that is outside the control of the aviation sector. In Australia it is indeed the case that responsibility for managing aviation, and responsibility for managing land use rest with different levels of government. Nevertheless there is something that the aviation sector can do. Better information about the impact of aircraft noise can inform better planning, and better decision making by home buyers. In Queensland the most popular real estate web site now includes a link to aircraft noise information. Collaboration is not just about working with other aviation agencies.

Information is a key ingredient for a sustainable aviation future just as it is for almost every aspect of modern life.

Conclusion

I have talked about the lessons that I have drawn from the complaints I get in my role as Aircraft Noise Ombudsman. These lessons do have a broad application across the industry. At the same time it is important to listen to specific complaints and pay attention to the messages that even seemingly unreasonable complainants are trying to deliver.

With some basic approaches to delivering good information about aircraft noise, some simple and clear training in best practice for those handling complaints, and a deliberate process for finding the best possible aircraft noise outcomes those noise complaints need not be an undue burden. There will always be difficult individuals and complex cases but there will also be a lot of useful information that can feed into better communications about aircraft noise, and a greater chance of delivering the best possible noise outcome.